READY TO INSPECT — FIELD CHECKLIST

Soils and foundations special inspection checklist

The ground gets covered as fast as it is inspected. The independent inspector verifies the bearing surface, witnesses the fill and compaction testing, and records deep-foundation installation while it can still be seen.

Who runs it: A third-party or owner's-rep geotechnical/special inspector, with the earthwork or foundation crew and the testing lab.
When: At subgrade and bearing exposure, during fill placement and compaction, and throughout pile or pier installation.

Subgrade and bearing

- [ ] **Bearing surface verified against the geotechnical report**
  Material and condition consistent with the report's bearing assumptions; unsuitable material removed.
  2 photos required
- [ ] **Excavation depth, dimensions and dewatering confirmed**
  Depth and plan dimensions match the documents; the excavation is stable and dry.
  2 photos required
- [ ] **Proof-roll witnessed and yielding areas marked for removal**
  Subgrade rolled with the equipment the geotechnical report calls for; soft or pumping areas marked, undercut and replaced.
  1 photo required
- [ ] **Unexpected bearing conditions shown to the geotechnical engineer**
  Soil, rock or water that does not match the report referred to the geotechnical engineer before footings are formed; the direction recorded.
  No photo required

Engineered fill and compaction

- [ ] **Fill material approved for use**
  Imported or reused material matches what the report and specification allow.
  1 photo required
- [ ] **Laboratory compaction curve on file for each fill source**
  Each fill material has a current moisture-density relationship so field densities are compared against the right maximum.
  No photo required
- [ ] **Lift thickness and moisture controlled during placement**
  Lifts within the specified thickness; moisture conditioning observed.
  2 photos required
- [ ] **In-place density testing witnessed at the specified frequency**
  Tests performed at the required locations and lifts; passing results recorded before the next lift.
  2 photos required

Deep foundations

- [ ] **Pile or pier location, plumbness and dimensions verified**
  Position and alignment within tolerance before and during installation.
  2 photos required
- [ ] **Pile or pier materials match the approved submittals**
  Where piles or piers are used, pile section and length, reinforcing cage, and concrete or grout match the approved submittals; mill or batch records on file.
  No photo required
- [ ] **Drilled shaft or pier bottoms cleaned before concrete**
  Where drilled shafts or piers are used, base free of loose spoil and water beyond what the documents allow, and bearing material confirmed before concrete goes in.
  No photo required
- [ ] **Installation records capture the capacity evidence**
  Driving resistance, drilling logs or load-test data recorded as the documents require.
  2 photos required

Discrepancies and reporting

- [ ] Test locations and nonconforming areas plotted on a site plan
  Density test locations, failing lifts, soft spots and off-plan piles plotted by lift or pile number; reworked areas retested before they are covered.
  No photo required

- [ ] Open earthwork items sent to the geotechnical engineer and AHJ
  Items not resolved before cover carried on the report to the geotechnical engineer, the engineer of record and the building official, per the statement of special inspections.
  No photo required