Statement of Special Inspections

Project:	Police Headquarters			
Location:	Stamford, Connecticut			
Owner:	City of Stamford			
Design Pro	ofessional in Responsible Charge: Ka	arl F. Frey, PE		
Special Ins Special Ins Coordinator	nent of Special Inspections is submitted a pection and Structural Testing requirem pection services applicable to this progrand the identity of other approved agency Statement of Special Inspections encomp Structural Architectural	ents of the Building (ject as well as the colors to be retained for	Code. It includes a schedule of name of the Special Inspection conducting these inspections and blines:	
the Building discrepancie discrepancie the Register	Inspection Coordinator shall keep recording Official and the Registered Designes shall be brought to the immediate as are not corrected, the discrepancies shall be brought in Responsible Cotor of his or her responsibilities.	Professional in Res attention of the Cor all be brought to the at	sponsible Charge. Discovered ntractor for correction. If such tention of the Building Official and	
Interim repo	orts shall be submitted to the Building Charge.	Official and the Re	gistered Design Professional In	
	ort of Special Inspections documenting co f any discrepancies noted in the inspectio cupancy.			
Job site safe	ety and means and methods of construction	on are solely the respon	nsibility of the Contractor.	
Interim Repo	ort Frequency: Monthly		or per attached schedule.	
Prepared by	,	59		
Karl F. Frey, (type or print na		_	OF COMM	
Kal	-7.7m	12/19/2016	No 15290 CENS Design Professional Seal	
Sighature		Date	Desigh Professional Seal	
Owner's Aut	horization:	Building Official's Ad		
(1/3/2011		3	
Signature	Date	Signature	Date	

Schedule of Inspection and Testing Agencies

This Stateme	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 Small Diameter Grouted Piles (Micropiles)	

Considian Association	I Fi	Address Translation 1
Special Inspection Agencies	Firm	Address, Telephone, e-mail
Special Inspection Coordinator	Independent Materials Testing Labs. Inc.	57 N. Washington Street P.O. Box 745 Plainville, CT 06062 Tel: 860-747-1000 Fax: 860-747-6455 Bill Itson-203-722-6613 mail@imtlct.com
2. Inspection and Testing Agency	Independent Materials Testing Labs. Inc.	57 N. Washington Street P.O. Box 745 Plainville, CT 06062 Tel: 860-747-1000 Fax: 860-747-6455 Bill Itson-203-722-6613 mail@imtlct.com
3.		
4.		**
5.		
6. Geotechnical Engineer	Dr. Clarence Welti, PE, PC	227 Williams Street Glastonbury, CT 06033-0397 860-633-4623 cwelti@weltiassoc.com

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.

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

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 Rein

Prestressed Concrete Special Inspector 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

ND

Technician certified to perform Nuclear Density testing.

Page 4 of 12

S	Soils and Foundations			
Ite	m	Agency # (Qualif.)	Scope	
1.	Shallow Foundations	6/2 PE/GE	Inspect soil at bottom of footing elevations and verify suitability and consistency of bearing stratum with geotechnical report prior to concrete placement. Ensure that excavation is to proper depth. Verify extent of overexcavation where applicable. Inspect removal of unsuitable material and preparation of subgrade prior to placement of controlled fill.	
2.	Controlled Structural Fill	6/2 PE/GE	Perform sieve tests (ASTM D422 & D1140) and modified Proctor tests (ASTM D1557) of each source of fill material.	
		ND	Inspect placement, lift thickness, and compaction of controlled fill.	
		ND	Test density of each lift of fill by nuclear methods (ASTM D2922)	
		ND	Verify extent and slope of fill placement.	
3.	Geotextile Separation Fabric and Slab Subbase	6/2 PE/GE	Inspect installation of geotextile fabric and slab crushed stone subbase.	
4.	Vapor Retarder	2 ACI-CCI	Inspect installation of under slab vapor retarder to confirm that installation and taping are in accordance with the manufacturer's written instructions. Verify all penetrations and blockouts through the vapor retarder are sealed per the manufacturer's published details.	
5.	Pile Foundations	2/6 PE/GE	Not Applicable.	
6.	Load Testing	2/6 . PE/GE	Not Applicable.	
7.	Pile Splices	2 AWS-CWI ASNT	Not Applicable.	
7.	Underpinning and Excavation Support Systems	6 PE/GE	Verify excavation support systems for conformance with approved submittals.	
8.	Other Reports	1 and 6 PE	Review contractor's field quality control procedures. Monitor testing lab and field inspection results to ensure conformance with construction documents. Notify Engineer of Record immediately of all discrepancies.	

Page 5 of 12

Cast-In-Place Concrete			
Item Agency # (Qualif.)		Scope	
1. Mix Design	2 ACI-CCI ICC-RCSI	Review concrete batch tickets and verify compliance with approved mix design.	
2. Material Certification	1 PE	Review certificates of compliance for concrete materials.	
3. Reinforcement Installation	2 ACI-CCI ICC-RCSI	Inspect size, spacing, cover, positioning and grade of all 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. Batching Plant	1/2 ACI-CCI	Review plant quality control procedures and batching and mixing methods.	
5. Welding of Reinforcing	2 AWS-CWI	Visually inspect all reinforcing steel welds. Verify weldability of reinforcing steel. Inspect preheating of steel when required.	
6. Anchor Rods	2 ACI-CCI ICC-RCSI	Inspect size, positioning and embedment of all anchor rods prior to and during concrete placement. Inspect concrete placement and consolidation around anchors.	
7. Formwork Geometry	2 ACI-CCI ICC-RCSI	Review for general conformance with contract documents.	
8. Concrete Placement	2 ACI-CCI ICC-RCSI	Inspect placement of concrete. Verify that concrete conveyance and depositing avoids segregation or contamination. Verify that concrete is properly consolidated. Verify use of required design mix.	

Page 6 of 12

Cast-In-Place Concrete			
Item	Agency # (Qualif.)	Scope	
Sampling and Testing of Concrete	2 ACI-CFTT ACI-STT	Test concrete compressive strength (ASTM C31 & C39), slump (ASTM C143), air-content (ASTM C231 or C173) and temperature (ASTM C1064).	
		Slump: ASTM C 143; one test at point of discharge for each set of compression strength cylinders and additional tests when concrete consistency seems to have changed.	
		Compression Test Cylinders: ASTM C 31; one set of four standard cylinders for each compressive-strength test, unless otherwise directed.	
:		Compressive-Strength Tests: ASTM C 39; one set for each day's pour, plus additional sets for each 50 cubic yards of each concrete class placed in any one day.	
		Provide one set of field cured cylinders for each concrete type for any days that are less than or expected to be less than 40 deg F within 24 hours after concrete placement.	
10. Curing and Protection	2 ACI-CCI ICC-RCSI	Inspect curing, cold weather protection and hot weather protection procedures. Inspect for maintenance of specified concrete curing temperature and techniques.	
Non-shrink grout for column base plates and beam bearing plates.	2 ACI-CFTT ACI-STT	Cast cubes and perform strength tests in conformance with ASTM C-109. Review curing and extreme weather precautions per Manufacturer's requirements.	
12. Expansion and Adhesive Anchoring	2 ACI-CCI ICC-RCSI	Witness installation of 25 percent for conformance with Manufacturer's requirements. Verify that materials are sultable for job conditions.	
13. Other Reports	1 PE	Review contactor's field quality control procedures. Monitor testing lab and field inspection results to ensure conformance with construction documents. Notify Engineer of Record immediately of all discrepancies.	

Page 7 of 12

Item		Agency # (Qualif.)	Scope	
1.	Plant Certification / Quality Control Procedures	ACI-CCI ICC-RCSI	Review plant operations and quality control procedures.	
2.	Mix Design	2 ACI-CCI ICC-RCSI	Inspect concrete batching operations and verify compliance with approved mix design.	
3.	Material Certification	ACI-CCI ICC-RCSI	Review for conformance with Contract Documents and approved shop drawings.	
4.	Reinforcement Installation	2 ACI-CCI ICC-RCSI	Inspect size, spacing, position and grade of reinforcing stee Verify that reinforcing bars are free of form oil or other deleterious materials.	
5.	Prestress Operations	2 ICC-PCSI	Inspect placement, stressing, grouting and protection of prestressing tendons.	
6.	Connections / Embedded Items	2 ACI-CCI ICC-RCSI	Review for conformance with approved shop drawings.	
7.	Formwork Geometry	2 ACI-CCI ICC-RCSI	Review for conformance with contract drawings and approved shop drawings.	
В.	Concrete Placement	2 ACI-CCI ICC-RCSI	Inspect placement of concrete. Verify that concrete conveyance and depositing avoids segregation or contamination. Verify that concrete is properly consolidated.	
9.	Sampling and Testing of Concrete	2 ACI-CFTT ACI-STT	Periodic review of sampling and testing procedures of Precaster for compliance with Contract Documents and ASTM procedures. Review batch plant compression tests reports.	
10.	Curing and Protection	2 ACI-CCI ICC-RCSI	Inspect curing, cold weather protection and hot weather protection procedures.	
11.	Erected Precast Elements	2 PE/SE AWS-CW	Inspect erection of precast concrete including member configuration, connections, welding, and grouting.	
12.	Other:	1 PE	Review contactor's field quality control procedures. Monitor testing lab and field inspection results to ensure conformance with construction documents. Notify Engineer of Record immediately of all discrepancies.	

Page 8 of 12

Masonry	Required Inspection Level:		
Item	Agency # (Qualif.)	Scope	
Material Certification	1 PE	Review certificates of compliance for masonry units, mortar and grout ingredients, and metal reinforcement and accessories.	
2. Mixing of Mortar and Grout	2 ICC-SMSI	Inspect proportioning, mixing and retempering of mortar and grout. Review mix design proportions, and inspect onsite mixing operations.	
3. Installation of Masonry	ICC-SMSI	Inspect size, layout, bonding, mortaring and placement of masonry units. Verify the installation of bond beams and special shapes.	
4. Mortar Joints	ICC-SMSI	Inspect construction of mortar joints including tooling and filling of head joints.	
5. Reinforcement Installation	2 ICC-SMSI AWS-CWI	Inspect the size, quality, positioning and placement of all reinforcing bars and wire for its conformance with the Contract Documents. Also inspect placement of inserts and anchorages. Inspect all lapping of steel reinforcement and welding of reinforcing.	
6. Prestressed Masonry	ICC-SMSI	Not Applicable.	
7. Grouting Operations	2 ICC-SMSI	Inspect cells prior to grouting. Inspect placement and consolidation of grout. Inspect masonry clean-outs for high-lift grouting. Perform random slump testing for grout.	
8. Weather Protection	2 ICC-SMSI	Inspect cold weather protection and hot weather protection procedures. Verify that wall cavities are protected against precipitation. When ambient temperature falls below 40 deg F, or rises above 90 deg. F, follow procedures per ACI 530.1, Section 2.3. Keep temperature records and monitor curing procedures.	
9. Evaluation of Masonry Strength	2 ICC-SMSI	Test compressive strength of mortar and grout cube samples (ASTM C780, ASTM C1019). Agency shall oversee construction of prisms in accordance with ASTM C1314. One set of hollow core prisms and one set of grout filled prisms are required for preconstruction testing and each 2,000 square feet of masonry wall. Prisms to be tested at 28 days. Reports to be in accordance with ASTM C1314.	
10. Anchors and Ties	2 ICC-SMSI	Inspect type, size, location, spacing and embedment of dowels, anchors and ties. Inspect anchorage of masonry to other construction for conformance with Contract Documents and approved shop drawings.	

Page 9 of 12

Masonry	Required Inspection Level:		
Item	Agency # (Qualif.)	Scope	
11. Other Reports	1 PE	Review contactor's field quality control procedures. Monitor testing lab and field inspection results to ensure conformance with construction documents. Notify Engineer of Record immediately of all discrepancies.	

Page 10 of 12

Structural Steel			
Item	Agency # (Qualif.)	Scope	
Fabricator Certification / Quality Control Procedures	2 AWS/ AISC-SSI ICC-SWSI	Verify that structural steel fabricator is AISC certified.	
2. Material Certification	1/2 AWS/ AISC-SSI ICC-SWSI	Certified mill test reports for structural steel, bolts, nuts, washers, and welding electrodes shall be reviewed by the Special Inspector. Verify grade of steel. Material identification markings shall be reviewed for compliance by on site Testing Technician.	
3. Anchor Rods	2 AWS/ AISC-SSI ICC-SWSI	Review Contractor's as-built survey. Verify that all anchor rods have been properly torqued and have adequate fit-up. Verify plate washers have been installed and welded when indicated.	
4. Protected Zones	2 AWS/ AISC-SSI ICC-SWSI	Not Applicable.	
5. Open Web Steel Joists	2 AWS/ AISC-SSI ICC-SWSI	Not Applicable.	
6. Bolting	2 AWS/ AISC-SSI ICC-SWSI	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. Visually inspect 100% of all field installed high-strength bolts for proper installation and connection fit-up.	
7. Welding	2 AWS-CWI ASNT	Check welder qualifications. Visually inspect all welds. Inspect pre-heat, post-heat and surface preparation between passes. Verify size and length of fillet welds. Shop and field inspection is required. The Special Inspector shall witness the welding of all complete and partial penetration groove welds, multipass fillet welds, and single-pass fillet welds greater than 5/16 inch. See specification Section 051200. Ultrasonic testing of all full-penetration welds. All full-	
		penetration welds to be inspected by ASNT Level II qualified inspection agent.	
8. Shear Connectors	2 AWS/ AISC-SSI ICC-SWSI	Inspect size, number, positioning and welding of shear connectors. Inspect studs for full 360 degree flash. Ring test all shear connectors with a 3 lb hammer. Bend test all questionable studs to 15 degrees.	
9. Structural Details	2 AWS/ AISC-SSI	Inspect steel frame for compliance with structural drawings and approved shop drawings, including bracing, member configuration, size, camber, and connection details.	

Page 11 of 12

Structural Steel			
Item	Agency # (Qualif.)	Scope	
10. Metał Deck	2 AWS-CWI	Verify gage, width, and type. Inspect welding and side-lap fastening of metal roof and floor deck. Inspect deck welding to structure, side lap attachments, perimeter edge fasteners, and pour-stop welds. Check welder qualifications.	
11. Metal Stair Framing	2 AWS/ AISC-SSI	Review metal stair framing connection details for conformance with approved miscellaneous metals shop drawings.	
12. Expansion and Adhesive Anchoring	2 ACI-CCI ICC-RCSI	Witness installation of 25 percent for conformance with Manufacturer's requirements. Verify that materials are suitable for job conditions.	
13. Field Correction of Fabricated Items	2 AWS/ AISC-SSI	Review documentation of RDP approved repair and verify completion of repairs.	
14. Other Reports	1 PE	Review contactor's field quality control procedures. Monitor testing lab and field inspection results to ensure conformance with construction documents. Notify Engineer of Record immediately of all discrepancies.	

Page 12 of 12

Cold-Formed Steel Framing-Exterior Wall Framing		
Item	Agency # (Qualif.)	Scope
1. Member Sizes	2 AWS/ AISC-SSI ICC-SWSI	Verify member sizes for conformance with the Contract Documents and approved shop drawings.
2. Material Thickness	2 AWS/ AISC-SSI ICC-SWSI	Review the gage of materials and the section properties of the members for conformance with the Contract Documents and approved shop drawings.
3. Material Properties	2 AWS/ AISC-SSI ICC-SWSI	Review the material properties of the members for conformance with the Contract Documents and approved shop drawings.
4. Mechanical Connections	2 AWS/ AISC-SSI ICC-SWSI	Inspect connections for conformance with the Contract Documents and approved shop drawings.
5. Welding	2 AWS/ AISC-SSI ICC-SWSI	Visually inspect welds for conformance with the Contract Documents and approved shop drawings. Verify that welding conforms to AWS specifications. Check welder qualifications.
6. Framing Details	2 AWS/ AISC-SSI ICC-SWSI	Field review of structural details for conformance with the Contract Documents and approved shop drawings.
7. Trusses		Not Applicable.
8. Permanent Truss Bracing		Not Applicable.
9. Other Fasteners	2 AWS/ AISC-SSI ICC-SWSI	Verify fastener type and installation procedures. Verify that fasteners conform to responsible RDP approved submittals the contact documents. Verify that fasteners are installed tight.
10. Field Correction of Fabricated Items	2 AWS/ AISC-SSI ICC-SWSI	Review documentation of RDP approved repair and verify completion of repairs.
11. Other:	1 PE	Review contactor's field quality control procedures. Monitor testing lab and field inspection results to ensure conformance with construction documents. Notify Engineer of Record immediately of all discrepancies.

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