



Install erosion and sediment controls checklist for earthworks

Install erosion and sediment controls with our interactive checklist; commentable and export as PDF/Excel to document silt fence, inlet protection, sediment traps, and maintenance.

Project:

Date:

Filled by:

Pre-Installation Planning and Layout

1	Review approved drawings to identify catchments, flow paths, sensitive receptors, and control locations; mark on a site plan and verify onsite with walkover.
2	Stake control alignments using stringline and coloured flags; record GPS points at changes in direction; tolerance for placement ± 0.1 m from plan.
3	Calculate disturbed area and upslope length to confirm control sizing per approved project specifications; upload calculation sheet and mark-ups.
4	Verify materials onsite: geotextile ratings, silt fence fabric, posts, aggregate sizes, inlet socks; photograph labels and delivery dockets for traceability.
5	Check 72-hour weather forecast; if heavy rain (>20 mm/day) likely, sequence works to install controls first; attach forecast screenshot.

Silt Fence Installation

6	Excavate trench 150 mm deep $\times$ 150 mm wide along staked alignment; verify depth with tape measure; photo before placing fabric.
7	Drive posts to ≥ 600 mm embedment at ≤ 2.0 m spacing (≤ 1.0 m on curves); confirm with depth marks; photo each 10 m.
8	Place fabric on upslope side of posts; key-in 150 mm into trench; backfill and compact with hand tamper; no gaps; photo after compaction.
9	Install end returns upslope ≥ 1.0 m every 10–20 m and at low points to prevent bypass; mark locations on plan and photograph.
10	Where higher velocities are expected, add wire mesh support fence; secure with ties at 300 mm spacing; document supported lengths.

Inlet Protection Installation

11	For curb inlets, install weighted inlet socks 200–300 mm diameter; leave a 50 mm weep gap at the lowest point; photo of gap.
12	For drop inlets, clamp non-woven geotextile under grate; test overflow path remains free; video or photo demonstrating unobstructed bypass.
13	Construct stone ring around drop inlet using 50–100 mm washed aggregate, ~ 300 mm high, 150 mm offset from grate; photo with scale.
14	Anchor inlet socks/bags with timber stakes at ≤ 1.0 m spacing; perform tug test to confirm stability; record stake spacing measurements.
15	Position sediment bags on hoses during dewatering near inlets; discharge to stable surface; verify no visible plume extends beyond 5 m; photo.

Sediment Trap Installation	
16	Excavate trap per approved drawings; confirm base area and depth with staff and tape; record as-built dimensions and location photo.
17	Form embankment side slopes $\geq 2H:1V$; compact in ≤ 150 mm lifts; verify with level and compaction passes; photo each lift.
18	Install armored spillway: geotextile underlayment and 100–150 mm rock; set crest level per design; check with laser level ± 10 mm.
19	Place outlet rock apron ≥ 3 m long, ≥ 200 mm thick using 100–150 mm rock; confirm thickness at three points; photo overview.
20	During excavation, install upstream silt curtain or straw bales to limit turbidity; remove after trap stabilizes; before/after photos.

Runoff and Access Control	
21	Construct stabilized construction entrance ≥ 10 m long, ≥ 3 m wide with 50–75 mm aggregate over geotextile; thickness ≥ 150 mm; photo with scale.
22	Install diversion berms/swales upslope to route clean water around work area; gradient 1–2%; verify with spot levels every 10 m; photos.
23	Cover stockpiles or surround with fiber rolls; maintain ≥ 2 m setback from drains and waterways; photo and location markup.
24	Discharge pumps through sediment filter bag (100–150 μm rating) onto level vegetated area with energy dissipation; verify no scour; photo after 10 min.

Maintenance, Inspection, and Documentation	
25	Inspect controls daily during active earthworks and within 24 h after ≥ 10 mm rainfall; log findings with photos and corrective actions.
26	Remove sediment at silt fence when deposits reach 150 mm depth or 50% height; record removal volumes and disposal location.
27	Repair damaged fabric, posts, inlets, or trap armoring within 24 h; capture before/after photos and supervisor sign-off.
28	Decommission after stabilization ($\geq 70\%$ vegetative cover or surface sealed); remove materials, backfill trenches, grade smooth; final photos and as-built sketch.

Comments:

Filled by:

Signature:

Introduction	How to use this checklist
Install erosion and sediment controls effectively to manage stormwater runoff during earthworks. This checklist focuses on practical erosion control and sediment control measures including silt fence, inlet protection, temporary sediment traps, and access/runoff management. It guides site engineers, foremen, and inspectors through planning, installation, and maintenance without delving into permanent drainage works or landscaping stabilization. By following these steps, teams reduce offsite sedimentation, prevent blocked inlets, minimize rework, and protect nearby waterways and infrastructure. You'll find measurable tolerances, acceptance criteria, and documentation requirements for defensible records. The checklist complements approved project specifications and authority requirements, giving you a consistent method to prepare for forecast rain events, control discharge from dewatering, and keep access points clean. Use this interactive page to tick items, add comments with photos, and export your record as PDF or Excel with a QR code for quick verification.	1. Preparation: Review approved drawings, erosion control plan, and forecast. Gather silt fence fabric, posts, geotextiles, inlet socks, washed aggregate, stakes, filter bags, stringline, tape, laser level, hand tamper, camera, PPE. 2. Preparation: Brief the crew on sequencing and hold points; assign responsibilities for installation, inspection, and documentation; set up a shared photo folder or app workspace. 3. Start Interactive Mode: Open this checklist, create a project instance, and invite team members with appropriate permissions. 4. Tick and Comment: Work through items, add comments, attach photos, GPS pins, and measurements to each task as evidence. 5. Resolve Issues: Mention stakeholders in comments to clarify nonconformances and record corrective actions and retest evidence. 6. Export Records: When complete or at milestones, export to PDF/Excel with the embedded QR code for verification. 7. Sign-Off: Capture digital signatures from the contractor's supervisor, site engineer, and environmental representative. 8. Archive and Share: Distribute the signed file to stakeholders and store in your project document control system.