
Design Collaboration on Construction Projects

PART 1:

Delegated Design, Design Assist, and Informal Involvement – what does it all mean?



PREAMBLE

This paper was written as a collaboration between the American Institute of Architects (AIA) and the American Institute of Steel Construction (AISC) with significant contributions from the AIA's Documents and Risk Management Committees and the AISC's Committee on the Code of Standard Practice. The goal of this paper is to provide general guidance about design collaboration strategies used on construction projects. Part 1 of this paper addresses the following collaboration strategies – Informal Involvement, Design Assist, and Delegated Design. It describes in general terms the roles and responsibilities of the project participants under each of these design collaboration concepts and offers definitions and guidelines that design professionals and the construction industry can adopt for their use. Part 2 of this paper will be published after Part 1 and will address Design Assist as it specifically relates to fabricated structural steel. This paper does not provide legal advice, and no one should act upon the information provided in this paper without seeking appropriate legal counsel.

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Over the past few decades, there has been an increasing emphasis on collaboration between design professionals and contractors to realize benefits that can be achieved when aspects of a project's design are informed by contractor input. While design-bid-build was once the customary delivery method for construction projects, the drive for shared expertise coupled with the increase in demand for cost and schedule efficiency by owners, has led to the emergence of alternate delivery methods such as design-build, construction manager at risk and as advisor, and integrated project delivery.¹ As building materials and systems have become more complex and proprietary, specialty contractors and product manufacturers have also emerged as knowledgeable participants who can make valuable technical contributions to some of the most complex parts of a project's design. These paradigm shifts have spurred the development of strategies to connect design professionals with contractors, specialty contractors, and product manufacturers during the design stages of a project.

In some sense, design collaboration has been in the construction industry for decades. After all, proprietary products and certain building components, like fire protection systems, have traditionally been designed by the parties who provide them. Yet over time, design collaboration has expanded to also include assistance with broader aspects of a project's design. Today, design collaboration can be found everywhere on a project. Collaborative strategies are routinely used in the design of mechanical systems, structural steel, retaining walls, clean rooms, and curtain wall assemblies, just to list a few.² These collaborative strategies range from informal discussions all the way to contractor acceptance of responsibility for elements of the project's design. The goal is to deliver a project on schedule and budget, minimizing the costs and impacts of changes due to late design.

This is a two-part paper: Part I will discuss three collaboration methods along this continuum - Informal Involvement, Design Assist, and

¹ The Associated General Contractors of America (AGC) has established two defining characteristics to identify project delivery methods: (1) contractual agreements among the core project team and (2) whether total construction cost is part of the criteria in the final selection of the constructor. Using these criteria AGC has identified four project delivery systems: design-bid-build, construction manager at risk, design-build, and integrated project delivery. *Project Delivery Systems for Construction*, 3rd Edition, AGC of America, (Arlington, Virginia, 2011). The American Institute of Architects also recognizes construction manager as advisor as a project delivery method.

² Some elements of the project design, such as design of the primary structural frame, cannot be delegated in some jurisdictions. See e.g. *Duncan v. Missouri Bd. for Architects, Professional Engineers and Land Surveyors*, 744 S.W.2d 524 (Mo. Ct. App. 1988); *Missouri Bd. for Architects, Professional Engineers, and Land Surveyors v. Daniel M. Duncan, Jack D. Gillum, and G.C.E. International, Inc.*, before the Administrative Hearing Commission, State of Missouri, Case No. AR840239, Nov. 14, 1985. See also N.Y. Comp. Codes R. & Regs. tit. 8, § 29.3 (permitting design delegation to unlicensed entities only for project components ancillary to the main components of the project).

Delegated Design; Part II will address Design Assist, specifically as it relates to fabricated structural steel. For the purposes of Part I of this paper, none of these are considered project delivery methods themselves.³ Rather, they are collaborative techniques that can be used with any project delivery method.⁴

As collaborative strategies have evolved, the industry has adopted and begun to use descriptive terms, including “Delegated Design” and “Design Assist”. Unfortunately, those terms often mean different things to different parties and, when used in contracts or related documents, can result in differing expectations among the project participants.⁵ The goal of Part I of this paper is to differentiate the roles and responsibilities of the project participants under each of these design collaboration concepts, and to offer definitions and guidelines that the design and construction industry can adopt to standardize their use.

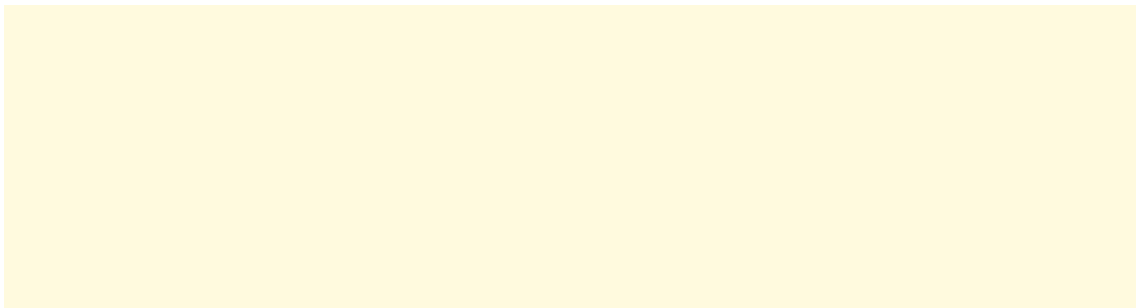
The key points of distinction between these collaboration strategies are (1) whether the contractor is merely providing input to influence a design or is taking contractual responsibility for a portion of the design itself, (2) the nature and timing of contractor involvement, and (3) the degree of liability that flows from the contractor’s involvement.

Regardless of the collaboration strategy used, contractor involvement should always occur at an appropriate time during the development of the design in order to provide value to the project. Also, the interests of all parties should be considered when soliciting contractor design collaboration, and such collaboration should be part of the agreed-upon design process. If not properly planned, ad hoc or late occurring contractor involvement can have significant impacts on the timely development or revision of the design and the resources budgeted by the design team or others.

³ But see, Joel Heusinger. *Ambiguity Breeds Conflict: The Importance of Defining ‘Design-Assist’ in the Construction Industry*. Journal of the American College of Construction Lawyers, Vol. 11, No. 1 (Winter, 2017) pgs. 7-8, 16 (suggesting that some might consider Design Assist to be a “procurement” or “project delivery” method.)

⁴ The design collaboration techniques discussed in this paper should not be confused with the design-build project delivery method. Design-build describes a contractual structure in which the owner hires one entity

There's one last point to consider before turning to the business of

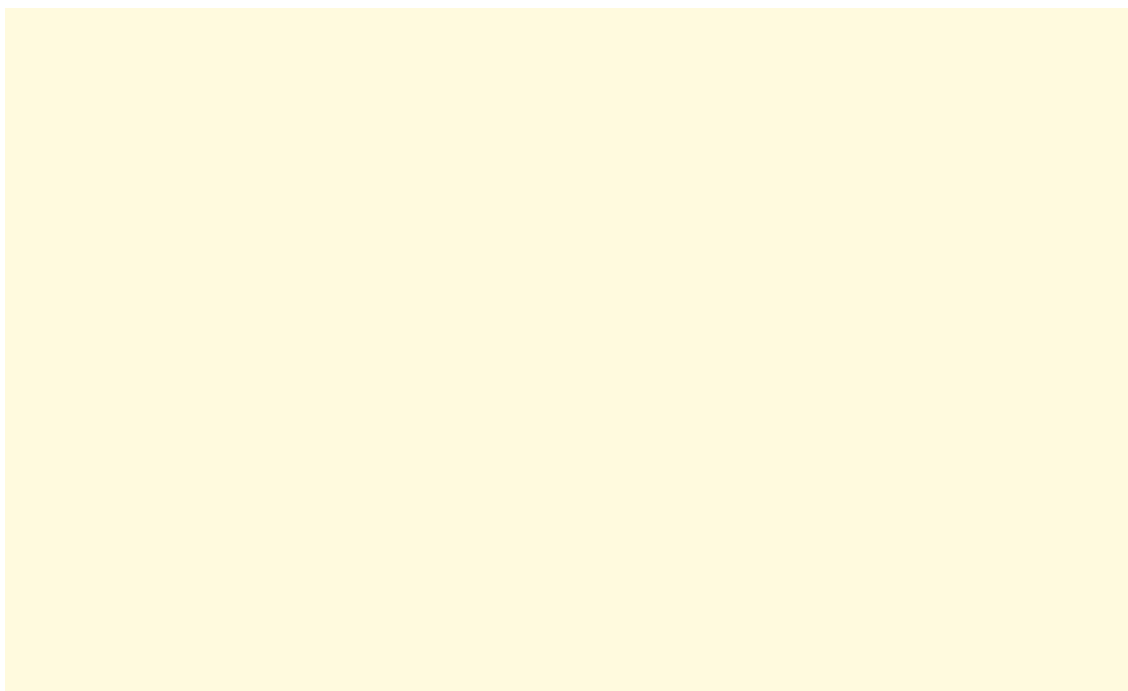


initial stages of design. For example, an architect might contact a trusted contractor and ask for feedback on matters such as:

- the constructability of a design element relating to the Project's work;
- realistic scheduling of work activities, such as material delivery, off-site construction, and field labor;
- cost estimates for portions of the work;
- ideas for possible cost reductions or enhancing value;
- product reliability based on the contractor's experience;
- product availability; and
- production schedules.

Each of these elements can potentially influence the project's design, schedule, and cost; and when the design team gets contractor input about these items, the owner is often the beneficiary in terms of reduced costs and increased efficiency.

With Informal Involvement, there is typically no agreement, no payment to the contractor, and no expectation that the contractor will guarantee, or be



can use contractor-provided information to inform its design, the design professional maintains control over all aspects of the preparation of

by the contractor, (3) the timing for when such information will be exchanged, and any special requirements for how the information is to be communicated, (4) the contractor's compensation, and (5) other specific

3.1.1: The Owner and Architect shall be entitled to rely on, and shall not be responsible for, the accuracy, completeness, and timeliness of services and information furnished by the Construction Manager.

3.1.1: The Construction Manager, however, does not warrant or guarantee estimates and schedules except as may be included as part of the Guaranteed Maximum Price.

3.1.3.2: The Construction Manager shall also provide recommendations to the Owner and Architect, consistent with the Project requirements, on constructability; availability of materials and labor; time requirements for procurement, installation and construction; prefabrication; and factors related to construction cost including, but not limited to, costs of alternative designs or materials, preliminary budgets, life-cycle data, and possible cost reductions.

3.1.4: When Project requirements in Section 4.1.1 have been sufficiently identified, the Construction Manager shall prepare and periodically update a Project schedule for the Architect's review and the Owner's acceptance.

3.1.6.2: As the Architect progresses with the preparation of the Schematic Design, Design Development and Construction Documents, the Construction Manager shall prepare and update, at appropriate intervals agreed to by the Owner, Construction Manager and Architect, an estimate of the Cost of the Work with increasing detail and refinement.

“Delegated Design” describes a form of collaboration between a design professional and contractor where the contractor assumes responsibility for an element or portion of the design. The design professional and contractor typically have separate written contracts with the owner that establish their respective design responsibilities. In the contractor's case, those design responsibilities are often established by performance specifications prepared by the design professional. The contractor may incur liability for the portion of design delegated to it, and may also assume professional

design responsibility and liability for its design.¹⁰ The ability to delegate professional design responsibility has limitations and, in many situations, professional design responsibility must remain with the design professional of record for the project.

Delegated Design is a further step along the continuum of design collaboration and is typically part of a contract that has been awarded for a scope of work on the project. In Delegated Design, a contractor

A201®-2017 contains several examples of the Delegated Design concepts discussed above:

If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Architect will specify all performance and design criteria that such services must satisfy. The Contractor shall be entitled to rely upon the adequacy and accuracy of the performance and design criteria provided in the Contract Documents. The Contractor shall cause such services or certifications to be provided by an appropriately licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings, and other submittals prepared by such professional. Shop Drawings, and other submittals related to the Work, designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. The Owner and the Architect shall be entitled to rely upon the adequacy and accuracy of the services, certifications, and approvals performed or provided by such design professionals, provided the Owner and Architect have specified to the Contractor the performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review and approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.

Section 3.12.10.1 sets forth the basic structure of how Delegated Design works on many projects. Fundamentally, it allows an owner, through the drawings and specifications prepared by the architect, to delegate the design of systems, materials, or equipment to the contractor, and their appropriately licensed design professional. The architect is required to specify the performance and design criteria that the contractor will be required to achieve. The contractor then provides those design services through an "appropriately licensed design professional" who uses its own signature and seal on design documents it produces. Both the architect and contractor are entitled to rely on information and services provided by the other, through the owner, in this exchange. Lastly, the architect will be required to review submittals pertaining to the portion of design that

has been delegated and check that the design conforms to the information given and with the design concept expressed in the Contract Documents, including the performance specifications.

A New York statute – Rule 29.3(b) of the Rules of the Board of Regents – is a rare state statute to address the issue of Delegated Design, and it has much in common with Section 3.2.10.1 of A201-2017.¹⁶ For example, Rule 29.3(b) expressly allows delegation of design responsibilities from one design professional to another through an intermediary (i.e. a contractor). It requires the first design professional to specify all parameters which the design must satisfy. It also requires the first design professional to review the design for both conformance with those parameters and to determine that the design can be integrated into the overall project design.¹⁷ Further, it requires the second design professional to be properly licensed to perform the design services and to sign and certify any design prepared.

Rule 29.3(b) was created primarily to clarify that contractors who provided Delegated Design services were not improperly performing professional design services.¹⁸ Yet, the heart of Rule 29.3(b) and Section 3.2.10.1 of A201-2017 get at the same issue – the true nature of the design and construction environment has changed, and design professionals and contractors need the flexibility to delegate design in situations requiring special expertise.¹⁹

SUMMARY

The collaboration strategies discussed in this paper all have similar features; however, each strategy also assigns different roles and responsibilities to the project participants. This paper highlights the key distinctions between these collaboration strategies and is intended to strengthen a consistent understanding of these terms for the design and construction industry. Also, please note that Part II of this paper, which addresses Design Assist as it relates to fabricated structural steel, will be published separately in the fall of 2020.

¹⁶ Appendix 1; N.Y. Comp. Codes R. & Regs. tit. 8, § 29.3.

¹⁷ Though Rule 29.3(b) of the Rules of the Board of Regents and AIA A201-2017, Section 3.2.10.1 have much in common, they differ in their exact language and pose different obligations on design professionals.

¹⁸ *Gen. Bldg. Contractors of New York State, Inc.*, 175 Misc. 2d at 925.

¹⁹ *Id.* at 924.

APPENDIX I

AIA Document A133-2019, Standard Form of Agreement Between Owner and Construction Manager as Constructor where the basis of payment is the Cost of the Work Plus a Fee with a Guaranteed Maximum Price

3.1 Preconstruction Phase

3.1.1 Extent of Responsibility

The Construction Manager shall exercise reasonable care in performing its Preconstruction Services. The Owner and Architect shall be entitled to rely on, and shall not be responsible for, the accuracy, completeness, and timeliness of services and information furnished by the Construction Manager. The Construction Manager, however, does not warrant or guarantee estimates and schedules except as may be included as part of the Guaranteed Maximum Price. The Construction Manager is not required to ascertain that the Drawings and Specifications are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Construction Manager shall promptly report to the Architect and Owner any nonconformity discovered by or made known to the Construction Manager as a request for information in such form as the Architect may require.

3.1.2 The Construction Manager shall provide a preliminary evaluation of the Owner's program, schedule and construction budget requirements, each in terms of the other.

3.1.3 Consultation

3.1.3.1 The Construction Manager shall schedule and conduct meetings

Construction Manager shall provide cost evaluations of those alternative materials and systems.

3.1.6.2 As the Architect progresses with the preparation of the Schematic Design, Design Development and Construction Documents, the Construction Manager shall prepare and update, at appropriate intervals agreed to by the Owner, Construction Manager and Architect, an estimate of the Cost of the Work with increasing detail and refinement. The Construction Manager shall include in the estimate those costs to allow for the further development of the design, price escalation, and market conditions, until such time as the Owner and Construction Manager agree on a Guaranteed Maximum Price for the Work. The estimate shall be provided for the Architect's review and the Owner's approval. The Construction Manager shall inform the Owner and Architect in the event that the estimate of the Cost of the Work exceeds the latest approved Project budget, and make recommendations for corrective action.

3.1.6.3 If the Architect is providing cost estimating services as a Supplemental Service, and a discrepancy exists between the Construction Manager's cost estimates and the Architect's cost estimates, the Construction Manager and the Architect shall work together to reconcile the cost estimates.

3.1.7 As the Architect progresses with the preparation of the Schematic Design, Design Development and Construction Documents, the Construction Manager shall consult with the Owner and Architect and make recommendations regarding constructability and schedules, for the Architect's review and the Owner's approval.

3.1.8 The Construction Manager shall provide recommendations and information to the Owner and Architect regarding equipment, materials, services, and temporary Project facilities.

3.1.9 The Construction Manager shall provide a staffing plan for Preconstruction Phase services for the Owner's review and approval.

3.1.10 If the Owner identified a Sustainable Objective in Article 1, the Construction Manager shall fulfill its Preconstruction Phase responsibilities as required in AIA Document [E 234™-2019](#), Sustainable Projects Exhibit, Construction Manager as Constructor Edition, attached to this Agreement.

8 NYCRR 29.3

Section 29.3. General provisions for design professions

(a) Unprofessional conduct shall also include, in the professions of architecture and landscape architecture, engineering, land surveying and geology:

- (1)** being associated in a professional capacity with any project or practice known to the licensee to be fraudulent or dishonest in character, or not reporting knowledge of such fraudulence or dishonesty to the Education Department;
- (2)** failing to report in writing to the owner or to the owner's designated agent any unauthorized or improperly authorized substantial disregard by any contractor of plans or specifications for construction or fabrication, when professional observation or supervision of the work is provided for in the agreement between the owner and the design professional or when supervision of the work is under the control of the design professional;
- (3)** certifying by affixing the licensee's signature and seal to documents for which the professional services have not been performed by, or thoroughly reviewed by, the licensee; or failing to prepare and retain a written evaluation of the professional services represented by such documents in accordance with the following requirements:
 - (i)** a licensee who signs and seals documents not prepared by the licensee or by an employee under the licensee's direct supervision shall prepare, and retain for a period of not less than six years, a thorough written evaluation of the professional services represented by the documents, including but not limited to drawings, specifications, reports, design calculations and references to applicable codes and standards. Such written evaluation shall clearly identify the project and the documents to which it relates, the source of the documents and the name of the person or organization for which the written evaluation was conducted, and the date of the evaluation, and the seal and signature of the licensee shall also be affixed thereto; and

(ii) nothing in this paragraph shall be construed as authorizing the practice of a design profession in this State by persons other than those authorized to practice pursuant to the provisions of article 145, 147 or 148 of the Education Law;

- (4)** failure by a licensee to maintain for at least six years all preliminary and final plans, documents, computations, records and professional evaluations prepared by the licensee, or the licensee's employees, relating to work to which the licensee has affixed his seal and signature;
- (5)** having a substantial financial interest, without the knowledge and approval of the client or employer, in any products or in the bids or earnings of any contractor, manufacturer or supplier on work for which the professional has responsibility;
- (6)** permitting any person to share in the fees for professional services, other than: a partner, employee, associate in a professional firm or corporation, subcontractor or consultant. This prohibition shall include any arrangement or agreement whereby the amount received in payment for furnishing space, facilities, equipment, or personnel services used by a professional licensee constitutes a percentage of or is otherwise dependent upon the income or receipts of the licensee from such practice. This provision shall apply in lieu of section 29.1(b)(4) of this Part;
- (7)** accepting any form of compensation from more than one party for services on the same project without fully disclosing the circumstances and receiving approval from all interested parties;
- (8)** participating as a member, advisor or employee or a government body in those actions or deliberations which pertain to services provided by the practitioner or his or her organization for such government body; or
- (9)** in the profession of land surveying, the revision, alteration, or update of any existing boundary survey without adequate confirmation of relevant boundary lines and monuments. To be adequate, such confirmation shall include a reasonable field verification and shall be sufficiently extensive to reasonably ensure the accuracy of the revision, alteration, or update, as appropriate to the circumstances of the revision, alteration, or update.

(b) Unprofessional conduct shall not be construed to include:

- (1)** the employment, with the knowledge of the client, of qualified

combination, licensed and registered in accordance with articles 145, 147 or 148 of the Education Law, and authorized to provide the services being delegated.

(ii) Intermediate entity means a person or entity, typically a contractor or subcontractor, responsible for performing the work under the contract for construction.

(iii) Delegatee means a design professional, licensed and registered in accordance with articles 145, 147 or 148 of the Education Law, who is employed or retained by the intermediate entity to produce design work in compliance with the performance requirements and parameters specified by a delegator.

(iv) Certify means a written statement by a licensee confirming responsibility for the work and attesting that the work prepared meets the specifications (as well as conforming to governing codes applicable at the time the work was prepared), and conforms to prevailing standards of practice.