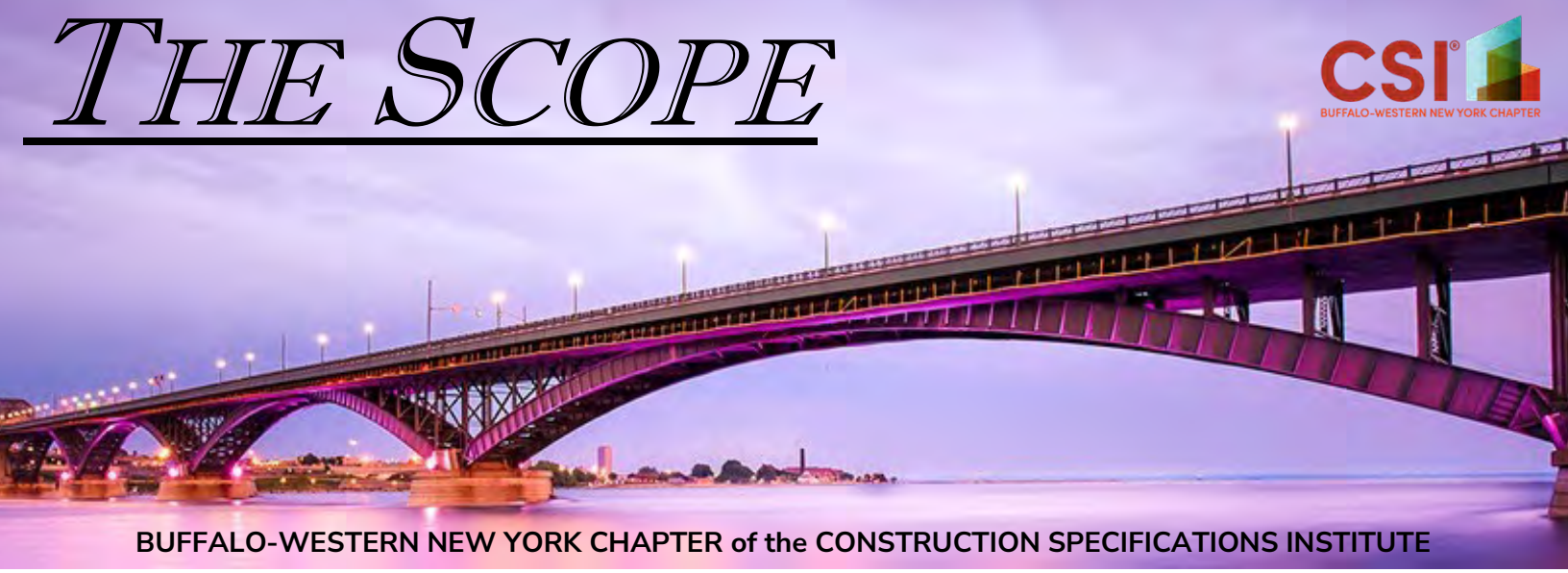
THE SCOPE

CSI BUFFALO-WESTERN NEW YORK CHAPTER



BUFFALO-WESTERN NEW YORK CHAPTER of the CONSTRUCTION SPECIFICATIONS INSTITUTE

Construction Specifications Institute, Inc.: www.csiresources.org
Northeast Region CSI: www.nercsi.com
Buffalo/WNY Chapter: www.csibwny.com

April 2026

Upcoming Events

CSI Northeast Region 2026 Annual Conference

Event Type: Educational seminars, exhibit hall, tours, and Northeast Region meeting.

Date: May 14-16, 2026. Description of daily activities is presented below.

Location: Embassy Suites by Hilton Buffalo, 200 Delaware Avenue, Buffalo NY.

Accreditation: Attendees will be eligible for up to 4 AIA HSW Learning Units, from among various, alternative educational sessions and tours.

Description: **Hosted by CSI Buffalo-WNY Chapter**.

CSI's Northeast Region's annual conference will include: Thursday - registration open, welcome reception, and hospitality suite. Friday - exhibit hall, tours of the Darwin-Martin House (designed by Frank Lloyd Wright), and the Richardson-Olmstead Campus (designed by architect Henry Hobson Richardson and landscape architect Frederick Law Olmstead), multiple presentations (AIA HSW accredited), including: "Working with What Exists: Practical Strategies for Adaptive Reuse and Historic Rehabilitation", by Paul Lang, AIA, of Carmina Wood Design, "Artificial Intelligence and Machine Learning – Ethical and Professional Considerations for Engineers and Architects" , by Larry Zamojski, PE, of Hatch Associates; "We Didn't Turn it Around on a Dime – Historic Rehabilitation Tax Credits", by Kerry Traynor, of KTA Preservation Specialists; "Mechanics of Preparing Construction Specifications: Practices for Clarity and Risk Management", by Kevin O'Beirne, PE, of HDR; and Panel Discussion: "Product Evaluation, Selection, and Procurement: Alternative Viewpoints of Priorities", moderated by Steve Van Dyke, RA, of Nault Architects; happy hour/scholarship fundraising auction, and banquet. The banquet will feature an interview with former Buffalo Bills safety Mark Kelso, who

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Chapter Officers:

President: David Rood, CSI, Commercial Sales, Weatherpanel, Inc, Dave.Rood@srsdistribution.com

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Committee Chairs:

Programming/Special Events: Deborah Siener, RA, CSI, CDT, LEED, APBD+C, Project Architect, Azar Design Co (formerly Foit-Albert Associates), DSiener@azardzn.com

Awards: (vacant)

Certification: Kevin O'Beirne, PE, FCSI, CCS, CCCA, CDT, National Manager of Engineering Specifications at a large design firm, Kevin.obeirne@hdrinc.com

Communications/Marketing: Vacant

Membership: Brad Vaillancourt, AIA, CSI, LEED, APBD+C, Trautman Associates, bvaillancourt@trautmanassociates.com

Newsletter Editor: Kevin O'Beirne

Directors:

Brad Vaillancourt, AIA, CSI, LEED, APBD+C, Trautman Associates, bvaillancourt@trautmanassoc.com

William Ferguson, CSI, AHC, wsferguson@roadrunner.com

Jim Bourgeois, CSI, Architectural Sales Representative, MarinoWare, jbourgeois@marinoware.com

Robert Kimmel, Pella, Trade & Commercial Sales KIMMELRD@Pellabuffalo.com

Websites:

CSI Buffalo-Western New York Chapter: www.csiwbny.com

CSI Northeast Region: www.nercsi.com

CSI-National: www.csiresources.org

The Scope

Newsletter of CSI's Buffalo-Western New York Chapter

The Scope is published approximately seven times per year, typically in September, October, December, January, February, April, and June, on or around the first day of the month. Submittals of articles and information of general interest to CSI's members and the design and construction community of Western New York, is always welcome. Submittals for this newsletter are due by the 15th of the previous month (approximately two weeks before publication). Please submit articles, information, and requests to the Editor:

Kevin O'Beirne

Kevin.obeirne@hdrinc.com

716-207-0396

Advertise in *The Scope*

Each issue of *The Scope* reaches approximately 650 people in the Buffalo-Western New York design and construction community, across a variety of disciplinary areas. An ad costs $100 per year. Contact the Editor for additional information.

Editorial

Regional Conference: Whaddya Waitin' For?

By Kevin O'Beirne

CSI's Northeast Region annual conference is being hosted by CSI's Buffalo Western New York Chapter, in Buffalo, on May 14-16, 2026. Almost all the preparations for the conference are in place. A hard-working committee of CSI Bufalo members has been actively planning the conference since September 2025. So, it is time to ask: If you have not yet registered for the conference, whaddya waitin' for?

The conference will be most successful when it has healthy attendance. Numerous sponsors and exhibitors have already signed up for the event. Although most registrants sign up in the final month, waiting until the very last minute is not desirable. Furthermore, the reputation of the Buffalo-WNY Chapter is, to some extent, on the line. The planning committee is proving that the chapter can plan and host a good, successful event, but a conference like this won't appear as successful without plenty of attendees.

The Northeast Region's 2025 conference was held in Plymouth MA, which is a nine-hour drive from Buffalo. It is no surprise that relatively few members of the Buffalo-WNY chapter attended the Plymouth conference. Now, with Buffalo hosting the conference, there may be real potential for Northeast Region members in population centers like Boston MA, New York City, Long Island, and northern New Jersey to likewise consider a conference in Buffalo to be too great of a distance for them to attend. Therefore, it is highly desirable that ***every single member*** of CSI's Buffalo-WNY Chapter register for the 2026 conference and participate.

Undoubtedly, many Northeast Region members from Maine to New Jersy to Rochester will attend the conference. Buffalo-WNY Chapter members are needed both to assist bringing off a smoothly-operating conference, and to welcome attendees from other chapters. This is an opportunity to demonstrate civic pride to other CSI members and serve as ambassadors of Western New York to people who may be visiting Buffalo for the very first time.

Buffalo has a lot to be proud of. Redevelopment as part of the Buffalo Renaissance, including smart and unique rehabilitation and repurposing of existing, historic buildings will not only be highlighted at the conference but is also a model for other communities to emulate. Buffalo has an exceedingly rich architectural heritage, some of which will be showcased through the conference and much more of which has been highlighted on the conference website. Downtown Buffalo in the area of the conference venue is an appealing locale, with many first rate restaurants and bars, with numerous nearby attractions to entice visitors. With Buffalo offering all of this, it is incumbent upon chapter members to turn out, participate, and get to know your fellow Northeast Region members.

See you at the conference!

[End]

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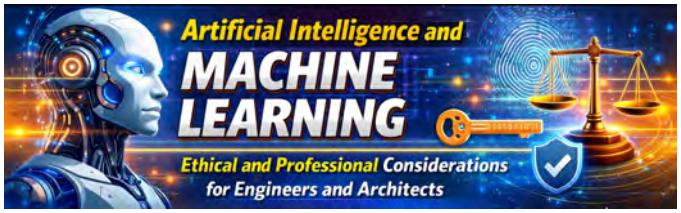
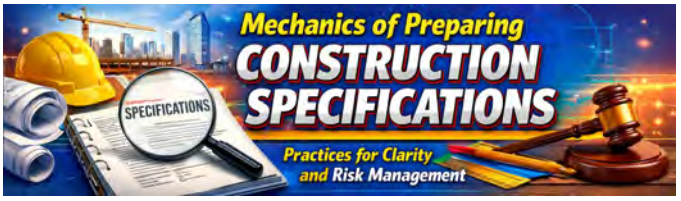
played for the team 1986-1993, and who served as the Buffalo Bills radio broadcast color commentator during 2006-2018. Saturday - annual meeting, CSI-National update, SPECtalks (three, separate non-technical, short presentations on entertaining and informative topics, including a discussion of innovations in technology used by daredevils who braved over Niagara Falls, a discussion by the Buffalo-based head of the Stained Glass Institute, and a brief presentation on a CSI member's recent visit to Antarctica), awards lunch, and Northeast Region board meeting. Conference is all day Friday and Saturday.

The event's theme is, "Kicking Off Project Success—Buffalo Proud", as supported by the following pages on the conference website: Things To Do In, And Near, Buffalo NY, Selected Points of Interest in Buffalo NY, and Restaurants and Bars Near Conference.





Cost: Full conference: $150 CSI members, $200 non-members; Friday educational sessions + banquet: $100 CSI members, $125 non-members. See conference website (link below) for complete information. Prices indicated here do not include hotel lodging, which is the responsibility of individual registrants.

Reservations Due By: May 13, 2026.

To Make Reservations: conference.nercsi.com

For Additional Information, visit conference.nercsi.com ***, or Contact***: Jim Bourgeoius, (732) 253-2678, jbourgeois@marinoware.com

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CSI National Conference

Event Type: Educational seminars, exhibit hall, and CSI-National annual meeting.

Date and Time: October 7-9, 2026.

Location: Phoenix AZ, (venue location TBA).

Accreditation: Multiple presentations accredited for AIA LU HSW.

Description: CSI's annual national conference is in Phoenix AZ. The conference includes multiple days of educational sessions, exhibit hall, banquets, awards ceremony, and networking opportunities. For additional information, see CSINational-Conference.org.

Cost: TBA

Reservations Due By: TBA

To Make Reservations: As of April 21, 2026, registration was not yet open.

Debut of MasterFormat 2026 and the Dynamic Standards

On March 31, 2026, the Construction Specifications Institute (CSI) debuted its new Dynamic Standards, featuring the newly-updated *MasterFormat* 2026, *Uniformat* 2010, and *OmniClass*.

In the past, *MasterFormat* was updated at somewhat uneven intervals, with its previous edition published in 2020. CSI is currently actively updating and expanding *UniFormat*. Going forward, CSI intends to publish updates much more-frequently, with revisions coming out not less than annually and, perhaps, as frequently as every six months.

In addition to the significant change in the frequency of issuing updates, the user interface with these organizational standards has also undergone a dramatic change. *MasterFormat* and *UniFormat* were each previously published as a paper book and an electronic PDF file. Now collectively grouped into the new Dynamic Standards, the user interface has become an interactive online database, known as "The Construction Standard", into which users input queries regarding appropriate numbers and titles in the desired organizational format. Reportedly, the new Dynamic Standards do not accommodate a user who merely wishes to browse a certain portion of the standard, perhaps to obtain an improved understanding of the work results or construction elements grouped together.

The user interface for these standards is not owned or administered by CSI. Rather, a new, for-profit entity, CIN ("Construction Information Network"), of which CSI is a minority shareholder, developed the new user interface and sells and licenses access to it by users. CIN is a private company created to commercialize and deliver CSI's standards through a subscription-based digital platform. CSI granted CIN the rights to host and distribute CSI standards digitally. CIN operates the platform where users access CSI's content. CIN is the technology and delivery entity, not the standards-writing body. The role of a private company in controlling access to public-interest standards owned by a non-profit entity has been controversial.

CIN does not publicly disclose its shareholders or board members. No corporate filings, press releases, CSI announcements, or industry publications list CIN's ownership structure or board composition.

With this change in business model for accessing the Dynamic Standards also comes a new pricing model. In the past, a legitimate, licensed copy of MasterFormat or UniFormat could be obtained by a one-time purchase from CSI's online store for approximately $150. As of March 31, 2026, access to the Dynamic Standards is only via a user-subscription, which is generally considerably more expensive for users. For example, a single seat license for the Dynamic Standards reportedly costs $400 per year. The pricing model for the Dynamic Standards appears to be largely oriented around "enterprise" subscriptions, apparently based on the user's revenue, although exactly how this is determined or verified was unclear at the time of this writing. One large design firm was reportedly quoted an annual subscription price of $100,000 for the Dynamic Standards, with CSI and CIN reportedly aggressively pushing the new fee and license agreement on the prospective user.

Although not publicized, CSI is also currently actively engaged in pursuing litigation in certain juris-

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dictions, including California, attempting to assert rights under its previous licensing agreement for *MasterFormat*. The merits and details of these cases are not entirely clear, and no court decisions have yet been rendered at the time of this writing. The extent to which CSI or CIN will pursue others in similar litigation is also unclear, although, at a CSI members' "town hall event" on March 31, 2026, CSI National board members asserted that "licensing police" would not pursue individual users. The current litigation was not mentioned during the town hall event. The developments since late March have been controversial among CSI members, as evidenced by a heavy volume of posts on various CSI online communities, as well as LinkedIn, 4specs, and perhaps others. Posts in the online forums have generally been unfavorable relative to the pricing of the Dynamic Standards, the muddled and reportedly contradictory language of its new licensing agreement, lack of clear communication from CSI, and questions about the new, for-profit entity administering the construction standard platform. In addition, the CSI-Connect Community has featured CSI members' allegations of censorship of posts critical of CSI staff, the national board, the license agreement for The Construction Standard, and other matters.

In an extraordinary incident, publicized on both LinkedIn and the CSI-Connect Community, a person associated with CIN, reportedly made a vicious, online, personal attack against a CSI member who had posted multiple, direct questions about the debut of the Dynamic Standards and their pricing structure. The incident drew the following response from CSI CEO Mark Dorsey, who posted on the CSI-Connect Community on April 20, 2026, "Late yesterday, an employee of The Construction Standard falsely represented his membership status with CSI and engaged in inappropriate social media exchanges with CSI members and others in our community regarding CSI Dynamic Standards. The posts were inappropriate, overreaching, and hurtful. This individual was not authorized to speak on behalf of CSI and does not represent CSI leadership or the organization's official view." Mr. Dorsey continued, "We have taken action to address this and prevent it from happening again." However, Mr. Dorsey's post presented relatively little detail regarding the incident.

It would be difficult to assert that the debut of the Dynamic Standards has been handled well, or that past decisions on the matter by CSI's National board have been undertaken in a fully transparent manner, that properly communicated the direction CSI was taking. The discontent of CSI members is apparent and, three weeks after the debut of the Dynamic Standards, does not appear to be declining. If anything, outrage seems to be increasing. How this matter will ultimately affect CSI as a whole and its membership remains a developing story.

[End]

Landmark Structures

Buffalo's Guaranty Building

By Kevin O'Beirne with a lot of help from "Staff Writer AI"

The Guaranty Building, at 140 Pearl Street in Buffalo, New York, is one of the most celebrated early skyscrapers in the United States. The Guaranty Building is a landmark structure of architectural innovation and a defining work of architects Louis Sullivan and Dankmar Adler. Its creation in the mid-1890s reflected Buffalo's rapid economic expansion, its ambition to assert itself among America's great industrial cities, and the desire of prominent local investors to commission a modern commercial building that embodied the latest advances in steel-frame construction and architectural design. The building's history, from its conception through its many renovations, mirrors the evolution of Buffalo itself and the broader development of American architecture.

Buffalo's Guaranty Building
(Image from Boston Valley Terra-Cotta)

In the early 1890s, Buffalo was booming. Its strategic location at the western terminus of the Erie Canal, its status as a busy, inland seaport on Lake Erie, and its role as a rail and industrial hub made it one of the fastest-growing cities in the nation. Commercial demand for modern office space surged as banks, insurance companies, and industrial firms sought prestigious downtown addresses. Oil magnate Hascal L. Taylor, recognizing both the economic opportunity and the symbolic value of a modern skyscraper, commissioned what would become the Guaranty Building as a premier office structure that would reflect Buffalo's rising stature.

Taylor's vision was to create a building that not only met the functional needs of tenants but also projected confidence and modernity. The decision to construct a steel-frame skyscraper, still a relatively new building type, was driven by the desire to maximize rentable space on a constrained urban parcel, showcasing Buffalo's embrace of cutting-edge architectural and engineering practices. The building is 13 stories, with a height of 167 feet above the adjacent streets.

The building was sited at the corner of Church and Pearl Streets, within what is now the Joseph Ellicott Historic District. This location placed it in the heart of Buffalo's central business district, close to major commercial institutions and transportation routes. The site's prominence made it ideal for a structure intended to symbolize economic ambition and architectural sophistication.

Taylor selected the Chicago architecture firm of Adler & Sullivan, then at the height of their influence, to design the building. Sullivan became the project's principal designer. He was a defining voice in early American architecture, shaping the

language of tall buildings through expressive form and structural clarity. Born in Boston in 1856, he became a leading figure of the Chicago School and a mentor to Frank Lloyd Wright, advancing ideas that helped establish modern architectural identity. Sullivan and Adler served as two of the principal architects for the much-lauded Chicago World's Fair of 1893.

Sullivan's reputation as a pioneer of the skyscraper and his philosophy that "form follows function" made him an ideal choice for a project intended to be both technologically advanced and aesthetically distinctive. The Guaranty Building was the final major collaboration between Sullivan and Adler, marking the culmination of their partnership.

Construction commenced in 1895 and was completed in 1896. While precise cost figures vary in historical accounts, the project represented a significant investment for its time, reflecting both the expense of steel frame construction and the elaborate terra cotta ornamentation that became its signature feature. Louis H. Sullivan's and Dankmar Adler's Chicago School approach to architecture emphasized verticality, structural clarity, and richly detailed, organic ornamentation.

The building's completion in just over a year demonstrated the efficiency of steel-frame construction and the growing sophistication of American building trades.

The Guaranty Building's main entrance, showing some of the details in the exterior terra cotta.

The Guaranty Building is widely regarded as one of the finest examples of Sullivan's mature architectural style. Its exterior is defined by a steel skeleton clad in brick and richly ornamented terra cotta. The façade is organized into four distinct zones: the base, the vertical shaft, the decorative cornice, and the attic level. This composition emphasizes the building's height and structural logic, a hallmark of the Chicago School.

The Guaranty Building's terra cotta ornamentation is particularly notable. Sullivan designed intricate organic patterns, featuring vines, tendrils, and geometric motifs, that almost entirely cover the building's facades. These patterns serve both decorative and symbolic purposes, expressing Sullivan's belief that ornamentation should reflect natural forms and reinforce the building's structural rhythm. The building's streetcorner location allows the ornamentation to wrap continuously around both street facing elevations, enhancing its visual impact.

The windows are arranged in vertical bands that accentuate the building's height. The repetition of these window bays, framed by terra cotta piers, creates a sense of upward movement that Sullivan described as essential to the skyscraper's identity as a "proud and soaring thing."

Inside, the Guaranty Building reflects Sullivan's commitment to functional clarity and aesthetic refinement. The lobby features decorative ironwork,

mosaic tile floors, and ornamental details that echo the organic motifs of the exterior. The use of natural light was a key design principle: large windows and an open floor plan allowed daylight to penetrate deep into the interior, reducing reliance on artificial lighting and creating a more pleasant working environment.

Sullivan's "form follows function" philosophy is evident throughout the Guaranty Building's interior. Office floors were designed to be flexible and efficient, with minimal structural intrusions. The building's steel frame allowed for open spans and adaptable layouts, making it attractive to a wide range of tenants.

The interior ornamentation, while less extensive than the exterior, includes stylized floral patterns in plaster, wood, and metal. These details reinforce the building's cohesive aesthetic and demonstrate Sullivan's belief that even utilitarian spaces should be enriched by thoughtful design.

The Guaranty Building opened in 1896, quickly becoming one of Buffalo's most prestigious office addresses. Its completion was celebrated as a milestone in Buffalo's architectural and commercial development. The building was originally named the Guaranty Building but, two years after its opening, it was renamed the Prudential Building. It held this name for 85 years, until its original name, the Guaranty Building, was reinstated in 1983.

Its opening coincided with a period of optimism in Buffalo, which hosted the Pan-American Exposition in 1901. The building's modern design and technological sophistication were emblematic of the city's aspirations and its role as a center of commerce and innovation.

Over the decades, the Guaranty Building underwent numerous changes, some of which altered its original character. Mid-Twentieth-Century renovations introduced modern materials and systems that were not always sympathetic to Sullivan's design. However, growing appreciation for the building's architectural significance led to major restoration efforts in the late Twentieth and early Twenty-first Centuries.

The building was added to the National Register of Historic Places in 1973 and designated a National Historic Landmark in 1975, reflecting its importance in American architectural history.
One of the most significant modern renovations began in 2006, when the law firm Hodgson Russ undertook a $15 million restoration project. This effort included extensive repairs to the terra-cotta façade, restoration of interior spaces, and modernization of building systems. The project aimed to preserve Sullivan's original design while ensuring the building's functionality for contemporary use. Visitors today can view exhibits documenting this restoration in the building's education center.

The building is now owned by the State University of New York at Buffalo, which has played a key role in its preservation and ongoing maintenance.

As of 2026, the Guaranty Building remains an active office building and a major architectural attraction. Its primary tenant is Hodgson Russ, one of Buffalo's largest and oldest law firms, which occupies a substantial portion of the building. The firm's investment in the building's restoration has helped ensure its continued use and preservation.

Architect Louis Sullivan
(Image from virtuvo.com)

The building also houses an education center and exhibition space that highlights its history, architecture, and restoration. These public areas allow visitors to appreciate the building's significance and learn about its place in the evolution of American skyscraper design.

References

- Prudential (Guaranty) Building – Wikipedia.
- Louis Sullivan's Masterpiece: The Guaranty Building – ArchEyes.
- Guaranty Building – Explore Buffalo.
- The History of the Guaranty Building – Born Buffalo.
- Architecture Behind Guaranty Building – Engineers and Architects of America.

Louis Sullivant – Wikipedia.

[End]

Feature Article

Specifications Language

Controlling the Work and Related Matters

By Kevin O'Beirne

It is widely known and accepted among design professionals and specifiers that construction contracts typically confer on the contractor responsibility for construction means, methods, procedures, techniques, and sequences, together with responsibility for construction site safety and protection, and complying with the contract documents. These are often regarded as among the contractor's most important obligations. Despite this, owners, design professionals, and specifiers routinely incorporate language into construction contracts and specifications that muddies the waters of contractual responsibility for controlling the work, safety, protection of property, and related matters. While likely well-intentioned by drafters, clauses that have potential to obscure otherwise clear contract language may also have potential to result in a sharing of responsibility and liability, in the event of lost time or financial damages.

Controlling the work, including construction means and methods, safety and protection during construction, and complying with the contract documents, is a broad topic, affecting preparation of construction contracts and specifications, as well as construction contract administration. This article focuses on preparation of the construction documents, especially the specifications and the documents in "Division 00 – Procurement and Contracting Requirements".

Foundational Contractual Requirements

The language of standard construction contracts in widespread use in the United States is generally quite clear, assigning to the contractor sole responsibility for construction means and methods, safety and protection during construction, compliance with the construction contract documents, and completing the work within the stipulated contract times. For example, AIA A201—2017, *Standard General Conditions of the Contract for Construction*, includes the following:

> **"§ 3.3.1** The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work under the Contract. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof and shall be solely responsible for the jobsite safety of such means, methods, techniques, sequences, or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely notice to the Owner and Architect, and shall propose alternative means, methods, techniques, sequences, or procedures. The Architect shall evaluate the proposed alternative solely for conformance with the design intent for the completed construction. Unless the Architect objects to the Contractor's proposed alternative, the Contractor shall perform the Work using its alternative means, methods, techniques, sequences, or procedures."

The foregoing not only assigns to the contractor responsibility for construction means and methods, but also for safety and protection. When the construction contract establishes specific means and methods of construction, which the contractor believes may be unsafe, Section 3.3.1 allows the contractor to propose alternative construction means and methods and expressly indicates that the architect's review is only for compliance with the architect's design intent for the completed project as a functioning whole. Section 3.3.1 does not require that the architect approve or accept the contractor's proposed alternative means and methods, regardless of whether the contract documents expressly establish certain means, methods, procedures, techniques, or sequences. Thus, by including language such as, "*Unless the Architect objects to the Contractor's proposed alternative, the Contractor shall perform the Work using its alternative means, methods, techniques, sequences, or procedures*", Section 3.3.1 might be construed as obviating the need for change orders

or architect's supplemental instructions when the contractor elects to use means and methods other than those expressly indicated in the contract documents.

AIA A201—2017 Section 10.2 titled, "Safety of Persons and Property", clearly establishes the contractor's responsibility for safety of persons at, and adjacent to, the site, as well as protection of property during construction. Section 3.5 ("Warranty") requires, in part, "the Work will conform to the requirements of the Contract Documents and will be free from defects", meaning that the contractor is solely responsible for providing work at the locations required, within the stipulated contract times, and of the quality established in the contract documents, without the intervention or assistance of any third-party, such as the architect or owner.

EJCDC C700—2018, *Standard General Conditions of the Construction Contract*, includes:

> "7.01 Contractor's Means and Methods of Construction
>
> "A. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
>
> "B. If the Contract Documents note, or Contractor determines, that professional engineering or other design services are needed to carry out Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures, or for Site safety, then Contractor shall cause such services to be provided by a properly licensed design professional, at Contractor's expense. Such services are not Owner-delegated professional design services under this Contract, and neither Owner nor Engineer has any responsibility with respect to (1) Contractor's determination of the need for such services, (2) the qualifications or licensing of the design professionals retained or employed by Contractor, (3) the performance of such services, or (4) any errors, omissions, or defects in such services.
>
> "7.02 Supervision and Superintendence
>
> "A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents.
>
> "B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who will not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.
>
> "7.03 Labor; Working Hours
>
> "A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall maintain good discipline and order at the Site."

EJCDC C-700—2018 addresses safety and protection in Paragraph 7.13, which states in part:

> "7.13 Safety and Protection
>
> "A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations."

Similar to AIA A201 Section 3.5, EJCDC C-700—2018 Paragraph 7.17 ("Contractor's General Warranty and Guarantee") states in part, "Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective." This extremely important provision makes the contractor solely responsible for complying with all aspects of the construction contract, without imposing on either the engineer or the owner any similar responsibility. The reason for this is fairly obvious: both AIA and EJCDC documents allocate contractual risk to the party best able to control that risk. Accordingly, the contractor is in the best position to control the work, its workers, scheduling, and other matters and, hence, possesses full responsibility for providing work in accordance with the contract.

Both AIA A201 and EJCDC C-700 include other provisions expressly indicating that the architect's and engineer's review and action on required submittals, visits to the site, and review and action on the contractor's payment requests do not constitute approval or acceptance of the contractor's means and methods of construction, or safety and protection measures. The design professional's responsibilities and limitations of authority as set forth in EJCDC C-700 and AIA A201,

are coordinated with their respective agreements for design professional services, including EJCDC E-500 – *Agreement Between Owner and Engineer for Professional Services,* and AIA B101 – *Agreement Between Owner and Architect*.

The Problem

Many project owners use their own, unique construction agreements and general conditions, rather than widely used standard contract documents, such as those by EJCDC and AIA. Owner-specific documents frequently incorporate language that decreases the clarity of provisions assigning to the contractor responsibility for construction means and methods, and safety and protection. Presented below are examples from actual construction contracts used by public owners:

"…the means and methods of construction shall be such as the CONTRACTOR may choose; subject, however, to the OWNER'S right to prohibit means and methods proposed by the CONTRACTOR which in the OWNER'S judgment: (1) shall constitute a hazard to the work, or to persons or property, or shall violate express requirements of applicable laws or ordinances; or (2) shall cause unnecessary or unreasonable inconvenience to the public; or (3) shall not produce finished work in accordance with the requirements of the Contract documents; or (4) shall not assure the work to be completed within the time allowed by the Contract."

"If the OWNER discovers that the CONTRACTOR has failed to comply with the applicable federal and state law by failing to furnish the necessary flagmen, warning devices, barricades, lights, signs or other precautionary measures for the protection of persons or property, the OWNER may order such other, additional precautionary measures as required by law to be taken to protect persons and property."

"Should the Contractor fail to remove any employee from work when requested or fail to furnish suitable and sufficient personnel and equipment for the proper prosecution of the work, the Engineer may suspend the work by written notice until compliance with such order is achieved."

"The superintendence and the number of workmen shall be sufficient, in the opinion of the Engineer,"

"Contractor…shall discharge at the written request of the Authority any incompetent or troublesome men in his employ. None but men expert in their respective branches of work shall be employed where special skill is required."

"If weather conditions prevent this contract from being completed in this calendar year, a winter shutdown or suspension of work may be ordered by the Commissioner of Public Works."

"The Consultant shall have the authority to stop the work, wholly or in part, as he may deem necessary to insure proper execution of the Contract Documents. The Contractor shall not suspend any operations without the permission of the Consultant."

"Upon notice to the Contractor that the City deems any employee incompetent or negligent or for any cause unfit for duty, the Contractor shall immediately require such employee to correct his conduct and if he is unable to do so, the Contractor shall immediately remove him from employment on the work."

"The Contractor shall promptly comply with any other instructions, written or verbal, which the Owner or the Design Professional shall give to the Contractor with respect to the storage, handling and use of explosives and inflammable materials as the work progresses."

"If, in the judgment of the Commissioner, it becomes necessary to change the schedule of operations in order to accelerate the work, each Contractor or Subcontractor, when so ordered by the Commissioner, shall cease work at any particular point and transfer the Contractor's workmen and equipment to such points and execute such portions of the work as the Commissioner may direct."

"All temporary shoring necessary for the removal of existing work or for the installation of new work shall be deemed to be required by the Contract Documents and must be done in ac-

cordance with the directions and to the satisfaction of the County."

"It shall be the Architect's or Engineer's responsibility to verify that the Contractor's schedule is adhered to strictly. Should the Contractor's progress fall behind the schedule established by the Contractor and approved jointly by the Owner and the Architect or Engineer, the Architect or Engineer shall promptly notify the Contractor in writing that the work must get back on schedule and further advise the Owner of the steps which the Contractor has taken to put the project back on schedule and enforce maintenance of the schedule."

Contract clauses that allow or obligate the project owner or design professional to review, comment on, or direct the contractor's means and methods, or safety and protection measures, muddy the contractual waters for controlling the work. As documented in many court and arbitration decisions in construction disputes, with a contractual right often comes a corresponding, associated duty. Therefore, the example contract clauses presented above could be interpreted such that the owner or design professional needs to affirmatively evaluate the competency of each worker employed in the construction, on an ongoing basis, and affirmatively examine the work for defects, as well as potential safety and protection concerns.

In a disagreement concerning injury to persons and property, late performance, acceptability of the work, or other matters, a contractor, perhaps in consultation with its legal counsel, may contend that contract clauses such as the examples presented above provide the contractor the ***right to rely*** on the skill, ability, timeliness, and judgement of the owner or design professional for the contractor's construction purposes. Few owners or design professionals conduct themselves during construction with the intent of looking out for the contractor's benefit, let alone being fully aware of, or sufficiently expert in, construction means and methods and their associated safety and protection measures. Therefore, contract language, such as the examples presented above, should be avoided or limited.

AIA A201 and EJCDC C-700, together with their associated professional services agreements, obligate the design professional to reject defective work when the design professional is aware of defective work, but expressly do not obligate the design professional to rigorously or continuously "inspect" the work, except to verify whether the work is substantially complete and to verify whether the work is fully complete and ready for final payment. In contrast, several of the example contract clauses, presented above, appear to interject the design professional or the owner into the contractor's obligation to furnish work in accordance with the contract documents, thus blurring which party is ultimately responsible for defective construction.

Despite the reasonably clear language of documents such as AIA A201 and EJCDC C-700, specifications provisions have potential to alter these contractual requirements. These often appear in requirements for the contractor to furnish, as a submittal, construction plans for specific elements of the work, often together with a written plan setting forth the contractor's quality assurance and quality control measures. Selected examples of this type of specifications language include:

"Excavation Plan: Prior to starting excavation operations, submit written plan to demonstrate compliance with OSHA 29 CFR Part 1926.650. As a minimum, excavation plan shall include: …2) Excavation method(s)... 3) Copies of "manufacturer's data" or other tabulated data if protective system(s) are designed on the basis of such data…"

"Submit Site-specific health and safety plan to ENGINEER the sooner of: seven days prior to pre-construction conference, or 30 days prior to CONTRACTOR's scheduled mobilization at the Site."

"Submit details for temporary supports and tie-downs as needed to stabilize the cantilevers during construction."

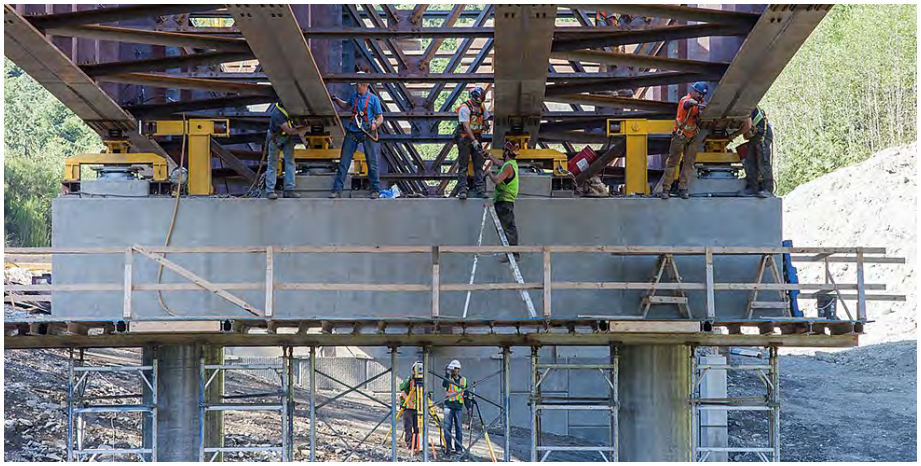
"Submit erection plan, including sequence of erection; crane capacities; and the location, capacity and elevation of any temporary supports."

It is common for construction contracts to require submittal of the contractor's project-specific quality assurance (QA) and quality control (QC) plan. Exactly what submitted QA/QC plans are required to address is often unclear. QC requirements for determining the acceptability of the work should not be established by a contractor-prepared submittal but, rather, should be clearly set forth in each specifications section. Similarly, the specifications should indicate required QA, such as qualifications requirements, mockups, and pre-installation conferences, for each work result. Indeed, *SectionFormat*--2007, by the Construction Specifications Institute, establishes articles titled, "Quality Assurance" in "Part 1 – General", "Source Quality Control" in "Part 2 Products", and "Field Quality Control" in "Part 3 – Execution". When necessary, requirements for QA and QC are clearly established in the specifications, there is often little need for a contractor-submitted QA/QC plan for the project. When a comprehensive QA/QC plan submittal is required, the design professional's review could potentially transfer from the contractor some

of the contractor's overarching responsibility to provide construction in accordance with the contract documents.

Requiring the contractor to submit its plan for executing the work, whether means and methods of excavation, safety and protection, temporary supports needed during construction, proposed types and capacities of construction equipment and machinery, and the like, obligates the receiving entity (typically the design professional) to review, comment upon, and assign a submittal disposition. Such requirements have the potential to impart to the receiving entity responsibility to evaluate the adequacy of the contractor's means and methods of construction and, possibly, associated safety and protection measures. The potential liability for requiring, receiving, and reviewing such submittals may be significant, and has the potential to impart to the receiving entity some of the contractor's risk associated with such matters.

Recommended Practices



The documents comprising "Division 00 – Procurement and Contracting Requirements" for a construction project should clearly assign to the contractor sole responsibility for controlling the work. Caveats that the owner or design professional may interject themselves into the contractor's responsibility for controlling the work, complying with the contract documents, safety and protection, and other matters should be avoided. When a design professional is required to use a project owner's unique Division 00 documents, an experienced employee, familiar with the project and contractual risk allocations, should perform a risk management review of the proposed Division 00 documents. One of the results of such reviews should be written recommendations presented to the owner, with advice that the owner consult with their legal counsel, to appropriately revise contract clauses that have potential to blur the lines of contractual responsibility for construction means and methods, safety and protection, complying with the contract documents, and complying with laws and regulations.

Drafters of construction specifications should carefully consider whether requiring certain, contractor-furnished submittals, such as installation plans, proposed construction procedures, details of proposed construction equipment and machinery, health and safety plans, and QA/QC plans are truly necessary to achieve the work results required by the construction contract. When such submittals or rights of the owner and design professional are being considered, specifiers, design professionals in responsible charge, and project managers should carefully consider that receiving and reviewing such submittals potentially increases their risk by transferring to them a portion of the contractor's liability. With a contractual ***right*** often comes a corresponding ***obligation*** to exercise the associated authority. Often, construction submittals are necessary only to indicate materials and equipment proposed for incorporation into the completed project, together with other common submittals, such as those requiring submittal of shop test results, field tests and inspections, and suppliers' written instructions.

For certain types of work, such as construction of special (deep) foundations, the design professional in responsible charge may deem it necessary to require installation plan submittals. In such cases, certain aspects of the proposed means and methods of construction may have strong potential to positively or negatively affect the quality of the completed work. Such cases should, optimally, be rare and, when necessary, the requirements for such submittals in the specifications should include language similar to the following:

> *[Architect's] [Engineer's] review of, comments upon, assignment of an appropriate Submittal disposition, and retention in files, for [indicate specific type of work] installation plan does not, in any way, modify Contractor's sole responsibility for complying with the Contract Documents, construction means, methods, procedures, techniques, and sequences, and associated safety and protection measures.*

When reviewing such submittals during construction, the design professional should avoid commenting on matters that will not affect the contractor's ability to

comply with the contract documents and the design professionals design intent. A disclaimer similar to that suggested above should likely also be included with the design professionals' comments on such submittals.

Although virtually every specifications section includes certain requirements for construction means, methods, procedures, techniques, or sequences, excessively detailed requirements should typically be avoided unless they address matters likely to adversely affect the required quality of the completed work and achievement of the design intent. Specific means and methods should be required only when absolutely necessary.

To further encourage the contractor to apply its expertise and innovation in the construction, it may be appropriate to include in the construction contract documents, likely within a specifications Section 01 25 00 – Substitution Procedures, language clearly establishing requirements for proposed substitute construction means, methods, techniques, procedures, and sequences. Although some may contend that design professionals' specifications do not address construction means and methods, the fact is that specifications frequently require certain means, methods, techniques, procedures, or sequences. For example, industrial/process projects frequently include a specifications Section 01 14 16 – Coordination with Owner's Operations, stipulating specific construction sequences and restrictions on facility or process shutdowns when tie-ins to existing systems are necessary. Contractors on such projects frequently propose alternate sequences, combining separate shutdowns, request additional shutdowns, or request longer durations for shutdowns. Such requests, when received, should be considered as proposed substitutes, even though they are not concerning materials or equipment that will become a permanent part of a completed project. In other cases, specifications may require use of certain tools or minimum curing periods or other matters. Contractor requests to modify such requirements should be regarded as proposed substitutes.

Temporary construction facilities, such as temporary support of excavations, can be considered with three levels of importance:

A shallow excavation required on a virgin site with reasonably stable soils. In this scenario, the contractor will typically be allowed to determine their own approach relative to the means and methods of supporting the excavations.

An excavation, perhaps of somewhat extensive depth and with variable subsurface conditions, where potential for damage to property or unsafe conditions may be expected. In this case, the specifications will likely expressly require that the contractor retain the services of a third-party professional engineer to evaluate the excavation conditions, together with the contractor's intended construction means and methods and, when necessary, design appropriate temporary supports.

A deep excavation in unstable soils adjacent to the foundation of an historic structure, or directly adjacent to a 72-inch diameter, 100-year-old, active combined sewer. In this scenario, where failure of the temporary supports of the excavation is likely to have an extremely adverse outcome, especially if entrusted to a contractor-retained professional engineer unknown to the owner and project design professional, the owner may desire to have the project design professional fully design the required temporary supports adjacent to the historic building or large, ancient sewer. Another example of this alternative is how highway projects for state departments of transportation include numerous sheets in the drawings showing required plans for maintenance and protection of traffic during construction. This alternative will, of course, increase the cost of the design professional's design phase services and may potentially be inconsistent with the contractor's preferred construction means and methods, but is likely to result in the owner and design professional having greater confidence in the required temporary facilities. While this alternative is relatively rare, when implemented, owners and design professionals should be prepared for the contractor to propose substitute means and methods.

Relative to temporary supports, whether for excavations or for temporarily supporting an existing structure or building element, the second alternative, above, is likely the most common. If a contractor-retained professional engineer is required to design temporary facilities and, during design, it is deemed that the contractor and their professional engineer are not fully trusted, documentation of the design of the temporary facilities may be a required submittal. In such a case, the specifications should clearly indicate what the project design professional will, and will not, review, similar in some respects to how AIA A201 and EJCDC C-700 address delegated designs. An example of such language in the associated specifications section is:

[Architect's] [Engineer's] review of, comments upon (if any), assignment of disposition, and retention of copy of such Submittal is only for the limited purposes of: (1) verifying that Contractor has complied with the requirement to retain the services of a properly licensed, registered professional engineer to design the required temporary facilities, and (2) determine by brief observation that such design appears

to be reasonably complete. [Architect's] [Engineer's] review expressly does not encompass: (a) Contractor's construction means, methods, techniques, procedures, or sequences, and associated safety and protection measures; (b) whether such design is suitable for Contractor's construction means, methods, techniques, procedures, or sequences, and associated safety and protection measures; and (c) suitability, completeness, and accuracy of such design prepared by or for Contractor, including loading conditions that are the basis of such design. Contractor's professional engineer solely possesses professional liability for the design of the temporary facilities. Owner and [Architect] [Engineer] have the right to rely on the suitability, completeness, and accuracy of such designs, and Contractor's implementation thereof.

The design professional's staff reviewing such submittals should understand and comply with language like the example, above, when incorporated in the construction contract. To reduce the potential for inadvertently taking on some of the contractor's risk and responsibilities, submittal reviewers should refrain from exceeding the limits of the design professional's authority when commenting on such submittals.

In addition, it may be desirable to include in the project's specifications Section 01 71 23 – Field Engineering, basic, brief requirements concerning the qualifications of professional engineers, professional geologists, and other design professionals retained by the contractor for services related to controlling the work, such as:

1. *Design Professional Services that are Not Delegated Professional Design of the Completed Work:*
    a. *Where the Contract Documents require that Contractor retain a design professional such as a professional engineer, geologist, or architect, or when in Contractor's judgment retaining such entity is necessary for implementing Contractor's means, methods, techniques, procedures, and sequences, or associated safety and protection measures, retain a design professional with necessary skills, experience, and qualifications to perform the required services. Where required by the Contract Documents or by Laws or Regulations, such entity shall be legally qualified and duly licensed and registered to perform the associated design professional services in the same jurisdiction as the Site, unless otherwise allowed by Laws or Regulations or by the Contract Documents.*
    b. *Owner and [Architect] [Engineer] shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and approvals performed by such design professional(s).*

Conclusions

In construction documents, contract language should avoid muddying the waters of contractual responsibility for construction means and methods, safety and protection, obligations to provide work in accordance with the contract documents, and other matters related to controlling the work. Design professionals should consider the potential for required submittals, such as installation plans, to potentially transfer to the design professional some of the contractor's obligations for controlling the work. In the relatively limited circumstances when such submittals are required, appropriate contract language should be included to expressly address the limits of the design professional's review and actions. Failure to do so may result in a significant shift of risk from the contractor to the project owner and the design professional.

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Kevin O'Beirne, PE, FCSI, CCS, CCCA is a professional engineer licensed in NY and PA with over 35 years of experience designing and constructing water and wastewater infrastructure for public and private clients. He is the engineering specifications manager for a global engineering and architecture design firm. He has been a member of various CSI national committees and is the certification chair of CSI's Buffalo-Western New York Chapter. He is an ACEC voting delegate in the Engineers Joint Contract Documents Committee (EJCDC) and lives and works in the Buffalo NY area. Kevin O'Beirne's LinkedIn page.