

Performing a Station Elevation in Survey Controller

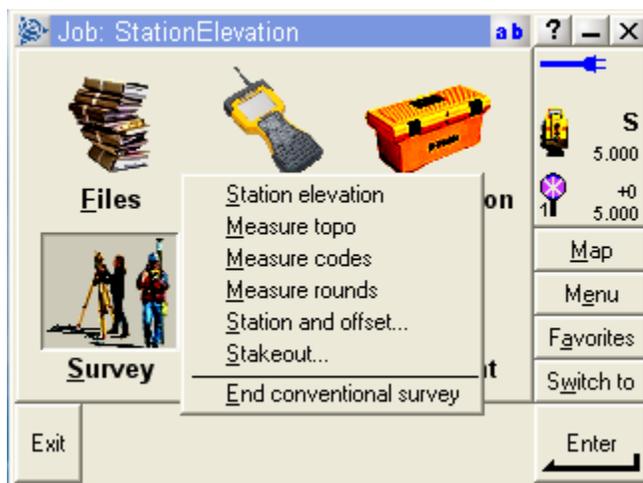
In a conventional survey, use the station elevation function to determine the elevation of the instrument point by making observations to point with known elevations.

Scenario

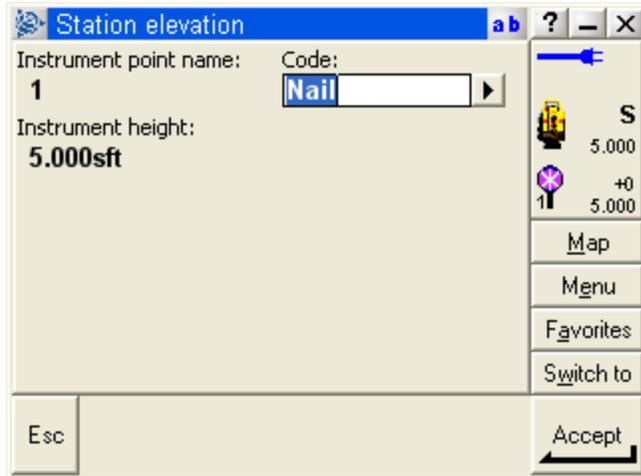
There is a BM with a known elevation on the job site (i.e., a railroad spike in the side of a pole or a tree). The elevation of the BM is 51.50 sft (survey feet). In addition, there are two points with known horizontal coordinates on them.

Note: You can assume the coordinates on the instrument point and determine coordinates on the backsight point. See the Tech Tip *Performing a Station Setup on One Point and Entering an Azimuth in Trimble Survey Controller*.

1. Perform a Station setup in Survey Controller.
2. Tap on Survey and then tap on Station elevation.



3. You see the Instrument point name, Code and Instrument height.

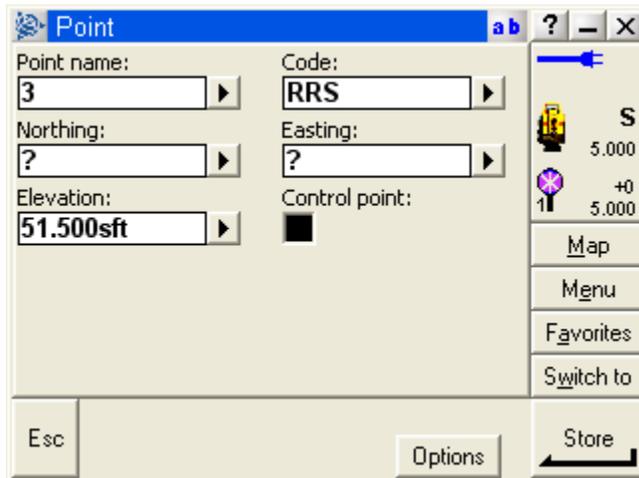


4. Tap on Accept.
5. You are taken to the Station elevation screen. Tap on the right arrow beside point name.



6. Tap on Key In.

7. Enter a new point name. For this example we are going to enter 3. Since we are shooting the BM we are going to enter the elevation of 51.50 sft.

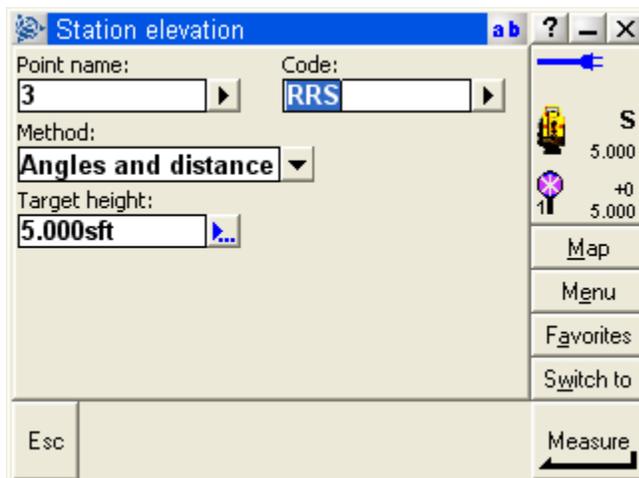


The screenshot shows a dialog box titled "Point" with the following fields and values:

Point name:	3	Code:	RRS
Northing:	?	Easting:	?
Elevation:	51.500sft	Control point:	<input checked="" type="checkbox"/>

On the right side, there are icons for a surveying instrument (S 5.000), a target (+0 5.000), and a button labeled "1". Below these are buttons for "Map", "Menu", "Favorites", and "Switch to". At the bottom, there are buttons for "Esc", "Options", and "Store".

8. Tap on Store.



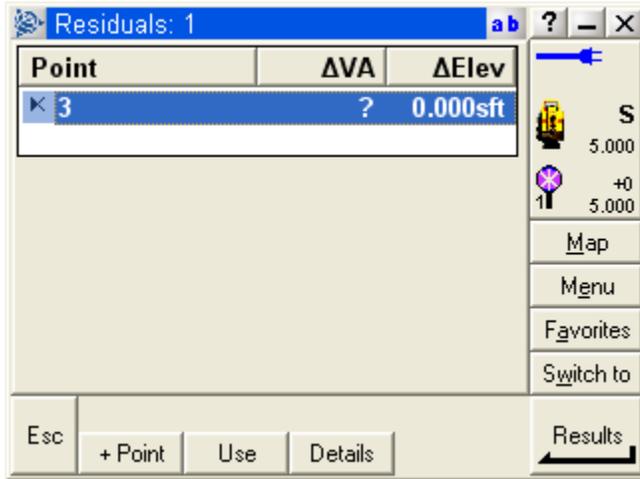
The screenshot shows a dialog box titled "Station elevation" with the following fields and values:

Point name:	3	Code:	RRS
Method:	Angles and distance	Target height:	5.000sft

On the right side, there are icons for a surveying instrument (S 5.000), a target (+0 5.000), and a button labeled "1". Below these are buttons for "Map", "Menu", "Favorites", and "Switch to". At the bottom, there are buttons for "Esc" and "Measure".

9. To measure the BM tap on Measure.

10. Once the measurement is complete you are taken to the Residuals screen.

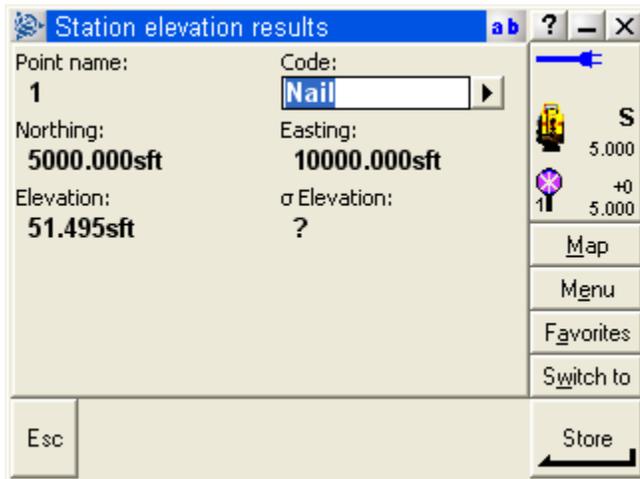


+ **Point**: Tap on to observe additional known points.

Details: Tap on view or edit point details.

Use: Tap on enable or disable a point.

11. To view the station elevation result, tap on Results.



12. We now have our instrument point within acceptable survey tolerances of our BM.

13. Tap on Store, to accept the result.

14. You are returned to the main menu in Survey Controller.

Note: The elevation determined through this station elevation method overwrites any existing elevation for the instrument point.