# Structural Statement of Special Inspections

Project: 42 O'Brion St Condos

Location: 42 O'Brion St Portland Maine

#### Owner:

This Statement of Special Inspections encompass the following discipline: Structural

This Statement of Special Inspections is submitted as a condition for permit issuance in accordance with the Special Inspection and Structural Testing requirements of the Building Code. It includes a schedule of Special Inspection services applicable to this project as well as the name of the Structural Special Inspection Coordinator (SSIC) and the identity of other approved agencies to be retained for conducting these inspections and tests.

The Structural Special Inspection Coordinator shall keep records of all Structural inspections and shall furnish inspection reports to the Building Code Official (BCO) and the Structural Registered Design Professional in Responsible Charge (SRDP). Discovered discrepancies shall be brought to the immediate attention of the Contractor for correction. If such discrepancies are not corrected, the discrepancies shall be brought to the attention of the Building Official and the Structural Registered Design Professional in Responsible Charge. The Special Inspection program does not relieve the Contractor of his or her responsibilities.

Interim reports shall be submitted to the Building Official and the Structural Registered Design Professional in Responsible Charge at an interval determined by the SSIC and the BCO.

A Final Report of Special Inspections documenting completion of all required Special Inspections, testing and correction of any discrepancies noted in the inspections shall be submitted to the BCO prior to issuance of a Certificate of Use and Occupancy.

Job site safety and means and methods of construction are solely the responsibility of the Contractor.

Interim Report Frequency:

 $\boxtimes$ Upon request of Building Official

or per attached schedule.

Prepared by:

Aaron C. Jones

(type or print name of the Structural Registered Design Professional in Responsible Charge)

Signature

<u>4/4/2018</u> Date



Building Code Official's Acceptance:

Signature

Date

# Structural Statement of Special Inspections (Continued)

## List of Agents

Project: 42 O'Brion Condos

Location: 42 O'Brion St Portland Maine

Owner:

This Statement of Special Inspections encompass the following discipline: Structural

#### (Note: Statement of Special Inspections for other disciplines may be included under a separate cover)

This Statement of Special Inspections / Quality Assurance Plan includes the following building systems:

- Soils and Foundations  $\boxtimes$  $\boxtimes$ Cast-in-Place Concrete
- Precast Concrete System
- Masonry Systems
- Structural Steel
- $\boxtimes$ Wood Construction

Special Cases

Special Inspection Agencies	Firm	Address, Telephone, e-mail
1. STRUCTURAL Special Inspections Coordinator (SSIC)		
2. Special Inspector (SI 1)		
3. Special Inspector (SI 2)		
4. Testing Agency (TA 1)		
5. Testing Agency (TA 2)		
6. Other (O1)		

Note: The inspectors and testing agencies shall be engaged by the Owner or the Owner's Agent, and not by the Contractor or Subcontractor whose work is to be inspected or tested. Any conflict of interest must be disclosed to the Building Official, prior to commencing work.

# Structural Schedule of Special Inspections

## **Qualifications of Inspectors and Testing Technicians**

The qualifications of all personnel performing Special Inspection and testing activities are subject to the approval of the Building Official. The credentials of all Inspectors and testing technicians shall be provided to the Special Inspector for their records. NOTE VERIFICATION THAT QUALIFIED INDIVIDUALS ARE AVAILABLE TO PERFORM STIPULATED TESTING AND/OR INSPECTION SHOULD BE PROVIDED PRIOR TO SUBMITTING STATEMENT. AGENT QUALIFICATIONS IN SCHEDULE ARE SUGGESTIONS ONLY; FINAL QUALIFICATIONS ARE SUBJECT TO THE DISCRETION OF THE REGISTERED DESIGN PROFESSIONAL PREPARING THE SCHEDULE.

#### Key for Minimum Qualifications of Inspection Agents:

When the Registered Design Professional in Responsible Charge or Special Inspector of Record deems it appropriate that the individual performing a stipulated test or inspection have a specific certification, license or experience as indicated below, such requirement shall be listed below and shall be clearly identified within the schedule under the Agent Qualification Designation.

PE/SE	Structural Engineer – a licensed SE or PE specializing in the design of building structures
PE/GE	Geotechnical Engineer – a licensed PE specializing in soil mechanics and foundations
EIT	Engineer-In-Training – a graduate engineer who has passed the Fundamentals of Engineering examination

#### **Experienced Testing Technician**

ETT Experienced Testing Technician – An Experienced Testing Technician with a minimum 5 years experience with the stipulated test or inspection

#### American Concrete Institute (ACI) Certification

ACI-CFTT	Concrete Field Testing Technician – Grade 1
ACI-CCI	Concrete Construction Inspector
ACI-LTT	Laboratory Testing Technician – Grade 1&2
ACI-STT	Strength Testing Technician

#### American Welding Society (AWS) Certification

AWS-CWI Certified Welding Inspector AWS/AISC-SSI Certified Structural Steel Inspector

#### American Society of Non-Destructive Testing (ASNT) Certification

ASNT Non-Destructive Testing Technician – Level II or III.

#### International Code Council (ICC) Certification

ICC-SMSI	Structural Masonry Special Inspector
ICC-SWSI	Structural Steel and Welding Special Inspector
ICC-SFSI	Spray-Applied Fireproofing Special Inspector
ICC-PCSI	Prestressed Concrete Special Inspector
ICC-RCSI	Reinforced Concrete Special Inspector

#### National Institute for Certification in Engineering Technologies (NICET)

NICET-CT	Concrete Technician – Levels I, II, III & IV
NICET-ST	Soils Technician - Levels I, II, III & IV
NICET-GET	Geotechnical Engineering Technician - Levels I, II, III & IV

#### Other

## Project: 42 O'Brion St Condos Date Prepared: 4/4/18 Structural Schedule of Special Inspections SOILS

VERIFICATION AND INSPECTION IBC Section 1705.6	Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
<ol> <li>Verify materials below shallow foundations are adequate to achieve the design bearing capacity.</li> </ol>	Y	Р			PE/GE, EIT or ETT	
2. Verify excavations are extended to proper depth and have reached proper material.	Y	Р			PE/GE, EIT or ETT	
3. Perform classification and testing of compacted fill materials.	Y	Р			PE/GE, EIT or ETT	
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.	Y	С			PE/GE, EIT or ETT	
5. Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared properly.	Y	Р			PE/GE, EIT or ETT	

# **Structural Schedule of Special Inspections** CONCRETE CONSTRUCTION

VERIFICATION AND INSPECTION IBC Section 1705.3	Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGEN T	AGENT QUALIFICATION	TASK COMPLETED
1. Inspect anchors cast in concrete.	Y	Р	ACI 318: 17.8.2		PE/SE or EIT	
<ol> <li>Inspect anchors post-installed in hardened concrete members.         <ol> <li>Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads.</li> <li>Mechanical anchors and adhesive anchors not</li> </ol> </li> </ol>	Y	C	ACI 318: 17.8.2.4 ACI 318: 17.8.2		PE/SE or EIT	
3. Verify use of required design mix.	Y	Р	ACI 318: Ch. 19, 26.4.3, 26.4.4		PE/SE or EIT	
4. Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	Y	С	ASTM C172 ASTM C31 ACI 318: 26.4, 26.12		ACI-CFTT or ACI-STT	
5. Inspect concrete and shotcrete placement for proper application techniques.	Y	С	ACI 318: 26.5		PE/SE or EIT	
<ol> <li>Verify maintenance of specified curing temperature and techniques.</li> </ol>	Y	Р	ACI 318: 26.5.3- 26.5.5		PE/SE or EIT	
7. Inspect formwork for shape, location and dimensions of the concrete member being formed.	Y	Р	ACI 318: 26.11.1.2(b)		PE/SE or EIT	

## Project: 42 O'Brion St Condos Date Prepared: 4/4/18

# **Structural Schedule of Special Inspections - STEEL CONSTRUCTION**

VERIFICATION AND INSPECTION	Y/N		COMMENTS	AGENT	AGENT	
IBC Section 1705.2 AISC 360-16 SPECIFICATIONS AND CODES Chapter N		ECONTINUOUS, PERIODIC, SUBMITTAL, OR			QUALIFICATION	COMPLETED
1. Material verification of high-strength bolts, nuts and washers:		None				
a. Identification markings to conform to ASTM standards specified in the approved construction documents.	Y	S	Applicable ASTM material specifications; AISC 335, Section A3.4; AISC LRFD, Section A3.3		PE/SE or EIT	
b. Manufacturer's certificate of compliance required.	Y	S			PE/SE or EIT	
2. Prior to bolting, the following inspection tasks and verifications shall be carried out:						
a. Verify the manufacturer's certifications for the fastener materials, the fasteners are marked in accordance with ASTM requirements, and that the correct fasteners are selected for the joint details.	Y	S	Applicable ASTM material specifications; AISC 335, Section A3.4; AISC LRFD, Section A3.3			
b. Verify that the correct bolting procedure is used for the joint detail.	Y	Р				
c. Examine the preparation of holes and faying surfaces.	Y	Р				
d. Verify that bolts, nuts, washers, etc. are kept in protected storage.	Y	S				
3. Inspection of high-strength bolting						
a. Bearing-type connections.	Y	Р	AISC LRFD Section M2.5		AWS/AISC-SSI	
b. Slip-critical connections.	Y	C or P (method dependent)	IBC Sect 1704.3.3		AWS/AISC-SSI	
4. Material verification of structural steel (IBC Sect 1705.2):						
a. Identification markings to conform to ASTM standards specified in the approved construction documents.	Y	S	ASTM A 6 or ASTM A 568 IBC Sect 1708.4		PE/SE or EIT	
b. Manufacturers' certified mill test reports.	Y	S	ASTM A 6 or ASTM A 568 IBC Sect 1708.4		PE/SE or EIT	
5. Material verification of weld filler materials:						
a. Identification markings to conform to AWS specification in the approved construction documents.	Y	S	AISC, ASD, Section A3.6; AISC LRFD, Section A3.5		PE/SE or EIT	
b. Manufacturer's certificate of compliance required.	Y	S			PE/SE or EIT	
6. Submit current AWS D1.1 welder certificate for all field welders who will be welding on this project.	Y	S	AWS D1.1		PE/SE or EIT	
7. Inspection of weld preparation:						
a. Observe joint preparations, dimensions, cleanliness, tacking, and backing type and fit for groove welds	Y	Р			PE/SE or EIT	
b. Observe joint preparations, dimensions, cleanliness, and tacking of CJP groove welds	Y	Р			PE/SE or EIT	
c. Verify the proper configuration and finish of access holes.	Y	Р			PE/SE or EIT	
cleanliness, and tacking.	Y	Р			PE/SE or EIT	

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8. Inspection of structural steel welding (IBC 1704.3.1):					
a. Verify that the environmental conditions (wind speed, precipitation, and temperature) are within the allowable limits.	Y	Р			
b. Complete and partial penetration groove welds.	Y	С		AWS-CWI	
c. Multi-pass fillet welds.	Y	С	AWG D1 1	AWS-CWI	
d. Single-pass fillet welds> 5/16"	Y	С	AWS DI.I	AWS-CWI	
e. Single-pass fillet welds< 5/16"	Y	Р	·	AWS-CWI	
f. Floor and deck welds.	Y	Р	AWS D1.3	AWS-CWI	
g. No welding is done over cracked tack welds.	Y	Р			
<ul> <li>h. Verify that steel headed stud anchors are placed and installed correctly.</li> </ul>	Y	Р			
9. Inspection after welding:					
a. Verify that welds are properly cleaned.	Y	Р		PE/SE or EIT	
b. Verify size, length, and location of the welds.	Y	Р		PE/SE or EIT	
<ul> <li>c. Verify that the welds meet visual acceptance criteria (crack prohibition, weld/base metal fusion, crater cross section, weld profile, weld size, undercut, porosity).</li> </ul>	Y	Р		PE/SE or EIT	
d. Locate and examine any arc strikes.	Y	Р		PE/SE or EIT	
e. Visually inspect the <i>k</i> -area for cracks within 3" (75 mm) of welds of doubler plates, continuity plates, or stiffeners performed in the <i>k</i> -area.	Y	Р		PE/SE or EIT	
f. After rolled heavy shapes and built-up heavy shapes are welded, visually inspect the weld access hole for cracks.	Y	Р		PE/SE or EIT	
g. Verify that backing and weld tabs are removed.	Y	Р		PE/SE or EIT	

## Project: 42 O'Brion St Condos Date Prepared: 4/4/18 Structural Schedule of Special Inspection Services FABRICATION AND IMPLEMENTATION PROCEDURES – STRUCTURAL STEEL

VERIFICATION AND INSPECTION IBC Section 1705.2.1	Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
<ol> <li>Fabrications Procedures: Review of fabricator's written procedural and quality control manuals and periodic auditing of fabrication practices by an approved special inspection agency. At the completion of fabrication, the approved fabricator shall submit a certificate of compliance to the building code official stating that the work was performed in accordance with the approved construction documents. -OR- 2. AISC Certification</li> </ol>	Y	S	Fabricator shall submit one of the two qualifications		PE/SE or EIT	
3. At completion of fabrication, the approved fabricator shall submit a certificate of compliance to the building code official stating that the work was performed in accordance with the approved construction documents.	Y	S	IBC 1704.2.2		PE/SE or EIT	

# **Structural Schedule of Special Inspection Services** FABRICATION AND IMPLEMENTATION PROCEDURES – WOOD TRUSSES

VERIFICATION AND INSPECTION IBC Section 1704.2.5	Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
1. Fabrications Procedures: Review of fabricator's written procedural and quality control manuals and periodic auditing of fabrication practices by an approved special inspection agency. At the completion of fabrication, the approved fabricator shall submit a certificate of compliance to the building code official stating that the work was performed in accordance with the approved construction documents.	Y	S	Fabricator shall submit one of the two qualifications		PE/SE or EIT	
<ol> <li>At completion of fabrication, the approved fabricator shall submit a certificate of compliance to the building code official stating that the work was performed in accordance with the approved construction documents</li> </ol>	Y	S	IBC 1704.2.5.1		PE/SE or EIT	

Prepared by:

Chr

Signature

Building Code Official's Acceptance:

4/4/2018 Date

Signature

Date

# Contractor's Statement of Responsibility

Each contractor responsible for the construction or fabrication of a system or component designated in the Quality Assurance Plan must submit a Statement of Responsibility. The Statement of Responsibility is required for Seismic Design Category C or higher. Make additional copies of this form as required.

Project: 42 O'Brion St Condos

Contractor's Name:

Address:

License No.:

Description of designated building systems and components included in the Statement of Responsibility:

## **Contractor's Acknowledgment of Special Requirements**

I hereby acknowledge that I have received, read, and understand the Quality Assurance Plan and Special Inspection program.

I hereby acknowledge that control will be exercised to obtain conformance with the construction documents approved by the Building Official.

Signature

Date

# **Contractor's Provisions for Quality Control**

Procedures for exercising control within the contractor's organization, the method and frequency of reporting and the distribution of reports is attached to this Statement.

Identification and qualifications of the person(s) exercising such control and their position(s) in the organization are attached to this Statement.