READY TO INSPECT — FIELD CHECKLIST

Excavation support and shoring rough-in inspection checklist

Excavation support and shoring rough-in is the last time the work is fully visible. Once the cover inspection passes and the walls, ceilings and slabs close, every defect left behind becomes a demolition bill. This checklist walks the rough-in in the order the work goes in, with the photo each item needs before it gets buried. Work is commonly verified against the project geotechnical report and specifications, the applicable building code. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The GC's superintendent with the shoring subcontractor's foreman, and the shoring engineer's field rep on proof-load days. When: As each lift is excavated and supported: member installation, lagging, anchors and bracing all get checked before the next lift is dug, since the design assumes support keeps pace with the cut.

Design documents on site

- [ ] Approved shoring submittal on site at its current revision
  Shoring drawings and calculations stamped by the shoring engineer, with the engineer of record's review, in the field set; superseded sheets marked void.
  No photo required
- [ ] Pre-construction condition survey of neighboring property on file
  Dated photos or a survey report of existing cracks and settlement on adjacent buildings, walks, streets and utilities on file before the first member goes in.
  No photo required

Wall members

- [ ] Member size, spacing and embedment match the engineered design
  Soldier pile or sheet section, spacing and tip elevation checked against the shoring drawings, embedment below subgrade verified, not assumed from the driving length.
  2 photos required
- [ ] Lagging installed tight to the face as excavation proceeds
  Lagging placed promptly behind the face each lift, boards in full contact with soil, voids packed, no unsupported height left open.
  2 photos required
- [ ] Member section markings matched to the approved submittal
  Beam size, sheet section stamp or heat marks on the steel delivered to site photographed and matched to the section and grade on the shoring submittal.
  1 photo required
- [ ] Lagging thickness and flange bearing per the shoring drawings
  At soldier-pile walls, lagging board thickness and grade match the drawings, and each board bears on the pile flanges by the length the drawings detail.
  No photo required

Anchors and bracing

- [ ] Tieback or anchor installation and proof load observed
  Anchor drilled and grouted to the design length and inclination, proof or performance load witnessed and recorded against the acceptance criteria before lock-off.
  No photo required
- [ ] Wales and internal bracing installed and connected
  Wale sections, struts and connections match the design, bearing tight, no missing bolts or field-cut members reducing capacity.
  2 photos required
- [ ] Lock-off load recorded for each tieback against the submittal value
  Where tiebacks are used, the load each anchor is locked off at is logged by anchor number and compared with the lock-off value on the approved shoring submittal.
  No photo required

Groundwater

- [ ] Dewatering keeping the cut and subgrade stable
  Groundwater drawn below the working level per the dewatering plan, no piping or boiling at subgrade, discharge running clear rather than carrying fines.
  1 photo required

- [ ] Surface water behind the top of the wall directed away from the face
  Ground or paving behind the wall sloped, bermed or curbed so runoff does not pour over the face or soak the retained soil; low spots behind the wall filled.
  1 photo required

Daily records

- [ ] Competent person's inspection record exists for today's shift
  A dated record from the designated competent person covering the shored excavation for today, made before crews entered, and redone after rain or any change.
  No photo required

- [ ] Shoring foreman's installation log current through today's work
  Log shows each pile or sheet with its tip depth and each anchor or brace with its length and test result, updated through today's lift.
  No photo required

- [ ] Differing conditions reported to the shoring engineer
  Obstructions, short embedment, running or wet soil, or utilities in an anchor path written up to the shoring engineer, with the response logged.
  No photo required

- [ ] Ground behind the wall walked for new cracks after each lift
  Paving, curbs and ground behind the wall looked at after each lift; new cracks or settlement marked with the date and photographed for the shoring engineer.
  1 photo required