



Legal Aspects and Risk Management of Design/Build Contracts

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Purpose

The purpose of this issue of *Practice Notes* is to address potential economic consequences confronted by architects and engineers as a result of the design/build process. It provides a general outline of the legal and risk management issues raised by design/build, and it reviews methods for managing the risk of loss.

Background

1. The Professional Crossroads

The professional relationship, by its nature, contemplates personal advice and counsel provided by the learned professional to his or her client. Each professional discipline is founded upon the recognition that in order to provide the needed services, a relationship of trust and confidence must develop. State and national associations in each profession define codes of ethics, monitor levels of professional performance, and establish levels of competence necessary to assure public safety. Professionals are required by statute to be licensed. Licensing provides assurance to clients that the licensed professional has achieved a minimal level of competence. It also provides a vehicle for disciplining improper practice.

In the current economic environment, the professional relationship is under attack. Doctors are compelled to render services through various health maintenance organizations. Lawyers are hired through insurance carriers or through prepaid legal service plans. Design professionals are hired by persons other than the owner/user to design projects. In each instance the effect on the personal relationship is the same. Clients, rightly or not, sense the professional is not protecting their interests. Rather, the client senses the professional's loyalty is divided between the client's need for professional services and the economic needs of the entity paying for those services. This sense of divided loyalty, in practice, limits the confidentiality of communications between professional and client and restrains the professionals' ability to provide candid opinions to the client ([Note 1](#)).

Architects and engineers today are approaching a crossroads in the evolution of their professional disciplines. This is a consequence of the growth of the design/build process as an accepted, often preferred method of project delivery. The trend signifies that the design professional will either be reduced to the level of technocrat, with a substantially reduced role in the construction process, or will emerge as a new profession altogether—the design/builder—with increased responsibility and professional obligations.

2. The Historical Development of the Traditional Roles in the Construction Process

Many commentators have referred to the current design/build process as a return to the era of the master builder. Such an analogy is flawed. The legal and economic environment facing today's design/builder would be completely alien to yesterday's true masters.

The master builder was a creature of pre-industrial societies. He has been described as the forerunner of the modern day architect. The master builder had full responsibility for all phases of a project, including



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drafting, engineering, aesthetic design, and construction. Government approval and financing was never a problem, as the client was most often the king, the church or whatever potentate had obtained the funds to develop a project. Liability was also never a problem, as the client had virtual absolute authority to repossess your life and/or your soul.

The age of the master builder reigned from the dawn of classical civilization to the Renaissance. As a part of the enlightenment, architecture developed as a liberal art. In reality, the formation of wealth resulting from seafaring trade created a challenge to the old authority and a remarkable increase in the potential client base. This rebellion from the old order fostered the development of architecture as an artistic pursuit. The creation of the printing press as a new technology accelerated the process by providing a means of disseminating knowledge, allowing the art of architecture to incorporate developments in the sciences.

Engineering had similar roots. Medieval military engineers earned their wage designing ramparts and barricades for the armies of the same kings and potentates who gave us the great architectural works of the past. The end of feudalism saw the rise of centralized state and city governments, which hired engineers to design and manage public works projects using labor hired by the government. The industrial revolution provided the nursery for the development of engineering as a science. Structural and mechanical theory emerged in tandem with the invention of James Watt's steam engine in the mundane search for a return on capital.

The modern construction company similarly had its roots in the industrial revolution. The medieval guilds, which provided labor for the various trades, survived through to the eighteenth century. Engineers who saw the potential for profit sought employment in private industry to build the toll roads, railways, bridges, canals, and factories undertaken by the industrialists. The weakening of the guilds brought about the advent of general contracting. General contractors brought the various trades together under direct supervision, allowing competitive bids and fixed prices to complete projects.

By the nineteenth century the construction process had evolved from one in which the master builder had full control over the scope of the project, subject to the aesthetic satisfaction of the king, to one in which the scope of the project was dictated by the developer's budgetary constraints, subject to the learned dictates of the designer. The system was flawed as the designer's profit was itself dictated by the scope of the project and the efficiency with which the project was delivered. American industrialists were among the first to recognize and act upon the potential for corruption inherent in that system. They acted by prohibiting engineers from having any financial involvement in the contracting or materials supplied on their projects.

Licensing of design professionals is for the most part the result of twentieth century progressivism. The imposition of licensing requirements complemented the development of building codes. Virtually every licensing statute was enacted in the interest of promoting public health, safety, and welfare.

Traditional roles in the construction process refer to a process which had its historical heyday covering a period of roughly sixty years, from the 1920's to the 1970's. It remains today the primary method of project delivery. The traditional process divides responsibility for the development of a project three ways. The developer defines the scope of the project by establishing a program to be implemented and a budget for the development of the program. The designer translates the developer's program into a workable set

of instructions for the construction of the project. The contractor performs the work pursuant to those instructions.

3. The Historical Development of the Design/Build Role in the Construction Process

Design/build contracts have existed since the early 1900's. They have been utilized on the simplest of projects where custom design was not required. Package builders would contract directly with owner/purchasers for the installation of prefabricated warehouses and farm structures, for example. They have also been used on the most complex projects, oftentimes where the design required incorporating new or untested science into large public works. The justification for the use of the process has always been the absence of a competitive bidding market for project implementation. Hence, projects such as regional electrical plants or nuclear power generation facilities have most often been developed on a design/build basis.

Modern day variations on the traditional construction process emerged in the early 1970's with the advent of the construction management industry. This industry emerged as a result of the search by owner/developers for ways to reduce costs. The construction manager offered the developer potential savings from the efficiencies it would extract from the cost of design and the time of construction. These savings were to result from the construction manager's performance of various activities on behalf of the project, including scheduling, coordinating, inspecting, and expediting cash flow-responsibilities increasingly abandoned by architects and engineers.

The construction management process benefited both the owner/developer and the design professional. The designer used the process as a vehicle for expanding the normal scope of services offered. The developer realized savings in construction cost and time through the coordination of design and construction activities. The design/build process is a natural outgrowth of this coordination effort.

The growth of construction management was aided by ethical restraints imposed upon the practice of architecture by The American Institute of Architects. Until 1978, the AIA code of ethics precluded architects from participating in construction other than as supervisory architect or construction manager.

The ethical preclusion was premised upon the belief that the architect would lose objectivity when his or her financial interest in the construction conflicted with the need to protect the owner's interest. The ethical preclusion was examined in *Mardirosian v. AIA*, 474 F.Supp. 628 (D.C.Cir. 1979). The court reviewed the canon in light of the antitrust statutes. The court found the canon was anti-competitive on its face and could not be justified on the basis of eliminating professional deception.

In 1978, the AIA modified its code of ethics to permit its members to participate in profit or loss situations related to labor and materials in construction contracting. The new process became known as design/build ([Note 2](#)).

The Design/Build Process as a Project Delivery System

The phrase "project delivery system " refers to the relationships of the parties involved in the process of project development. In essence, various systems describe who among the parties is responsible for specific performance aspects required for project development, including

selection, design, coordination, supervision, and construction. The design/build process describes a project delivery system whereby both the design and the implementation of that design are performed by the same entity. In the design/build system, a single entity agrees to deliver the design and to construct the project, either through its own forces or through subcontractors and consultants.

1. The Traditional Project Delivery System

Under the traditional system, the owner/developer contracts directly and separately with the designer and contractor(s). Project delivery proceeds in a linear fashion, with the design being completed before construction is bid. Cost efficiencies are realized from the ability to bid the construction competitively.

Under the traditional system, the designer functions as the owner's agent during construction. This provides the owner with the dual safeguards of having an agent guarding the owner against defects in the work and having an arbiter of disputes between the owner and contractor which, by their nature, affect the progress of the work. The owner retains decision making authority for the selection of materials and coordinates the design with the construction. The contractor performs and supervises the construction.

2. The Construction Management Project Delivery System

Under the construction management system, the owner/developer contracts directly with a construction manager as well as with the designer and the contractor. Typically, this delivery system is used when the project is to be constructed with more than one prime contractor. Additional cost efficiencies are realized by the construction manager's coordination of the design with construction processes. Fast tracking involves the contractor in the coordination process.

The construction manager may or may not supervise the construction, depending upon the scope of the construction management contract with the owner. He or she coordinates the work of the various prime contractors and is the owner's agent overseeing the performance of the construction contracts.

3. The Design/Build Project Delivery System

Under the design/build system, the owner/developer contracts directly with a single design/builder who has full responsibility for developing a design meeting the owner's performance expectations and for implementing that design. The design/builder is responsible for the selection of materials which meet the owner's program and for coordinating those activities required to produce the project within the contract price. The owner realizes cost benefits by converting the project coordination function from a cost management item controlled by the owner to a profit management mechanism under the control of the design/builder.

The Liability Potential of the Design/Builder

1. The Legal World of the Original Master Builders

Architectural legend describes the ancients' deification of the Master Builder. He was glorified by the Egyptians as the god "Imhotep, " the master architect of the step pyramid in Egypt. The master architect

held high station in Egyptian civilization. He was the only one who knew the way to the burial chamber of the pharaoh. As a result, he was killed as part of the burial ceremony and buried with his king.

Builder liability for losses suffered was first codified by the Babylonians in the Code of Hammurabi. The liability was absolute, leaving the Master Builder strictly liable for losses incurred. The Code provided for equal compensation parallel to the injury. Thus, if the householder was killed, the builder would be killed. If goods were destroyed, the builder would replace them in kind.

The legal framework changed with the spread of the Roman Empire. The Romans injected a concept of privity, which was required between the suing party and the Master Builder. The doctrine precluded suits by third parties, even if personal injury or monetary damages were incurred. At the time of the Industrial Revolution, liability required both a showing of privity and negligence.

2. The Current Liability of the Design Professional

The current liability of the designer is founded upon principles of negligence. The concept of privity survived the birth of the Industrial Revolution but has since been abandoned. The rationale for maintaining the doctrine was expressed in the English case of *Winterbottom v. Wright*, 152 Eng. Rep. 402 (Exch. Cham. 1842). The court was concerned, firstly, that lack of protection would lead to excessive and unlimited liability resulting in endless complications in determining cause and effect and, secondly, that the parties would be burdened with rights and liabilities beyond those for which they had contracted.

The historical requirement of privity was not impassionate. The doctrine is rooted in pre-industrial society, where a man's profit was limited by his ability to work the soil or peddle his craft. The limit of a person's reach required a balance of equities in his favor when considering the potential for harm resulting from his errors. The industrial revolution changed the social relationship by introducing mass production and mass marketing. *MacPherson v. Buick Motor Co.*, 217 N.Y. 382, 111 N.E. 1050 (1916) reflected Justice Cardozo's famous discourse on the "assault upon the citadel." Today, the defense of privity has been replaced with a required showing of foreseeability and proximate cause.

The law of negligence evolved from the English common law during the Industrial Revolution. It requires performance by an architect or an engineer in accordance with that standard of care, skill, and diligence as those in the same profession would ordinarily exercise under like circumstances. Failure to perform in accordance with this standard constitutes a breach of the professional performance obligations required by the contract for professional services. The performance breach imposes liability for damages contemplated by the contracting parties which ordinarily flow from the breach. Failure to so perform also constitutes negligence, imposing liability for foreseeable injuries proximately caused.

The erosion of privity as a defense led to increased exposure of the design professional. Gradually, the professions insulated themselves, through contract, by reducing their performance obligations.

The standard contract for professional services excludes certain duties historically undertaken by the professional as master builder. The supervisory role on the job-site was reduced to inspection, and the inspection role was subsequently reduced to making observations of the work for the limited purposes of 1) ascertaining whether it was workmanlike, 2) assessing whether it generally conformed to the contract requirements, and 3) advising the owner whether to pay for the work.

The standard professional services agreements exclude responsibility for safety on the site and for the failure of the contractor to perform the work in accordance with the contract documents. They also afford immunity for good faith interpretations of the contract documents and for decisions rendered as arbiter of disputes between the owner and the contractor.

These exclusions have reduced the role of the design professional in the traditional construction process. This reduced role has accelerated the owner/developer's rush to retain design/builders with full responsibility for the entire project ([Note 3](#)).

3. The Current Liability of the Builder

The current liability of the builder is founded upon principles of warranty. The builder is potentially liable to a larger class of plaintiffs without proof of negligence because warranty liability does not depend solely upon negligent performance.

Warranty liability originates with commercial transactions. Each transaction involving the sale of goods or services considers the purchaser's expectations as to the quality of that performance (implied warranty) and the seller's representations as to the quality of that performance (express warranty). Actual reliance upon the representation is presumed.

In performing pursuant to a construction contract, builders expressly warrant they shall build in accordance with the plans and specifications. Builders impliedly warrant the work shall be performed in a workmanlike manner. Liability is established without a showing of negligence on the part of the builder by merely establishing either that the work is defective, or that it deviates from the contract documents.

The warranty theory establishes a standard of performance rather than the standard of care exercised by the builder as the basis for liability. Any deviation from performing in a good and workmanlike manner, irrespective of the degree of care employed, renders the builder liable. The only limitation on the builder's potential liability is a required showing that the condition alleged to be defective was part of the builder's performance obligation.

The builder's warranty obligation has been extended to include a strict liability obligation in a number of circumstances. Builder/vendors as sellers and producers of homes in mass developments are strictly liable for defects in the development ([Note 4](#)). The strict liability obligation is founded upon the *Restatement of Torts 2nd*, section 402A, which imposes the obligation upon sellers of products placing goods into the stream of commerce. The obligation is imposed irrespective of a lack of privity or of disclaimer. Strict liability imposes a performance obligation upon a builder that its "product " be merchantable and fit for the purposes intended and that facilities constructed be habitable.

The doctrine of *caveat emptor* is a vestige of the pre-industrial era when merchant and buyer had relatively equal bargaining positions. The rationale for imposing strict liability is the absence of equal bargaining power and the seller's ability to spread the loss amongst consumers in a mass market.

4. The Current Liability of the Design/Builder

The time lapse between the historical evolution of legal theory as contrasted against the pace of economic and social change is valuable when evaluating the applicability of current theories to the new project delivery systems. Legal principles evolved in response to social and economic change. Privity survived as a defense in many jurisdictions until the late twentieth century, long after the justifications for the doctrine had disappeared. Today's theories of liability are stretched to their logical limits in assessing the liability of the design/builder. New theories of liability have not yet evolved to meet the economic and social consequences of the design/build process.

The design/builder is exposed to a greater degree of liability for project related defects than if the project were designed or constructed independently. The designer is liable principally when the design and/or the designer's professional performance deviates from professional standards. The builder is liable when its performance deviates from project plans and specifications or from the standards of good workmanship. The design/builder is liable for defective project-related conditions irrespective of whether the project was designed in accordance with industry standards or whether the work was performed in accordance with the plans and specifications. Liability is imposed by extending theories of express warranty as measured by the design/builder's contractual undertaking.

In the traditional process the designer's undertaking does not express or imply such a warranty. Traditional theory accepts that designers, like other professionals, perform an inexact science. They are called upon to exercise professional judgment in matters which are often beyond their control or influence. This requires an assessment of numerous factors which are incapable of precise analysis. Unless the designer "guarantees" the design, the owner/developer bears the risk of the unforeseen or the uncontrollable.

The design/build approach requires that the finished project comply with the owner/developer's expectations of performance. The warranty obligation is expressed by the design/builder's acceptance of a performance specification as the measure of the contractual undertaking. The risk of the unknown contractually shifts from the owner/developer to the design/builder.

This assumption of risk has been treated as an expansion of the builder's warranty obligation and not an expansion of the professional undertaking. Rather than merely warranting workmanlike performance, the design/builder warrants the performance of the project as a product. The project must be fit for the performance objective ([Note 5](#)).

In considering whether to impose design/build liability the courts look beyond the labels ascribed by the parties to the contract and evaluate the characteristics of the project specifications. The test is whether the project specification are performance or design specifications ([Note 6](#)).

Design specifications describe in precise detail the materials to be employed and the manner in which the work is to be performed, affording no discretion. Performance specifications set forth an objective. Successful bidders are expected to exercise ingenuity in achieving the objective. Many projects incorporate a blend of design and performance specifications. In that case, the specific objective is examined, with the expanded liability limited to the scope of the specific performance obligation ([Note 7](#)).

The Legal Framework for the Design/Build Enterprise

1. Economic Realities for the Design Professional

The economic consequences of the design/build process for the design professional are twofold. First, the design professional is removed from the role as a professional advisor to the owner, thereby decreasing the market for his or her services. Second, the professional services performed for the design/builder are expanded, thereby increasing the exposure in negligence. At the same time, the process presents an economic opportunity for design professionals to expand the market for their services by becoming design/builders ([Note 8](#)). In order to achieve this objective, certain statutory limitations must be overcome.

The designer's professionalism is founded upon the ethical requirement of placing the client's and society's interests in front of the economic interest of the professional. The diminishing role as professional advisor is the result of the professions' failure to fulfill that role to the satisfaction of the industry. This failure is built into the fabric of the professional relationship.

The commonly accepted fee arrangement compensates the design professional based upon a percentage of the construction cost. This fee arrangement is in direct conflict with the client's need for value engineering. Clients today place as great an emphasis on the functional utility of a project as they do on the aesthetic image projected by the completed facility. Where cost and time are more important than aesthetic quality, the professional's aesthetic talent is less important to the client than the capacity for cost effectiveness.

The design professional's role as owner's representative is further diminished by efforts to limit the financial exposure resulting from that role. The exposure was first limited by reducing performance obligations as owner's agent. Performance obligations were gradually diminished from supervision to inspection to observation. Contractual limitations of liability for failure to fulfill remaining performance obligations have reduced the owner's desire for such services. Further, potential liability for contractor claims due to errors in design presents an inherent conflict, as perceived by owners, when the designer administers the contract for construction. In each instance, the owner perceives the design professional as placing his or her own economic interest ahead of that of the client.

When retained by the design/builder, the expectations of performance by the design professional are greater than those typically found in the traditional owner/designer relationship. The designer becomes involved in the details of construction. Evaluation of the means, methods, and techniques of installation becomes an integral part of the original design. This evaluation places responsibility for the constructibility of the design onto the shoulders of the designer ([Note 9](#)).

2. The Professional Licensing Requirement for the Design/Build Enterprise

A design/build capability is essential for the design professional to survive and compete in today's construction market. The alternative is to offer specialized services, in addition to general professional services, to the growing market of design/build firms. General contractors face the same dilemma as the design professional. The design/builder, through contract, can impose the performance obligation upon

contractors retained to perform the work. Unless the general contractor develops a design capability, the market available is increasingly limited.

The licensing statutes provide the design professional with a competitive advantage in forming a design/build enterprise. Contracts for professional services by nonprofessionals are, as a matter of law, void and unenforceable. The licensing statutes have prevented professionals from forming design/build enterprises by precluding professional corporations from engaging in any business other than the rendering of professional services for which they were incorporated. The courts are presently circumventing the limitations imposed by the statutes to facilitate the development of the design/build enterprise.

In *Charlebois v. J.M. Weller Associates*, 72 N.Y.2d 587, 531 N.E.2d1 (NY, 1988), plaintiffs entered into a design/build contract with defendants for a new warehouse and an addition to an existing building for the operation of a beer distributorship. The contract was a standard AGC design/build agreement involving a design team with J.M. Weller Associates being the contractor and James M. Weller, P.E., the engineer. The plaintiff withheld \$600,000 in contract sums pending the resolution of construction disputes and sought to have the contract nullified because it violated the New York State licensing statute. The lower court enforced the contract, observing that the protections of the licensing statute were adequately addressed by the contractor's engaging a properly licensed professional.

The design/build contract required that an architect/engineer be retained by the design/builder and that all architectural and structural engineering services be provided by James M. Weller, P.E. The appellate court ruled that the design/builder did not agree to provide professional engineering services. Rather, the parties agreed that a licensed third party would perform those services. The plaintiff owner/developer was, thus, a third party beneficiary of the contract between the design/builder and the architect/engineer. The dissent argued that the design/build contract would allow a contractor to become a package dealer, resulting in the frustration of the public policy underlying the statutory licensing requirement.

The Court of Appeals ruled that the design/build contract did not constitute the unauthorized practice of engineering by the design/builder. The design/build contract required the design functions to be performed by an independent third party who was not acting in the capacity of an employee of the design/build business corporation but, rather, as a professional licensed engineer obligated by contract to exercise his professional judgment in the interests of the public health and welfare.

The court enforced the contract, noting that to hold otherwise would have the effect of disenfranchising a fully regulated, professional engineer from participation in a commercial transaction of this nature. The regulatory sanctions, reinforced by potential civil malpractice liability, complementarily and proportionately protect the underlying public policy and protect the plaintiffs. The court noted the legislative objective to be professional performance, not the vehicle of delivery of that performance.

The dissent argued that the performance of a/e services by a professional is insufficient to protect the public where the professional is also president of the unlicensed business corporation and, presumably, is beholden to that profit motivated, commercial enterprise. A professional license is intended to guarantee that any services performed will be rendered in the exercise of independent professional judgment uninhibited by any outside influence or control. The protection of the public health and safety depends at least as much on the professional independence of licensees as on their professional competence.

The dissent observed that architects and engineers, as learned professionals, have a higher calling than pure profit motive. Concerns with time, cost restraints, allocation of resources, and profit margins will influence the professional independence of the a/e (Note 10). The dissent further observed that the financial interests of the licensee are inseparably wedded to those of the design/build. The licensee may subordinate the owner's interest to those of his corporate employer. Where there is neither contract nor privity directly between the professional and the client, it is virtually impossible for the licensee to maintain a professional relationship of trust and confidence.

Charlebois reflects a current trend towards recognizing the legitimacy of the design/build enterprise. State legislatures have since adopted statutory schemes allowing business corporations to practice architecture and engineering directly by obtaining certificates of authorization. The certificate requires the corporation to identify a licensed professional who is the corporate representative providing the professional service. Nonprofessional corporations must hire professionals by contract or obtain statutory authorization to offer and perform design services. Professionals may offer design/build services directly or may form a general business corporation authorized to perform design through their professional license.

The professional associations have developed standardized contracts for use on design/build projects. Appendix A reflects the current body of documents as issued. The AIA is currently revising document A191 in response to the 1987 revision to document A201-the General Conditions for the Contract for Construction. The utility of the standardized documents is restrained, however, as design/build projects, by their nature, are customized to meet the owner/developer's expectations.

Large design/build projects involve public works or complex industrial facilities. The clients more often insist upon use of contracts developed for use by the particular government agency or by the particular client. The standardized contracts identify design services as being performed by a separately retained architect/engineer. Customized contracts must be reconciled with the statutory licensing scheme as interpreted by the courts of each particular state to assure enforceability.

Risk Management of the Design/Build Project

1. Identifying the Risk of Loss

The most salient aspect of the design/build process is the contractual reallocation of risk. The owner/developer is requiring more than professional design and workmanlike construction. The design/build promises to deliver a finished project which meets the owner's stated performance expectations.

Effective risk management of design/build enterprises is similar to the risk management of any project related enterprise. It requires assessing the risks of loss inherent in the undertaking and determining the most cost effective strategy for minimizing those risks. While the business and financial risks assumed by the design/build are greater than those undertaken by the designer or builder acting alone, the success of design/build enterprises suggests that the rewards are greater than the risks involved.

The design/build faces increased business risk associated with the acquisition of the project and the enforceability of the contract. Acquisition costs are increased where bids are required to obtain the design/build contract. In order to bid the full project competitively, most of the preliminary design and

several aspects of the final design must be completed without any commitment of compensation for the service (Note 11). Even when a bid is accepted, the design/builder faces potential legal challenges to the legality of the enterprise formed to provide design/build services. Public works contracts let on a design/build basis may violate public bidding statutes (Note 12).

Design/build projects present less exposure for the design/builder to personal injury claims than other construction processes. A direct benefit is derived from the worker's compensation exclusion for injuries suffered by employees at a job-site. Under the traditional system, a worker injured at a job-site receives statutory compensation from his or her employing contractor and then seeks the recovery of third party benefits from other participants in the construction project.

In a design/build project, the design/builder, as the employer, receives the benefit of the worker's compensation exclusion. The design professional acting as design/builder controls the opportunity of securing contractual indemnity from subcontractors for claims related to injuries suffered by their workers. The potential exposure for personal injuries suffered by unrelated third parties is increased, however, as the design/builder has undertaken greater performance responsibilities. The increased exposure merely reflects the combined exposure of designer and builder.

The design/builder faces substantially increased exposure for property damages suffered. This results from the increased performance obligation undertaken. As a contractor, the design/builder is responsible for the replacement of defective work. The design/builder is similarly responsible for the consequential losses incurred as a result of defects in performance. Claims for damage to property and economic loss are not limited to defects in workmanship or deviation from accepted standards of performance. The consequential losses include foreseeable economic losses incurred by the owner/developer as a result of the failure to deliver a project which meets the owner's performance specifications.

2. Indemnifying Against the Risk of Loss

Indemnification provides a right of recovery against third parties who are responsible for the breach of performance obligations undertaken by the design/builder. The law recognizes a right of indemnification where performance by the indemnitor is total and the indemnitee is liable solely by reason of his or her status. The passive responsibility of the indemnitee and the active performance by the indemnitor allow full recovery by way of common law indemnification.

To enforce rights to common law indemnity, no active participation by the party seeking relief can have occurred. Any showing of an active role by the indemnitee defeats the claim. Thus, while the owner/developer may well preserve its common law right to indemnification by the design/builder, it is less likely that the design/builder can preserve its common law indemnification rights as respects the performance of its subcontractors and subconsultants.

An effective method for shifting the risk of loss to subcontractors and subconsultants is through the use of contractual indemnification clauses. The courts have recognized that parties to a construction services contract can agree as to which of them bears the risk of loss. Through the use of such clauses, the right of indemnity can be expanded to include situations in which both the design/builder and its subcontractor or subconsultant are actively at fault. The enforcement of such rights is subject to several limitations, however, and there may be differences in the coverage afforded under the insurance available to subcontractors and subconsultants which could affect the allocation of risk to each of them.

Some states have adopted anti-indemnification statutes which render contractual indemnity clauses void. The rationale behind these statutes is twofold: 1) to preserve the integrity of insurance regulations, and 2) to support a legislative policy of preventing a party who is totally at fault from imposing financial responsibility by contract onto the shoulders of others who are without fault. Anti-indemnification statutes in some states require a showing that the indemnitor undertook the performance obligation with respect to the loss incurred and actively contributed to the loss. Only then may an indemnitee recover for its own active contribution. Other states restrict the enforceability of indemnification provisions to the comparative or proportionate fault of the indemnitor.

Contractual indemnity clauses are strictly construed by the courts against the indemnitee. This strict construction is supported by the judicial policy of imposing financial responsibility on each party who has contributed to a loss in proportion to the degree of fault. The strict construction of indemnity clauses requires that care be exercised in drafting. Any ambiguities in interpretation will be resolved against the indemnitee ([Note 13](#)). The assistance of competent counsel can be invaluable here.

One objective of contractual indemnity is to remove the burden of the litigation process. Indemnity clauses which run in favor of the design/builder from subcontractors typically incorporate exceptions relating to the professional services exclusion contained in a subcontractor's general liability policy. The exclusion creates issues of fact which prevent enforcement of the hold-harmless and duty to defend provisions normally included in such clauses until completion of a trial on the underlying issues. The effect is to require the expense of discovery and trial preparation to be borne by the indemnitee (in this case, the design/builder). These expenses are most often absorbed in settlement negotiation of the underlying case.

Contractual indemnity clauses can be improved by requiring the indemnitor to front the cost of defense notwithstanding the factual issues involved. Appendix B contains an indemnification provision which attempts both to accomplish this result and to leave squarely in the court of the owner/developer the burden of the uncertain and the unforeseeable inherent in the performance of professional services. The enforcement of such a clause, as always, is subject to judicial interpretation, and the advice of counsel is recommended.

As respects indemnification running from subconsultants to the design/builder, most (but not all) professional liability insurers will refuse to stand behind that portion of an indemnity obligation which requires that the costs of defense be fronted by the subconsultant. All will refuse to stand behind indemnity obligations which extend beyond negligence in the performance of professional services. You will want to discuss these issues with an insurance broker who specializes in professional liability insurance for architects and engineers.

3. Insuring Against the Risk of Loss

The judicially preferred method of shifting the risk of loss is through the purchase of insurance. Insurance provides contractual indemnification by way of the coverage issued to the insured. The passive role of the insurer is irrelevant, as the contractual assumption of risk is the source of the insurer's business. Insurers provide a service to each industry served by facilitating risk sharing. While the courts will strictly construe indemnity clauses against the indemnitee, they will liberally construe the assumption of risk contractually assumed by an insurer in favor of the insured. This results from the insurance policy being perceived as a



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contract of adhesion and from the recognition that the insurer is in a better position to recognize and spread the risk of loss.

The design/builder should carry both professional liability (E&O) insurance and commercial general liability (CGL) insurance. Coverage generally is not available for the increased performance obligation running from the design/builder to the owner/developer. This increased performance obligation is consistent with the individual business risk excluded from both the professional and general liability coverage available to the design professional and the builder.

E&O policies provide coverage for professional performance, but not for the faithful performance of contractual obligations. The risks of the uncertain and unforeseeable inherent in design and traditionally retained by the owner/developer will be included within the increased performance obligation of the design/builder unless specifically transferred back to the owner/developer through appropriate contractual provisions. Alternatively, these risks can be retained. This is a decision which has implications as respects the expectation of profit to be derived from the project.

The E&O policy contains a number of exclusions which limit coverage to the designer's obligation to provide professional services. These include a contractual liability exclusion; warranty and strict liability exclusions; partnership and joint venture exclusions; an equity interest exclusion; an involvement in construction exclusion; a products exclusion; and an intentional acts exclusion. Each of these exclusions address liabilities which do not arise strictly as a result of negligence in the performance of professional services for which coverage is contemplated by the underwriters.

The partnership and joint venture exclusions are particularly relevant to the design/build process. Design professionals are often called upon to render design/build services through joint ventures, alliances, and other partnership arrangements. Joint venture coverage endorsements should be obtained from both CGL and E&O insurers in such situations (although some E&O insurers afford blanket joint venture coverage in their basic policy forms).

The E&O policy will cover all losses incurred as a result of negligence in the performance of professional services, including economic losses. CGL coverage excludes coverage for professional services and for pure economic losses, but generally provides coverage for bodily injury and property damage losses incurred as a result of the insured's business undertakings. It also affords coverage for consequential damages, including economic losses, which are triggered by covered bodily injury or property damage losses.

Further, the CGL policy will not cover the cost of replacing defective work or materials supplied by the builder. The policy contains standard exclusions which effectively bar claims for defective workmanship and materials. The language of the "insured's product" (Exclusion k), "work performed" (Exclusion l), and "business risk" (Exclusion m) exclusions is set forth in Appendix C. The combined effect of these exclusions is to exclude coverage for direct losses suffered from defective work. If, for example, the builder's wall falls down the CGL policy will cover the damage caused by the fall, but not the cost of replacing the wall.

When obtaining E&O coverage and CGL coverage, care must be taken to assure that the policies do not exclude design/build projects ([Note 14](#)). The projects, by their nature, increase the insured's exposure to

consequential losses resulting from breaches in performance. The projects further create a conflict amongst the carriers in fulfilling the duty to defend ([Note 15](#)).

The traditional process involves discreet entities separately insured by E&O and CGL coverage. The design/build process involves the same entity simultaneously insured by both E&O and CGL coverage. In addition to the question of the insured's deductible, an issue exists as to who controls the defense,

Claims arising out of design/build projects may or may not be covered by one or both policies of insurance, depending upon whether the loss results from professional negligence or defective workmanship or whether it contains elements of direct or consequential loss. The duty to defend the claims is concurrent until the nature of the loss and the particular obligation breached is factually resolved. This places the insured at risk for the deductible under the E&O policy, and it raises questions as respects the extent of participation from each carrier in any settlement. For these reasons, the insured should insist upon representation by personal counsel until the coverage issues are resolved.

4. Allocating the Risk of Loss

The design/build process should be viewed as the latest iteration in the building industry's struggle to avoid the risk of projects gone sour. The insurance industry has attempted to remove itself from the struggle by excluding coverage for the direct losses flowing from warranted breaches in performance. Designer's have attempted to avoid the risk by standardized reductions in their professional performance obligations. The design/build process reflects the owner/developer's attempt to shift this risk to the design/builder irrespective of fault. This at least provides the owner the assurance of best efforts on the part of the design/builder to perform the contract.

The design/build process provides the design/builder the opportunity to negotiate contractual allocations of risk with the owner/developer. This negotiation can be conducted prior to contract execution on negotiated proposals and after bid acceptance of competitively bid projects with an offered reduction in contract price. Contractual allocation of risk provides an opportunity for risk sharing by appropriately drafted risk allocation clauses.

Many standard provisions, such as unforeseen conditions clauses, damage for delay clauses, and liquidated damage clauses are already accepted by the industry. Additional risk allocation clauses are appropriate for the design/build project where liability is imposed without fault. No standard risk allocation clause is universally appropriate for design/build projects. Appropriate language can only be developed on a project by project basis by considering the unpredictable aspects of each particular project; the needs of the owner/developer; the financial risk to the design/builder; and the ability of the design/build entity to financially back its performance commitment.

Limitation of liability provisions should be used with care as overuse has probably resulted in the owner's rejection of traditional project delivery systems. They have typically included limitations as to the kind of losses warranted (disclaimers) and limitations as to the amount and nature of the remedy. A more intelligent limitation, one which serves both the design/builder and owner developer, would be to limit the exposure to the amount of insurance coverage obtained and available. An example of such a limitation is presented in Appendix D.

5. Avoiding the Risk of Loss

The design/build process presents the opportunity for the design professional to expand the market for professional services. Construction companies have taken the lead in the development of the industry and in forming design/build firms. This lead results in part from the design professional's past efforts to avoid exposure.

The design/build enterprise can be entered without increased personal exposure. The states are gradually allowing general business corporations to practice the design professions by obtaining appropriate certificates of authorization. The corporate form insulates the officers and employees from contractual responsibilities which do not flow from a breach of the professional performance obligation. This same corporate form has allowed the construction contractor to flourish without coverage for his warranted obligations.

In those states where the design/build process is a legitimate business enterprise, the design/build firm should incorporate. The corporate veil can be pierced exposing its owners to personal liability if corporate formalities are not followed or if the corporation is not sufficiently capitalized. Care should be exercised by the design professional in establishing a business corporation. Once again, the advice of competent counsel is recommended.

The increased risks presented by the design/build process requires greater care in personal asset management. Consideration should be given to the irrevocable disposition of assets placed in trust to fulfill personal obligations such as children's educational trusts, separate retirement accounts for husband and wife, etc. Personal asset management should be practiced independently of any considered liability as attempts to avoid financial obligations are subject to the fraudulent conveyance acts as adopted by the various states.

The most effective method of avoiding the risk of loss is to develop a program for loss prevention. The design/builder must maintain a high level of competence in order to compete for a variety of projects. The design professional lacking experience in construction should consider merger first with construction management personnel and then with reputable construction companies as a means of assuring competence. Success requires a broader range of learning and experience than either the designer or builder possesses independently. The disciplines must merge to provide value engineering at a profit. Effective quality control requires internal control procedures and a network of outside consultants available to assist in the delivery of the project.

Conclusion

The design/build process is preferred by owner/developers as a project delivery system. It reflects the changing role and obligations which must be assumed by the design professional to compete in the post industrial era. Although builders have assumed the lead role in advancing the process, removal of the legal restraints previously imposed upon the professions will ultimately provide the design professional with a competitive advantage. The design/build process will continue to evolve as the new profession for architects and engineers.

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Endnotes

1. The demise of modern professionalism is described in *The Third Wave*, by Alvin Toffler, Bantam Edition, at page 262, as follows:

"Society is also taking a hard look at Second Wave specialization and professionalism. The Second Wave code book put experts on a towering pedestal. One of its basic rules was "Specialize to succeed." Today, in every field, including politics, we see a basic change in attitude toward the expert. Once regarded as a trustworthy source of neutral intelligence, specialists have been dethroned from public approval. They are increasingly criticized for pursuing their own self-interest and for being incapable of anything but tunnel vision. We see more and more efforts to restrain the power of the expert by adding laymen to decision-making bodies-in hospitals, for example, and many other institutions.

2. In 1995, design/build projects comprised 29% of the construction market. Predictions estimate the market share will reach 49% by the turn of the century and 80% within the next ten years. *Design Build Predictions for 1995 and Beyond*, "Design Build Strategies," Practice Management Associates, Ltd. 1995.

3. The diminishing role of the architect can be traced by examining the evolution of AIA document B141, the standard form of agreement between owner and architect. The standard agreement is scheduled for revision in 1997.

4. A seminal case for the imposition of strict liability is *Schipper v. Levitt & Sons*, 44 NJ 70, 207 A.2d 314 (1965).

5. The warranty basis of the design/builder's liability is discussed in *Kishwaukee Community Health Services Center v. Hospital Building and Equipment Company, et. al.*, 638 F.Supp 1492 (E.D.Ill., 1986). The court observed that design/build is a package situation which relates the professionals service to a product. Since the plaintiff developer's expectations were for a final product, its remedies should be product-oriented and thus lie in the contract/warranty area.

6. *S&D Mechanical Contractors, Inc. v. Enting Water Conditioning Systems, Inc.*, 71 Ohio App. 3d 228, 593 N.E.2d 354 (Ohio 1991). The distinction between a design and a performance specification is further described in *Dillingham Construction N.A., Inc. v. United States*, 33 Fed.Cl. 495, 500 (1995), as follows:

"In general, specifications are divided into two categories: design specifications, and performance specifications. The difference between design and performance specifications is well settled. Design specifications 'describe in precise detail the materials to be employed and the manner in which the work is to be performed' *Blake Constr. Co. v. United States*, 987 F.2d 743, 745 (Fed. Cir. 1993) (quoting *J.L. Simmons Co. v. United States*, 412 F.2d 1360, 1362, 188 Ct.Cl.684(1969)). They afford no discretion to the contractor, which is 'required to follow them as one would a road map.' [cite omitted]. Performance specifications, however, 'set forth an objective or standard to be achieved, and the successful bidder is expected to exercise his ingenuity in achieving that objective or standard of performance, selecting the means and assuming a corresponding responsibility for that selection' [cite omitted]. "

7. *Dillingham*, supra, at 501 states: "...the existence of performance specifications is not incompatible with the inclusion of design specifications. A contract may contain design specifications, performance specifications, or a mixture of both... the terms 'performance specification' and 'design specification' are merely labels that help describe the degree of specificity contained by a contractual provision.... they do not 'independently create, limit, or remove a contractor's obligations. It is the obligations imposed by the specification which determine the extent to which it is 'performance' or 'design' not the other way around....to determine the obligations the specifications impose, the court must look to the specifications themselves. "

8. In addition to the expanded market of construction related activities, the design/builder, as part of the value engineering services delivered, becomes intimately familiar with the internal business functions of his client. Successful completion of a project creates a lifetime client requiring services relating to facility upgrades and life-cycle costs. *Design/Build Predictions*, supra, Note 2

9. In the traditional construction process the owner/developer impliedly warrants the adequacy of the plans and specifications. This warranty does not arise in a design/build setting. The design/builder is expected to exercise his own expertise in attaining the objective. *Sterling Millwrights, Inc. v. United States*, 26 Cl.Ct. 49 (Ct. Cl, 1992); *Aleutian Constructors v. United States*, 24 Cl.Ct. 372 (Ct. Cl. 1991).

10. The professional independence of the design professional is mythical. The dissent in *Charlebois* assumes the design professional's retention by the owner limits the professional's profit motive. Direct retention impels the designer to over design rather than find the optimal design for a project. The design/build process restrains design excesses by exposing the value of the designer's services to free competition.

11. The standardized agreements allowed phased participation in the design/build project. The parties first agree on developing a preliminary design for fixed compensation. The parties then negotiate the second phase of the project involving final design and construction. The Phase I agreements provide that the design/builder retain title to the preliminary design. In effect, the owner/developer is paying the design/builder for the preparation of a bid.

See *Irwin Industries Canada, Ltd., v. United States Air Force*, 924 F2d 1068 (D.C. Cir., 1990): The U.S. Air Force has developed a two step bidding procurement process. Step 1 requires bidders to submit a technical proposal for the purpose of determining the acceptability of the supplies or services offered, i.e., whether the bidder conforms to the performance requirements. Step 2 allows those bidders who conform to submit sealed bids. The two step process reduces the cost of bid preparation by reducing the competition for the final phase of bidding, thereby increasing the chance of obtaining the project.

12. See *General Engineering Corporation v. Virgin Islands Water and Power Authority*, 636 F.Supp. 22 (D.V I 1985). Bidding statutes have the dual purpose of providing construction contractors a fair forum for the review of their proposals and of assuring the efficient expenditure of public funds. Statutory exceptions to public bidding requirements include emergencies, repair contracts, contracts for professional or financial services, and projects where prices are not competitive.

Two approaches are taken in reviewing whether a project is an appropriate exception to the public bidding statutes. the liberal approach looks to see whether the project advances the public interest *Waste Management, Inc. v. Wisconsin Solid Waste Recycling Authority*, 84 Wisc. 2d 462, 267 N.W. 2d. 659(1978). The strict approach requires that bidding statutes be strictly construed in favor of public bidding *Autotote, Ltd. v. New Jersey Sports & Exposition Authority*, 85 NJ 363, 427 A.2d 55 (NJ 1981).

13. See *Playskool v. Elsa Benson, Inc.*, 147 Ill. App. 3d 292, 497 N.E.2d 1199 (Ill. 1986). Common law indemnity was not allowed where the indemnitee's obligation was to design and build. Contractual indemnity clause was not enforced because of poorly constructed indemnification clause.

14. Most professional liability policies currently available to architects and engineers exclude involvement in construction. Some can be endorsed to modify or remove this exclusion. As of the time of this writing, only a few insurers offer a basic design/build policy for architects and engineers. Even fewer offer a contractor's design/build policy for entities which derive the bulk of their revenues from contracting operations. As is the case under the CGL policy, faulty workmanship is generally excluded from design/build E&O coverage.

The design/builder's performance warranty is similar to the warranty of good workmanship for which the cost of replacement and repair is excluded from the CGL policy. This is not likely to change, at least not in the foreseeable future. To the extent that the performance warranty extends to the design of the project, and in many cases you can expect that it will, there is coverage under design/build E&O policies for negligence in the performance of professional services. There is no coverage under those policies, absent professional negligence, for the promise that the owner/developer's performance specifications will be met on time, at the promised cost, or even at all.

15. See *United States Fidelity & Guarantee Company v. Continental Casualty Company*, 153 Ill. App. 3d 185, 505 N.E.2d 1072 (Ill. 1987). USF&G issued a multi-peril policy to a design/builder excluding coverage for injuries arising from professional services. Continental insured the design/builder for professional errors and omissions. Control of the job-site was contractually described as a professional service. The court observed the architect was owed a defense under a reservation of rights by both carriers.

Appendix A

STANDARD DESIGN/BUILD DOCUMENTS

AIA Documents

A191	Owner/Design-Builder-Preliminary Owner/Design-Builder-Final
B901	Design-Builder/Design Professional
A491	Contractor/Subcontractor

AGC Documents

400	Owner/Design-Builder-Preliminary
410	Owner/Design-Builder-Final
415	General Conditions
420	Professional Design-Builder/Design
440	Change Order
450	Contractor/Subcontractor-Fixed Price
460	Contractor/Subcontractor-Cost Plus
490	Commentaries

EJCDC Documents

1910-40	General Conditions
1910-40-A	Owner/Contractor-Fixed Price
1910-40-B	Owner/Contractor-Cost Plus
1910-40-A/B	Owner/Design-Builder-Final
1910-41	Design-Builder/Design Professional
1910-42	Commentaries
1910-43	Owner/Design Professional
1910-48	Subcontract General Conditions
1910-48-A	Contractor/Subcontractor-Fixed Price
1910-48-B	Contractor/Subcontractor-Cost Plus

Appendix B

INDEMNIFICATION

A. The Owner shall indemnify, defend and otherwise hold harmless the Design/Builder, his agents, servants, and employees from and against any and all claims, damages, losses and expenses incurred, including attorney's fees, caused by or resulting from the services provided by the architect, his agents,

servant, or employees pursuant to this contract, other than those caused by the sole negligence of the Design/Builder, his agents, servants or employees arising either out of:

1. the preparation or approval by the architect of maps, drawings, opinions, reports, surveys, change orders, designs or specifications, or
2. the giving of or the failure to give directions or instructions by the Design/Builder, his agents, servant or employees; providing the giving or failure to give is the cause of the damage, claim, loss or expense.

B. The Owner's obligation to indemnify, defend and otherwise hold harmless the Design/Builder, his agents, servants and employees as provided in the preceding paragraph A shall arise, without demand, upon the occurrence of events upon which a claim against the Design/Builder, his agents, servants, or employees can be made. The Owner shall advance all costs to indemnify, defend and hold harmless the Design/Builder, his agents, servants, or employees notwithstanding the exception as contained within the preceding paragraph A subject to a right of reimbursement which may be asserted when the indemnity obligation does not apply. The right of reimbursement must be asserted in a separate action against the Design/Builder, his agents, servants, or employees pursuant to the dispute resolution procedures, if any, outlined in this Agreement.

Appendix C

STANDARD CGL WORKMANSHIP AND MATERIALS EXCLUSIONS

ISO Commercial General Liability Insurance Form (1988)

(k) Property damage to your product arising out of it or any part of it.

(l) Property damage to your work arising out of it or any portion of it and included in the products-completed operations* hazard.

This exclusion does not apply if the damaged work or the work out of which the damage arises was performed on your behalf by a subcontractor.

(m) Property damage to impaired property** or property that has not been physically injured, arising out of:

1. A defect, deficiency, inadequacy or dangerous condition in your product or your work; or
2. A delay or failure by you or anyone acting on your behalf to perform a contract or agreement in accordance with its terms.

This exclusion does not apply to the loss of other arising out of sudden and accidental physical injury to your product or your work after it has been put to its intended use.

*Defined term. See policy for details.



ProNet Practice Notes

**Impaired property means tangible property, other than your product or your work, that cannot be used or is less than useful because:

- a. It incorporates your product or your work that is known or thought to be defective, deficient, inadequate or dangerous; or
- b. You have failed to fulfill the terms of a contract or agreement; if such property can be restored to use by:
 - a. The repair, replacement, adjustment or removal of your product or your work; or
 - b. Your fulfilling the terms of the contract or agreement.

Appendix D

LIMITATION OF LIABILITY

A. The liability of the Design/Builder, his agents, servants and employees and losses incurred by reason of breach of this agreement or by reason of his errors or omissions, negligence, or otherwise is limited to the amount of insurance coverage available to the Design/Builder, his agents, servants and employees to cover the loss.

B. The Design/Builder has obtained at his own cost and expense the usual professional errors and omissions coverage within the usual limits and subject to the usual conditions and exceptions to coverage as is ordinarily carried by his business. The Design/Builder has further obtained the additional insurance coverages outlined in this agreement. The Owner may direct the Design/Builder to obtain additional insurance other than as outlined above. The costs of such additional coverage shall be paid by the Owner to the Design/Builder as an additional cost prior to the Design/Builder obtaining such coverage.