#### APPENDIX - A

#### **QUALIFICATIONS FOR SPECIAL INSPECTION AGENCIES**

NOTE - Agencies are required to be registered with the Department, listing the specific qualifications, in accordance with The Philadelphia Code, Chapter 9-1300 <u>Inspection Businesses</u>, within 18 months of enactment of Ordinance.

- Agency maintains current accreditation as a special inspection agency by the International Accreditation Service [IAS] within the scope of accreditation issued by IAS or other approval entity as determined by the DPRC-SI, subject to Department approval, or;
- Agency maintains current accreditation as a special inspection agency in accordance with ASTM E329, [Standard Specification for Agencies Engaged in Construction Inspection and/or Testing], or;
- The agency has been accredited in accordance with ISO/IEC 17020 [International Organization for Standardization/International Electro-technical Commission - The General Criteria for the Operation of Various Types of Bodies Performing Inspection], or;
- The DPRC-SI shall provide for Department review and approval, the agency[s] project history/experience of comparable projects as applicable for the special inspections required for the submitted project. (A guideline for Agency Qualification may include written or oral examination to verify the agencies knowledge of jurisdictional procedures and code requirements).
- Approved Fabricators Special inspections of factory fabrication described in Section 1704 are
  not required where the work is done on the premises of a fabricator accredited by IAS under its
  Fabricator Inspection Accreditation Program and a certificate of accreditation indicating the scope
  of fabrication issued by IAS is noted on the IAS website, or;
- Approval of a fabricator by the Department shall be based upon review of the fabricator's quality control manuals and auditing of fabricator practices by an approved accreditation agency, and;
- At completion of fabrication, the fabricator shall submit a certificate of compliance to the building
  official stating that the work was performed in accordance with the approved construction
  documents. Refer to Section 1704.2.2.

#### APPENDIX - B

## QUALIFICATIONS FOR SPECIAL INSPECTORS

NOTE - Inspectors are required to be registered with the Department, listing specific qualifications, in accordance with The Philadelphia Code, Chapter 9-1300 <u>Inspection Businesses</u>, within 18 months of enactment of Ordinance.

- Individuals maintaining current certification by ICC as a special inspector for the discipline(s) which the individual is requesting approval; **or**
- The special inspector may be a Professional Engineer with experience in the area of Special Inspections required, submitted by the DPRC-SI including Engineers In Training with one year related experience working under the supervision of the P.E; or
- During the 18 month period after Ordinance approval, submit to the Department for approval documentation of Special Inspection experience [with recommendations] for the specific types of inspections applicable to the submitted Special Inspections Program. Acceptable experience is 1–5 year(s) of verifiable practical experience; a portion of the experience may be satisfied by the applicable technical education, or;
- Individuals presenting documentation of approved, current certifications in the specific field of special inspection as follows:

# <u>FABRICATION – INSPECTOR QUALIFICATIONS</u> (see Appendix 'A' for approval of Fabricators with in-house inspection)

## Inspection of Structural Steel Fabrication; IBC Section 1704.2

- Current Certified Welding Inspector [CWI] in accordance with the provisions of AWS [American Welding Society] QC1, or;
- Current ICC S1 and S2 Structural Welding Inspector,
- Current certified personnel meeting the requirements of ASNT [The American Society for Nondestructive Testing] Level III or Level II in accordance with SNT-TC-1A or ACCP certified personnel.

## Inspection of Pre-Cast Concrete Fabrication; IBC Section 1704.2

- Current ICC Reinforced Concrete certificate; or
- Pre-Cast/Pre-Stressed Concrete Institute (PCI) Quality Control Technician/Inspector Level II certificate, or;
- ACI [American Concrete Institute] certified personnel as appropriate.

#### Inspection of Engineered Wood Product Fabrication; IBC Section 1704.6

Professional Engineer licensed in the State of Pennsylvania.

## APPENDIX - B [continued]

## FIELD INSPECTION

## Welding; IBC Section 1704.3.1, Table 1704.3(4 & 5), and Table 1704.4(2)

- Current Certified Welding Inspector (CWI) in accordance with the provisions of AWS [American Welding Society] QC1; or;
- Current AWS [American Welding Society] Senior Certified Welding Inspector (SCWI); or
- Current ICC S2 Structural Welding Inspector,
- Current certified personnel meeting the requirements of ASNT [The American Society for Nondestructive Testing] Level III or Level II in accordance with SNT-TC-1A or ACCP certified personnel.

## High-Strength Bolting and Steel Frame Inspection; IBC Section 1704.3.3 and Table 1704.3(1, 2, 3 & 6)

- Current ICC Structural Steel & Bolting Special Inspector certificate, or;
- Engineer-In-Training (EIT) with one year related experience.\*

## Reinforced Concrete; IBC Section 1704.4 and Table 1704.4(1, 2, 3, 5, 6, 7, 8, and 12)

- Current ICC Reinforced Concrete Special Inspector certificate; or
- ACI [American Concrete Institute] Certified Concrete Construction Special Inspector, or;
- Engineer-In-Training (EIT) with one year related experience.\*

## Pre-Stressed Concrete; IBC Table 1704.4(9)

- ICC Pre-Stressed Concrete Certificate; or;
- Pre-Cast/Pre-Stressed Concrete Institute (PCI) Quality Control Technician/Inspector Level II certificate; or
- Engineer-In-Training (EIT) with one year related experience.\*

## **Pre-Cast Concrete Erection; IBC Table 1704.4(10)**

- Current Certified Welding Inspector [CWI] in accordance with the provisions of AWS [American Welding Society] QC1; or
- Current ICC S2 Structural Welding Inspector certificate.
- Current certified personnel meeting the requirements of ASNT [The American Society for Nondestructive Testing] Level III or Level II in accordance with SNT-TC-1A or ACCP certified personnel.

#### Post Tension Slabs-on-Ground and Post Tension Concrete; IBC Table 1704.4 (11)

- Current Post-Tensioning Institute (PTI) Certification Level 2; or
- Current ICC Pre-stressed Concrete Special Inspector certificate; or
- Engineer-In-Training (EIT) with one year related experience.\*

## Post Installed Concrete Anchor Installation; Table 1704.4 (4), ACI 318, Section 1912.1

- Approval of this work shall be provided by a Structural Engineer licensed in the State of Pennsylvania, or
- ACI/CRSI certified for adhesive anchor installation. [American Concrete Institute/Concrete Reinforcing Steel Institute]

## Structural Masonry; IBC Sections 1704.5, and 1704.11

- Current ICC Structural Masonry certificate, or
- Engineer-In-Training (EIT) with one year related experience.\*

## **APPENDIX B (continued)**

### Modular Retaining Walls; IBC Section 1704.5

- Current NICET (National Institute for Certification in Engineering Technologies) Level II certificate in Geotechnical Engineering Technology/Construction; or
- Current NICET Level II soils certificate in Construction Materials Testing; or
- Current ICC Soils Special Inspector certificate; or
- Licensed Professional Geologist in the State of Pennsylvania with one year related experience; or
- Engineer-In-Training (EIT) with one year related experience\*; or
- Geologist-in-Training (GIT) with one year related experience.\*

## Wood Construction, IBC Sections 1704.6 and 1707.3

- Professional Structural Engineer licensed in the State of Pennsylvania with six months related experience, or;
- Engineer-In-Training (EIT) with one year related experience\*

## Verification of Soils; IBC Section 1704.7

- Current NICET Level II certification in Geotechnical Engineering Technology/Construction; or
- Current NICET Level II soils certificate in Construction Materials Testing; or
- Current ICC Soils Special Inspector certificate; or
- Licensed Geologist with one year related experience; or
- Engineer-In-Training (EIT) with one year related experience\*; or
- Geologist-in-Training (GIT) with one year related experience.\*

#### Excavation and Filling; IBC Section 1704.7

- Current NICET Level II certificate in Geotechnical Engineering Technology/Construction;
   or
- Current NICET Level II soils certificate in Construction Materials Testing; or
- Current ICC Soils Special Inspector certificate; or
- Licensed Professional Geologist in the State of Pennsylvania with one year related experience; or
- Engineer-In-Training (EIT) with one year related experience\*; or
- Geologist-in-Training (GIT) with one year related experience.\*

## Deep Foundations and Helical Pile Foundations; IBC Sections 1704.8, 1704.9, 1704.10; IBC Tables 1704.8 and 1704.9

- Current NICET Level II certificate in Geotechnical Engineering Technology/Construction;
   or
- Current NICET Level II soils certificate in Construction Materials Testing; or
- Federal Highway Administration National Highway Institute Drilled Shafts Course, or Certificate and Driven Pile Foundations (Construction Monitoring) Course Certificate with one year related experience; or
- Licensed Professional Geologist in the State of Pennsylvania with one year related experience; or
- Engineer-In-Training (EIT) with two year related experience\*; or
- Geologist-in-Training (GIT) with two year related experience.\*

## **APPENDIX B (continued)**

## Sprayed Fire-Resistant Materials, Mastic and Intumescent Fire Resistant Coatings; IBC Sections 1704.12 and 1704.13

- Current ICC Spray-Applied Fire Proofing certificate; or
- Inspector to comply with standard AWCI (Association of the Wall and Ceiling Industry);
   current edition of Technical Manuals 12-A and 12-B or
- Engineer-In-Training (EIT) with one year related experience.\*

## Exterior Insulation and Finish System (EIFS), IBC Section 1704.14

- Registered Professional Engineer or Architect with related experience; or
- Association of the Wall and Ceiling Industry (AWCI) EIFS Inspector Certificate.
- \* Engineers and/or Geologists in Training licensed with the State of Pennsylvania shall be under the direct supervision of the registered engineer for the specific field of inspection listed.

## Special Cases; IBC Section 1704.15

Underpinning

 Inspections of this work shall be reported continuously, conducted by a Geotechnical, Civil, or Structural Engineer licensed in the Commonwealth of Pennsylvania and submitted by the DPRC-SI.

#### Demolition

When Required;

- Complete demolition of a building in excess of three (3) stories or any structure in excess of 40 feet (12192 mm) in height. These inspections shall be performed on a continuous basis until the structure is demolished to a height of 10 feet (3048 mm).
- 2. Where the use of mechanical demolition is recommended in writing by a licensed structural engineer, pursuant to Section 3303.9. These inspections shall be performed on a continuous basis until the structure is demolished to a height of 10 feet (3048 mm).
- 3. Where mechanical demolition equipment, other than handheld devices, is to be used in the full or partial demolition of a building from within the building, or is to be used within the building to remove debris or move material. These inspections may be performed on a periodic basis.
- Professional licensed in the State of Pennsylvania [aka Registered Design Professional] with qualifying relevant experience\* in demolition of structures, and/or;
- Licensed/Registered Design Professional of Record licensed with the State of Pennsylvania with qualifying relevant experience\* in demolition of structures, or;
- Inspector providing certification/approval of accepted completion of OSHA Standards 29 CFR 1926 Subpart T-Demolition and applicable 29 CFR 1910 standard., **or:**
- Qualifying Special Inspector with relevant experience\* inspecting the demolition of structures.
  - \*for clarification, **relevant experience** is defined as direct participation and practice related to the demolition activities that are the subject of the special inspection where such participation has led to accumulation of knowledge required for the proper execution of such inspection.

## **APPENDIX B (continued)**

## Smoke Control; IBC Sections 1704.16, 909, 909.18.8, and 909.19

- Special Inspection Agency/Inspector shall provide a copy of resume to include expertise in fire protection engineering, mechanical engineering and certification as air balancer. Air balancer certification may be one of the following:
  - a. AABC (Associated Air Balance Council)
  - b. TABB (Testing & Balancing Bureau)
  - c. NEBB (National Environmental Balancing Bureau)
  - d. NBI (National Balancing Council)
- Mechanical or Fire Protection Engineer licensed in the State of Pennsylvania, submitted by the DPRC-SI.

## Seismic Resistance; IBC Sections, 1705.3.1 through 1705.3.6 inclusive

- Civil and/or Structural Engineer licensed in the State of Pennsylvania; or
- Engineer in Training under the direct supervision of a Civil and/or Structural Engineer licensed in the State of Pennsylvania.

#### Test Safe Loads, In-Situ Load Tests and Preconstruction Load Tests;

Professional Structural Engineer licensed in the State of Pennsylvania.

## **End of Procedure**