## Structural Statement of Special Inspections

Project: Northeast Bank, Portland Branch – Tenant Fit up and Addition

Location: 27 Pearl St. Portland, ME

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:

Upon request of Building Official

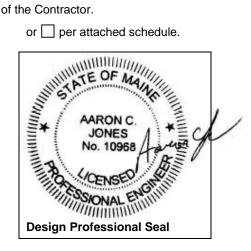
or per attached schedule.

Prepared by:

Aaron C. Jones, P.E.

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

2/13/15 Date



Owner's Authorization:

Building Code Official's Acceptance:

Signature

Date

Signature

Date

## Structural Statement of Special Inspections (Continued)

### List of Agents

Project: Northeast Bank, Portland Branch – Tenant Fit up and Addition

Location: 27 Pearl St. Portland

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
- Cast-in-Place Concrete
- Precast Concrete System
- Masonry Systems
- Structural Steel
- Wood Construction

Special Cases

| Special Inspection Agencies                             | Firm   | Address, Telephone, e-mail  |
|---|--|---|
| 1. STRUCTURAL Special<br>Inspections Coordinator (SSIC) | Structural Integrity Consulting Engineers,<br>Inc. | 77 Oak St.<br>Portland, ME<br>207-774-4614<br>Aaron@structuralinteg.com |
| 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 <u>not</u> 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

### **Structural Schedule of Special Inspections** SOILS & FOUNDATION CONSTRUCTION

| VERIFICATION AND INSPECTION<br>IBC Section 1704.7, 1704.8, 1704.9   | Y/N | <u>EXTENT:</u><br>CONTINUOUS,<br>PERIODIC,<br>SUBMITTAL, OR<br>NONE | COMMENTS     | AGENT | AGENT<br>QUALIFICATION | TASK<br>COMPLETED |
|---|-----|---|--------------|-------|------------------------|-------------------|
| 1. Verify existing soil conditions, fill placement and load bearing requirements  |     |   |              |       |                        |                   |
| <ul> <li>a. Prior to placement of prepared fill, determine that<br/>the site has been prepared in accordance with the<br/>approved soils report.</li> </ul> | Y   | Р   | IBC 1704.7.1 |       | PE/GE, EIT or ETT      |                   |
| b. During placement and compaction of fill material,<br>verify material being used and maximum lift<br>thickness comply with the approved soils report.     | Y   | Р   | IBC 1704.7.2 |       | PE/GE, EIT or ETT      |                   |
| c. Test in-place dry density of compacted fill complies with the approved soils report.   | Y   | р   | IBC 1704.7.2 |       | PE/GE, EIT or ETT      |                   |

## Structural Schedule of Special Inspections CONCRETE CONSTRUCTION

| VERIFICATION AND INSPECTION<br>IBC Section 1704.4  | Y/N | EXTENT:<br>CONTINUOUS,<br>PERIODIC,<br>SUBMITTAL,<br>OR NONE | COMMENTS  | AGEN<br>T | AGENT<br>QUALIFICATION | TASK<br>COMPLETED |
|--|-----|--|---|-----------|------------------------|-------------------|
| 1. Inspection of reinforcing steel and placement   | Y   | Р  | ACI 318: 3.5,<br>7.1-7.7                        |           | PE/SE or EIT           |                   |
| 2. Inspection of reinforcing steel welding in accordance with Table 1704.3, Item 5B  | Y   |  | Welding of<br>Reinf Not<br>Allowed              |           | AWS-CWI                |                   |
| <ol> <li>Inspect bolts to be installed in concrete prior to and<br/>during placement of concrete where allowable loads have<br/>been increased</li> </ol>  | Y   | С  | IBC 1912.5                                      |           | PE/SE or EIT           |                   |
| 4. Verifying use of required design mix  | Y   | Р  | ACI 318: Ch 4,<br>5.2-5.4                       |           | PE/SE or EIT           |                   |
| <ol> <li>At time fresh concrete is sampled to fabricate<br/>specimens for strength test, perform slump and air<br/>content test and temperature</li> </ol> | Y   | С  | ASTM C 172<br>ASTM C 31<br>ACI 318: 5.6,<br>5.8 |           | ACI-CFTT or<br>ACI-STT |                   |
| 6. Inspection of concrete and shotcrete placement for<br>proper application techniques   | Y   | С  | ACI 318: 5.9,<br>5.10                           |           | PE/SE or EIT           |                   |
| 7. Inspection for maintenance of specified curing temperature and techniques   | Y   | Р  | ACI 318: 5.11-<br>5.13                          |           | PE/SE or EIT           |                   |

### **Structural Schedule of Special Inspections** MASONRY CONSTRUCTION – LEVEL 1 (NON-ESSENTIAL FACILITY)

| VERIFICATION AND INSPECTION<br>IBC Section 1704.5   | Y/N | EXTENT:<br>CONTINUOUS,<br>PERIODIC,<br>SUBMITTAL,<br>OR NONE | COMMENTS  | AGENT | AGENT<br>QUALIFICATION | TASK<br>COMPLETED |
|---|-----|--|---|-------|------------------------|-------------------|
| 1. As masonry construction begins, the following shall be verified to ensure compliance:  |     |  |   |       |                        |                   |
| a. Proportions of site-prepared mortar.   | Y   | Р  | ACI530.1, 2.6A                                    |       | PE/SE or EIT           |                   |
| b. Construction of mortar joints.   | Y   | Р  | ACI530.1, 3.3B                                    |       | PE/SE or EIT           |                   |
| c. Location of reinforcement and connectors.  | Y   | Р  | ACI530.1, 3.4, 3.6A                               |       | PE/SE or EIT           |                   |
| 2. The inspection program shall verify:   |     |  |   |       |                        |                   |
| a. Size and location of structural elements.  | Y   | Р  | ACI530.1, 3.3G                                    |       | PE/SE or EIT           |                   |
| b. Type, size and location of anchors, including<br>other details of anchorage of masonry to<br>structural members, frames or other construction.       | Y   | Р  | ACI530, 1.2.2(e),<br>2.1.4, 3.1.6                 |       | PE/SE or EIT           |                   |
| c. Specified size, grade and type of reinforcement.   | Y   | Р  | ACI530, 1.12,<br>ACI530.1, 2.4,<br>3.4            |       | PE/SE or EIT           |                   |
| e. Protection of masonry during cold weather<br>(temperature below 40°F) or hot weather<br>(temperature above 90°F).                                    | Y   | Р  | IBC 2104.3,<br>2104.4; ACI530.1,<br>1.8C,<br>1.8D |       | PE/SE or EIT           |                   |
| <ol> <li>Prior to grouting, the following shall be verified to<br/>ensure compliance:</li> </ol>  |     |  |   |       |                        |                   |
| a. Grout space is clean.  | Y   | Р  | ACI530.1, 3.2D                                    |       | PE/SE or EIT           |                   |
| <ul> <li>b. Placement of reinforcement and connectors<br/>and anchorages.</li> </ul>  | Y   | Р  | ACI530, 1.12,<br>ACI530.1, 3.4                    |       | PE/SE or EIT           |                   |
| c. Proportions of site-prepared grout   | Y   | Р  | ACI530.1, 2.6B                                    |       | PE/SE or EIT           |                   |
| d. Construction of mortar joints.   | Y   | Р  | ACI530.1, 3.3B                                    |       | PE/SE or EIT           |                   |
| 4. Grout placement shall be verified to ensure compliance with code and construction document provisions.   | Y   | С  | ACI530.1, 3.5                                     |       | PE/SE or EIT           |                   |
| a. Grouting of prestressing bonded tendons.   | Y   | С  | ACI530.1, 3.6C                                    |       | PE/SE or EIT           |                   |
| <ol> <li>Preparation of any required grout specimens, mortar<br/>specimens and/or prisms shall be observed.</li> </ol>                                  | Y   | С  | IBC 2105.2.2,<br>2105.3; ACI530.1, 1.4            |       | PE/SE or EIT           |                   |
| <ol> <li>Compliance with required inspection provisions of the<br/>construction documents and the approved submittals<br/>shall be verified.</li> </ol> | Y   | Р  | ACI530.1, 1.5                                     |       | PE/SE or EIT           |                   |

## Structural Schedule of Special Inspections - STEEL CONSTRUCTION

| VERIFICATION AND INSPECTION  | Y/N | •                                  | COMMENTS  | AGENT<br>QUALIFICATION | TASK<br>COMPLETED |
|--|-----|------------------------------------|---|------------------------|-------------------|
| IBC Section 1704.3   |     | PERIODIC,<br>SUBMITTAL, OR<br>NONE |   |                        |                   |
| 1. Material verification of high-strength bolts, nuts and washers:   |     |                                    |   |                        |                   |
| a. Identification markings to conform to ASTM standards specified in the approved construction documents.  | Y   | S                                  | Applicable<br>ASTM<br>material<br>specifications;<br>AISC 335,<br>Section A3.4;<br>AISC LRFD,<br>Section A3.3 | PE/SE or EIT           |                   |
| b. Manufacturer's certificate of compliance required.  | Y   | S                                  |   | PE/SE or EIT           |                   |
| 2. Inspection of high-strength bolting   |     |                                    |   |                        |                   |
| a. Bearing-type connections.   | Y   | Р                                  | AISC LRFD<br>Section M2.5<br>IBC Sect<br>1704.3.3   | AWS/AISC-SSI           |                   |
| 3. Material verification of structural steel (IBC Sect 1708.4):  |     |                                    |   |                        |                   |
| <ul> <li>a. Identification markings to conform to ASTM<br/>standards specified in the approved construction<br/>documents.</li> </ul>  | Y   | S                                  | ASTM A 6 or<br>ASTM A 568<br>IBC Sect 1708.4  | PE/SE or EIT           |                   |
| b. Manufacturers' certified mill test reports.   | Y   | S                                  | ASTM A 6 or<br>ASTM A 568<br>IBC Sect 1708.4  | PE/SE or EIT           |                   |
| 4. Material verification of weld filler materials:   |     |                                    |   |                        |                   |
| a. Identification markings to conform to AWS specification in the approved construction documents.   | Y   | S                                  | AISC, ASD,<br>Section A3.6;<br>AISC LRFD,<br>Section A3.5   | PE/SE or EIT           |                   |
| b. Manufacturer's certificate of compliance required.  | Y   | S                                  |   | PE/SE or EIT           |                   |
| 5. 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           |                   |
| 6. Inspection of welding (IBC 1704.3.1):<br>a. Structural steel:   |     |                                    |   |                        |                   |
| 4) Single-pass fillet welds< 5/16"   | Y   | Р                                  |   | AWS-CWI                |                   |
| 5) Floor and deck welds.   | Y   | Р                                  | AWS D1.3  | AWS-CWI                |                   |
| b. Reinforcing steel (IBC Sect 1903.5.2):  |     |                                    |   |                        |                   |
| 1) Verification of weldability of reinforcing steel other than ASTM A706.  | Y   | С                                  |   |                        |                   |
| <ol> <li>Reinforcing steel-resisting flexural and axial forces in<br/>intermediate and special moment frames, and boundary<br/>elements of special reinforced concrete shear walls and<br/>shear reinforcement.</li> </ol> | Y   | С                                  | AWS D1.4  | AWS-CWI                |                   |
| 3) Shear reinforcement.  | Y   | С                                  | ACI 318: 3.5.2  | AWS-CWI                |                   |
| 4) Other reinforcing steel.  | Y   | Р                                  |   | AWS-CWI                |                   |

### **Structural Schedule of Special Inspection Services** FABRICATION AND IMPLEMENTATION PROCEDURES – STRUCTURAL STEEL

| VERIFICATION AND INSPECTION<br>IBC Section 1704.2   | Y/N | EXTENT:<br>CONTINUOUS,<br>PERIODIC,<br>SUBMITTAL,<br>OR NONE | COMMENTS   | - | AGENT<br>QUALIFICATION | TASK<br>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.<br/>-OR- 2. AISC Certification</li> </ol> | Y   | S  | Fabricator<br>shall submit<br>one of the two<br>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 Inspections** SEISMIC RESISTANCE - STRUCTURAL

| VERIFICATION AND INSPECTION IBC Section 1707  | Y/N | EXTENT:<br>CONTINUOU<br>S,<br>PERIODIC,<br>SUBMITTAL,<br>OR NONE | COMMENTS | AGENT | AGENT<br>QUALIFICATION | TASK<br>COMPLETE<br>D |
|---|-----|--|----------|-------|------------------------|-----------------------|
| 4. Cold-formed steel framing: Periodic special<br>inspections during welding operations of<br>elements of the seismic-force-resisting system.<br>Periodic special inspections for screw<br>attachment, bolting, anchoring and other<br>fastening of components within the seismic-<br>force-resisting system, including struts, braces,<br>and hold-downs | Y   | Ν  |          |       |                        |                       |

## **Quality Assurance Plan – Seismic and Wind**

### QUALITY ASSURANCE FOR SEISMIC RESISTANCE CHECK LIST [IBC 1705] Seismic Design Category B

### **<u>FOR SEISMIC DESIGN CATEGORY C OR HIGHER:</u>**

#### Structural:

☐ The seismic-force-resisting systems ☐ Steel Braced Frames and associated connections/anchorage

Steel Moment Frames and associated connections

Shear walls: CMU Wood Concrete

Other:

Diaphragms: Floor Roof

### QUALITY ASSURANCE FOR WIND RESISTANCE CHECK LIST [IBC 1706] Wind Exposure Category B

| REQUIRED | NOT<br>REQUIRED | NOT<br>APPLICABLE | <b>QUALITY ASSURANCE PLAN REQUIREMENTS</b><br>(A Quality Assurance Plan is required where indicated below)                                 |
|----------|-----------------|-------------------|--|
|          | $\boxtimes$     |                   | In wind exposure Categories A and B, where the 3-second-gust basic wind speed is 120 miles per hour (mph) (52.8 <i>m/sec</i> ) or greater. |
|          |                 | $\boxtimes$       | In wind exposure Categories C and D, where the 3-second-gust basic wind speed is 110 mph (49 <i>m/sec</i> ) or greater.                    |

Prepared by:

Building Code Official's Acceptance:

| Aaron C. Jones | 2/13/15 |           |      |
|----------------|---------|-----------|------|
| Signature      | 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: Northeast Bank, Portland Branch – Tenant Fit up and Addition

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.