

Surveying Technician interview questions

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What to expect

Interviews for Surveying Technician roles usually mix practical process questions with behavioural and scenario-based questions. Employers want to see that you can work accurately in the field, process data reliably, and communicate well with surveyors and site teams.

- **Process and technical:** Questions that ask you to walk through field procedures, such as setting up a total station or checking GNSS data.
- **Behavioural:** Questions about past experiences, especially how you have handled errors, worked in a team, or managed time pressure.
- **Scenario:** Hypothetical situations that test your judgement, such as disturbed control points or urgent requests to skip checks.
- **Safety:** Questions about identifying and managing risks on construction or remote sites.
- **Client and teamwork:** Questions about working with site supervisors, clients and licensed surveyors, including how you handle pressure to cut corners.

Typically, you will have an initial phone screen with a recruiter or hiring manager, then a face-to-face or online interview with a survey manager and sometimes a senior technician. Some employers include a short practical test, such as setting up an instrument or processing a small dataset. The interview usually lasts around an hour and covers your technical skills, your approach to accuracy, and how you fit with the field team.

1. Walk me through how you set up a total station for a construction set-out.

Why they ask

This is a core task for the role. Employers want to hear that you follow a consistent, safe and accurate procedure.

How to structure your answer

Walk-through: describe each step in order, from checking control points to the final check shot. Mention the checks you perform and why they matter.

Example answer

"First I confirm the control points and check they are clear and stable. Then I set up the tripod over the point, level the instrument using the tribrach and optical plummet or laser plummet, and enter the instrument height. I do a backsight on a known point and check the residual, then I shoot a second known point as a check. Only after that do I begin the set-out, and I record everything in the controller. At the end I do a final check shot to confirm the setup hasn't moved."

2. What checks do you perform on GNSS data to ensure it meets cadastral accuracy requirements?

Why they ask

GNSS is widely used, but cadastral work demands specific checks. The interviewer wants to see you understand accuracy and validation.

How to structure your answer

Explain your approach: state the principle, describe the steps you take, and give an example of a time you caught an issue.

Example answer

"When processing GNSS data for cadastral work, I first check the observation log for satellite availability and PDOP. I then process the baselines in Leica Infinity or Trimble Business Center, checking the residuals and the fixed solutions. I compare the results against the published control marks and the local cadastral plan. If any baseline is not fixed, I either re-observe or adjust the processing settings. I also check the antenna height and the model against the field notes. Finally I produce a report that shows the closure and the coordinate comparison."

3. Tell me about a time you identified an error in survey data. What did you do?

Why they ask

This behavioural question reveals how you handle mistakes and whether you take ownership. Surveying technicians need to catch errors before they affect a project.

How to structure your answer

STAR: describe the situation and task, then the action you took, and finish with the result.

Example answer

"On a road upgrade, I was reducing data from a day of level runs and noticed that the closing error on one run was larger than expected. I went back through the booking sheet and found that a staff reading had been recorded as 1.235 instead of 1.325. I flagged it to the surveyor, we re-ran that section the next morning, and the corrected data passed the check. I also started using a second person to call out readings on important runs to reduce transcription errors."

4. You arrive on site and find that your control points have been disturbed. How do you proceed?

Why they ask

This scenario tests your judgement under pressure and your commitment to accuracy. Control points are the foundation of any survey.

How to structure your answer

Judgement under pressure: assess the situation, prioritise safety and accuracy, take action, and report.

Example answer

"If I arrive and find control points disturbed, I would not use them. First I would check if there are any other known marks nearby that I can use as a reference. If not, I would contact the office or the surveyor to get the original coordinates and see if we can re-establish the control from a more stable location. I would document the condition of the disturbed points with photos and notes. If the work is urgent, I might use a temporary benchmark from a nearby feature, but I would flag that the results need to be confirmed later. Safety and accuracy come first."

5. What are the main safety risks when surveying on a live construction site, and how do you manage them?

Why they ask

Safety is non-negotiable on Australian construction sites. Employers want to know you can identify hazards and follow controls.

How to structure your answer

Risk assessment: identify hazards, describe control measures, and explain how you review and adapt.

Example answer

"The main risks are moving plant, open trenches, overhead power lines, and uneven ground. Before I start, I do a site induction and check the daily hazards board. I wear high-vis, boots, and a hard hat. I set up my tripod away from vehicle paths and use a spotter if I need to cross a haul road. For overhead lines, I keep the staff and antenna below the exclusion zone. I also check the weather for lightning risk. If anything changes, I stop and reassess."

6. How do you handle a situation where a client or site supervisor pressures you to skip a calibration check to save time?

Why they ask

This tests your integrity and communication skills. Surveying technicians often face time pressure, and cutting corners can cause bigger problems.

How to structure your answer

Conflict resolution: acknowledge the pressure, explain the risk, offer a practical solution, and escalate if needed.

Example answer

"I would explain that the calibration check is what ensures the accuracy of the whole job, and that skipping it could lead to rework. I would offer to do a quick check that takes only a few minutes, and if the supervisor still insisted, I would escalate to my surveyor or project manager. I would stay calm and professional. In the past, I have found that showing the check results and the time it takes usually convinces people."