Special Inspections Scope of Work

(SI-6) 2009 IBC

APPL/PERMIT # _____

ADDRESS_____

Includes all types of work listed under IBC Chapter 17.

SIA = Special Inspection Agency to perform inspection
CLV = City of Las Vegas staff to perform inspection unless otherwise noted
To schedule CLV Express and Special Inspections, call 229-6914

NOTE: Items that are not checked but are applicable to the project shall have special inspections in accordance with Chapter 17 of the International Building Code

Required inspection ***if marked with X***

CLV	SIA	ITEM #	DESCRIPTION
		S	**Steel Construction (Table 1704.3 & Section 1704.3)**
		S1	Applicable material verification (high strength bolts, structural steel, weld filler, nuts and washers, cold-formed steel deck)
		S1.1	Manufacturer's certificate of compliance
		S1.2	Manufacturer's certified mill tests reports
		S1.3	Identification markings per ASTM standards in approved drawings, AISC 360, AWS
		S2	Welding (Section 1704.3.1,Table 1704.3 and AWS D1.1, D1.3 & D1.4)
		S2.1	Structural steel (1704.3.1.1)
		S2.2	Cold-Formed Steel AWS D1.3
		S2.2	Reinforcing steel (1704.3.1.3) AWS D1.4 & ACI-318
		S3	Details of steel frames (Table 1704.3.2)
		S4	High strength bolting (Section 1704.3.3 and Table 1704.3)
		S4.1	Snug tight connections
		S4.2	Slip critical connections and pre-tensioned joints
		S5	Inspection of fabricator (shop and shop fabricated items per Section 1704.2)
		S6	Verification of approved fabricator
		S6.1	Fabricator's certificate of compliance
		S7	Bearing and base plate grouting
		S8	Non-destructive testing
		S9	Cold formed steel deck welding (floor and roof)
		S10	Welded studs for structural diaphragm
		S11	Welded sheet steel for cold-formed framing members

CLV	SIA	ITEM #	DESCRIPTION
		S12	Welding of stairs and railing systems
		S13	Cod-formed steel trusses spanning 60 feet or greater
		S13.1	Verify temporary and permanent installation restraint/bracing per approved truss submittal package
		S13	Steel bar joists and girders installation
		S14	Others
		S15	Any other applicable items per Table 1704.3
		C	**Concrete Construction (Table 1704.4 & Section 1704.4)**
		C1	Materials
		C2	Reinforcing steel and placement
		C3	Pre-stressing tendons and placement
		C4	Bolts in concrete per table 1704.4
		C5	Concrete shot crete and placement
		C6	Pre-stressed concrete
		C6.1	Pre-stressing forces
		C6.2	Grouting of bonded pre-stressing tendons in seismic force resisting systems
		C7	Erection of pre-cast concrete members
		C8	Slab-on-grade, where required
		C9	Verification of required design mix
		C10	Concrete cylinders, slump, air, temperature, strength tests
		C11	Curing
		C12	Verification of in-situ concrete strength
		C12.1	Prior to stressing of tendons
		C12.2	Prior to removal of shores and forms for beams and structural slabs
		C13	Formwork for shape, location and dimension of concrete member being formed
		M	**Masonry Construction (Sections 1704.5 and 1704.11)**
		M1	Level 1 Special Inspections (Table 1704.5.1 **in Occupancy Categories I,II &III)**
		M2	Level 2 Special Inspections (Table 1704.5.3 **in Occupancy Category IV)**
		M3	Vertical masonry foundation elements
		M4	Empirically designed masonry in Occupancy Category IV (1704.5.1)
		W	**Wood Construction (Section 1704.6)**
		W1	Verification of approved fabricator for prefabricated wood structural elements.
		W2	High load diaphragms (sheathing, nailing, fastening, framing) Table 2306.3.2
		W3	Metal plate-connected trusses spanning 60 feet or greater
		W3.1	Verify that the restraint/bracing are installed per approved truss submittal package
		G	**Soils (Section 1704.7 and Table 1704.7, Ch 18 &Southern Nevada Amendments to 2009 IBC)**

CLV	SIA	ITEM #	DESCRIPTION
		G1	Verify design bearing capacity under shallow foundation
		G2	Verify excavations
		G3	Prior to placement of compacted fill, observe sub-grade and site preparations
		G4	Perform classification & testing of compacted fill materials
		G5	Verify proper materials, densities, lift thicknesses during placement, compaction and special grading requiring special inspections
		G5.1	All soils not meeting the requirements of item G5.2
		G5.2	Moderately, highly or critically expansive soils, hydro-collapsible soils, soluble soils
		PL	**Driven deep Foundation Elements (Section 1704.8 and table 1704.8)**
		PL1	Verify element materials, sizes, length
		PL2	Verify capacities of test elements and any additional required load tests
		PL3	Verify placement locations, plumb-ness
		PL4	Verify type and size of hammer
		PL5	Record number of blows per foot of penetration
		PL6	Verify required penetrations to achieve design capacity
		PL7	Observe driving operations with complete and accurate records for EACH element, including any element damage
		PL8	Verify tip and butt elevations
		PL9	For specialty elements, perform additional inspections as required by the engineer of record.
		PL10	For steel elements, perform additional inspections per 1704.3
		PR	**Cast-In-Place Deep Foundation Elements (Section 1704.9 and Table 1704.9)**
		PR1	Observe drilling operations and maintain complete and accurate records for EACH element
		PR2	Verify placement locations and plumb-ness
		PR3	Confirm element diameters, bell diameters(if applicable), length, embedment into bedrock (if applicable), end bearing strata capacity. Record concrete or grout volumes
		PR4	Perform additional concrete inspections per section 1704.4 or masonry inspections per section 1704.5
		HP	Helical Pile Foundations (1704.10)
		F	**Sprayed Fire Resistant Materials (Section 1704.12)**
		X	**Special Cases: (Section 1704.13)**
		X1	**Rebar/Bolt/Threaded Rods/Anchors in epoxy grout (verify bolt or bar materials, hole depth and diameter, hole cleanout, epoxy mixing and placement, embedment depth and other requirements of ICC-ESR report and manufacturer's specifications) CLV Express Call 229-5112 to schedule**
		X2	**Hold-down substitution in tension**

CLV	SIA	ITEM #	DESCRIPTION
		X3	Rock retaining walls (Rock placement, rock size, footing, embedment, drainage, backfill, compaction, filter fabric, batter, slope and other items specified by engineer of record), Rammed Earth walls.
		X4	**Expansion anchors / Concrete screw anchors (per ICC – ES reports)**
		X5	**Embedded plates**
		X6	Alternate materials & methods of construction
		X7	Unusual design applications of materials described in this code
		X8	Materials & systems per manufacturer's instructions
		X9	Structural steel in seismic design category C that are not specifically detailed for seismic resistance with R=3 or less (1704.3 and table 1704.3)
		MS	**Mastic and in tumescent fire-resistance coatings (Section 1704.13)**
		EIFS	**Exterior Insulation and Finish Systems (EIFS) (Section 1704.14) SI based on ICC – ES reports**
		E	Special Inspections for Seismic Resistance (Section 1707)
		ES1	Structural steel (Section 1707.2 and AISC 341)
		ES2	Structural welding (Section 1707.2)
		EW	**Structural wood (Section 1707.3) Seismic Design Category C,D,E,F , except where fastener spacing of sheathing is more than 4 inches**
		EW1	**Field Gluing**
		EW2	**Nailing, bolting, anchoring, fastening**
		EW3	**Drag struts**
		EW4	**Braces**
		EW5	**Hold-downs**
		EW6	**Shear walls and diaphragm nailing, anchoring, bolting and fastening (fastener spacing less than or equal to 4 inches)**
		EL	**Cold formed steel framing for seismic force resisting system (Section 1707.4)**
		EL1	**Welding**
		EL2	**Screw attachment, bolting, anchoring**
		EL3	**Shear walls and diaphragm fasteners, anchoring, bolting and fastening (fastener spacing less than or equal to 4 inches)**
		ER	**Storage racks over 8 ft and access floors (Section 1707.5) in SDC D,E,F**
		EV	**Architectural components (Section 1707.6) For structures in SDC D,E,F**
		EV1	**Exterior cladding (weight > 5 psf)**
		EV2	**Interior and exterior non-bearing walls (weight > 15 psf) and height more than 30 ft**
		EV3	**Interior and exterior veneer (weight > 5 psf)**
		EME	**Mechanical and electrical components (Section 1707.7)**

CLV	SIA	ITEM #	DESCRIPTION
		EME1	**Electrical equipment anchorage for emergency systems in SDC C,D,E,F (Section 1707.7.1)**
		EME2	**Other electrical equipment in SDC E,F (Section 1707.72)**
		EME3	**Installation of piping systems with flammable, combustible or highly toxic materials in SDC C, D,E,F (Section 1707.73)**
		T	**Testing and Qualification for Seismic Resistance (Section 1708)**
		T1	Seismic force resisting systems in SDC C,D,E,F (1708.2 and 1708.3)
		T2	Designated systems in SDC C, D,E,F (1708.1 item 2)
		T3	Architectural, mechanical and electrical components in SDC C,D,E,F per 1708.1 item 3
		T4	Concrete reinforcement (Section 1708.2)
		T4.1	Certified mill tests
		T4.2	Chemical tests for weld ability
		T5	Structural steel (Section 1708.3 and AISC 341)
		T5.1	All testing as required by AISC 341
		T5.2	Non-destructive testing (AWS D1.1). Acceptance criteria for NDT to be specified by engineer of record
		T5.3	Others
		T6	Seismic Certification of nonstructural components (1708.4)
		T6.1	**Manufacturer's certificate of compliance on anchorage**
		A	**Amusement Rides**
		A1	Construction inspection and testing
		A2	Operation and maintenance inspection and testing
		A3	Non-destructive testing
		Z	**Other Inspections and Tests**
		Z1	Alternative tests (Section 1711)
		Z2	In-situ load tests (Section 1713)
		Z3	Pre-construction load tests (Section 1714)

- **Statement of special inspections specified by Engineer of Record (Section 1705 Yes or No**

- **Is Structural Observation by a Registered Design Professional Required? (Section 1710) Yes or No**

All continuous inspections and periodic inspections shall be in accordance with 2009 IBC, Chapter 17.