DC1

Residential Statement of Special Inspections**

CNI-033R

JOE GOLDEN
Name of Owner

47 & 49 Ursuline Road
Address

BLD18-6072
Permit Number

Duplex – Fire Rebuild
Job Description

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

OCT 04 2018

PRMD RESILIENCY PERMIT CENTER

This Statement of Special Inspections is submitted to outline the requirements of 2013 CBC Chapter 17. Included are:

- Schedule of special inspections and tests applicable to this project:
  - Special inspections, per Section 1704 & 1705
  - Special inspection for seismic resistance, per Sections 1704.3.2, 1705.11, 1705.12
  - Structural observations, per Section 1704.5
  - Material testing and/or load testing, per Sections 1706 through 1711
- List of the special inspectors, 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

PERMIT #

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:

OFFICE

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

Prepared by:

Kennedy Structural Engineering
Registered Design Professional in Responsible Charge

SE2538
License Number

Jeff Kennedy
Signature

5/29/18
Date

Owner's Authorization:

K Burnell
Owner

Signature Date

Building official's acceptance:

REVIEWED FOR CODE COMPLIANCE

Building official

Signature Date OCT 04 2018

RESILIENCY PERMIT CENTER

**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)	Bauer Associates	(707) 887-2505
2. Material Testing		
3. Geotechnical Inspections	Bauer Associates	(707) 887-2505
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 1705.11. Identify any required testing and qualification for seismic resistance per CBC Section 1705.12.

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 INSPECTION	STRUCTURAL OBSERVATION
Geotechnical Anchors in hardened concrete (if necessary)	

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 frequency of the special inspection or testing required. Additional notes may be included in this box denoting frequency of inspections or the special inspection agency responsible for the particular inspection item.

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 – Inspection of Fabricators:				
1. Fabrication and implementation procedures	--	--		
2. Fabricator approval	--	--		
1704.5 – 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	--	--		
1705.1.1 – Special Cases:				
1. Materials and systems required to be installed in accordance with additional manufacturer's instructions that prescribe requirements not contained in the applicable code or referenced standards	--	--		List code reports (attached to construction documents) for each applicable material/system.
1705.2.1 – 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.)	--	--		AISC 360: N3.2, N5.7
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, Appendix 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 form **CNI-033A** Statement of Special Inspections Steel Appendix. See N5.6 for exceptions based on installation method
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).				
7. Inspection of steel elements of composite construction prior to concrete placement in accordance with QA tasks listed in AISC 360: Table N6.1.	----			AISC 360: N6, Table N6.1. Perform these tasks for each steel element.
Table 1705.3 – Concrete Construction				
1. Inspection of reinforcing steel, including prestressing tendons, and placement.		X		ACI 318: 3.5, 7.1-7.7 CBC 1910.4
2. Inspection of reinforcing steel welding in accordance with Table 1705.2.2 Item 2b.	–	–		AWS D1.4 ACI 318: 3.5.2
3. Inspection of anchors cast in concrete where allowable loads have been increased or where strength design is used.		X		ACI 318: 3.8.6, 8.1.3, 21.2.8 CBC 1908.5, 1909.1
4. Inspection of anchors post-installed in hardened concrete members[1].		X	✓	ACI 318: 3.8.6, 8.1.3, 21.2.8 CBC 1912.1
5. Verify use of required design mix		X		ACI 318: Ch.4, 5.2-5.4 CBC 1904.2, 1910.2, 1910.3
6. At the time fresh concrete is sampled to fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete	X			ASTM C 172 ASTM C 31 ACI 318: 5.6, 5.8 CBC 1910.10

[1] Specific requirements for special inspection shall be included in the research report for the anchor issued by an approved source in accordance with ACI 355.2 or other qualification procedures. Where specific requirements are not provided, special inspection requirements shall be specified by the registered design professional and shall be approved by the building official prior to the commencement of the work.

7. Inspection of concrete and shotcrete placement for proper application techniques	X			ACI 318: 5.9, 5.10 CBC 1910.6, 1910.7, 1910.8
8. Inspection for maintenance of specified curing temperature and techniques		X		ACI 318: 5.11-5.13 CBC 1910.9
9. Inspect formwork for shape, location and dimensions of the concrete member being formed		X		ACI 318: 6.1.1
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. Observe 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. Record installation equipment used, pile dimensions, tip elevations, final depth, final installation torque, and other pertinent data as required.	X			
1705.11 – Verification and Inspection for Seismic Resistance				
1. **Structural Steel:** Inspection in accordance with AISC 341- Welding, Nondestructive Testing, High-strength bolting, Composite Structures, Piling, Etc.	See form **CNI-033A** Inspections Steel Appendix.			CBC 1705.11.1, AISC 341: Chapter J Quality Control and Quality Assurance
2. **Structural Wood:**				CBC 1705.11.2
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. **Architectural Components:** Erection and fastening of exterior cladding (more than 5 psf), interior (more than 15 psf) and exterior nonbearing walls, and interior and exterior veneer (more than 30 feet in height and more than 5 psf). Anchorage of access floors.		X		CBC 1705.11.5
1705.12 –Testing and Qualification for Seismic Resistance				
1. **Structural Steel:** Testing shall be in accordance with quality assurance requirements of AISC 341	See form **CNI-033A** Inspections Steel Appendix.			CBC 1705.12.2 AISC 341: Chapter J Quality Control and Quality Assurance

Contractor Responsibility

Per Section 1709, 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 awareness of the special requirements contained in the Statement of Special Inspections.

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

Main seismic-force resisting system or designated seismic system or seismic-force resisting component

Name

Signature

Company

License Number

Date

Main seismic-force resisting system or designated seismic system or seismic-force resisting component