1. Check gravity framing.
   a. Check TJI/BCI/LPI or dimensional lumber joist span.
   b. Is framing around openings sufficient? If so, provide design.
   c. Are there any cantilevered areas?
   d. Check any beams used as drag struts for combined forces and connections
   e. Check connections shown at top and bottom of columns and at beam connections.
   f. Do bearing walls stack continuously to foundation?
   g. Check for beam, lower bearing walls, and strip footings beneath upper bearing walls, over wall openings, and supporting joists-rafters.

2. Check lateral analysis.
   a. Is it provided?
   b. Are the engineering items on the plans?
   c. Are the wind and earthquake profiles correct?
   d. Are forces checked both directions and all floors for controlling force?
   e. Check that all walls meet minimum aspect ratio of 3.5 to 1 and that no openings are located in a shear panel.
   f. Are the shear wall schedules correct and on the plans?
   g. Are unused options removed from the plans?
   h. Are drag struts located where required by code, designed and connected with straps?

3. Check diaphragms.
   a. Check design of openings.
   b. Check forces for blocking required and verify that elements are shown on the plans.
   c. Check chord forces and lap splices.

4. Check lateral force connections from roof to foundation.
   a. Some connections are standard and do not need to be designed; however, all the details should be on the plans
      and more complex transfer systems should be designed and detailed by the designer of record.

5. Check of foundation systems.
   a. Check for required spread footings under interior hold downs.
   b. Check for engineered foundation requirements and, if required, review and approve or comment on it.
   c. Check for concentrated loads from girders and beams.
   d. Check grout required in masonry for development of anchor uplift.
   e. Check poured wall thickness as required for number of floors and anchor size embedded in it.
   f. Check design of anchors for hold downs.
   g. Check tall basement wall design and anchor bolts in it.
   h. Verify that water proofing and insulation is sufficient.
   i. Verify that connection at the top of basement wall is sufficient to transfer soil pressure forces back into the
      diaphragm and to resisting elements on the other side.
   j. Verify that all elements from the design are on the plans including size and spacing of galvanized anchor bolts.

6. Check roof system.
   a. Check for girder location and design.
   b. Check for uplift (typically minimum H-1 on each truss and designed system for hold down of girders)
   c. Review truss shop drawings for input, reactions and girder design.

Ron Thompson, Building Official
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