Division 31 Earthwork pre-submittal checklist

PROJECT	SPEC SECTION	SUBMITTAL NO.

CHECKED BY	DATE

1. Before you start

These apply to every submittal, whatever the trade.

- [ ] Pull the exact spec section this package answers to, including addenda that changed it.
- [ ] Read the submittal articles in Part 1 and list every item they ask for.
- [ ] Confirm the transmittal names the right section number, and that each product is tagged to the paragraph it answers.
- [ ] Mark any deviation from the spec yourself on the transmittal. A declared deviation gets reviewed; a hidden one gets the package rejected.
- [ ] Keep a copy of exactly what you sent, with the date, for your submittal log.

2. Named manufacturers and products match the spec **Blocker**

Compare every product in the package to the manufacturer and model the spec names. If anything differs, attach the approved substitution or or-equal letter, or swap back before you send. Tick each item once you have checked it and nothing below applies without written approval.

- [ ] Geotextile brand substitutions (Mirafi, Propex, Tensar, Huesker) without equivalency documentation
- [ ] Geogrid manufacturer swaps (Tensar TriAx, Fortrac, Secugrid) where specific products are tied to engineered designs
- [ ] Drainage composite substitutions (Enkadrain, Miradrains, Serindrain) that may have different flow rates
- [ ] Erosion control blanket brand changes (North American Green, Profile Products, Western Excelsior) affecting C-factor ratings
- [ ] Shoring system component manufacturer swaps where proprietary system was specified (e.g., Schnabel, Hayward Baker, Golder)
- [ ] Dewatering pump manufacturer substitutions where flow capacity is performance-critical

3. Performance values meet the spec numbers **Blocker**

Put the data sheet next to the spec and compare the actual values, not just the test method. A sheet that says "tested per ASTM" without the number is not proof. Tick each value once it meets or beats the spec.

- [ ] **Compaction requirement** - percent of maximum dry density per ASTM D1557 (Modified Proctor) or ASTM D698 (Standard Proctor); spec typically requires 95% or 98% - verify submitted value matches

- [ ] **Geotextile grab tensile strength** (ASTM D4632) and puncture resistance (ASTM D4833) - must meet AASHTO M288 class minimum
- [ ] **Geotextile permittivity** (ASTM D4491) and AOS/EOS (ASTM D4751) for filtration applications
- [ ] **Geogrid tensile strength** (ASTM D6637 for geogrids, ASTM D4595 for woven) at specified strain level (2% or 5%)
- [ ] **Drainage composite flow rate** (ASTM D4716) at design compressive load
- [ ] **Shoring system allowable load** per linear foot or per soldier pile - must match structural engineer's design load
- [ ] **Tieback design load vs proof load** - submitted load test procedure must target correct proof load (typically 133% of design)
- [ ] **Dewatering pump capacity** (gpm) and head rating vs site hydrogeology requirements
- [ ] **Erosion control blanket C-factor** - must meet or exceed specified value for site slope and rainfall intensity

4. Certifications and test reports are attached Fix and Resubmit

Reviewers want the report itself, not a line on the data sheet saying one exists. Tick each document that the spec requires and the package actually contains. Skip lines that do not apply to your section.

- [ ] **AASHTO M288 class designation** for geotextiles - Classes 1, 2, 3 correspond to different survivability requirements; wrong class is a blocker
- [ ] **Geotechnical engineer stamp** on shoring and retention system shop drawings - legally required under OSHA 29 CFR 1926 Subpart P
- [ ] **ASTM D1557 Proctor test report** for the specific fill material proposed - generic data sheets do not satisfy this requirement
- [ ] **Independent laboratory certification** for compaction test frequency and method per spec
- [ ] **OSHA 29 CFR 1926 Subpart P** compliance documentation for excavations deeper than 5 feet
- [ ] **IBC/ASCE 7 shoring load calculations** - required for temporary structures in seismic or wind-critical zones
- [ ] **Geotechnical engineer approval letter** for proprietary shoring system modifications
- [ ] **SWPPP (Stormwater Pollution Prevention Plan)** approval from local authority where required
- [ ] **Tieback pre-production and proof test procedures** stamped by geotechnical or structural engineer

5. Colors, finishes, and profiles match the selection Fix and Resubmit

Match each visible attribute to the spec text and the architect's approved sample or color schedule. Tick each one you have confirmed.

- [ ] Erosion control blanket color where specified (visible at site perimeter, HOA-sensitive projects)
- [ ] Drainage composite facing material color or texture where architecturally exposed at retaining walls
- [ ] Silt fence color or height visible from street

6. Details and installation match the spec and drawings Fix and Resubmit

These are the mismatches reviewers catch most in this division. Check your shop drawings and installation data against the spec and the contract drawings, and tick each line once you have confirmed it does not apply to your package.

- [ ] **Tieback spacing** differs from shoring design drawings (changes tributary load per anchor)
- [ ] **Soldier pile embedment depth** below excavation subgrade differs from design (affects passive resistance)
- [ ] **Geogrid overlap dimensions** at connections and boundaries - spec typically requires minimum 12-24 inches
- [ ] **Compaction lift thickness** differs from spec maximum (typically 8-12 inches per lift for granular, 6-8 inches for cohesive)
- [ ] **Geotextile overlap** at seams - spec typically requires 12-24 inches; stapled seam vs sewn seam requirements
- [ ] **SWPPP best management practices** proposed differ from approved plan (inlet protection type, silt fence placement, stabilization method)
- [ ] **Drainage composite overlap** at joints - most products require minimum 6-inch lap
- [ ] **Dewatering discharge location** differs from approved SWPPP or stormwater permit

7. Every required item is in the package Fix and Resubmit

Open the submittal articles in Part 1 of your spec section (often split into action and informational submittals) and confirm each required item is present. The list below is what this division's specs most often require.

- [ ] Shoring and retention system shop drawings with licensed PE stamp (civil or geotechnical)
- [ ] Tieback design calculations and pre-production test procedure
- [ ] Geotechnical engineer approval letter for proposed shoring system
- [ ] Proctor test report (ASTM D1557 or D698) for proposed fill material
- [ ] Compaction specification (target % and field test frequency per specification section)
- [ ] Geosynthetic manufacturer's certification of conformance and MARV (Minimum Average Roll Value) data
- [ ] Geosynthetic installation manual and seaming procedures
- [ ] SWPPP narrative and site map
- [ ] Dewatering plan with pump sizing and discharge point
- [ ] Boring logs or geotechnical report excerpt (by reference acceptable, but reference must be named)
- [ ] Erosion control blanket C-factor test data and installation instructions

Free checklist from deviationcheck.com/checklists/31-earthwork/. Want the package checked against your spec? Deviation Check reviews it for $35 at deviationcheck.com.