Statement of Special Inspections

Project: *North Haven Middle School Renovations and Additions*

Location: *55 Bailey Road, North Haven, CT 06473*

Owner: *Town of North Haven*

Design Professional in Responsible Charge:

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 Special Inspection Coordinator and the identity of other approved agencies to be retained for conducting these inspections and tests. This *Statement of Special Inspections* encompass the following disciplines:

☒ Structural ☒ Mechanical/Electrical/Plumbing

☒ Architectural ☐ Other: _____

The Special Inspection Coordinator shall keep records of all inspections and shall furnish inspection reports to the Building Official and the Registered Design Professional in Responsible Charge. 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 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 Registered Design Professional in Responsible Charge.

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 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: *Bi-Weekly* or ☐ per attached schedule.

Prepared by:

_____
(type or print name)

_____ _____
Signature Date

Design Professional Seal

Owner's Authorization:

_____ _____
Signature Date

Building Official's Acceptance:

_____ _____
Signature Date

Schedule of Inspection and Testing Agencies

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

- ☒ Soils and Foundations
- ☒ Cast-in-Place Concrete
- ☐ Precast Concrete
- ☒ Masonry
- ☒ Structural Steel
- ☒ Cold-Formed Steel Framing
- ☐ Spray Fire Resistant Material
- ☐ Wood Construction
- ☐ Exterior Insulation and Finish System
- ☒ Mechanical & Electrical Systems
- ☒ Architectural Systems
- ☐ Special Cases

Special Inspection Agencies	Firm	Address, Telephone, e-mail
1. **Special Inspection Coordinator**		
2. Inspector	*TO BE DETERMINED*	
3. Inspector		
4. Testing Agency	*TO BE DETERMINED*	
5. Testing Agency		
6. Other	*Haley & Aldrich, Inc* *Rocky Hill, CT*	*100 Corporate Place, Suite 105* *Rocky Hill, CT 06067* *860.282.9400*

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.

Quality Assurance Plan

Quality Assurance for Seismic Resistance

Seismic Design Category

Quality Assurance Plan Required (Y/N) *Not Required*

Description of seismic force resisting system and designated seismic systems:

Quality Assurance for Wind Requirements

Basic Wind Speed (3 second gust)

Wind Exposure Category

Quality Assurance Plan Required (Y/N) *Not Required*

Description of wind force resisting system and designated wind resisting components:

Statement of Responsibility

Each contractor responsible for the construction or fabrication of a system or component designated above must submit a Statement of Responsibility.

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
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

Other

Soils and Foundations

Item	Agency # (Qualif.)	Scope
1. Shallow Foundations	*2* *6* *PE/GE*	*Inspect soils below footings for adequate bearing capacity and consistency with geotechnical report.* *Inspect removal of unsuitable material and preparation of subgrade prior to placement of controlled fill*
2. Controlled Structural Fill	*4* *6*	*Perform sieve tests (ASTM D422 & D1140) and modified Proctor tests (ASTM D1557) of each source of fill material.* *Inspect placement, lift thickness and compaction of controlled fill.* *Test density of each lift of fill by nuclear methods (ASTM D2922)* *Verify extent and slope of fill placement.*
3. Deep Foundations	*N/A*	*N/A*
4. Load Testing		
4. Other:		

Cast-in-Place Concrete

Item	Agency # (Qualif.)	Scope
1. Mix Design	*1* *4* *ACI-CCI*	*Review concrete batch tickets and verify compliance with approved mix design. Verify that water added at the site does not exceed that allowed by the mix design.*
2. Material Certification		
3. Reinforcement Installation	*4* *ACI-CCI* *ICC-RCSI*	*Inspect size, spacing, cover, positioning and grade of reinforcing steel. Verify that reinforcing bars are free of form oil or other deleterious materials. Inspect bar laps and mechanical splices. Verify that bars are adequately tied and supported on chairs or bolsters*
4. Post-Tensioning Operations	*ICC-PCSI*	*Inspect placement, stressing, grouting and protection of post-tensioning tendons. Verify that tendons are correctly positioned, supported, tied and wrapped. Record tendon elongations.*
5. Welding of Reinforcing	*N/A*	*N/A*
6. Anchor Rods	*4*	*Inspect size, positioning and embedment of anchor rods. Inspect concrete placement and consolidation around anchors.*
7. Concrete Placement	*4* *ACI-CCI*	*Inspect placement of concrete. Verify that concrete conveyance and depositing avoids segregation or contamination. Verify that concrete is properly consolidated.*
8. Sampling and Testing of Concrete	*4* *ACI-CFTT* *ACI-STT*	*Test concrete compressive strength (ASTM C31 & C39), slump (ASTM C143), air-content (ASTM C231 or C173) and temperature (ASTM C1064). IBC Table 1704.4 and as per project specifications.*
9. Curing and Protection	*4* *ACI-CCI* *ICC-RCSI*	*Inspect curing, cold weather protection and hot weather protection procedures.*
10. Other: *Column Base Plate Grouting*	*4* *ACI-CCI*	*Observe installation and material installed for grouting of column base plates.*

Precast Concrete

Item	Agency # (Qualif.)	Scope
1. Plant Certification / Quality Control Procedures ☐ Fabricator Exempt	*N/A*	*N/A*
2. Mix Design	*N/A*	*N/A*
3. Material Certification	*N/A*	*N/A*
4. Reinforcement Installation	*N/A*	*N/A*
5. Prestress Operations	*N/A*	*N/A*
6. Connections / Embedded Items	*N/A*	*N/A*
7. Formwork Geometry	*N/A*	*N/A*
8. Concrete Placement	*N/A*	*N/A*
9. Sampling and Testing of Concrete	*ACI-CFTT* *ACI-STT*	*N/A*
10. Curing and Protection	*ACI-CCI* *ICC-RCSI*	*N/A*
11. Erected Precast Elements	*PE/SE*	*N/A*
12. Other:		

Masonry

Required Inspection Level: ☐ **1** ☒ **2**

Item	Agency # (Qualif.)	Scope
1. Material Certification	*1*	*Review for compliance to specified materials (IBC Table 1708.1.4). Review for compliance certified mill test reports for reinforcing steel used in masonry shear walls (IBC 1708.3).*
2. Mixing of Mortar and Grout	*4 Testing Lab Masonry Inspector*	*Inspect proportioning, mixing and retempering of mortar and grout (IBC Table 1704.5.3)*
3. Installation of Masonry	*4 Testing Lab Masonry Inspector*	*Inspect size, layout, bonding and placement of masonry units (IBC Table 1704.5.3)*
4. Mortar Joints	*4 Testing Lab Masonry Inspector*	*Inspect construction of mortar joints including tooling and filling of head joints (IBC Table 1704.5.3)*
5. Reinforcement Installation	*4 Testing Lab Masonry Inspector*	*Inspect placement positioning and lapping of reinforcing steel (IBC Table 1704.5.3). Inspect all reinforcing at all exterior masonry walls, all masonry shear walls, and all masonry firewalls. Inspect reinforcement of 33% of all remaining masonry walls.*
6. Prestressed Masonry	*N/A*	*N/A*
7. Grouting Operations	*4 Testing Lab Masonry Inspector*	*Inspect placement and consolidation of grout. Inspect masonry clean-outs for high-lift grouting (IBC Table 1704.5.3).*
7. Weather Protection	*4 Testing Lab Masonry Inspector*	*Inspect cold weather protection and hot weather protection procedures. Verify that wall cavities are protected against precipitation (IBC Table 1704.5.3).*
9. Evaluation of Masonry Strength	*4 Testing Lab Masonry Inspector*	*Test compressive strength of mortar and grout cube samples (ASTM C780). Test compressive strength of masonry prisms (ASTM C1314). (IBC Table 1704.5.3 and Table 1708.1.4). One masonry prism test is required for every 750 s.f. of masonry.*
10. Anchors and Ties	*4 Testing Lab Masonry Inspector*	*Inspect size, location, spacing and embedment of dowels, anchors and ties.*
11. Other: *Bracing and Structural Stability*	*4 Testing Lab Masonry Inspector*	*Inspect top of wall bracing for all masonry walls and structural stability of all masonry firewalls.*

Structural Steel

Item	Agency # (Qualif.)	Scope
1. Fabricator Certification/ Quality Control Procedures ☐ Fabricator Exempt	*1* *4* *AWS/AISC-SSI*	*Review shop fabrication and quality control procedures.*
2. Material Certification	*1* *4* *AWS/AISC-SSI*	*Review certified mill test reports and identification markings on wide-flange shapes, high-strength bolts, nuts and welding electrodes*
3. Open Web Steel Joists		*N/A*
4. Bolting	*4* *AWS/AISC-SSI*	*Inspect installation and tightening of high-strength bolts. Verify that splines have separated from tension control bolts. Verify proper tightening sequence. Continuous inspection of bolts in slip-critical connections. (IBC Table 1704.3)*
5. Welding	*4* *AWS-CWI*	*Visually inspect all welds. Inspect pre-heat, post-heat and surface preparation between passes. Verify size and length of fillet welds. (IBC Section 1707.2 and IBC Table 1704.3).* *Ultrasonic testing of all full-penetration welds.*
6. Shear Connectors	*4* *AWS/CWI*	*Inspect size, number, positioning and welding of shear connectors. Inspect suds for full 360 degree flash. Ring test all shear connectors with a 3 lb hammer. Bend test all questionable studs to 15 degrees.*
7. Structural Details	*4* *AISC-SSI*	*Inspect steel frame for compliance with structural drawings, including Ridged Frames, member configuration and connection details (IBC Table 1704.3).*
8. Metal Deck	*4* *AWS-CWI*	*Inspect welding and side-lap fastening of metal roof and floor deck.*
9. Other: *Bracing*	*4* *AWS-CWI*	*Inspect installation of all top of masonry wall bracing.*

Cold-Formed Steel Framing

Item	Agency # (Qualif.)	Scope
1. Member Sizes	*4 Testing Lab Inspector*	*Review for compliance with the construction documents. Review all sizes in the field for compliance with approved shop drawings.*
2. Material Thickness	*4 Testing Lab Inspector*	*Review for compliance with the construction documents. Review al thicknesses in the field for compliance with approved shop drawings.*
3. Material Properties	*1 4 Testing Lab Inspector*	*Review for compliance with the construction documents.*
4. Mechanical Connections	*4 Testing Lab Inspector*	*Review for compliance with the construction documents.*
5. Welding	*4 Testing Lab Inspector*	*Review welding procedures and verify welding materials for compliance with construction documents and approved shop drawings. Visually inspect all welds by a certified welding inspector.*
6. Framing Details	*4 Testing Lab Inspector*	*Verify in field framing details for compliance with construction documents and approved shop.*
7. Trusses	*N/A*	*N/A*
8. Permanent Truss Bracing	*N/A*	*N/A*
9. Other:	*N/A*	*N/A*

Spray-Applied Fire Resistant Material

Item	Agency # (Qualif.)	Scope
1. Material Specifications		*N/A*
2. Laboratory Tested Fire Resistance Design	*ICC-SFSI*	*N/A*
3. Schedule of Thickness	*ICC-SFSI*	*N/A*
4. Surface Preparation	*ICC-SFSI*	*N/A*
5. Application	*ICC-SFSI*	*N/A*
6. Curing and Ambient Condition	*ICC-SFSI*	*N/A*
7. Thickness	*ICC-SFSI*	*N/A*
8. Density	*ICC-SFSI*	*N/A*
9. Bond Strength	*ICC-SFSI*	*N/A*
10. Other:		

Wood Construction

Item	Agency # (Qualif.)	Scope
1. Fabricator Certification/ Quality Control Procedures ☐ Fabricator Exempt	*N/A*	*N/A*
2. Material Grading	*N/A*	*N/A*
3. Connections	*N/A*	*N/A*
4. Framing and Details	*N/A*	*N/A*
5. Diaphragms and Shearwalls	*N/A*	*N/A*
6. Prefabricated Wood Trusses	*N/A*	*N/A*
7. Permanent Truss Bracing	*N/A*	*N/A*
8. Other:		

Exterior Insulation & Finish Systems (EIFS)

Item	Agency # (Qualif.)	Scope
1. Material Submittals	*N/A*	*N/A*
2. Condition of Substrate	*N/A*	*N/A*
3. Application of Foam Plastic Board	*N/A*	*N/A*
4. Application of Coatings	*N/A*	*N/A*
5. Application of Mesh	*N/A*	*N/A*
6. Ambient Condition and Curing	*N/A*	*N/A*
7. Flashing and Joint Details	*N/A*	*N/A*
8. Sealants/Caulks	*N/A*	*N/A*
9. Other:		

Mechanical & Electrical Systems

Item	Agency # (Qualif.)	Scope
1. Smoke Control	*N/A*	*N/A*
2. Mechanical, HVAC & Piping	*4*	*1. Reciprocating and rotating-type machinery. Pumps, chillers, air handling units, fire pump.* *2. Piping system 3 inches and larger.* *3. Tanks, heat exchangers.* *4. Roof Drainage Systems.* *5. Fire Dampers.* *6. Conformance with plans and specifications related to seismic connections and all fasteners as required per Section 17 of IBC Code 1707.7 and 1708.5.*
3. Electrical System	*4*	*1. Electrical motors, transformers, swtichboards, emergency generator system.* *2. Conformance with plans and specifications related to seismic connections and all fasteners as required per Section 17 of IBC Code 1707.7 and 1708.5.*
4. Other:		

Architectural Systems

Item	Agency # (Qualif.)	Scope
1. Wall Panels & Veneers	*4*	*Verify 25% of wall panel installation and 25% of veneer installation.*
2. Suspended Ceilings	*4*	*1. Verify type of materials and applications.* *2. Verify installation of ceiling assemblies for compliance with seismic requirements.*
3. Access Floors		*N/A*
4. Other:		*N/A*

Special Cases

Item	Agency # (Qualif.)	Scope
Post Installed Anchors	*4*	*Verify anchor size and type adhesive; hole size, depth and preparation of post installed anchors. Inspect the installation of 100% of all the post-installed anchors.*