BLD20-1481-FCI

Residential Statement of Special Inspections**

CNI-033R

Name of Owner: Kathryn Harmon

Permit Number:

Address: 110 Dorchester Dr.

Job Description: Workshop

THESE ATTACHMENTS ARE PART OF THE APPROVED PLANS *DO NOT REMOVE THEM*

Reviewed for Code Compliance County of Sonoma PRMD MAR 13 2020

PRMD RESILIENCY PERMIT CENTER MAR 13 2020

This Statement of Special Inspections is submitted to outline the requirements of 2016 CBC Chapter 17.
Included are:

- Schedule of special inspections and tests applicable to this project:
  - o Special inspections, per Section 1704 & 1705
  - o Special inspection for seismic resistance, per Sections 1704.3.2, 1705.12, 1705.13
  - o Structural observations, per Section 1704.6
  - o Material testing and/or load testing, per Sections 1706 through 1709
- List of the special inspector, testing agencies, and registered design professionals that will be retained to conduct the applicable tests, observations, and testing required.
- Contractor's statement of responsibility, per Section 1704.4

Resiliency Permit Center

Special inspections and testing, and structural observations, shall be performed in accordance with the approved plans and specifications, this statement, approved testing procedures, applicable listing information for fabricated items, and CBC Section 17.

The Schedule of Special Inspections summarizes the special inspections and tests required. Special inspectors shall refer to the approved plans and specifications for detailed special inspection requirements. Any additional tests or observations required by the approved plans, specifications, or required by the building official shall also be performed.

Interim reports will be submitted to the building official and the registered design professional in responsible charge, in accordance with CBC Section 1704.2.4.

At the conclusion of work included in the permit, a report of special inspections and structural observations shall be submitted to the building inspector. This final report shall document:

- Required special inspections
- Final results of structural testing
- Correction of discrepancies noted in inspections
- Written statement of structural observations, and identify any reported deficiencies which, to the best of the structural observer's knowledge, have not been resolved

This plan has been developed with the understanding that the building official shall:

- Review and approve the qualifications of special inspectors who shall perform inspections
- Review submitted inspection reports
- Perform inspections as required by the locally adopted building codes

Prepared By:

Registered Design Professional in Responsible Charge: Richard J. Wills

Signature:

License Number: 67927

Date:

Owner's Authorizaton:

Owner: Kathryn Harmon

Signature:

Building Official Approval:

OFFICE

**This form is for Residential Structures and Accessory U-Occupancies. The inspections listed in this form are intended to represent special inspections most common to residential projects which include: wood frame structures, moment frames, pier and grade beam foundations, and geotechnical engineering. Form CNI-033 which includes all inspections from CBC Chapter 17 should be used for commercial permits and residential permits that include foundations other than shallow footings or pier and grade beams, permits to address code violations, alternate materials/methods, and construction materials other than wood or steel used to resist lateral loads (e.g. concrete and masonry).

Schedule of Inspections, Testing Agencies, and Inspectors

The following are the testing agencies, registered design professionals, and special inspectors that will be retained to conduct tests, inspections, and structural observations for this project:

Responsibility	Firm	Address, telephone, e-mail
1. Special Inspection (Except for geotechnical)		
2. Material Testing		
3. Geotechnical Inspections		
4. Structural Observations		

Seismic Requirements (Section 1704.3.2):

Identify the designated seismic systems and seismic-force-resisting systems subject to special inspections, per CBC Sections 1705.12. Identify any required testing and qualification for seismic resistance per CBC Section 1705.13.

Summary of Required Special Inspections, Structural Testing, and Structural Observations:

Brief description of required special inspections and structural observations for this project. Full schedule of inspections are those that are checked off on the following pages. Include additional sheets as necessary to identify frequency and extent of structural observations.

Special Inspections:	Structural Observations:

Schedule of Special Inspections

Column headers:

C = Full-time observation of work by an approved special inspector while the work is being performed.

P = Intermittent observation of work by an approved special inspector where the work has been performed and at the completion of work.

Box entries:

X = Is placed in the appropriate column denoting either "C" continuous or "P" periodic inspections.

-- = Denotes an activity that is either a one-time activity or whose frequency is defined in some other manner.

Notes/Referenced Standards: Indicates the applicable reference standard applicable to the criteria, method and

Additional details regarding inspections and tests are provided in the project specifications or notes on the drawings.

Verification and Inspection	C	P	✓ if Req'd	Notes/Referenced standards
1704.2.5 & 1705.10 -Fabricated Items				
1. Fabrication and implementation	--	--	☐	
2. Fabricator approval and certificate of compliance	--	--	☐	CBC 1704.2.5.1
1704.6 - Structural Observations				
1. Prior to the commencement of observations, the structural observer shall submit to the building official a written statement identifying the frequency and extent of structural observations	--	--	☐	
2. At the conclusion of work included in the permit, the structural observer shall submit to the building official a written statement that the site visits have been made and identify any reported deficiencies which have not been resolved	--	--	☐	
3. Structural observations for seismic resistance	--	--	☐	CBC 1704.6.1
1705.1.1 – Special Cases:				
1. Construction materials and systems that are alternatives to materials and systems prescribed by the applicable code	--	--	☐	
1705.2 – Steel Construction, Quality Assurance per AISC 360				
1. Fabricator and erector documents (Verify reports and certificates as listed in AISC 360, chapter N, paragraph 3.2 for compliance with construction documents. Includes structural steel, castings, forgings, fasteners, rods, welding, anchors, braces, stiffeners, member locations, joint details, etc.)		X	☐	AISC 360: Chapter N
2. Identification markings for structural steel materials conform to ASTM standards specified in the approved construction documents (e.g. structural shapes, castings, forgings, bolts, washers, nuts, rods, consumables for welding, anchors, etc.)		X	☐	AISC 360: A3
3. Embedments (Verify diameter, grade, type, length, and depth of embedded item)		X	☐	AISC 360: N5.7
4. Verify compliance with details on the construction documents, such as braces, stiffeners, member locations, and proper application of joint details at each connection.		X	☐	AISC 360: N5.7

5. **Structural Steel Welding:**				
a. Inspection tasks **Prior** to Welding (Observe, or perform for each welded joint or member, the QA tasks listed in AISC 360, Table N5.4-1).	Random Basis (O) or Each Joint or Member (P) per applicable table		☐	See form **CNI-033A** Statement of Special Inspections Steel Appendix.
b. Inspection tasks **During** Welding (Observe, or perform for each welded joint or member, the QA tasks listed in AISC 360, Table N5.4-2).			☐	
c. Inspection tasks **After** Welding (Observe, or perform for each welded joint or member, the QA tasks listed in AISC 360, Table N5.4-3).			☐	
d. Nondestructive Testing (NDT) of welded joints:				AISC 360: N5.5
1) Complete penetration groove welds 5/16" or greater in risk category III or IV.		X	☐	N5.5b
2) Complete penetration groove welds 5/16" or greater in risk category II.		X	☐	N5.5b
3) Thermally cut surfaces of access holes when material t > 2".		X	☐	N5.5c
4) Welded joints subject to fatigue when required by AISC 360, App. 3, Table A-3.1.		X	☐	N5.5d
5) Fabricator's NDT reports when fabricator performs NDT.		X	☐	N5.5g
6. Inspection of High-Strength Bolting				
a. Inspection tasks Prior to Bolting (Observe, or perform tasks for each bolted connection, in accordance with QA tasks listed in AISC 360, Table N5.6-1).	Random Basis (O) or Each Joint or Member (P) per applicable table.		☐	See N5.6 for exceptions based on installation method. See form **CNI-033A** Statement of Special Inspections Steel Appendix.
b. Inspection tasks During Bolting (Observe the QA tasks listed in AISC 360, Table N5.6-2).			☐	
1) Pre-tensioned and slip-critical joints.			☐	
2) Snug-tight joints			☐	
c. Inspection tasks **After** Bolting (Perform tasks for each bolted connection in accordance with QA tasks listed in AISC 360, Table N5.6-3).			☐	
Table 1705.3 – Concrete Construction				
1. Inspection reinforcement, including prestressing tendons, and verify placement.		X	☐	ACI 318 Ch. 20, 25.2, 25.3, 26.5.1-26.5.3, CBC 1908.4
2. Reinforcing bar welding:				
a. Verify weldability of reinforcing bars other than ASTM A706		X	☐	AWS D1.4, ACI 318: 26.5.4, CBC 1708.3.1
b. Inspect single-pass fillet welds, maximum 5/16"		X	☐	
c. Inspect all other welds	X		☐	
3. Inspect anchors cast in concrete		X	☐	ACI 318: 17.8.2
4. Inspect anchors post-installed in hardened concrete members (see footnote b. Table 1705.3)				
a. Adhesive anchors installed in horizontally or upwardly inclined orientations to resists sustained tension loads	X		☐	ACI 318: 17.8.2.4
b. Mechanical anchors and adhesive anchors not defined in 4.a		X	☐	ACI 318: 17.8.2
5. Verify use of required design mix		X	☐	ACI 318: Ch. 19, 26.4.3, 26.4.4, CBC 1904.1, 1904.2, 1908.2, 1908.

6. Prior to concrete placement, fabricate specimens for strength tests, preform slump and air content tests, and determine the temperature of the concrete.	X		☐	ASTM C172, ASTM C31, ACI 318: 26.4.5, 26.12, CBC 1908.10
7. Inspect concrete and shotcrete placement for proper application techniques.	X		☐	ACI 318: 26.4.5, CBC 1908.6, 1908.7, 1908.8
8. Verify maintenance of specified curing temperature and techniques		X	☐	ACI 318: 26.4.7-26.4.9, CBC 1908.9
9. Inspect prestressed concrete for:				
a. Application of prestressing forces; and	X		☐	ACI 318: 26.9.2.1
b. Grouting of bonded prestressing tendons	X		☐	ACI 318: 26.9.2.3
10. Inspect erection of precast concrete members		X	☐	ACI 318: Ch. 26.8
11. Verifiy in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs		X	☐	ACI 318: 26.10.2
12. Inspect formwork for shape, location, and dimenstions of the concrete member being formed.		X	☐	ACI 318: 26.10.1 (b)
13. Material tests in absence of sufficient data or documentation	–	–	☐	CBC 1705.3.2
Table 1705.6 – Verification and Inspection of Soils				
1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity		X	☐	
2. Verify excavations are extended to proper depth and have reached proper material		X	☐	
3. Perform classification and testing of compacted fill materials		X	☐	
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill	X		☐	
5. Prior to placement of compacted fill, observe subgrade and verify that site has been prepared properly	X		☐	
Table 1705.8 – Verification and Inspection of Cast-in-place Deep Foundation Elements				
1. Inspect drilling operations and maintain complete and accurate records for each element	x		☐	
2. Verify placement locations and plumbness, confirm element diameters, bell diameters, lengths, embedment into bedrock and adequate end-bearing strata capacity. Record concrete or grout volumes	x		☐	
3. For concrete elements, perform additional inspections in accordance with Section 1705.3	–	–	☐	

1705.9 – Helical Pile Foundations				
1. Continuous inspection is required during installation of helical pile foundations. Record installation equipment used, pile dimensions, tip elevations, final depth, final installation torque, and other pertinent data as required. The approved geotechnical report and construction documents shall be used to determine compliance.	X		☐	
1705.12 – Verification and Inspection for Seismic Resistance				
1. **Structural Steel:**				CBC 1705.12.1, AISC 341: Chapter J Quality Control and Quality Assurance
a. Seismic force-resisting systems, 1705.12.1.1: Joint Details, Connection Details, Welding, Nondestructive Testing, High-strength bolting, Composite Structures, Piling, Etc.	See form **CNI-033A** Statement of Special Inspections Steel Appendix		☐	
b. Structural steel elements, 1705.12.1.2: inspection of steel elements in the seismic force-resisting system not covered in 1705.12.1.1, including struts, collectors, chords, foundation elements, etc.			☐	
2. **Structural Wood:**				CBC 1705.12.2
a. Inspection of field gluing operations of elements of the seismic-force resisting system.	X		☐	
b. Nailing, bolting, fastening, and other fastening of components within the seismic-force-resisting system, where the fastener spacing of the sheathing is 4 inches or less on center.		X	☐	
3. Cold-formed steel special bolted moment frames		X	☐	
1705.13 –Testing and Qualification for Seismic Resistance				
1. **Structural Steel:** Nondestructive testing for Seismic force-resisting systems per 1705.13.1.1 and/or Structural steel elements per 1705.13.1.2	See form **CNI-033A** Statement of Special Inspections Steel Appendix		☐	CBC 1705.13.1, AISC 341

Contractor Responsibility

Per Section 1704.4, each contractor responsible for the construction of a main seismic-force resisting system, designated seismic system or a seismic-resisting component listed in the Statement of Special Inspections shall submit a written statement of responsibility to the building official and the owner **prior to the commencement of work** on the system or component. The contractor's statement of responsibility shall contain acknowledgement of

Each contractor responsible for the construction of the applicable system or component as specified above shall use the following lines to enter their name, signature, company, license number, date, and particular system or component that they are taking responsibility for prior to commencement of work on the indicated system or component. A copy of this page shall be presented to the building official, and it is the contractor's responsibility to also provide the owner a copy of this document.

Name:	
Signature:	
Company:	
License Number:	
Date:	

PRMD Special Inspection Agency Recognition List

CNI-014

Special Inspection Agencies approved to perform services in unincorporated Sonoma County are listed below. Agencies have not been evaluated for Geotechnical Special Inspection. Other agencies and individual special inspectors may also be qualified. Permit Sonoma's Building Division has ultimate responsibility for approval.

Note: In general, Permit Sonoma does not maintain lists of design and development professionals. However, there are a few occasions for which we allow third party inspections. In these cases, we maintain public lists of inspection agencies.

A 1 Inspections Collin Miller P.O. Box 467085 San Francisco, CA 94146 Phone: (415) 621-8001 Fax: (415) 358-4409	Reinforced Concrete Prestressed/Post-tensioned Concrete Structural Masonry Structural Steel Welding/Bolting
Achievement Engineering Corporation 2455 Autumnvale Drive, Unit E San Jose Ca 95131 Phone: (408) 217-9174 Fax: (408) 217-9632	Reinforced Concrete Prestressed/Post-tensioned Concrete Structural Masonry Structural Steel Welding/Bolting Spray-Applied Fireproofing Tests Only Unreinforced Masonry Push/Torque
Bace Geotechnical (AKA Brunsing Associates) 5468 Skylane Boulevard, Suite 201 Santa Rosa, CA 95403 Phone: (707) 528-6108 Fax: (707) 838-4420	Reinforced Concrete Prestressed/Post-tensioned Concrete Structural Masonry Structural Steel Welding/Bolting Spray-Applied Fireproofing Tests Only
Bagg Engineers 138 Charcot Avenue San Jose, CA 95131 Phone: (650) 852-9133 Fax: (650) 852-9138	Reinforced Concrete Prestressed/Post-tensioned Concrete Structural Masonry Structural Steel Welding/Bolting Spray-Applied Fireproofing Tests Only Unreinforced Masonry Push/Torque
Bauer Associates P.O. Box 460 Forestville, CA 95436 Phone: (707) 887-2505	Reinforced Concrete
John E. Brotschi, PE P.O. Box 435 Sebastopol, CA 95473 Phone: (707) 823-7313	Reinforced Concrete
Condor Earth Technologies, Inc. Attn: Elizabeth Wilden 188 Frank West Circle, Suite 1 Stockton, CA 95206 Phone: (209) 234-0518 Fax: (209) 234-0538	Reinforced Concrete Prestressed/Post-tensioned Concrete Structural Masonry Structural Steel Welding/Bolting Spray-Applied Fireproofing Tests Only Unreinforced Masonry Push/Torque

Kleinfelder Inc. 2240 North Point Parkway Santa Rosa, CA 95407 Phone: (707) 571-1883	Reinforced Concrete Prestressed/Post-tensioned Concrete Structural Masonry Structural Steel Welding/Bolting Spray-Applied Fireproofing Tests Only Unreinforced Masonry Push/Torque
LACO Associates Richard Yahn 3450 Regional Parkway, Suite B Santa Rosa, CA 95403 Phone: (707) 525-1222	Reinforced Concrete Prestressed/Post-tensioned Concrete Structural Masonry Structural Steel Welding/Bolting Spray-Applied Fireproofing Tests Only
Materials Testing, Inc. Dba KC Engineering Co. 865 Cotting Lane, Suite A Vacaville CA 95688 Phone: (707) 447-4025 Fax: (707) 447-4143	Reinforced Concrete Prestressed/Post-tensioned Concrete Structural Masonry Structural Steel Welding/Bolting Spray-Applied Fireproofing Tests Only Unreinforced Masonry Push/Torque
McCall Construction 2225 King Ranch Road Ukiah, CA 95482 Phone: (707) 485-9255	Reinforced Concrete Prestressed/Post-tensioned Concrete Structural Masonry Structural Steel Welding/Bolting
Mid Pacific Engineering, Inc. (MPE) 840 Embarcadero Drive, Suite 20 West Sacramento, CA 95605 Phone: (916) 927-7000	Reinforced Concrete Prestressed/Post-tensioned Concrete Structural Masonry Structural Steel Welding/Bolting Spray-Applied Fireproofing Tests Only
PJC & Associates 600 Martin Avenue, Suite 210 Rohnert Park, CA 94928 Phone: (707) 584-4804 Fax: (707) 584-4811	Reinforced Concrete Prestressed/Post-tensioned Concrete Structural Masonry Structural Steel Welding/Bolting Unreinforced Masonry Push/Torque
Reese & Associates 134 Lystra Court Santa Rosa, CA 95403 Phone: (707) 528-3078 Fax: (707) 528-2837	Reinforced Concrete

RGH Consultants 1305 North Dutton Avenue Santa Rosa, CA 95401 Phone: (707) 544-1072 Fax: (707) 544-1082	Reinforced Concrete Prestressed/Post-tensioned Concrete Structural Masonry
Testing Engineers, Inc. 2811 Teagarden Street San Leandro, CA 94577 Phone: (510) 835-3142 Fax: (510) 834-3777	Reinforced Concrete Prestressed/Post-tensioned Concrete Structural Masonry Structural Steel Welding/Bolting Spray-Applied Fireproofing Tests Only Unreinforced Masonry Push/Torque
Valley Inspection Services 326 Woodrow Avenue Vallejo, CA 94571 Phone: (707) 552-7037 Fax: (707) 552-7022	Structural Steel Welding/Bolting Spray-Applied Fireproofing Tests Only Unreinforced Masonry Push/Torque
Young Engineering Services (YES!) 132 Boas Drive Santa Rosa, CA 95409 Phone: (707) 538-7503 Fax: (707) 539-6227	Reinforced Concrete