New Single Family Residential Special Inspections

R401.4.4 **Special Inspections**

R401.4.4.1 **Piers**

A sufficient number of the piers, but in no case less than 25%, shall be inspected, as determined necessary by the special inspector, to verify consistency of soil report findings. Such piers shall be selected from all levels when there is more than one level and at opposite corners of the structure.

R401.4.4.2 **Pier Drilling Log**

The pier inspections shall be reported on a drilling log which contains detailed information on each hole including total depth, depth to bedrock, descriptions of the various strata the hole was drilled through, the condition of the hole, and whether ground water was encountered; the drilling log shall be stamped by a Colorado licensed professional engineer.

R401.4.4.3 **Foundation Walls**

Foundation walls shall be inspected just prior to placement of concrete. The inspection shall be under the supervision of a Colorado licensed professional engineer. Such inspection shall confirm compliance with the design drawings and other provisions of this code.

R401.4.4.3.1 **Foundation, Underslab, and Excavation Trench Backfill**

Foundation, underslab, and excavation trench backfill shall be moisture conditioned and compacted to control settlement. Additionally, all backfill and compaction recommendations contained in the geotechnical report and the structural engineer's foundation design shall be followed. If conflicts exist, the most stringent requirement shall be followed.

Fill materials shall not contain debris, clods over 6" diameter, or frozen soil. Water shall be added uniformly to the stockpiled materials, or as backfill is placed so that water content at the time of compaction is within tolerances established by the engineering documents. Flooding or puddling of the backfill is not allowed. Fill shall be placed in loose lifts as established by the engineering documents. The surface of each lift shall be compacted as established by the engineering documents.

Over-compaction shall be avoided to reduce potential wall damage. Backfill and compaction of foundation walls shall not take place until the wall has gained sufficient strength, temporary bracing of the walls is provided, or other equivalent measures are used to limit damage to walls during the backfill and compaction process.

The placement and compaction of foundation, underslab, and excavation trench backfill shall be observed by a person working under the supervision of a Colorado licensed professional engineer. The observations shall be performed at a frequency sufficient to provide reasonable assurance that backfill has been placed in substantial conformance with these requirements. At least one observation visit shall be performed for the following: foundation backfill, trench backfill, and underslab preparation.

R401.4.4.4 **Perimeter Drainage and Dampproofing**

Perimeter drainage systems and dampproofing of foundation walls shall be inspected under the supervision of a Colorado licensed professional engineer.

R401.4.4.5 **Basement Floors**

All slab on grade and structural floor systems shall be inspected under the supervision of a Colorado licensed professional engineer.

R401.4.4.6 **Reporting**

Reports for the above-mentioned special inspections shall be submitted within ten (10) days of the inspection and shall be stamped by a Colorado licensed professional engineer. Framing inspections will not be performed by the City prior to receipt of the special inspection reports.

Inspection of the individual sewage disposal system shall be made by the City & County of Broomfield Environmental Health