READY TO INSPECT — FIELD CHECKLIST

Deep foundations final inspection checklist

Deep foundations final inspection is where the punch list is either short or expensive. This checklist walks the finished work the way an owner or AHJ will see it: devices on, systems running, everything labeled. Each item gets the photo that closes it instead of reopening it. Work is commonly verified against ACI, the project geotechnical report and specifications. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The GC's superintendent with the geotechnical rep and the structural engineer of record's field observer before caps are formed. When: After piles and shafts are trimmed to cutoff and before pile caps and grade beams are formed, so any deficient element is caught while it's still exposed.

Cutoffs and connection

- [ ] Cutoff elevations verified and sound concrete exposed
  Each pile trimmed to the specified cutoff, concrete at the head sound and not fractured from over-driving or chipping.
  2 photos required
- [ ] Dowels and embeds for the cap in place and correct
  Projecting bars, dowels or embed plates for the pile cap present, correct length and position, undamaged after trimming.
  2 photos required
- [ ] Cutoff line marked from a surveyed elevation before trimming
  Cutoff painted or marked on each head from a surveyed benchmark, not measured down from grade by eye, before the saw or breaker starts.
  1 photo required
- [ ] Cut-off pieces and broken concrete cleared from the cap excavation
  Trimmed pile ends, chipped concrete and slurry-contaminated material removed from around each head and out of the cap or grade beam excavation before forming.
  1 photo required

Testing coordination

- [ ] Integrity and load testing observed and documented
  Specified integrity or load tests witnessed on the required elements, results recorded and reconciled against acceptance criteria before proceeding.
  No photo required
- [ ] Integrity report anomalies sent to the engineer of record
  Each anomaly the testing agency's integrity report flags is listed by element number and sent to the engineer of record, with the evaluation or coring request logged.
  No photo required
- [ ] Load-test report and the engineer's written criteria in the file
  Where load tests were specified, the testing agency's report is on file with the geotechnical engineer's written confirmation or revision of the production criteria.
  No photo required
- [ ] Crosshole access tubes grouted once testing is complete
  Where shafts carry access tubes for crosshole testing, tubes filled with grout after the testing agency releases them, per the specifications, and noted on the log.
  No photo required

As-built record

- [ ] As-built locations and elevations surveyed
  Final head location and cutoff elevation surveyed for each element and compared against plan tolerance before caps are formed.
  1 photo required
- [ ] Out-of-tolerance elements listed with measured offsets
  Every element outside location, plumb or cutoff tolerance listed with its measured deviation and sent to the engineer of record for evaluation before caps are formed.
  No photo required

- [ ] **Element count on the logs reconciled with the survey and pile plan**
  Number of elements on the installation logs matches the as-built survey and the pile plan; any missing, added or abandoned element explained in writing.
  No photo required

- [ ] **Cap or grade beam outline laid out over the as-built heads**
  Cap edges marked over the surveyed heads so edge distance to each pile is checked against the cap detail before forms go up.
  1 photo required

- [ ] **Engineer of record's acceptance received before caps are formed**
  Written acceptance or direction from the engineer of record on file for the elements under each cap, with the special inspector's reports referenced.
  No photo required