

Statement of Special Inspections

College of Pharmacy University of New England Portland, Maine January 24, 2008

Statement Prepared by
Structural Engineer of Record
Becker Structural Engineers, Inc.
75 York Street
Portland, ME 04101
207. 879. 1838

Owner
University of New England
11 Hills Beach Rd.
Biddeford, ME
207. 283. 0170

Architect of Record Port City Architecture 65 Newbury St. Portland, ME 04101 207. 761. 9000

Contractor
Allied/Cook Construction
PO Box 1396
Portland, ME 04101
207. 772. 2888

Special Inspections - Exhibit A

Statement of Special Inspections
List of Agents
Final Report of Special Inspections
Special Inspector/Agent Report

Statement of Special Inspections - Ex	chibit A	
Project: University of New England – College of	of Pharmacy	
Location: Portland, Maine		
Owner: University of New England		
This Statement of Special Inspections encompass the	e following discipline:	
	nbing	
Design Professional in Responsible Charge:	Paul B. Becker, P.E.	
Firm Name:	Becker Structural Engin	eers, Portland, ME
(Note: Statement of Special Inspections for other dis	ciplines may be included	under a separate cover)
This Statement of Special Inspections is submitted Special Inspection and Structural Testing requireme Inspection services applicable to this project as Coordinator (SSIC) and the identity of other apinspections and tests.	nts of the Building Code. well as the name of th	It includes a schedule of Special e Structural Special Inspection
The Structural Special Inspection Coordinator shall reports to the Building Code Official (BCO) and the Charge (SRDP). Discovered discrepancies shall be correction. If such discrepancies are not corrected Building Official and the Structural Registered De Inspection program does not relieve the Contractor of	Structural Registered De e brought to the immedia , the discrepancies shall t sign Professional in Res	sign Professional in Responsible te attention of the Contractor for be brought to the attention of the sponsible Charge. The Special
Interim reports shall be submitted to the Building Of Responsible Charge at an interval determined by the		tegistered Design Professional in
A Final Report of Special Inspections documenting correction of any discrepancies noted in the inspectorificate of Use and Occupancy.		
Job site safety and means and methods of construc	tion are solely the respons	sibility of the Contractor.
Interim Report Frequency: © Upon request of But	iilding Official	or \square per attached schedule.
Prepared by:		TE OF MAN
Paul B. Becker, P.E.		The farmer of the second
(type or print name of the Structural Registered Design Professional in Responsible Charge)		PAUL B. BECKER NO. 6554
Memule	1-24-08	105.62
Signature	Date	Design Professional Seal
Owner's Authorization:	Building Code Officia	al's Acceptance:
Signature Date	Signature	Date

Statement of Special Inspections (Continued) - Exhibit A

List of	Agents		
Project:	University of New Engi	land – College of Pharmacy	
Location:	Portland, Maine		
Owner: This Stateme	University of New Engi ent of Special Inspection	land s encompass the following discipline	»:
		al/Electrical/Plumbing	
(Note: Stater	nent of Special Inspection	ons for other disciplines may be included	ded under a separate cover)
This Stateme	ent of Special Inspection	s / Quality Assurance Plan includes t	he following building systems:
	Soils and Foundations Cast-in-Place Concret Precast Concrete Masonry Structural Steel Wood Construction	te Cold-Forme	
Special Insp	ection Agencies	Firm	Address, Telephone, e-mail
	Il Special Inspection ator (SSIC)	Becker Structural Engineers (BSE)	75 York Street Portland, ME 04107 (207) 879-1838 info@beckerstructural.com
2. Special l	nspector (SI 1)	Becker Structural Engineers (BSE)	75 York Street Portland, ME 04107 (207) 879-1838 info@beckerstructural.com
3. Special l	nspector (SI 2)	Haley & Aldrich, Inc.	75 Washington Ave Suite 203 Portland, ME 04101
4. Testing A	Agency (TA 1)	To Be Determined	
5. Testing A	Agency (TA 2)		

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.

6. Other (O1)

Statement of Special Inspections (Continued) - Exhibit A

To be completed by the Structural Special Reports must be received prior to issuance	I Inspections Coordinator	
Project: University of New England -	- College of Pharmacy	
Location: Portland, Maine	, ,	
Owner: University of New England		
Owner's Address: 11 Hills Beach Rd.		
Biddeford, ME 040	005	
Architect of Record: Lita Semrau		Port City Architecture
(name)		(firm)
Structural Registered Design		09
Professional in Responsible Charge:	Paul B. Becker	Becker Structural Engineers
	(name)	(firm)
(Attach continuation sheets if required to	complete the description	of corrections.)
Interim reports submitted prior to this fina this final report.	l report form a basis for	and are to be considered an integral part of
Respectfully submitted, Structural Special Inspection Coordinator		
(Type or print name)		
(Firm Name)		

Date

Signature

	ecial Inspections (Con or's/Agent's Final Repo		Α
Project: Special Inspector or Agent:	University of New England – C		& Aldrich, Inc.
Designation:	(name) SI-2	(firm)	
project, and designate	d for this Inspector/Agent in the	Statement of Special	tions or testing required for this Inspections submitted for permit, ted and resolved other than the
Comments:			
(Attach continuation s	heets if required to complete the	description of correcti	ions)
,	·	·	be considered an integral part of
Respectfully submitted Special Inspector or A			
(Type or print name)		_	
Signature		Date	Licensed Professional Seal or Certification Number

Statement of Special Inspections (Continued) - Exhibit A

Special Inspector's/Agent's Final Report

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Project: Special Inspector or Agent:	University of New En	gland – College of Pharmacy	
5	(name)	(firm)	
Designation:	TA1		
project, and designat	ed for this Inspector/Age	ent in the Statement of Special	tions or testing required for this Inspections submitted for permit, ted and resolved other than the
Comments:			
(Attach continuation	sheets if required to com	nplete the description of correcti	ons.)
Interim reports subm this final report.	itted prior to this final re	eport form a basis for and are to	be considered an integral part of
Respectfully submitte Special Inspector or			
(Type or print name)	<u> </u>		SEAL NOT REQUIRED FOR TESTING AGENCY
Signature		Date	Licensed Professional Seal
			or Certification Number

Special Inspections – Exhibit B

Qualifications of Inspectors and Test Agency List of Minimum Qualifications Schedule of Structural 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 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 Geotechnical Engineer – a licensed PE specializing in soil mechanics and foundations

PE/GE 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 OF	Caile Technician Lovele I II III 9 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

Other

Schedule of Special Inspections – Exhibit B SOILS & FOUNDATION CONSTRUCTION

Project: University of New England - College of Pharmacy, Portland, ME

Date Prepared: 01/24/2008

VERIFICATION AND INSPECTION IBC Section 1704.7, 1704.8, 1704.9	Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	DATE	INITIAL
Verify existing soil conditions, fill placement and load bearing requirements							
Prior to placement of prepared fill, determine that the site has been prepared in accordance with the approved soils report.	Y	P	IBC 1704.7.1	SI2	PE/GE or EIT		
 b. During placement and compaction of fill material, verify material being used and maximum lift thickness comply with the approved soils report. 	Y	P	IBC 1704.7.2	SI2	PE/GE or EIT		
c. Test in-place dry density of compacted fill complies with the approved soils report.	Y	P	IBC 1704.7.2	TA1	NICET-ST or NICET-GET		
2. Pile foundations:							
a. Observe and record procedures for static load testing of piles.	N	С	IBC 1704.8	SI2	PE/GE or EIT		
b. Observe and record procedures for dynamic load testing of piles.	N	С		SI2	PE/GE or EIT		
c. Record installation of each pile and results of load test. Include cutoff and tip elevations of each pile relative to permanent reference.	N	С		TA1	NICET-GET		
d. Test welded splices of steel piles	N	С	AWS D1.1	TA1	AWS-CWI		
3. Pier foundations: Verify installation of pier foundations for buildings assigned to Seismic Design Category C, D, E or F.	N	С	IBC 1704.9	SI2	PE/GE or EIT		
a. Verify pier diameter and length	N	С		SI2	PE/GE or EIT		
b. Verify pier embedment (socket) into bedrock	N	P		SI2	PE/GE or EIT		
c. Verify suitability of end bearing strata	N	P	··· -	SI2	PE/GE or EIT		

Soils and Foundations Construction has been reviewed in accordance with	sections 1704.7, 8 & 9 of the IBC Code	
Special Inspector	Date	Page of

Schedule of Special Inspections – Exhibit B CONCRETE CONSTRUCTION

Project: University of New England – College of Pharmacy, Portland, ME Date Prepared: 01/24/2008

VERIFICATION AND INSPECTION IBC Section 1704.4	Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	DATE	INITIAL
Inspection of reinforcing steel, including prestressing tendons, and placement	Y	P	ACI 318: 3.5, 7.1-7.7	SII	PE/SE or EIT		
Inspection of reinforcing steel welding in accordance with Table 1704.3, Item 5B	N		Welding of Reinf Not Allowed	TA1	AWS-CWI		
 Inspect bolts to be installed in concrete prior to and during placement of concrete where allowable loads have been increased 	N	С	IBC 1912.5	SII	PE/SE or EIT		
Verifying use of required design mix	Y	P	ACI 318: Ch 4, 5.2-5.4	SII	PE/SE or EIT		
5. At time fresh concrete is sampled to fabricate specimens for strength test, perform slump and air content test and temperature	Y	С	ASTM C 172 ASTM C 31 ACI 318: 5.6, 5.8	TA1	ACI-CFTT or ACI-STT		
6. Inspection of concrete and shotcrete placement for proper application techniques	Y	С	ACI 318: 5.9, 5.10	SI1	PE/SE or EIT		
7. Inspection for maintenance of specified curing temperature and techniques	Y	Р	ACI 318: 5.11- 5.13	SII	PE/SE or EIT		
8. Inspection of Prestressed Concrete							
a. Application of prestressing force.	Z	С	ACI 318: 18.20	SI1	PE/SE or EIT		
b. Grouting of bonded prestressing tendons in seismic force resisting system	N	С	ACI 318: 18.18.4	SII	PE/SE or EIT		
9. Erection of precast concrete members	N	P	ACI 318: Ch 16	SII	PE/SE or EIT		
10. Verification of in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms beans and structural slabs	N	P	ACI 318: 6.2	TAI	ACI-STT		

Concrete Construction has been reviewed in accordance with section 170	4.4 of the IBC Code	
Special Inspector	Date	Page of

Schedule of Special Inspections – Exhibit B STEEL CONSTRUCTION

Project: University of New England – College of Pharmacy, Portland, ME Date Prepared: 01/24/2008

VERIFICATION AND INSPECTION IBC Section 1704.3	Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	DATE	INITIAL
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 ASTM material specifications; AISC 335, Section A3.4; AISC LRFD, Section A3.3	SI1	PE/SE or EIT		
b. Manufacturer's certificate of compliance required.	Y	S		SII	PE/SE or EIT		
2. Inspection of high-strength bolting							
a. Bearing-type connections.	Y	P	AISC LRFD Section M2.5	TA1	AWS/AISC-SSI		
b. Slip-critical connections.	Y	C or P (method dependent)	IBC Sect 1704.3.3	TA1	AWS/AISC-SSI		
3. Material verification of structural steel (IBC Sect 1708.4):							
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	SII	PE/SE or EIT		
b. Manufacturers' certified mill test reports.	Y	S	ASTM A 6 or ASTM A 568 IBC Sect 1708.4	SII	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, Section A3.6; AISC LRFD, Section A3.5	SII	PE/SE or EIT		
b. Manufacturer's certificate of compliance required.	Y	S		S11	PE/SE or EIT		

Steel Construction has been reviewed in accorda	nce with section 1704.3 of the IBC Code	
Special Inspector	Date	Page of

Schedule of Special Inspections – Exhibit B STEEL CONSTRUCTION

Project: University of New England - College of Pharmacy, Portland, ME Date Prepared: 01/24/2008

VERIFICATION AND INSPECTION IBC Section 1704.3		EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	DATE	INITIAL.
5. Submit current AWS D1.1 welder certificate for all field welders who will be welding on this project.	Y	S	AWS D1.1	SII	PE/SE or EIT		
6. Inspection of welding (IBC 1704.3.1): a. Structural steel:							
Complete and partial penetration groove welds.	Y	С	, , , , , , , , , , , , , , , , , , , ,	TA1	AWS-CWI		
2) Multipass fillet welds.	Y	C	AWS D1.1	TAI	AWS-CWI		
3) Single-pass fillet welds> 5/16"	Y	С	AWSDIN	TA1	AWS-CWI		
4) Single-pass fillet welds< 5/16"	Y	P	1	TA1	AWS-CWI		
5) Floor and Roof deck welds.	Y	P	AWS D1.3	TA1	AWS-CWI		
b. Reinforcing steel (IBC Sect 1903.5.2):		erane III. Perini III. Peri					
Verification of weldability of reinforcing steel other than ASTM A706.	N		Welding of Reinforcement not permitted	N/A			
2) Reinforcing steel-resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special reinforced concrete shear walls and shear reinforcement. 3) Shear reinforcement.		С	AWS D1.4 ACI 318: 3.5.2	TA1	AWS-CWI		
		С		TAl	AWS-CWI		
4) Other reinforcing steel.	N	P		TAI	AWS-CWI		
Inspection of steel frame joint details for compliance (IBC Sect 1704.3.2) with approved construction documents:							
a. Details such as bracing and stiffening.	Y	P		S11	PE/SE or EIT		
b. Member locations.	Y	P		SII	PE/SE or EIT		
c. Application of joint details at each connection.	Y	Р		SII	PE/SE or EIT		

Steel Construction has been reviewed i	n accordance with section 1704.3 of the IBC Code	
Special Inspector		Page of

Schedule of Special Inspection Services – Exhibit B FABRICATION AND IMPLEMENTATION PROCEDURES - STRUCTURAL STEEL

Project: University of New England - College of Pharmacy, Portland, ME Date Prepared: 01/24/2008

VERIFICATION AND INSPECTION IBC Section 1704.2		EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE			AGENT QUALIFICATION	DATE	INITIAL	
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- AISC or SSFNE Certification		S	Fabricator shall submit one of the two qualifications	SII	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	SI1	PE/SE or EIT			

Fabricator Qualifications have been reviewed in accordance with section 1704.2 of the IBC Code					
Special Inspector	_ Date	Page of			

Special Inspections - Exhibit C

Quality Assurance for Seismic Resistance Seismic Checklist Quality Assurance for Seismic Resistance Wind Checklist Schedule of Inspections

(Note: participation of Architect, Mechanical Engineer, and Electrical Engineer of Record will be required to complete Exhibit C)

Quality Assurance Plan - Exhibit C

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Project: University of New England - College of Pharmacy, Portland, ME

Page C1

QUALITY ASSURANCE FOR SEISMIC RESISTANCE CHECK LIST [IBC 1705]

Date Prepared: 01/24/2008 SEISMIC DESIGN CATEGORY: QUALITY ASSURANCE PLAN REQUIREMENTS (A Quality Assurance Plan, enacted through the Special Inspections requirements for this project, are in place for the following systems) FOR SKISMIC DESIGN CATEGORY C OR HIGHER: Structural: SER ☐ The seismin-force-resisting systems ☐ Steel Brackd Frames and associated connections/anchorage Frames and associated connections ☐ Shear walls: ☐ MU ☐ Wood ☐ Concrete ☐ Diaphragms: ☐ Floor ☐ Roof Other: Mechanical/Piping: MER Heating, ventilating and air-conditioning (HVAC) ductwork containing hazardous materials and anchorage of such ductwork ☐ Hazardous Material: ☐ Hazardous Material: Piping systems and mechanical units containing flammable, combustible or highly toxic materials Material: ☐ Material: EER Electrical: Anchorage of electrical equipment used for emerge cy or standby power systems ☐Equipment: Equipment: Equipment: ☐ ADDITIONAL SYSTEMS FOR SEISMIC DESIGN CATEGORY D OR HIGHER: RAR Architectural: Exterior wall panels and their anchorage ☐Precast Concrete Brick ☐Stone: Other: ☐ Suspended ceiling systems and their anchorage Access floors and their anchorage ☐ Steel storage racks and their anchorage ☐ Retail Storage Racks ☐ High Density Files Other: ☐ Life-safety component required to function after an earthquake: ☐Engineered Egress Stairs Fire Protection Sprinkler System Other: Other: □Other: ADDITIONAL SYSTEMS FOR SEISMIC DESIGN CATEGORY D OR HIGHER: EER Electrical: ☐ Electrical equipment Registered Architect of Record (RAR): Structural Engineer of Record (SER): Signature Date Date Electrical Engineer of Record (EER): Mechanical Engineer of Record (MER): Date Signature Date Signature Building Code Official's Acceptance: Signature Date

Quality Assurance Plan – Exhibit C Page C2 QUALITY ASSURANCE FOR WIND REQUIREMENTS CHECK LIST [IBC 1706]

Project: University of New England - College of Pharmacy, Portland, ME Date Prepared: 01/24/2008

Win	d Ex	posure	re:		
		[F-)			
REQUIRED	NOT REQUIRED	NOT APPLICABLE	QUALITY ASSURANCE PLAN REQUIREMENTS (A Quality Assurance Plan is required where indicated below)		
	\boxtimes		In wind exposure Categories A and B, where the 3-second-gust basic wind hour (mph) (52.8 <i>m/sec</i>) or greater.	speed is 120 miles per	
		\boxtimes	In wind exposure Categories C and D, where the 3-second-gust basic wind speed is 110 mph (49 m/sec) or greater.		
ғтер	ared by	y .	Building Code Official's Accepta	AILOU.	
Sign	ature		Date Signature	Date	

$\underline{Special\ Inspections-Exhibit\ D}$

Contractor's Statement of Responsibility

Fabricator's Certificate of Compliance – Exhibit D

Each approved fabricator that is exempt from Special Inspection of shop fabrication and implementation procedures per section 1704.2 of the International Building Code must submit a *Fabricator's Certificate of Compliance* at the completion of fabrication.

Project:	
Fabricator's Name:	
Address:	
Certification or Approval Agency:	
Certification Number:	
Date of Last Audit or Approval:	
Description of structural members and ass	emblies that have been fabricated:
I hereby certify that items described above construction documents.	were fabricated in strict accordance with the approved
Signature	Date
Title	
Attach copies of fabricator's certification or	r building code evaluation service report and fabricator's quality

control manual

End of Statement of Special Inspections