



Passing the Design Ball

Delegated Professional Design – Part 1

by Kevin O’Beirne, PE, FCSI, CCS, CCCA, CDT

Few things in design and construction are so misunderstood as delegation of professional design: what it is, its legality, how to do it, how to review delegated design submittals, and other matters. Darn it, I’m tired of this ignorance, so I’m sharing some information about it.

When it’s done properly and with care, delegation of professional design can be a useful tool to optimize project costs and encourage innovation in selected areas of the work. On the flipside, when it is done incorrectly, or when the project’s design professional exceeds its authority relative to reviewing delegated design submittals, the lines of professional liability can become blurred, which is no good for the project architect or engineer’s professional liability insurance premiums, and it might help to get your name published in the licensing board’s quarterly listing of violations. Delegation of professional design is a delicate matter that must be handled correctly or else the wheels can come off the wagon.



*We’re not talking about passing this type of ball
Photo by Stew Milne-USA TODAY Sports*



*Looks like the wheels already
came off this one*

What is Delegation of Professional Design?

Delegation of professional design responsibility, or “delegated design” for short, is when the construction contractor (or a subcontractor) is required by the contract to retain as a subcontractor a licensed design professional to design some element of the project, which will subsequently be constructed by the contractor. In essence, it is somewhat like a “mini design-build project within a project.”

Delegated design can be required in any project delivery method, but is probably most common in design-bid-build, construction manager as advisor (CMA), and construction manager at risk (CMAR).

In delegated design, the owner’s design professional indicates in the contract documents only the general elements of the work for which design responsibility is delegated, and only in such detail as is necessary to properly communicate the overall intent and requirements for the completed project as a functioning whole. While the contractor-hired designer will have professional liability for the work element(s) it designs, the owner-hired design professional has

responsibility for the overall project as a functioning whole and professional liability for the parts of the project it designed in detail..

The balance of this article uses the term “designer” to refer to the contractor-hired engineer, geologist, or architect, to distinguish it from the owner-hired design professional.

There are several reasons why delegated design can be somewhat tricky and why it is often misunderstood. Put simply, delegated design appears to result in two separate professionals—the owner-hired design professional and the contractor-hired designer—having responsibility for designing the same project. Among the keys to successful delegated design responsibility are: (1) clear indication of the specific element(s) of the work that are delegated design and the performance and design criteria the delegated design must satisfy, and (2) the owner-hired design professional not exceeding its limits of authority when reviewing delegated design submittals. Both of these are addressed in detail in Part 2 of this article.

It is vital that all participants, including the contractor-hired designer, comply with all relevant laws and regulations governing the practice of the subject design profession in effect where the project is located. In many states, these require, among other things, that only licensed *entities* (firms) as well as licensed *individuals* (registered architects, professional engineers, or professional geologists) practice the subject profession. Thus, a *contractor* not licensed to practice the subject profession usually cannot have its own employee, whether or not individually licensed, prepare the delegated design; instead, the work usually has to be subcontracted to a properly licensed design professional consulting firm.



Delegated design typically applies only to elements of the *completed* project and usually excludes temporary structures and temporary facilities. However, as presented later in Part 1 of this article, the language of AIA® A201™—2017, *Standard General Conditions of the Contract for Construction*, appears to support the applicability of delegated design principles to the contractor’s means and methods, whereas the language of EJCDC® C-700—2018, *Standard General Conditions of the Construction Contract*, does not.

Delegated design, as discussed in this article, is limited to the contractor’s (or subcontractor’s) retaining a licensed, registered designer to design some element of the project and where the designer *applies its seal and signature* to the drawings, specifications, calculations, and reports it prepares for the assignment. “Delegated design” is *not* design commonly performed by an unlicensed designer typically employed by a supplier or fabricator—such as detailers employed by structural steel fabricators or reinforcing steel suppliers—because the shop drawings normally produced by such detailers are *not* sealed and signed by a licensed, registered design professional. Fabricators’ detailers and their designs is a separate topic not addressed in this article.

Also, delegated design is not an equipment manufacturer’s employment of a licensed engineer to design and produce products such as pumps, HVAC equipment, or other equipment, because 36 states have “industrial exemptions” in their professional engineering licensure laws or regulations, and product manufacturers’ shop drawings and product data are not sealed and signed by a design professional licensed in the location where the item(s) will be installed.

The reason certain project elements are delegated to a contractor-hired designer is to foster innovation in certain elements of the project, or to account for the unique needs of a certain product or item to be incorporated into the completed project. While delegating the design of certain, selected elements of the project may be appropriate and provide some cost advantages to the owner, the opposite—delegating *too much* of the work—should be avoided. Reasons for avoiding over-delegation include requiring contractors to furnish bid pricing on under-designed elements of the work (which probably costs the owner money through contingencies included in the bids) and could cross the line into design-build, as described later in Part 1 of this article. With limited exceptions, delegated designs are typically for some ancillary element of the project.

Design delegation is relatively common for the following types of work:¹

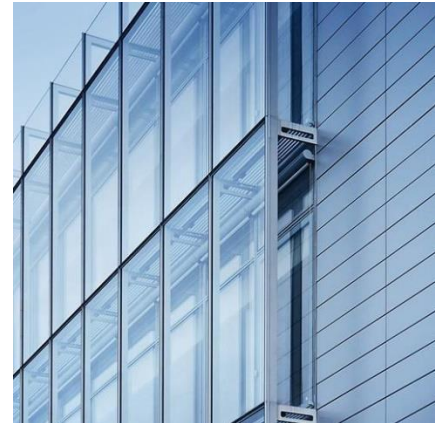
- Geotechnical
- Site/street shelters
- Pre-fabricated bridges
- Pre-assembled stone panels or wall systems
- Structural metal framing and/or systems
- Pre-fabricated stairs
- Pre-fabricated structural wood, including joists and trusses
- Glued laminated timber
- Roof and wall panels
- Skylight systems
- Curtain wall systems
- Window washing and building facade maintenance equipment
- Cable-supported and fabric structures
- Athletic rooms
- Controlled environments
- Radiation protection
- Radio frequency-shielded enclosures
- Pre-engineered metal building systems
- Glazed structures
- Bleachers and grandstands
- Dome structures
- Mezzanine systems
- Pre-fabricated structures (for human habitation)
- Elevators, escalators, and moving walkways
- Turntables
- Funiculars (inclined cable traction ways)
- Fire protection sprinkler systems
- Utility storage tanks, such as steel, composite, or pre-stressed concrete tanks for storing water, wastewater, fuel, and industrial liquids
- Communication towers

Delegation of design should typically *not* be used: (1) without the owner's knowledge and consent; (2) when disallowed by applicable laws or regulations; (3) as a means of "cheapening up" on the fees paid by the owner to its design professional; (4) when there is no other compelling reason to do so; and (5) when more than half of the project's total design will be delegated and design-build project delivery is not enabled by statute for the owner.

Contract Requirements for Delegated Design

¹ Listing adapted from New York State Education Department, Office of the Professions, Architecture, "Practice Guideline B.6, Shop Drawings, Submittals, and Delegation," January 1, 2002.

According to AIA® A521™/EJCDC® N-122—2012, *Uniform Location of Subject Matter*, basic contractual requirements governing delegated design are typically set forth in the General Conditions. In addition, CSI *MasterFormat—2018* assigns in Division 01 Section “01 35 73, Delegated Design Procedures”. Typically, the detailed requirements for delegated design of a given element of the project, including the required performance and design criteria, are set forth in the specifications section for that item. Each of these is discussed below.



Glass curtain walls are frequently delegated design

The model language of selected, leading standard General Conditions is presented in the following table. As indicated in the table, the American Institute of Architects (AIA) also addresses delegated design in the AIA’s model owner-architect agreement. The requirements and risk allocations for delegated design in AIA A201—2017 and EJCDC C-700—2018 are similar. The delegated design provisions of the AIA’s professional services agreements primarily addresses the architect’s responsibilities for reviewing delegated design submittals, whereas EJCDC addresses this topic in the construction contract’s General Conditions.

Construction Contract	Owner-Design Professional Agreement
American Institute of Architects (AIA)	
<p>AIA® A201™—2017, Standard General Conditions of the Contract for Construction</p> <p>§ 3.12.10 The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor’s responsibilities for construction means, methods, techniques, sequences, and procedures. The Contractor shall not be required to provide professional services in violation of applicable law.</p> <p>§ 3.12.10.1 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.</p> <p>§ 3.12.10.2 If the Contract Documents require the Contractor’s design professional to certify that the Work has been performed in accordance with the design criteria, the Contractor shall furnish such certifications to the Architect at the time and in the form specified by the Architect.</p>	<p>AIA® B101™—2017, Standard form of Agreement between Owner and Architect</p> <p>§ 3.6.4.3 If the Contract Documents specifically require the Contractor to provide professional design services or certifications by a design professional related to systems, materials, or equipment, the Architect shall specify the appropriate performance and design criteria that such services must satisfy. The Architect shall review and take appropriate action on Shop Drawings and other submittals related to the Work designed or certified by the Contractor’s design professional, provided the submittals bear such professional’s seal and signature when submitted to the Architect. The Architect’s review shall be for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect shall be entitled to rely upon, and shall not be responsible for, the adequacy and accuracy of the services, certifications, and approvals performed or provided by such design professionals.</p>

Construction Contract	Owner-Design Professional Agreement
Engineers Joint Contract Documents Committee (EJCDC)	
<p>EJCDC® C-700—2018, Standard General Conditions of the Construction Contract</p> <p>7.19 <i>Delegation of Professional Design Services</i></p> <p>A. Owner may require Contractor to provide professional design services for a portion of the Work by express delegation in the Contract Documents. Such delegation will specify the performance and design criteria that such services must satisfy, and the Submittals that Contractor must furnish to Engineer with respect to the Owner-delegated design.</p> <p>B. Contractor shall cause such Owner-delegated professional design services to be provided pursuant to the professional standard of care by a properly licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, and Submittals prepared by such design professional. Such design professional shall issue all certifications of design required by Laws and Regulations.</p> <p>C. If a Shop Drawing or other Submittal related to the Owner-delegated design is prepared by Contractor, a Subcontractor, or others for submittal to Engineer, then such Shop Drawing or other Submittal shall bear the written approval of Contractor’s design professional when submitted by Contractor to Engineer.</p> <p>D. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and approvals performed or provided by the design professionals retained or employed by Contractor under an Owner-delegated design, subject to the professional standard of care and the performance and design criteria stated in the Contract Documents.</p> <p>E. Pursuant to this Paragraph 7.19, Engineer’s review, approval, and other determinations regarding design drawings, calculations, specifications, certifications, and other Submittals furnished by Contractor pursuant to an Owner-delegated design will be only for the following limited purposes:</p> <ol style="list-style-type: none"> 1. checking for conformance with the requirements of this Paragraph 7.19; 2. confirming that Contractor (through its design professionals) has used the performance and design criteria specified in the Contract Documents; and 3. establishing that the design furnished by Contractor is consistent with the design concept expressed in the Contract Documents. <p>F. Contractor shall not be responsible for the adequacy of performance or design criteria specified by Owner or Engineer.</p> <p>G. Contractor is not required to provide professional services in violation of applicable Laws and Regulations.</p>	<p>EJCDC® E-500—2014, Agreement between Owner and Engineer for Professional Services</p> <p>Document has no express provisions on delegation of professional design but indirectly addresses delegation, as design details and submittals, through various clauses including Paragraph 6.01.D (“Reliance on Others”) and Exhibit A Paragraph A1.05.A.17 (“Shop Drawings”).</p>

The Construction Specifications Institute (CSI) does not present recommendations for the content of specifications Section 01 35 73, Delegated Design Procedures. Potential topics to be addressed in such a section include:

- General provisions on delegated design responsibilities, similar to the model language in AIA A201—2017 Section 3.12.10 or EJCDC C-700—2018 Paragraph 7.19, when the project’s General Conditions do not address delegation of design responsibility.

- General requirements on qualifications and responsibilities for the contractor-hired designer. Sample language is presented in Part 2 of this article.
- Requirements for mandatory professional liability insurance, if not covered in the contract documents' principal provisions on required contractor insurance. Sample language for this is presented in Part 2 of this article. The model language of Exhibit A of AIA A101—2017 (Section A.3.2.8) and EJCDC® C-800—2018, *Supplementary Conditions of the Construction Contract*, (Paragraph SC-6.03.N) addresses contractor-furnished professional liability insurance for delegated designs.
- Requirements for pre-design meetings, if any.
- General provisions on delegated design submittals required.
- Other general requirements that augment the standard General Conditions.
- Although not optimal, Section 01 35 73, Delegated Design Procedures, might perhaps also indicate those project element(s) for which design responsibility is delegated and the performance and design criteria such work is to satisfy, although this writer recommends that such provisions optimally be included in the specification section where the associated work is specified.



Water storage tanks are Typically, delegated designs

In addition, the Division 02-49 specifications section(s) for the work for which design responsibility is delegated, the following are often addressed:

- Clear indication of which element(s) of the work for which design responsibility is delegated.
- Indication in Paragraph 1.1.A (“Section Includes”) that the scope of the work under the section includes professional design services that are the contractor’s responsibility.
- Qualifications and responsibilities of the contractor’s designer, if not addressed in a Section 01 35 73, Delegated Design Procedures. Sample language is presented in Part 2 of this article.
- Requirements for pre-design meetings, if any, specific to the work in that section.
- The specific delegated design submittals required for the subject work. Part 2 of this article addresses classifying various types of delegated design submittals.
- Including, in the list of informational submittals required, “Qualifications of the design professional retained by Contractor, when required by [Engineer][Architect].”
- In the “Part 2 – Products” article titled, “System” or “Equipment” (or other alternative title), typically Article 2.1, immediately following the primary paragraphs “Manufacturers” (if any) and “Description”, include a primary paragraph (often, “2.1.C”) titled, “Performance Criteria” (see CSI *SectionFormat*—2007). At this location, the performance and design criteria the delegated design must satisfy should be clearly indicated.

- In “Part 3 – Execution”, in the article titled “Field [or Site] Quality Control”, indicate required onsite obligations, if any, of the contractor’s designer. For example, it may be appropriate to require the designer to agree in writing that the work done from their design is substantially complete.
- Other requirements necessary to clearly indicate all delegated design responsibilities.

Delegated design is separate from any services specified under specifications Section 01 71 23, Field Engineering, as assigned in CSI *MasterFormat*. Section 01 71 23 generally does not encompass delegated designs, but rather addresses the contractor’s obligations for onsite personnel engaged in laying out the work and general requirements for layouts, field recordkeeping, and additional qualifications (if any) for the contractor’s onsite superintendent and similar personnel.

Laws and Regulations Governing Delegated Design

Before a decision is made to delegate part of the project’s design, it is essential that the design professional fully understand and comply with the laws, rules, and regulations governing the practice of the subject design profession in the jurisdiction where the project site is located.



Statutes governing the practice of engineering, architecture, geology, and other design disciplines vary significantly from state to state. The potential exists that some jurisdictions may disallow delegation of design responsibility to the contractor.

As examples, presented below are the results of this writer’s research into the engineering and architecture laws, rules, and regulations governing delegated designs for New York, Pennsylvania, and North Carolina. New York and Pennsylvania were selected merely because this writer is licensed in those states and because New York comprehensively addresses delegation of design. North Carolina was selected because its professional licensing statutes are generally well-written. Of these three, only New York expressly allows delegated design, but neither Pennsylvania nor North Carolina expressly disallows design delegation.

Engineering	Architecture
State of New York	
New York State Education Law, Rules of the Board of Regents, Part 29, Unprofessional Conduct, Section 29.3 (applies equally to architecture, engineering, and other design professions), as follows:	
b. Unprofessional conduct shall not be construed to include: <ol style="list-style-type: none"> 2. participation as a delegator, or delegatee in delegating or accepting delegation, through an intermediate entity not authorized to provide professional design services, of specifically defined work involving the performance of a design function requiring a professional license, under the following terms, conditions and limitations: <ol style="list-style-type: none"> i. such specifically defined design work shall be limited to project components ancillary to the main components of the project; ii. the delegator shall specify in writing to the delegatee all parameters which the design must satisfy; iii. the design function shall be required to be performed in accordance with performance specifications established by the delegator; iv. the delegatee shall be required to be licensed or otherwise legally authorized to perform the design work involved and shall be required to sign and certify any design prepared; 	

Engineering	Architecture
<p>v. the delegator shall be required to review and approve the design submitted by the delegatee for conformance with the established specifications and parameters and such determination shall be in writing; and</p> <p>vi. the delegator shall be required to determine that the design prepared by the delegatee conforms to the overall project design and can be integrated into such design and such determination shall be in writing.</p> <p>3. As used in paragraph (2) of this subdivision:</p> <p>i. Delegator means a primary design team or team of design professionals which may be composed of professional engineers, land surveyors, architects and landscape architects acting either alone or in combination, licensed and registered in accordance with Articles 145, 147 or 148 of the Education Law, and authorized to provide the services being delegated.</p> <p>ii. Intermediate entity means a person or entity, typically a contractor or subcontractor, responsible for performing the work under the contract for construction.</p> <p>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.</p> <p>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.</p>	
Commonwealth of Pennsylvania	
Pennsylvania Regulations, Chapter 37, State Registration Board for Professional Engineers, Land Surveyors, and Geologists , does not address delegation of design.	Pennsylvania Regulations, Chapter 9, State Architects Licensure Board , does not address delegation of design.
State of North Carolina	
Title 21, NCAC Chapter 56, Engineers and Surveyors , does not address delegation of design.	Title 21, NCAC Chapter 02, Board of Architecture , does not explicitly address delegation of design. However, NCAC Chapter 02.0209, Paragraph (6)(a), forbids architects employed by contractors, where the contractor firm is not itself authorized to practice architecture, “to enable the employer to offer or perform architectural services, except as provided in G.S. 83A-13. In design/build arrangements, the architect shall not be an employee of a person or firm not holding a registration to practice architecture in North Carolina.” It appears the forgoing does not forbid delegated design, but rather says that a contractor’s employee cannot practice as an architect if the employer is not so licensed. NCAC Chapter 02.0209, Paragraph (6)(c), may be relevant in certain circumstances of delegated design.

In addition to laws, rules, and regulations, a state’s professional licensing board may also publish guidelines or practice advisories that address delegation of professional design. For example, the New York State Education Department’s Office of Professions publishes the following, frequently-cited and succinct guidelines on delegated design:

- *Engineering*: “[Guideline 4: Design Delegation](#)”
- *Architecture*: “[Practice Guideline B.6, Shop Drawings, Submittals, and Delegation](#)” (January 1, 2002).
- *Architecture*: “[Practice Guideline B.7: Design Delegation](#)” (January 1, 2002).

How much delegation of professional design is too much? This may need to be determined on a case-by-case basis by the project owner's legal counsel and the state's licensing board, but consideration should be given to the following:

- At what point does delegating “too much” of the design to a contractor-hired designer constitute design-build?
- Is design-build enabled by statute in the state where the project is located? For example, in New York, there is some debate over whether design-build is allowed at all—except for certain state agencies designated in specific legislation, and the state's energy law—because of constraints in the laws and regulations governing the practice of architecture, engineering, and other design disciplines.
- For public work, not all states allow design-build project delivery.



To illustrate, in 2016, this article's author learned of a project that appeared to stretch the bounds of delegated design. The project's principal element was constructing a new storage building for a municipal highway department. The project owner (a municipality) had issued contract documents that included only 30-percent-complete drawings and specifications, sealed by the owner's professional engineering consultant, requiring that the balance of the project's design be performed by a licensed design professional(s) retained by the contractor, thus essentially delegating 70 percent of the

project's design. The project was in a state where design-build was not enabled for municipalities. However, when an official of the municipality questioned whether it was appropriate to delegate 70 percent of the project's design to a construction contractor, the owner's attorney reportedly advised that the owner's intended approach was acceptable. Whether this would stand up to public scrutiny or in a court is, perhaps, another matter.

The takeaway is to be cognizant when delegating a substantial portion of the design has potential for a third-party to interpret that a line has been crossed into a different method of project delivery. Especially in public work, it is advisable to involve the owner's legal counsel for a written interpretation. As always, the applicable laws and regulations must be respected and complied with.

Owner's Consent to Delegated Design

The first step in properly delegating design responsibility to a contractor-hired designer is to clearly identify the project's specific element(s) where design delegation would be useful and articulate the reason(s) why design delegation would be advantageous to the project.

The second step involves a frank discussion with the owner on the concept of delegated design, the specific project element(s) where delegated design is recommended and why, and the benefits to the owner and the project. Projects should not include delegation of design responsibility without the owner's full knowledge and consent. Imagine the awkwardness of being in the construction stage and only then having the owner learn that the design professional has not actually designed some part of the project, but rather is requiring the contractor to do it. Owners placed in such situations are often understandably angered and frustrated with their design professional.

When the design professional knows prior to entering into its professional services agreement with the owner that some element of the project's construction will likely be a delegated design, it is wise for the design professional to explicitly so indicate in its scope of services with the owner. This reduces the potential of the owner later objecting to delegating that part of the design to a contractor-hired designer. Indicating this in the scope of services also gives the design professional increased standing for a contract amendment if the owner subsequently refuses to allow delegation of design responsibility.

Some owners may not understand or accept the concept of delegating design responsibility to a contractor-hired designer and, thus, may refuse to allow it. What's the design professional to do when a logical, reasoned argument based on practice typical in the industry fails to sway the owner?

The only real recourse is for the design professional to design the subject element of the project instead of delegating the design. This may have a substantial impact on the design professional's budget and time of performance. If the design professional does not have the necessary experience, expertise, or licensure, project quality and completion time are much more-likely to be adversely affected, so that an appropriate subconsultant can be retained.



Where typical practice for the project element in question is for delegated design and the owner refuses to allow it, then the design prepared by the owner-hired design professional is likely to (perhaps unintentionally) restrict competition and reduce innovation and may result in increased construction pricing paid by the owner. The probable reduction in competition and its associated effect on pricing could be significant and should be discussed with the owner. In some cases, multiple, alternative designs by the design professional may be necessary to reduce the potential for sole-sourcing—whether inadvertent or otherwise.



The eight-story escalator at CNN's Atlanta headquarters was probably delegated design

For example, there are many different styles of elevated water storage tanks, each with unique aspects of its design, depending on the tank supplier. By limiting the design to a single style (if the design is not delegated, as is customary for utility storage tanks), a project owner may unintentionally discourage bids from contractors that specialize in other styles of design for the required type of tank. Even if the owner retains the engineer to prepare multiple alternative designs (which is rare and expensive), there would still be potential to exclude an innovative or cost-effective design. Delegated design works well in this situation by allowing all qualified contractors the opportunity to bid with their own design style, providing they comply with the proposed contract documents. Furthermore, the project's overall design cost will be optimized instead of multiplied for similar, but nevertheless different, designs.

If the owner refuses to allow delegated design and the design professional does not possess the necessary expertise or licensure, then it would likely be necessary for the design

professional or owner to hire an appropriate consultant to design the project element in question.

Conclusion to Part 1

Part 1 of this article has covered what delegated design is, why it's done, and the types of work for which delegated design is common; the locations of contractual requirements in construction documents and the text of commonly-used standard General Conditions; considerations regarding laws, rules, and regulations for the design discipline(s) involved and how much delegated design may be too much; and recommendations for broaching with the owner the concept of delegated design. A good understanding of these matters is essential for the successful delegation of design responsibility, to be addressed in Part 2 of this article.

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