THE NEWEST OF THE NEW
AIA'S INTEGRATED PROJECT DELIVERY AGREEMENTS

BY

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Introduction

Imagine a world without Requests for Information issued during construction. Imagine a world without conflicts within the design drawings; where every pipe, duct and conduit fit within the area in which they are to be installed; where change orders relate only to scope changes ordered by the owner; where the architect and constructor work together to solve problems instead of pointing fingers to avoid liability; and where the project participants pursue monetary incentives based on owner's needs. Welcome to the world of Integrated Project Delivery.

What is Integrated Project Delivery?

In November 2007, the American Institute of Architects, in collaboration with the AIA California Council, published a document called "Integrated Project Delivery: A Guide." The Guide is the first and most comprehensive description of a project delivery approach called "Integrated Project Delivery." The Guide defines Integrated Project Delivery as follows:

> "Integrated Project Delivery (IPD) is a project delivery approach that integrates people, systems, business structures and practices into a process that collaboratively harnesses the talents and insights of all participants to optimize project results, increase value to the owner, reduce waste and maximize efficiency through all phases of design, fabrication and construction."

This approach is in sharp contrast to the more traditional methods of project delivery, such as design-bid-build, design-build, and construction management, among others. While each one of

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these more traditional methods includes some degree of collaboration, none includes the degree of collaboration envisioned by Integrated Project Delivery.

Why did AIA propose a new system for project delivery? As the Guide points out, governmental data, both in this country and abroad, demonstrates that a very significant portion of the cost incurred in construction results in complete "waste."[2] In the United States alone, as much as 30% of the total construction cost is consumed by waste, with no value to the project.[3] The Guide also points out that the construction industry is the only significant industry in the United States which has shown a *decline in productivity* in the past few decades.[4] These statistics are simply unacceptable. A new approach is necessary and, due to the advent of new technology, is now available.

What is the new technology? The Digital Model. With the use of new digital programs tailored to the construction industry, it is now possible to almost build a building "virtually" before the first shovel of dirt is moved at the site. The "virtual building" can incorporate all traditional design elements, as well as the specialty contractor's shop drawings and submittals. Thus, the model allows the user to substitute components immediately after pressing the "enter" button. The aesthetics of the substituted product are seen visually in the model; the adjacent components are resized; and all components are immediately measured or counted.

The most efficient and effective use of an electronic model requires the key participants—the architect, key engineers, the contractor, key specialty contractors and others—to each participate during the design phase of the project, so that many of the activities which traditionally occur after construction begins, are now incorporated into the design documents during the preconstruction phase.

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[2] Guide at page 3.
[3] Id.
[4] Id.

The AIA Response

Upon recognizing the potential advantages of Integrated Project Delivery, the AIA published the Guide to familiarize the industry with the key concepts underlying this new method of project delivery. The Guide, however, did not provide the necessary tools to implement this new approach. For this reason, the AIA's Board of Directors charged the AIA Documents Committee with creating agreement forms to allow construction industry participants to obtain the benefits that this delivery method is intended to provide.

In response, the Documents Committee has created two types of agreements to implement this mandate. One, presenting a transitional approach to integrated project delivery, consists of four documents: A295™–2008, General Conditions of the Contract for Integrated Project Delivery; B195™–2008, Standard Form of Agreement Between Owner and Architect for Integrated Project Delivery; A195™–2008, Standard Form of Agreement between Owner and Contractor for Integrated Project Delivery; and a GMP Amendment to A195–2008. The second, and most novel of the two types, presently consists of one agreement entitled C195™–2008, Standard Form Single Purpose Entity Agreement for Integrated Project Delivery. All of these new documents will be published and available to the public on May 15, 2008.

A. The "Transitional Forms"

The transitional forms contain many concepts familiar to the users of AIA documents, particularly those of the Construction Management Family. There is an owner-architect agreement form; a separate owner-contractor agreement form; and a "general conditions" document, which defines the responsibilities of each participant.

The two agreement forms are relatively short and to the point. Most of the provisions relate to the amount and timing of payment for the preconstruction and then the construction

phases of the project. There are the normal termination provisions, suspension of work provisions and the rights to intellectual property created during the project. The basic services and relationships created among the parties, however, are not found in the agreement forms themselves, but rather in A295, the general conditions document. A295 forms the cornerstone for the transitional forms and distinguishes them from those associated with the more traditional methods of project delivery.

As you may have inferred, A295 is evolutionary and not revolutionary—it is essentially a three party set of general conditions, with the duties of all three participants integrated in each phase of the project. The first major change is that the phases of design are contained in a document which also contains the general conditions for construction. For those familiar with A201, General Conditions of the Contract for Construction, the rights and duties of each of the participants are set forth in separate Articles within the document—for example, the owner's duties are set forth in Article 2, the contractor's activities are in Article 3, and the architect's administration duties are set forth in Article 4. A295 has an entirely different arrangement.[5] For each of the "phases" of activities, the duties of each of the three participants are integrated and defined. As a result, each participant can determine that participant's duties during any specific phase by reading the text relating to that phase.

In addition the names of the phases during design have changed. No longer is there a schematic design phase; a design development phase; or a construction documents phase. Rather, the project phases are (1) the Conceptualization Phase; (2) the Criteria Design Phase; (3) the Detailed Design Phase; (4) the Implementation Documents Phase; (5) the Construction Phase and finally (6) the Closeout Phase. Each of the first four (preconstruction phases) contains a

[5] There are still rather short articles for each of the three principle participants, but they are each very abbreviated, with the bulk of the information about their respective activities contained in separate articles for each phase of the project.

description of the activities of each participant, which are integrated with the activities of all other participants.

The Conceptualization Phase is the kickoff phase for the project. The key consultants and subcontractors are identified and brought into the "team" for further project development, design and ultimately construction of the project. The program is reviewed and a common understanding arrived at by the team. The architect prepares a schedule of design services for inclusion in an overall project schedule. The architect's schedule will include, among other items, dates relating to the progress of design, anticipated dates for cost estimates to be provided by the contractor, and other key milestone dates. The contractor will then prepare an overall Project Schedule in collaboration with the architect. Once the overall schedule is agreed upon by the owner and other participants, a preliminary analysis of the project is jointly performed. This analysis includes decisions concerning project delivery, which may involve fast track construction, early procurement of key systems or materials, identifying key subcontractors or suppliers, etc.

The project then moves into the Criteria Design Phase. In this phase, the Architect identifies alternative approaches to design; and reviews laws, codes and regulations applicable to the Architect's services. In conjunction with input from the contractor, the architect prepares Criteria Design Documents, consisting of drawings and other documents which include initial sections and elevations, and considers environmental alternatives for inclusion of environmentally responsible design elements. Throughout this phase, the architect and contractor consider alternative materials, systems and equipment, based on the owner's program, the schedule and the budget. During this phase, the contractor obtains detailed information from subcontractors and material suppliers with regard to specific systems or products, procurement of long lead items, and life cycle and energy efficiency. Based on this information, the contractor prepares a procurement

schedule for long lead items. The contractor also updates the project schedule, and at the end of the phase, once the owner approves the design documents, the contractor provides an up to date cost estimate.

The Criteria Design Phase also marks another major innovation of this new delivery method, the anticipated use of a digital model.[6] This model will be used throughout the balance of the design and construction of the project, with the building being "virtually built" at the end of design and the model then updated during construction to eventually serve as a "record drawing" of the completed project in order to assist the owner with regard to the eventual operation and maintenance of the project.

The next stage is the Detailed Design Phase, in which the architect, in consultation with the other members of the team, prepares "detailed design documents" which consist of drawings and the model that fix and describe the size and character of the major components of the project, including the mechanical, electrical, plumbing and structural systems. During this phase, the contractor updates the previously furnished cost estimates, verifies that all design elements have been included in the estimate and that the schedule is realistic, and also begins the construction coordination effort. Once these activities have been concluded and the owner has approved the design, cost estimate and schedule, it is time for the contractor to prepare and submit a "Guaranteed Maximum Price Proposal."

This proposal includes a proposed guaranteed maximum price (based on a cost reimbursable procurement approach) and a list of other items, including:

a. a list of documents and information on which the proposal is based;

b. a list of allowances;

c. a list of any clarifications and assumptions on which the price is based;

[6] This form of project delivery assumes that the participants will utilize a model during design and construction.

d. the proposed price organized by trade categories, with defined contingencies; and

e. a date of Substantial Completion.

After the contractor submits this proposal to the owner and architect, the owner, contractor and architect meet to review it in detail in order to discover any inconsistencies or inaccuracies in the information provided. If there are any, the contractor makes the necessary adjustments. Thereafter, if the owner accepts the Proposal and the amendment is signed, the contractor prepares a detailed construction schedule and the project proceeds to the next phase.[7]

The next phase is the Implementation Documents Phase. Based on the Guaranteed Maximum Price Proposal, the architect then proceeds to incorporate the final design elements into the model so that it reflects the quality level of materials, systems and other requirements for construction. The contractor coordinates with subcontractors and suppliers for final pricing. Shop drawing and submittal information is included in the model; any substitutions are agreed upon and implemented; and the design is submitted for governmental review and permitting.

Once permitted, the project moves into the construction phase, which is based in substantial part on typical A201 concepts. Payment is based on the same "cost of the work" description as one would normally find in AIA documents, identifying which costs are reimbursable and identifying those which are not.

The one major difference between this "general conditions" document and A201, and other AIA general conditions, involves the application of the traditional concept that in a design-bid-build delivery approach, there is an implied warranty of fitness given by the owner to the contractor with regard to the design adequacy of the project. That concept is not applicable here, except as it relates to compliance with code issues. Since the contractor is involved throughout the

[7] If the owner rejects the proposal and the contractor and owner can not agree on an alternate proposal, the project ends.

design phases and is compensated for reviewing such items as "constructability;" the selection of the equipment and systems which were incorporated into the design; the spatial requirements of the building components, etc, it would be inappropriate for the contractor to obtain an increase in the guaranteed maximum price for these kinds of issues. Accordingly, these provisions, which are part of the customary allocation of risks on a design-bid-build project, have been eliminated.

Another novel element involves dispute resolution. Unlike the more normal AIA approach where dispute resolution procedures between owner and contractor and owner and architect are separate,[8] A295 contemplates completely consolidated proceedings, as would be expected where all three participants are bound by the same set of general conditions.

By virtue of the high degree of integrated activity, many of the "normal" problems inherent in most projects will either be eliminated or substantially curtailed. These include the need for tens or hundreds of RFIs being issued once construction begins; claims due to errors or omissions in the documents which could not be identified in a short bidding period; conflicts between trades; specialty subcontractor scope ambiguities; change orders; and many of the disputes which have often resulted in the final phase of construction being "the litigation phase."

B. The Single Purpose Entity: AIA Document C195

In considering the type of agreement forms to create in order to implement integrated project delivery, the AIA Documents Committee decided that one approach might not be sufficient. The transitional forms were viewed as creating a delivery system which would find almost immediate acceptance, since many of its concepts are familiar to a large segment of the construction industry. But, this approach did not provide all of the benefits that a totally integrated project was envisioned to provide. For this reason, the AIA decided to publish a second integrated

[8] In the 2007 Edition of A201, the prohibition against consolidation of an arbitration in which the architect is a party with one in which the contractor is a party was, for the most part, removed, the result being that consolidated arbitrations may occur under certain defined circumstances.

project delivery document—one which would be more provocative and would lead to a far greater degree of innovation for those users brave enough to utilize it—the Single Purpose Entity.

How can project participants integrate their interests to a greater extent than by together entering into a business arrangement by which they each become members of a separate entity, whose sole purpose is to design and construct a project? This then is viewed as the "ultimate" in project integration. The type of business entity chosen was the limited liability company ("LLC"), a business form readily recognizable and available in all jurisdictions to provide the benefits of limited liability to its members, and with the ability to transact business as a separate entity.

Thus, AIA Document C195 envisions the owner, architect and construction manager forming a LLC. Each of the three become a "member" of the Company. The three anticipated initial members can invite other participants to become members. For example, if the project involved a complicated mechanical system, perhaps the mechanical engineer would become a member. If the project involved the design of a building and an adjacent park, perhaps the landscape architect would become a member.[9]

The LLC entity then signs a contract with the architectural firm member and a separate contract with the construction manager member.[10] The services provided by these members are then provided through these separate contracts. Why separate contracts? In order to comply with the licensing laws of many jurisdictions in the country, the Documents Committee concluded that the Company itself could not engage in the profession of "architecture" or the business of "construction management." Thus, those services will be provided by duly licensed entities. It should also be noted that the construction manager will only be providing "services." The construction manager will not be constructing the project with its own forces.

[9] The balance of the discussion assumes that the only three LLC members are the owner, architect and construction manager.

[10] If other service providers are added as members, additional member contracts with those parties will also be created.

The monies to operate the Company will come wholly from the owner, and will be used to pay all of the expenses of the entity. The Company will have a separate contract with the owner, by which the owner will be required to provide funds for all expenses incurred by the Company. The owner will advance money only when it is needed to pay a specific expense and the expense will be paid immediately upon receipt of the owner's contribution. The Company itself will not "hold" money contributed by the owner. As noted, payment for the services of the architect and construction manager will be made pursuant to the terms of those "Member Agreements."

One major difference between this approach and the transitional forms is that design consultants and specialty trade contractors (normally subcontractors) will have direct contracts with the Company to provide their services or work. Similarly, the Company will have contracts directly with vendors and material suppliers.[11]

The work effort of the three parties will follow the same pattern as described above for the transitional forms (see pages 4-7). The same preconstruction phases will apply. There is, however, one major difference—the introduction of a concept known as a "Target Cost." While the Target Cost may have some of the same attributes as a Guaranteed Maximum Price, it is intended to be quite different. To understand its function, the concept of compensation to the members must be explained.

The entire approach to compensation and profit inherent in the traditional methods of project delivery is eliminated, with the substitution of an entirely different set of profit incentives. The incentives in this method of delivery are "goal oriented" for all three participants on a "one for all and all for one basis." What are the goals? They are whatever is important to the owner. The owner's goals may include the cost of the project; the date of substantial completion; the quality of

[11] It is possible for the architect to retain the normal engineering consultants and the construction manager to retain the specialty contractors as subcontractors but C195 anticipates that these third party contractual relationships will be with the Company and not the members.

an element; the achievement of LEED® certification; the cost effectiveness of the operation or maintenance of the facility; or any number of other things.

How do the goals translate into compensation to the architect and construction manager? In the following fashion: During the course of design and construction, the architect and construction manager are compensated through payments made pursuant to the two Member Agreements based solely on reimbursement of their "actual costs." No element of profit is paid. Instead, what might be called "traditional profit" is earned by the architect and construction manager in one of two ways. The first involves the selection of goals, with a consequent payment by the owner, based on the achievement of the goal (and the payment for any goal is to both the architect and the construction manager). In this way, a portion of the participants' profit is performance or "goal oriented." The second element of profit comes from the establishment of a Target Cost for the project, a figure which includes (a) the actual cost of the design and construction, (b) the amount of goal related payments and (c) a "contingency" which reflects a sum of money which will be divided according to a pre-determined (but negotiated) formula if the eventual cost of the project is less than the Target Cost.

How does this work? Let's take three examples:

Example 1: The actual cost of the work is less than the Target Cost? The difference is divided among the three participants in accordance with the predetermined formula. (This payment, along with the performance goal payments constitutes "profit" to the architect and the construction manager. The owner simply keeps (and doesn't have to pay) the owner's share.)

Example 2: The cost of the work equals the Target Cost? The owner pays for the cost of the work and the goal oriented payments but there is no contingency available to divide. Thus, the architect and construction manager receive no additional payment.

Example 3: The cost of the work exceeds the Target Cost? The same as 2, except that the owner pays all costs incurred by the architect and construction manager only up to the amount of the Target Cost.

Under each of these scenarios, there is one other principle which defines this method of project delivery—none of the members may sue another member except for "willful misconduct." It is "one for all and all for one." This is intended to create the incentive on the part of each participant to cooperate with each of the other participants in order to meet goals instead of protecting the individual interests of each participant. If there is a design error, what will the construction manager do when it realizes that it can't sue its co-members and won't get any goal oriented payment unless the goal is met? It will cooperate to solve the problem, as fast and as inexpensively as it can be solved. If there is a construction error, what is the incentive to the architect? In this approach it is to resolve the issue as quickly and cheaply as possible.

What's in it for each of the participants? Stated another way, why would anyone enter into such an arrangement? First, the owner. This approach is not attractive to an owner who is seeking the "lowest initial cost" of a project. The typical developer who wants to develop the project for the lowest cost and then flip it to another owner for a profit should **not** consider it. Rather, this approach is tailored for an owner who believes that "meeting certain specified goals is more important than having the ability to sue someone if they are not met." For example, if Intel is planning a new facility that will make it millions of dollars each day that it is open, isn't it more important to incentivize the architect to make that happen than have the ability to sue the architect in order to try to collect the architect's $1 million policy of professional liability insurance if the project is late by three months due to an unnoticed design error? The owner who wants quality instead of claims may also find this approach appealing.

What about the architect or construction manager? Why would they become involved in such a project, one in which their profit is deferred and may never be received? The answer is in the incentive. If the owner is not willing to provide a realistic and reasonably achievable contingency, which will yield these participants a profit in excess of their "normal" profit for a similar job, they will probably not be interested. However, if the incentive payments are reasonably achievable and are higher than what might be called "normal profit," many firms will probably be willing to participate, particularly because their downside risks are limited. They will receive payment for costs, up to the amount of the Target Cost, and will not be facing lawsuits by their co-members.

When then is the Target Cost, with its component elements, created? When the design effort has progressed to a point that the construction manager can provide a realistic estimate for the cost of the work, but no later than the end of criteria design. The construction manager, in collaboration with the architect, must prepare a proposed Target Cost for review and possible acceptance by the owner. A number of things are necessary for that stage to be reached.

First of all, the owner needs to have already provided a list of "criteria" that the owner desires to achieve. These criteria are provided at the beginning of the project, so that all elements necessary to achieve the criteria, including cost, schedule and other items can be considered from the outset. Second, the three parties should meet and conduct a "collaboration standards workshop" to establish standards, protocols and other items to facilitate their collaboration on the project, including the types of software to be used as well as the anticipated use for all digital information. Next, the parties need to consider and develop a "risk matrix" to identify the principal risks which they will face and to identify the party with primary responsibility to manage that risk. Most importantly, the parties must identify the "project goals" and establish the specific incentive payment to be made by the owner upon the achievement of that goal. There also needs

to be a comprehensive scope of services, which outlines the responsibilities and services to be provided by each participant; a detailed project schedule and a proposed "work plan." It is at this point that the Target Cost can be determined and presented to the owner.

If the owner accepts the proposed Target Cost, or the parties mutually agree to some other alternative Target Cost, the project proceeds. If not, the project ends. In the latter event, the architect and construction manager will receive their costs and the entity will be dissolved and the project concluded.

If the project proceeds, the remaining design activities are completed and construction commences. The only reason for the Target Cost to be increased is for scope changes approved by the owner or certain Force Majeure items, which are identified specifically in the C195. Typically, these include matters outside of the control of the parties, changed site conditions, and similar matters which are familiar to most participants in the construction industry.

Once established, there are specific requirements relating to monitoring and maintaining costs within the Target Cost. Where any member has or receives information indicating that any element of the Target Cost might be exceeded, there are very specific notice obligations imposed on that member. Upon receipt of that information, all members must participate in the development of a Recovery Plan. Upon the owner's approval, the Recovery Plan will be implemented.

Management of the Company is vested in a Governance Board, which consists of representatives appointed by each member. The owner appoints a simple majority of representatives. Most important decisions require unanimity of the Governance Board. Disputes are resolved first at the Governance Board, then through stepped negotiation among the members,

and if all else fails, the dispute is presented to an agreed upon Neutral, whose decision is final and binding, with the same legal affect as an arbitrator.

As indicated, the use of a Single Purpose Entity is a unique response to the challenges facing the construction industry in this Century. As a thought leader, the American Institute of Architects presents this approach for the consideration of one of America's most important industries.

END

For questions about the AIA's integrated project delivery documents, write to docinfo@aia.org, or call 202-626-7526.