

Owner's Topo: The Pre-Bid Checklist

Before you bid, design or mobilize, verify the ground you are about to price.

Project: _____ Bid due: _____

Site / acreage: _____ Review lead: _____

First question: What evidence supports the ground surface we are pricing, and what uncertainty are we still carrying?

1. Establish a reliable starting point

- ☐ **Get the source package.**
Request the native existing-ground surface, available source measurements, metadata, survey report and current design revision. Record the exact files supplied for the bid.
- ☐ **Check collection date, purpose and changes.**
Use the date the ground was measured, not the PDF export date. Confirm civil-design suitability. Identify subsequent grading, dumping, erosion, drainage work or construction.
- ☐ **Confirm the project reference system.**
Have the survey team verify horizontal and vertical datums, units, geoid model where applicable, benchmarks and site localization. Document any transformations between datasets.
- ☐ **Define required accuracy and detail.**
Have survey and civil leads set acceptance criteria for the intended work, including drainage outlets, tie-ins and slope changes. Pixel size and contour spacing do not prove accuracy.
- ☐ **Verify current conditions independently.**
Agree on current drone coverage and independent surveyed checkpoints, separate from model-adjustment control. Cover representative terrain, relevant vegetation and critical areas. Identify what remains untested.

Budget tight? Start with a desk review, ask the owner for a shared verified baseline, and prioritize field checks with the survey and civil leads. A limited check can uncover a problem; it cannot validate the acreage you did not check.

Files / revisions reviewed: _____

Collection date: _____ Original purpose: _____

Resolve the gaps. Preserve the baseline.

Complete these checks before quantities harden into commitments or the original ground is disturbed.

- ☐ **Select a method that can measure the ground.**
Choose photogrammetry, LiDAR, ground survey or a combination for the site. Cameras need visible ground; LiDAR needs sufficient returns through vegetation gaps. Define supplemental fieldwork.
- ☐ **Reconcile all three surfaces.**
Compare the bid ground, validated current ground and correct design revision using matching references and limits. Investigate discrepancies. Keep stripping, rock, unsuitable material, shrink and swell assumptions separate.
- ☐ **Raise clear bid questions.**
Submit locations, measurements and quantity implications through the bid process. Ask which surface controls the price and how unresolved discrepancies will be addressed. Save the written response.
- ☐ **Agree on usable deliverables and reviewers.**
Specify required imagery, point clouds, terrain surfaces, breaklines, comparison reports and receiving-software formats. Name the survey and civil leads responsible for review and applicable approvals.
- ☐ **Capture and preserve conditions before disturbance.**
Agree on baseline capture, review and acceptance before clearing, grubbing or grading. Keep original files, dates, control records and correspondence. If capture must wait until after award, record the uncertainty still carried in the bid.

Why this matters: On a 1,100-acre project, a \$730,000 bust surfaced after mobilization. The design used a topo more than six years old, collected for geological rather than civil-quality purposes. EAP data identified the error, enabling the owner to accept the findings and pay for remedies and change orders. *Project account supplied by Mark Taylor; outcomes vary.*

Unresolved issue / action owner / due date: _____

Baseline capture date: _____ Review / acceptance lead: _____

Drone data supports the survey and civil team. It does not replace geotechnical investigation, utility locating, boundary surveying or professional design review.

Technical references: USGS validation guidance; NOAA lidar limitations. Scope criteria to your project.

Discuss your topo requirements with Extreme Aerial Productions