80 Leighton Road . Falmouth, Maine 04105

April 16<sup>th</sup>, 2015 14064

Code Enforcement Officer 389 Congress St Portland, ME 04101

Re: 2015 Allagash Brewery Expansion, Portland, ME Statement of Special Inspections – Final Report

Dear CEO,

To the best of my information, knowledge and belief, the Special Inspections required for this project, and itemized in the *Statement of Special Inspections* submitted for permit, have been performed and all discovered discrepancies have been reported and resolved.

Sincerely,

Aaron S. Wilson, P.E. Structural Engineer

Om S. Wh-

Associated Design Partners, Inc.

# STATEMENT OF SPECIAL CONSTRUCTION MONITORING

PROJECT: ALLAGASH BREWERY 2015 EXPANSION 50 Industrial Way, Portland Maine **PERMIT APPLICANT: Allagash Brewing Company APPLICANT'S ADDRESS:** 50 Industrial Way, Portland, ME 04103 STRUCTURAL ENGINEER OF RECORD: **Associated Design Partners, Inc CONTRACTOR: Landry and French** This Statement of Special Construction Monitoring is submitted as a condition for building permit issuance in accordance with Section 1704.0 of the 2009 International Building Code. It includes the Schedule of Special Construction Monitoring and Testing as applicable to this project. Also included is a listing of agents and other approved agencies to be retained for conducting the monitoring and testing applicable to this project. The Special Construction Monitoring Coordinator shall keep records of all observations listed herein. and shall furnish field reports to the Registered Design Professional of Record. All discrepancies shall be brought to the immediate attention of the Contractor for correction, and to the Registered Design Professional of Record. If the discrepancies are not corrected, the discrepancies shall be brought to the attention of the Registered Design Professional of Record. Interim reports shall be submitted to the Registered Design Professional of Record monthly, unless more frequent submissions are requested. The Special Inspection program does not relieve the Contractor of his or her responsibilities. Job site safety is solely the responsibility of the Contractor. Materials and activities covered under the monitoring schedule are not to include the Contractor's equipment and methods used to erect or install the materials listed. Prepared by: Aaron S. Wilson, P.E. (type or print name) In 5 Wh-7/25/14 Signature Date Design Professional Seal Owner's Authorization: Building Official's Acceptance:

Date

Signature

Signature

Date

### **SPECIAL CONSTRUCTION MONITORING AGENTS**

This Stateme building system	nt of Special Construction ms:	Monitoring /	Quality	/ Assurance	Plan	includes	the	following
	Soils and Foundations Cast-in-Place Concrete Precast Concrete Masonry Structural Steel Cold-Formed Steel Framing		<ul><li></li></ul>	oray Fire Res ood Construkterior Insulatechanical & Inchitectural Special Cases	ction tion ar Electri ystem	nd Finish S cal Syster	-	em

	AGENT	FIRM	CONTACT
			INFORMATION
1.	Engineer of Record	Associated Design Partners	80 Leighton Rd Falmouth ME 04105 Ph: 878-1751
2.	Special Construction  Monitoring Coordinator	Associated Design Partners	80 Leighton Rd Falmouth ME 04105 Ph: 878-1751
3.	Field Monitor	S.W. Cole	286 Portland Road Gray, ME 04039-9586 P: (207) 657.2866
4.	Testing Agency	S.W. Cole	286 Portland Road Gray, ME 04039-9586 P: (207) 657.2866
5.	Other		

Note: The construction monitoring agent and testing agency 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.

### **QUALITY ASSURANCE FOR LATERAL SYSTEMS**

## Quality Assurance for Seismic Requirements

Seismic Design Category

Quality Assurance Plan Required (Y/N)

N

If seismic design category C, and plan is not required, explain (see exceptions to 1705.1)

Description of seismic force resisting system and designated seismic systems: Ordinary Steel Moment Frames

# Quality Assurance for Wind Requirements

Basic Wind Speed (3 second gust) 98MPH

Quality Assurance Plan Required (Y/N)

Description of wind force resisting system and designated wind resisting components: Ordinary Steel Moment Frames

# Statement of Responsibility

Each contractor responsible for the construction or fabrication of a system or component designated above must submit a Statement of Responsibility in accordance with section 1705.3, and 1706.3 of the 2009 IBC code.

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 if requested.

Key for Minimum Qualifications of Inspection Agents:

When the Registered Design Professional in Responsible Charge deems it appropriate that the individual performing a stipulated test or inspection have a specific certification or license as indicated below, such designation shall appear below the *Agency Number* on the Schedule.

**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

#### **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

#### **Exterior Design Institute (EDI) Certification**

EDI-EIFS EIFS Third Party Inspector

#### TABLE 1 – SCHEDULE OF SPECIAL CONSTRUCTION MONITORING AGENT# DATE REV EXTENT of MATERIAL / ACTIVITY **COMMENTS** COMPLETED # MONITORING (Continuous, Periodic, Other, Exempt, None) 1704.3 STEEL CONSTRUCTION 12-18-14 1. Material Verification of high a. Identification markings to conform Periodic 1 strength bolts, nuts, and washers. to ASTM standards specified in the approved construction documents. Periodic b. Manufacturers Certificate of 1 Compliance required. 12-18-14 2. Inspection of High – Strength a. Bearing type connections Periodic 3 Bolting None b. Slip – critical connections No SC connections in building 12-18-14 3. Material Verification of structural a. Identification marking to conform All SER to verify on shop drawings. 3 #3 to verify in field steel to ASTM standards specified in the contract documents. Engage AISC certified fabricator b. Manufacturers certified mill test Exempt Reports. 12-18-14 4. Material Verification of weld filler a. Identification marking to conform All SER to verify on shop drawings. 3 materials: to ASTM standards specified in the contract documents. Engage AISC certified fabricator b. Manufacturers Certificate of Exempt Compliance required. 12-18-14 5. Inspection of Welding a. Single Pass fillet welds < 5/16" Periodic 1,3 Structural Steel 12-18-14 b. Floor and deck welds Periodic 1.3 12-18-14 6. Inspection of Steel Frame Joint a. Bracing connections All 3 details for compliance with 12-18-14 b. Member locations Periodic approved construction c. Application of joint details at each Periodic documents. connection.

#### TABLE 1 – STATEMENT OF SPECIAL INSPECTIONS, cont. AGENT# DATE REV MATERIAL/ACTIVITY EXTENT of **COMMENTS** COMPLETED # INSPECTION (Continuous, Periodic, Other, None) 1704.4 CONCRETE CONSTRUCTION 1. Inspection of reinforcing steel, 10-20-14 3 Continuous including placement. 10-20-14 2. Inspection of reinforcing steel None No welded reinforcing. couplers 1. Inspect bolts embedded into concrete prior to and during placement of None Allowable loads have not been concrete where allowable loads have been increased. increased for lateral loads. 10-20-14 2. Verify use of required concrete mix design(s) Continuous SER review and approve mix 1,3 design prior to installation. SI verify delivery ticket matches approved mix design. 2-16-15 Sample fresh concrete for strength tests, perform slump and air content 3 Continuous tests, and determine temperature of concrete. 10-20-14 3 6. Inspection of concrete placement for proper techniques. Continuous 10-20-14 3 7. Inspection for maintenance of specified curing temperature and techniques. Periodic 1704.5 MASONRY CONSTRUCTION -Level 1 Special Inspection for non-essential facility – 1704.5.2 1. As Masonry Construction begins, a. Proportions of site-prepared mortar None the following shall be verified to b. Construction of mortar joints None ensure conformance c. Location of reinforcement None d. Pre-stressing technique None No pre-stressing in building e. Grade and size of pre-stressing None No pre-stressing in building tendons. 2. The Inspection program shall verify a. Size and location of structural None the following: elements. b. Type, size, and location of None embedded anchors.

None

c. Size, grade, and type of reinforcing

#### TABLE 1 – STATEMENT OF SPECIAL INSPECTIONS, cont. AGENT# DATE REV MATERIAL/ACTIVITY EXTENT of **COMMENTS** COMPLETED # INSPECTION (Continuous, Periodic, Other, None) 1704.5MASONRY CONSTRUCTION -Level 1 Special Inspection for non-essential facility – 1704.5.2 2. The Inspection program shall verify d. welding of reinforcing bars None the following, cont: e. Protection of Masonry during cold None weather (temp. below 40 deg F.) f. Application and measurement of pre-None No pre-stressing in building stressing reinforcement a. Grout space is clean Prior to grouting, the following None shall be verified to ensure b. Placement of reinforcement None compliance. c. Proportions of site-prepared grout None d. Construction of mortar joints None 4. Grout placement shall be verified to ensure compliance with code and None construction document provisions. Preparation of any grout specimens, mortar specimens and/or prisms shall None be observed 4. Compliance with required inspection provisions of the construction None documents and the approved submittals shall be verified. 1704.6WOOD CONSTRUCTION 1. Horizontal Diaphragms and Vertical a. Inspect sheathing size, grade, and None Shearwalls thickness for conformance with construction documents. b. Inspect sheathing fastener size and None pattern for conformance with construction documents. c. Verify attachment to supporting None elements is per contract documents. Wood truss fabricator certification / Verify shop fabrication and quality None quality control procedures control procedures for wood truss plant. Verify material grading for sawn lumber 3. Material Grading None for compliance with construction documents. Verify manufactured lumber (LVL'S, PSL's) for conformance with construction documents.

# TABLE 1 – STATEMENT OF SPECIAL INSPECTIONS, cont.

MATERIAL/ACTIVITY  1704.6WOOD CONSTRUCTION		COMMENTS	AGENT #	DATE COMPLETED	REV #
Verify that connections are made as shown in the contract documents. For connections not specifically detailed, verify conformance with IBC 2003 Ch. 23	None				
Verify that framing is installed in accordance with construction documents.	None				
Inspect preparation of site for conformance with Geotechnical recommendations prior to placement of prepared fill.	Periodic		3	12/18/14	
During Fill Placement verify that material and lift thickness comply with approved Geotechnical report.	Periodic		3	12/18/14	
Verify compliance of in-place compacted dry density with approved Geotechnical report.	Continuous		3	12/18/14	
Record installation and testing of procedures of each pile. Submit reports to building official and EOR. Reports to include pile tip cutoff elevation relative to a common benchmark.	None				
Verify compliance of attachment of interior and exterior Architectural veneers to supporting structure for building in Seismic Design Category E or F.	None				
a. Verify conformance of the prepared surface with manufacturer's specifications prior to application of material.					
	Verify that connections are made as shown in the contract documents. For connections not specifically detailed, verify conformance with IBC 2003 Ch. 23  Verify that framing is installed in accordance with construction documents.  Inspect preparation of site for conformance with Geotechnical recommendations prior to placement of prepared fill.  During Fill Placement verify that material and lift thickness comply with approved Geotechnical report.  Verify compliance of in-place compacted dry density with approved Geotechnical report.  Record installation and testing of procedures of each pile. Submit reports to building official and EOR. Reports to include pile tip cutoff elevation relative to a common benchmark.  Verify compliance of attachment of interior and exterior Architectural veneers to supporting structure for building in Seismic Design Category E or F.  a. Verify conformance of the prepared surface with manufacturer's specifications prior to application of	Verify that connections are made as shown in the contract documents. For connections not specifically detailed, verify conformance with IBC 2003 Ch. 23  Verify that framing is installed in accordance with construction documents.  Inspect preparation of site for conformance with Geotechnical recommendations prior to placement of prepared fill.  During Fill Placement verify that material and lift thickness comply with approved Geotechnical report.  Verify compliance of in-place compacted dry density with approved Geotechnical report.  Record installation and testing of procedures of each pile. Submit reports to building official and EOR. Reports to include pile tip cutoff elevation relative to a common benchmark.  Verify compliance of attachment of interior and exterior Architectural veneers to supporting structure for building in Seismic Design Category E or F.  a. Verify conformance of the prepared surface with manufacturer's specifications prior to application of material.	Verify that connections are made as shown in the contract documents. For connections not specifically detailed, verify conformance with IBC 2003 Ch. 23  Verify that framing is installed in accordance with construction documents.  Inspect preparation of site for conformance with Geotechnical recommendations prior to placement of prepared fill.  During Fill Placement verify that material and lift thickness comply with approved Geotechnical report.  Verify compliance of in-place compacted dry density with approved Geotechnical report.  Record installation and testing of procedures of each pile. Submit reports to building official and EOR. Reports to include pile tip cutoff elevation relative to a common benchmark.  Verify compliance of attachment of interior and exterior Architectural veneers to supporting structure for building in Seismic Design Category E or F.  a. Verify conformance of the prepared surface with manufacturer's specifications prior to application of material.	Verify that connections are made as shown in the contract documents. For connections not specifically detailed, verify conformance with IBC 2003 Ch. 23  Verify that framing is installed in accordance with construction documents.  Inspect preparation of site for conformance with Geotechnical recommendations prior to placement of prepared fill.  During Fill Placement verify that material and lift thickness comply with approved Geotechnical report.  Verify compliance of in-place compacted dry density with approved Geotechnical report.  Record installation and testing of procedures of each pile. Submit reports to building official and EOR. Reports to include pile tip cutoff elevation relative to a common benchmark.  Verify compliance of attachment of interior and exterior Architectural veneers to supporting structure for building in Seismic Design Category E or F.  a. Verify conformance of the prepared surface with manufacturer's specifications prior to application of material.	EXTENT of INSPECTION (Continuous, Periodic, Other, None)    Verify that connections are made as shown in the contract documents. For connections ont specifically detailed, verify conformance with IBC 2003 Ch. 23   Verify that framing is installed in accordance with construction documents.

#### TABLE 1 – STATEMENT OF SPECIAL INSPECTIONS, cont. AGENT# DATE REV MATERIAL/ACTIVITY EXTENT of **COMMENTS** COMPLETED # INSPECTION (Continuous, Periodic, Other, None) temperature meet manufacturer's specifications. c. Verify that material thickness meets design specifications. Verify that the material density meets the design specifications. Test in accordance with ASTM E 605. Verify that bond strength between material and substrate is greater than or equal to 150 psf. Test in accordance with ASTM E 736 and IBC 2003 1704.11.5.1 - 1704.11.5.2 Not Required if applied over a 1704.12 EXTERIOR AND Verify conformance of EFIS installation INSULATION AND FINISH with manufacturers and design water resistive barrier with a SYSTEMS (EIFS) specifications. means of draining moisture to the outside. Not required for EIFS installed over concrete or masonry walls. 1704.13 SPECIAL CASES COLD FORMED METAL FRAMING 1. Horizontal Diaphragms and Vertical a. Inspect sheathing size, grade, and None thickness for conformance with Shearwalls construction documents. b. Inspect sheathing fastener size and pattern for conformance with construction documents. 2. Framing Verify member size, thickness, material, None and spacing is in accordance with design specifications and drawings. Verify shop fabrication and quality Wood truss fabricator certification / None control procedures for wood truss plant. quality control procedures Verify that member connections are in 4. Framing Connections None accordance with design specifications and drawings.

MATERIAL/ACTIVITY		EXTENT of INSPECTION (Continuous, Periodic, Other, None)	COMMENTS	AGENT #	DATE COMPLETED	REV #
5. Welding	Verify welding of cold formed members is in accordance with design specifications and AWS standards.	None				
6. Light Gage Trusses	a. Verify that light gage trusses are design in accordance with the loads specified on the contract documents.	None				
	b. Verify that light gage trusses and truss bracing is installed per manufacturers specifications, contract documents, and BCSI 1-03 guidelines.					
704.10 SPECIAL CASE – N/A						