

# Structural Steel Preconstruction Agenda

IMPORTANT: This precons steel deferred submittals	<del>-</del>	•	of any work. All structural to start of work.
Project Name:			
Date:			
Date.			
Project Team	Name/Company	Phone	Email
COB Building Inspector			
RDPRC			
Engineer of Record			
General Contractor			
Steel Subcontractor			
Special Inspector			
Steel Fabricator			
General Provide estimated start de	ates, work hours and du	ıration of steel fabricat	ion and erection.
Briefly describe handling,	storage and transporta	tion of fabricated mem	nbers.
Discuss procedures for connonconformance issues (			ntation of
Note that substantial char for review. Please check w	=		

### **Submittals and Certifications**

Submittals and certifications shall be available on site at the start, during, and at the completion of the project for verification by the City of Bellevue (COB) and special inspector(s).

- 1. The following submittals and certifications shall be reviewed and approved by COB.
  - Fabricator approval (IBC 1704.2.5.1) Where a fabricator is not WABO-certified, the
    fabricator's qualification must be reviewed and approved by the engineer of record (EOR)
    prior to submittal for review and approval by COB. For non WABO-certified fabricators,
    special inspections may be required to be performed during fabrication at the fabrication
    shop and special inspection reports must be submitted to the building inspector and EOR
    during fabrication.
  - For fabricated items without special inspection, a certificate of compliance stating that the work was performed in accordance with the approved construction documents shall be submitted to the building inspector at the completion of fabrication (IBC 1704.51.1).

•	Deferred submittals shall be submitted for approval prior to installation. Provide a full list of the structural steel deferred submittals as shown in the approval drawings:

2. As applicable, submittals and certifications shown in <u>Appendix A</u> shall be reviewed and approved by the engineer of record (EOR).

#### **Structural Observation**

Where structural observations are required per IBC 1704.6, the structural observer shall submit a structural observation program outlining the items scheduled for review and a general description of when structural observation is intended to occur. Copies of structural observation reports shall be on site for review by the inspectors.

In the space provided below, please provide a summary of the required structural observations for this project.

Sp	pecial Inspections
per	view the statement of special inspections and go over the frequency of special inspections (i.e., form and observe). Where unclear, the EOR needs to define the frequency of specific tasks for riodic special inspections.
RD cor	ports from the inspections and tests shall be submitted to the building inspector and the PRC. Discrepancies shall be brought to the immediate attention of the contractor for rection. If they are not corrected, the discrepancies shall be brought to the attention of the ilding inspector, architect, and EOR.
bui rep	al inspection reports and non-destructive testing (NDT) reports shall be submitted to the ilding inspector prior to final inspection stating that all systems and elements listed in the port were inspected, found that materials, procedures and workmanship are in conformance h the approved construction documents, and there are no pending corrections.
Sy	stems and Elements
1.	Special inspection of structural steel construction shall be in accordance with the quality assurance requirements of American Institute of Steel Construction (AISC) 360 Chapter N. (IBC 1705.2.1)
2.	Special inspection of structural steel elements in the seismic force-resisting systems (SFRS) shall be in accordance with the quality assurance requirements of AISC 341 Section J. (IBC 1705.12.1)
3.	What are the SFRS for this project? Are there any special requirements for the system in accordance with AISC 341?

4. Standard Code of Practice Section 1.11 requires that the fabricator permanently mark protected zones. If the markings are obscured in the field, such as after fireproofing, the

	contractor shall re-mark the protected zones. What are the specifications for protected zones for this project?
W	elding
1.	Special inspections of welding shall be per the American Welding Society (AWS) D1.1. Special welds shall be per seismic supplement AWS D1.8. Welders shall be WABO-approved and certifications shall be verified by the special inspector on site.
2.	Provide welding procedures and welder's qualifications on site for verification by the special inspector.
3.	Discuss welds that are for the seismic force-resisting systems (SFRS). Note that demand critical (DC) welds require AWS D1.8-certified welders DC welds. Identify where demand critical welding is required:
4.	Address nondestructive testing (NDT) frequency and documentation in the field, such as ultrasonic testing (UT), magnetic particle testing (MT), etc.:
5.	For ASTM A913 grades, use E70, E80 and E90 electrodes when matching weld metal strength is required for Grades 50, 65 and 70, respectively.
В	olting
1.	Bolting operations are inspected per AISC 360 Chapter N and AISC 341 Chapter J.
2.	Discuss bolting system to be used, tolerance for bolt holes, procedures for mis-drilled and mis- aligned holes.
3.	Discuss connection types (i.e., snug-tight, pretensioned, slip critical, etc.).

4.	Bolt certifications must be available on site for the verification by the special inspector.
5.	Discuss method of marking bolted locations where the use of TC/twist-off-bolts cannot be
	accessed to tension the bolts with equipment/shear wrench.
То	lerances
	cuss allowable tolerances during erection of steel members. Are there any special design
cor	nsiderations such as differential column shortening, deflection of transfer girders and trusses?
۸۰۰	there any aposition decreases and adjustments for other trades such as proteins and wall
	e there any specified clearances and adjustments for other trades, such as prefabricated wall nels and curtain wall systems?
Pai	ieis and curtain wan systems:
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TP	uccos and Onon-Woh Stool Toicts

## Trusses and Open-Web Steel Joists

Discuss required welding inspection, verification of connection details, bridging and bracing requirements.

#### **Decks**

Special inspection and qualification of welding special inspectors for cold-formed steel floor and roof deck shall be in accordance with the quality assurance inspection requirements of SDI QA/QC.

- 1. Review weld size, spacing, and pattern. Confirm visible weld information is provided in the approved plans.
- 2. Type of seam attachments.
- 3. Allowable penetration (size of penetration) with or without supplemental supports.
  - a. Pre-made holes or post made holes/cores.
- 4. Repair procedure for damaged deck during installations.

Is lightweight concrete required to meet fire-resistance rated requirements?  $\square$  Yes  $\square$  No.

If yes, has this been approved as part of the concrete mix design? $\square$ Yes $\square$ No.			
Note: batch plant inspection is required for lightweight concrete mixes.			
<ol> <li>Architecturally Exposed Structural Steel (AESS)</li> <li>Identification of members and connections using AESS Categories.</li> <li>Fabrication and erection tolerance requirements if more restrictive.</li> <li>Any other special requirements.</li> <li>Discuss any issues.</li> </ol>			
<ul> <li>Painting, Coating, and Fireproofing</li> <li>1. Masking of field bolted and field welded connections.</li> <li>2. See the Fireproofing Preconstruction Agenda.</li> </ul> Other Issues			

## **Appendix A**

The following submittals and certifications, as shown in AISC 360 Section N3, shall be reviewed and approved by the engineer of record (EOR) and maintained onsite for the special inspector:

- 1. For main structural steel elements, copies of material test reports in accordance with Section A3.1.
- 2. For steel castings and forgings, copies of material test reports in accordance with Section A3.2.
- 3. For fasteners, copies of manufacturer's certifications in accordance with Section A3.3.
- 4. For deck fasteners, copies of manufacturer's product data sheets or catalog data. The data sheets shall describe the product, limitations of use, and recommended or typical installation instructions.
- 5. For anchor rods and threaded rods, copies of material test reports in accordance with Section A3.4.
- 6. For welding consumables, copies of manufacturer's certifications in accordance with Section A3.5.

- 7. For headed stud anchors, copies of manufacturer's certifications in accordance with Section A3.6.
- 8. Manufacturer's product data sheets or catalog data for welding filler metals and fluxes to be used. The data sheets shall describe the product, limitations of use, recommended or typical welding parameters, and storage and exposure requirements, including baking, if applicable.
- 9. Welding procedure specifications (WPSs).
- 10. Procedure qualification records (PQRs) for WPSs that are not prequalified in accordance with AWS D1.1/D1.1M or AWS D1.3/D1.3M, as applicable.
- 11. Welding personnel performance qualification records (WPQR) and continuity records.



For alternative formats, interpreters, or reasonable modification requests please phone at least 48 hours in advance 425-452-4570 (voice) or email (<a href="mailto:DS\_Experience@bellevuewa.gov">DS\_Experience@bellevuewa.gov</a>). For complaints regarding modifications, contact the City of Bellevue ADA, Title VI, and Equal Opportunity Officer at <a href="mailto:ADATitleVI@bellevuewa.gov">ADATitleVI@bellevuewa.gov</a>.