

I. PROJECT DELIVERY METHODS

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The form of project delivery, as well as the form of contract utilized, can have a significant effect on the risk of claims faced by the project participants.

A. Introduction

1. The Basic Elements of a Contract. A contract is a promise, or a set of promises, to which the law attaches a legal obligation. See *Cedarstrand v. Lutheran Brotherhood*, 117 N.W.2d 213 (Minn. 1962); *In the matter of Anderson*, 565 N.W.2d 461, 464 (Minn. Ct. App. 1997). In the construction contract, a bid is an offer, the acceptance of which forms a contract. In order to be enforceable, a contract must contain the following essential elements:

1. There must be an offer and an acceptance and, more generally, a manifestation of mutual consent to the formation of a contract. This element has sometimes been referred to as a "meeting of the minds." See *Minneapolis Cablesystems v. City of Minneapolis*, 299 N.W.2d 121 (Minn. 1980); *VeerKamp v. Farmers Coon. Creamery of Foreston, Minn.*, 523 N.W.2d 7153 717 (Minn. Ct. App. 1998).

2. There must be consideration exchanged. See *Cedarstrand*, *supra*.

3. The parties to the contract must be legally competent. This requires that they be mentally capable of understanding the nature and effect of the contract entered into.

4. The purpose of the contract must be legal. See *ACLI Int'l Commodity Services v. Lindwall*, 347 N.W.2d 522 (Minn. Ct. App.), *vacated in part, on other grounds*, 355 N.W.2d 704 (Minn. 1989).

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Although the absence of any of the above may lead to possible avoidance of the contract, courts usually uphold contracts and are hesitant to set aside a contract on purely technical grounds.

2. Oral Contract. An oral contract may be as valid as a written one, as long as it complies with both the basic elements of contract formation and with the requirements of the statute of frauds. *See* Minn. Stat. § 513.01.

3. Implied Contract. Even in the absence of an express written or oral contract, Minnesota courts have long recognized that the doctrine of implied contract may bind the parties. A contract implied in fact is one inferred from the circumstances or conduct of the parties. *See Gryc v. Louis*, 410 N.W.2d 888 Minn. App. 1987); *see also Upsher-Smith Lab., Inc. v. Mylan Lab., Inc.*, 944 F. Supp 1411, 1433 D. Minn. 1996); *Denmar Constr. Co. v. American Ins. Co.*, 290 N.W.2d 737 (Minn. 1979) (bid bond surety held to its implicit contract to issue final bonding on construction project). Express contracts and contracts implied in fact have the same legal effect, and the only difference between them is the way in which the parties manifest assent. *See Balafas v. Balafas*, 117 N.W.2d 20 (Minn. 1962); *Mjolsness v. Miolsness*, 363 N.W.2d 839, 842 (Minn. Ct. App. 1985). In the absence of an express contract, a contractor may recover on an implied contract theory for the reasonable value of its work to the extent of benefits conferred by it upon the owner in the performance of the work. *See Williams v. National Contracting Co.*, 160 Minn. 293, 199 N.W. 919 (1924); *Fargo Foundry Co. v. Village of Callaway*, 148

Minn. 273, 181 N.W. 584 (1921); *Olsen v. I.S.D.*, 175 Minn. 201, 220 N.W. 606 (1928); *First National Bank of Goodhue v. Village of Goodhue*, 120 Minn. 362, 139 N.W. 599 (1913). "Reasonable value" usually means actual incurred costs plus profit unless the owner proves such costs to be unreasonable or without benefit. *Lane Minnesota Co. v. Town of Stuntz*, 257 N.W.2d 295 (Minn. 1977); *Bruce Constr. Corp. v. United States*, 324 F.2d 516 (Ct. Cl. 1963).

4. Types of Written Construction Contracts. Traditionally, there have been three basic types of contracts in the construction industry: the fixed price contract, the cost plus contract, and the unit price contract.

a. Fixed price contracts. A fixed price contract, generally awarded through the competitive bidding process, has the advantage from the owner's perspective of providing a limit to its construction costs. Such a contract usually sets forth a stipulated sum for the work to be completed, and is suitable for most projects.

b. Cost plus contracts. Under this contractual arrangement, the contractor is paid the cost of work plus a fee, which may be a stipulated amount or a percentage of the construction cost. These contracts often contain a guaranteed maximum price, with a mechanism for distribution of savings below the guaranteed maximum price. From the owner's perspective, a fixed fee is preferable to a fee equal to a percentage of costs because a fixed fee gives the contractor an incentive to reduce costs.

c. **Unit price contracts.** This type of contract provides for payment to the contractor based upon, for example, linear feet of underground piping installed or cubic yards of mass rock to be excavated. Thus, this type of contract has a particular utility in the context of heavy construction projects where estimated quantities will only rarely bear substantial resemblance to final quantities.

The advantages and disadvantages of these three types of contracts are discussed in Fogel, Selecting The Right Plant Construction Contract, *Plant Engineering*, (April 17, 1975); See also, *Harvard Business Review*, March-April, 1989, p. 159.

B. STANDARD FORM CONTRACTS.

1. The Impact of the Construction Contract.

The construction contract allocates construction risks and responsibilities among owner, designer, and contractor. Indeed, the most significant provisions in the construction contract may be those which allocate the risks associated with a project. For this reason (among many others), the contract documents must be read with great care. A casual review of the language of the general and special conditions, the specifications, and other contract documents is inadequate.

This is true even when the project may appear to be merely routine and when the documentation, upon casual review, appears to cover familiar ground. Indeed, careful review of all contract documents is imperative because burdensome contracts signed by experienced businessmen are not lightly

changed or set aside, and courts assume that businessmen charge a consideration for the risks they accept in their contracts. Unfortunately, however, hungry contractors (and their counsel) have been known, in their haste to be the low bidder) to ignore tough contract terms imposed by bid documents and not to price significant risks. Contractors must always bear in mind the admonition of a prominent surety executive:

Historically, construction contract terms have been drafted by the owner without an input by contractors. Far too often, the contract is in favor of the owner, which creates serious problems for contractors and their sureties. Contractors are forced, because of these unfair terms, into an adversary position with the owner. Many public and private owners impose liability on the contractor for the owner's negligence, the engineer's mistakes or even for injury to third parties by reason of the contractor's assuming the job. Some owners do not give the contractor a time extension for conditions beyond his control while others have awarded not-to-be exceeded lump-sum jobs for dams and tunnels. Many underground and subsurface foundation jobs contain no changed conditions clauses. Many of these agreements say the contractor cannot rely on the owner's representatives and must be responsible for any surprises he finds underground. He does not get relief if the conditions are not as described. Sometimes, the contractor goes broke or he ends up in a lengthy lawsuit. In the meantime, his business can be badly damaged.

Burgoon, "Risky Issues for Contracts," Highway and Heavy Construction Magazine (March 1978).

2. Widely Used Standard Forms.

a. **Owner-Contractor Agreements.** The most frequently used owner-contractor agreements today are those published by (1) the American Institute of Architects (Documents A101 and A111, supplemented by General Conditions Document A201) and (2) the Engineers' Joint Contract Documents Committee (EJCDC), comprised of the National Society of Professional Engineers, American Consulting Engineers Council, The American Society of Civil Engineers, and The Construction Specifications Institute (Document 1910-8-A-1 or 1910-8-A-2, and General Conditions Document 1910-8 (1996 editions)).

b. **Architect-Engineer Agreements.** The most frequently used architect-engineer agreements are (1) AIA Form C141 (1997 ed.) (Architect Consultant Agreement), and (2) EJCDC Form 1910-10 (1996 ed.) (Engineer-Architect Agreement).

c. **Design Professional-Owner Agreements.** The most frequently used design professional-owner agreements are (1) AIA Form B141 (1997 ed.) (Owner-Architect Contract) and (2) EJCDC Document 1910-1 (1996 ed.) (Owner-Engineer Contract).

d. **The Contract Conditions.** Construction contract terms, particularly in competitive bidding situations, are dictated by the owner or its architect or engineer. Today the most widely encountered construction terms are the General Conditions of the Contract for Construction (AIA Document A201 (1997 ed.)) and The Engineers Standard General Conditions of the Construction Contract

(EJCDC1910-8, 1996 ed.). In addition to or in modification of these General Conditions, owner and design professionals regularly "handcraft" their own special or supplementary conditions which may alter customary risk allocations considerably.

e. **Subcontractor Agreements.** In Minnesota the predominate form of contractor-subcontractor agreement is that published by the Associated General Contractors of Minnesota.

3. **The Pricing Mechanism.** Most construction contracts are priced on one or more of the following bases:

a. **Fixed Lump Sum Price.** The contractor receives a fixed sum for completion of the contract. This fixed sum may be adjusted for such things as owner changes in the work, differing site conditions, suspensions or delays, defective specifications, etc.

b. **Fixed Unit Prices.** The contractor receives a fixed sum for each unit of work completed. Because the units are not fixed, contracts may provide for renegotiation of the unit price for substantial variations in unit quantities from estimated quantities. For example, paragraph 11.9 of the Engineers General Conditions provides:

11.9 Where the quantity or Work with respect to any item that is covered by a unit price differs materially and significantly from the quantity of such Work indicated in the Contract Documents, an appropriate Change Order shall be issued on recommendation of Engineer to adjust the unit price.

c. **Cost Plus a Fee.** The contractor receives its actual "cost of the work plus a fee for overhead and profit." Definitions of "cost" (such as in AIA document A111) include the contractor's direct job-site costs. Agreement on cost definitions is essential to avoid disputes over allocation of items to reimbursable cost or to fee. Since an open "cost plus" arrangement is in effect a "bank check," cost controls and audits are essential. Fees may be negotiated either as a fixed lump sum or as a percentage of cost. The latter encourages the contractor to spend more to increase its fee. *Bank v. Schrupp*, 375 N.W.2d 48 (Minn. App. 1985).

C. **Design-Bid-Build**

The "traditional" form of project delivery. In the classical form, the Architect/Engineer (A/E) works alone with the Owner from conceptual design through construction documents. The Owner (usually with the A/E's assistance) then takes the completed documents and obtains competitive, lump-sum or unit price bids from general contractors. This process is usually required on public jobs.

Advantages: Allows the A/E (in theory) to complete the documents without interruption for "value engineering" or "packaging". Works well for relatively simple, straightforward projects where the scope of work is clear, or where the contractor's scope can be defined in terms of quantities.

For the Contractor, the risk of claims is, in theory, lower because it only has to price what is shown on the contract documents and anything subsequently required that is not shown on the contract documents will be treated as a change.

For the owner, in theory this method of project delivery ensures the lowest possible cost and offers a reasonable degree of certainty that there won't be overruns in budget or schedule.

Disadvantages: The A/E is left alone to prepare cost estimates throughout design, a task for which the A/E may be ill-suited.

As for the contractor, because competition is solely on the basis of price, resulting in extremely tight margins, contractors are strongly incited to look for changes during construction, and to capitalize on ambiguities in the documents. Moreover, unless contractors are pre-qualified (see below), this method of project delivery may attract weaker contractors. Design-Bid-Build frequently does not work well on complex projects or jobs with tight schedules.

The advantages to the owner described above are indeed more theoretical than practical. Since the Owner warrants the adequacy of the contract documents when they are issued to the contractor, the owner may be left "holding the bag" if there are ambiguities in the documents. This is because the A/E's standard of care does not require the A/E to prepare a perfect set of documents. Thus, even if ambiguities in the documents make the owner liable to the contractor for a

breach of the warranty of adequacy, the owner might not be able to recover from the A/E if those ambiguities do not rise to the level of a breach of the standard of care.

Risk Level: Moderate to High. The good news is that the parties' respective responsibilities are well defined by the AIA and EJCDC documents, and by industry practice. The bad news is that some (by no means all) contractors know how to exploit the system to their advantage.

Variations:

- **Multiple Prime Contractors.** Required by law on public jobs in some states (*e.g.*, New York), this method requires major trades to be bid separately. The documents are usually broken into discrete packages, resulting in a significantly higher possibility of coordination errors. Typically, the contractor bidding the "general construction" package is required to coordinate the construction; but often, the Owner manages the work itself. Because of the usual lack of a single-source coordinating entity which has the power to coordinate all the work, this method of construction has a fairly high incidence of claims.
- **Pre-Qualified Bidders.** Requires contractors (or particular subcontractors) bidding on the project to be qualified by experience or financial capacity. Used, for example, on projects involving fabrication and erection of long-

span steel roof structures to ensure the steel contractors have the requisite experience. Subject to statutory requirements, this method may be used on many public jobs. The risk level is moderated somewhat, because the pre-qualification process theoretically eliminates some of the weaker contractors.

- **Design-Negotiate-Build.** After the documents are completed, they are turned over to one or more pre-qualified contractors, who may or may not have been involved during the design process, and a process of negotiation begins. The risk level is moderated somewhat, because the contractors are pre-selected and (theoretically) have had a chance to study the documents. However, the risk may be increased if the Owner “goes it alone” in negotiations with the contractor. All parties, including the A/E, should be involved in, or at least kept well-informed of, the negotiations.

D. Construction Manager as Agent.

This form of project delivery became popular in the early 1980s, when high interest rates created an incentive for Owners to seek a project delivery system which could (in theory) allow for quicker completion of the project. In this format, the CM acts as the Owner’s agent in estimating the project’s cost, scheduling the work, buying the job out, and administering the construction.

Advantages: In theory, the A/E is usually relieved from the task of estimating the project’s cost, a task for which most A/E’s are ill-suited. The CM

can assist the A/E during the design phases by making suggestions which will reduce procurement time, increase constructability, and accelerate the schedule. In addition, the A/E is relieved from many of its traditional tasks during construction, and contractor claims are filtered through the CM. Properly structured, with an experienced and professional design and construction team, an agency CM form of project delivery can work well for complex projects having tight schedules.

As for the owner, in theory the agency CM approach gives the owner the advantage of having a professional team member “on its side” protecting the owner’s interests in keeping the job within budget and on schedule.

Contactors may find their risks reduced since they are no longer primarily responsible for scheduling and coordination.

Disadvantages: In practice, many A/Es believe that CM increases the cost of performing their services, rather than decreasing it, because of the significantly greater amount of paperwork generated by the CM process and the repeated “value engineering” exercises the A/E is required to engage in. In addition, the tendency of CMs to “package” the work in ways that may seem strange or unusual to A/Es can result in coordination problems in the documents. These coordination issues are exacerbated if the project proceeds on a “fast-track” basis, where major portions of the project can be under construction when other portions are still in design. Finally, the injection of a CM

into the construction process can insulate the A/E from what is actually going on out in the field, with the result that the A/E is often surprised to find out that relatively minor changes in the work during construction can result in major claims after the work is done.

Owners, many owners are surprised to find that the typical agency CM contract doesn't make the CM responsible for much of anything, and indeed the owner may be saddled with the CM's actions in claims brought by the contractors.

Risk Level: *High*. Although the theory of agency CM suggests that a professional CM should be able to minimize claims, in practice agency CM has resulted in a significantly higher risk of claims against A/Es and owners. The reasons for this can be debated, but the main issue seems to be a lack of clear definition of the parties' respective responsibilities, and a lack of communication among project participants.

Variations:

- **Project Management/Program Management.** Really another name for agency CM, but in these types of projects the "project manager" essentially serves as the owner's representative for all design and construction issues.

E. Construction Manager as Constructor.

This method of project delivery is similar to the “design-negotiate-build” format. However, on these types of projects a single contractor is typically pre-selected, based on qualifications, early in the design process and (in theory) sits shoulder-to-shoulder with the A/E during the design process making suggestions regarding cost and constructability. The contractor provides cost estimates throughout the design process and, at some point prior to completion of the construction documents, submits a “guaranteed maximum price” (GMP) proposal. The GMP proposal is based on a scope of work outlined in the preliminary design documents, and usually proposes that the contractor be reimbursed for the cost of the work, plus a pre-determined fee, up to a maximum. Because of the incomplete nature of the design, contingencies and allowances are included in the GMP and the contractor is expected to build the job within the GMP limits, unless there is an owner-directed scope change.

Advantages. In theory, these types projects lead to a collaborative effort among the Owner, A/E, and contractor in developing the project’s design and in ferreting out any problems with the documents. The owner’s risks are minimized, and the quality of the A/E’s documents is improved by the contractor’s participation in the design phases, and the contractor has better control over the scope development and therefore faces less price risk. This form of project delivery is useful in complex projects where a single source of responsibility for schedule and project cost is desirable.

Disadvantages. If the preconstruction process is not properly run, or if the projects participants are mismatched, CM-as-constructor projects can combine the worst elements of design-bid-build and agency CM projects. The author is familiar with one project where a CM-as-constructor took the A/E's schematic design documents and used them to buy out the work and enter into subcontracts.

Risk Level: *Low to Moderate.* For the right project, a CM-as-constructor approach can minimize risks to all project participants. The owner needs, however, to make sure that the preselected contractor is "at the table" from the early design stages onwards, and that "value engineering" is strictly controlled.

F. Design/Build.

There are many variations on design/build, and how the process is structured can have a significant effect on the risks faced by the project participants.

In general, although it can be said that the theoretical risks faced by the A/E in a design/build setup are high (due in large part to the unsettled state of the law with respect to the A/E's participation in the contractor's warranties) as a practical matter, participation in design/build work has led to fewer claims against A/Es rather than more.

This is not to say that design/build is a panacea, suitable for every project. Rather, design/build seems to be a method of project delivery that can result in a

reduction in the number and severity of claims. Whether this benefit outweighs some of the disadvantages of design-build – for example (in contractor-led design/build) the perceived loss of quality and the A/E’s distance from the Owner – can only be determined by reviewing the needs of a particular project and the strengths or weaknesses of project participants.

G. Fast-Track Project Delivery.

“Fast-Track” construction is not really a separate method of project delivery; it can be grafted onto any of the methods discussed above.

Basically, fast-track refers to a method of design, procurement, and construction whereby the design and procurement efforts are broken into phases. Earlier phases of the project – typically, excavation, foundations, and structural work – are bought out as soon as the design for those elements is complete and before the design for the later phases (such as M/E/P, fenestration, etc.) is complete.

The advantage of fast-track construction is that the owner may achieve occupancy much earlier than under traditional procurement methods, where the design is completely finished before the job is bought out. This minimizes the owner’s construction financing costs, and may also be useful in other circumstances where occupancy at the earliest possible date is a paramount consideration.

However, a fast-track procurement method frequently results in a higher incidence of claims, since inevitably the phases that are designed later in the process are not fully coordinated with the earlier phases. For example, the M/E/P design may be completed several months after the foundation package has been bought out. If there have been no changes in the mechanical design since the early design stages, few problems will result; however (as is almost always the case), if there have been changes to the mechanical design this may result in the contractor having to move, in the field, the utilities serving the upper portions of the building.

The risk of claims resulting from a fast-track procurement method is very high. The risk can be moderated somewhat if the parties carefully coordinate their respective responsibilities, if value engineering is performed early on in the design, and if the owner carries an adequate contingency to cover the inevitable cost of coordination field changes necessitated by phased completion of the design.