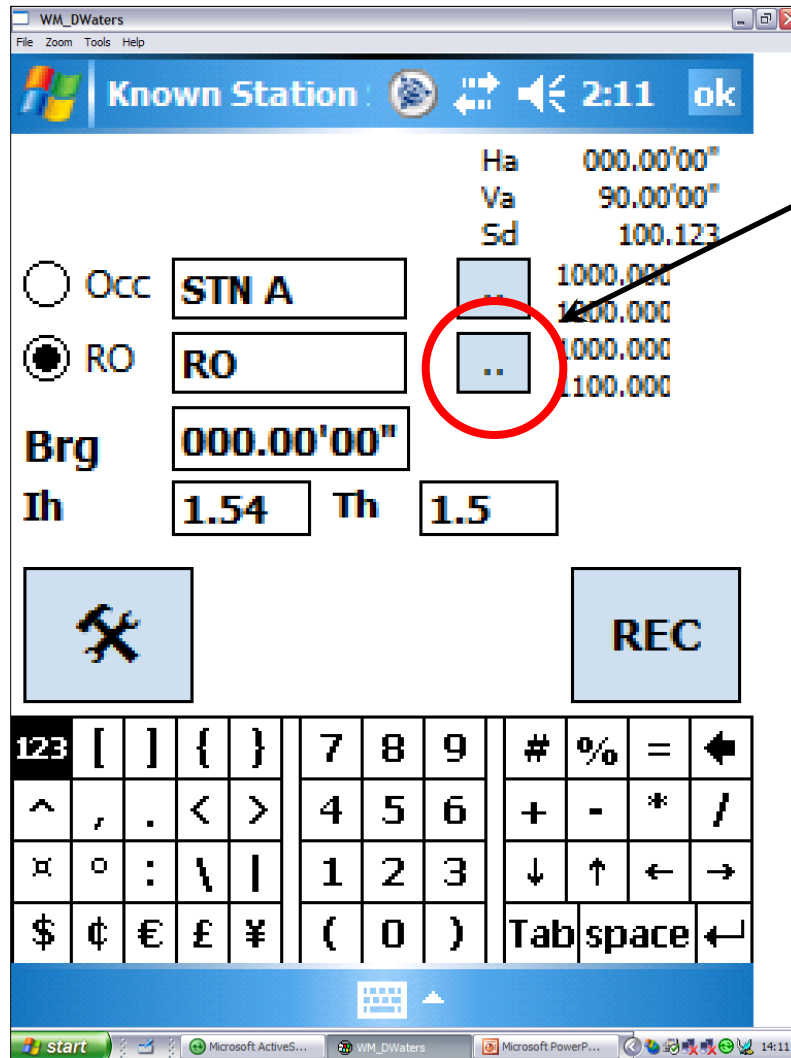


Advanced Logger Usage



Known Station setup (most common method)



Reference Object

(can be an actual point with coordinates if you have one, or just a feature on a building to use as an object to 'zero' onto)

Set

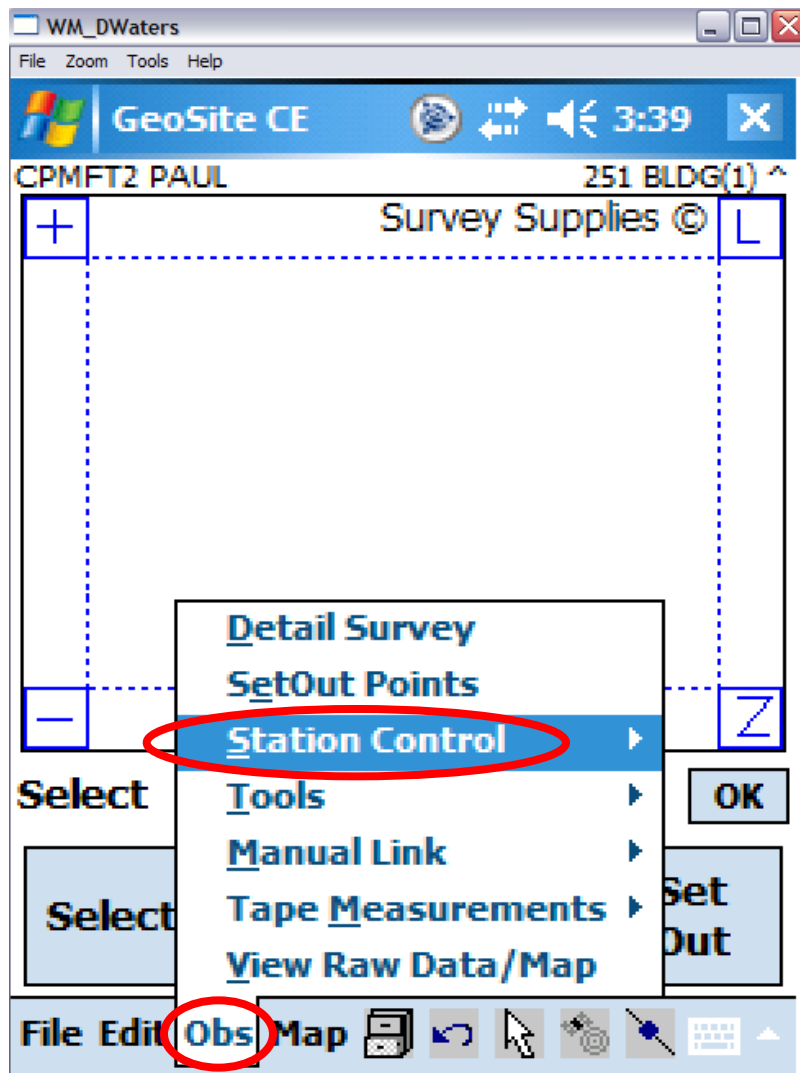
Instrument Height (Ih)

Target Height (Th)

Sight **RO** then tap **REC**

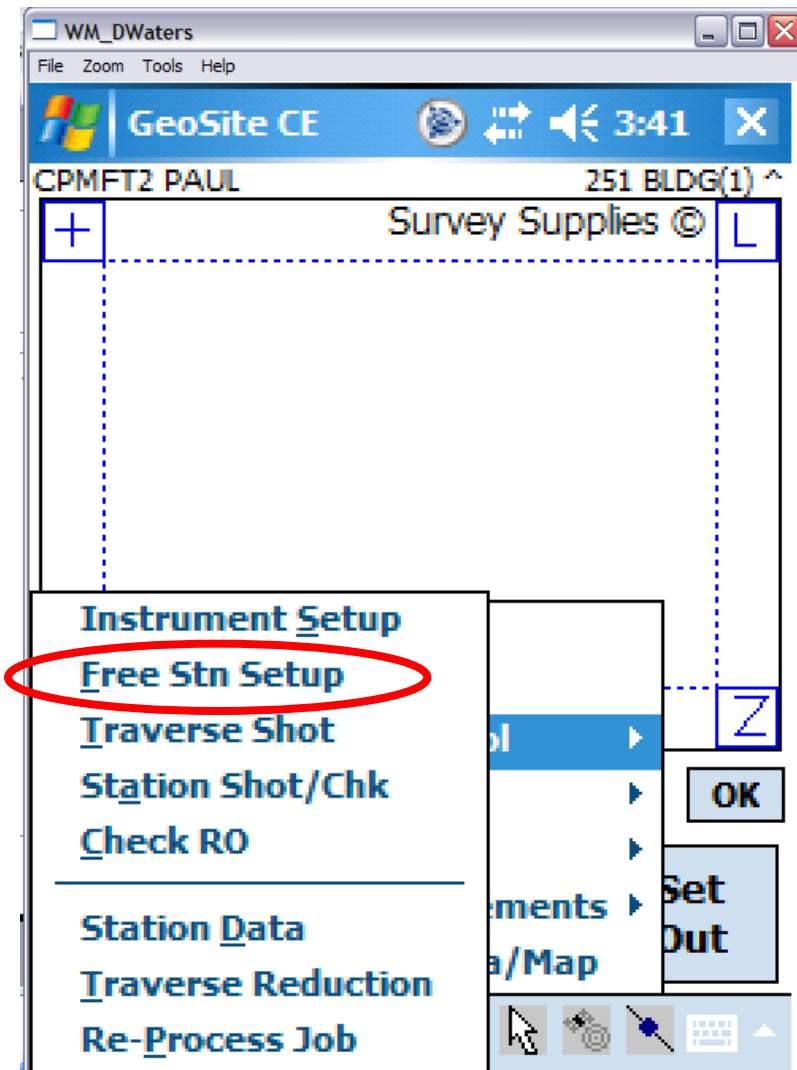
Setting up by Resection / Free station

(finding your position by sighting 2 points with known co-ordinates)



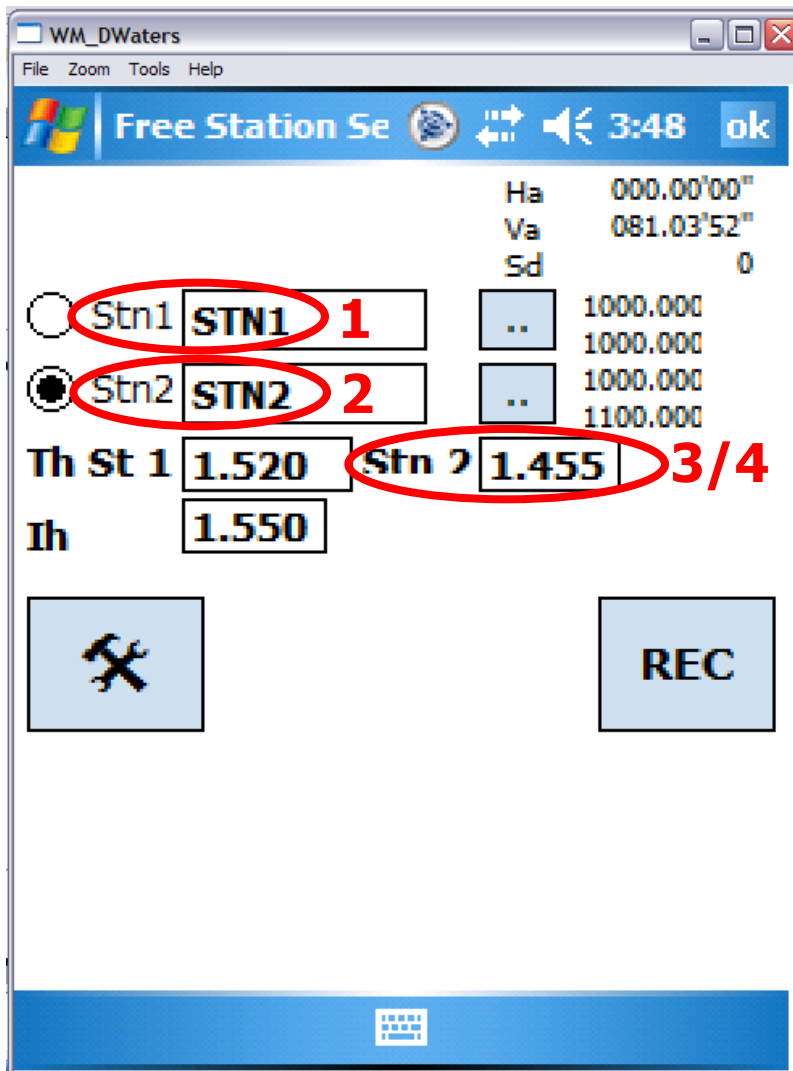
Instead of selecting the 'Detail Survey' button, select '**Obs**' from the bottom menu and then '**Station Control**'

Setting up by Resection - 2



Now select '**Free Stn Setup**', otherwise known as a 'Resection' setup

Setting up by Resection - 3



Station	Stn ID	Th St	Ih	Ha	Va	Sd
Stn1	STN1	1.520	1.550	000.00'00"	081.03'52"	0
Stn2	STN2	1.455		1000.000	1000.000	1000.000

Buttons: [Wrench icon] [REC]

Enter information

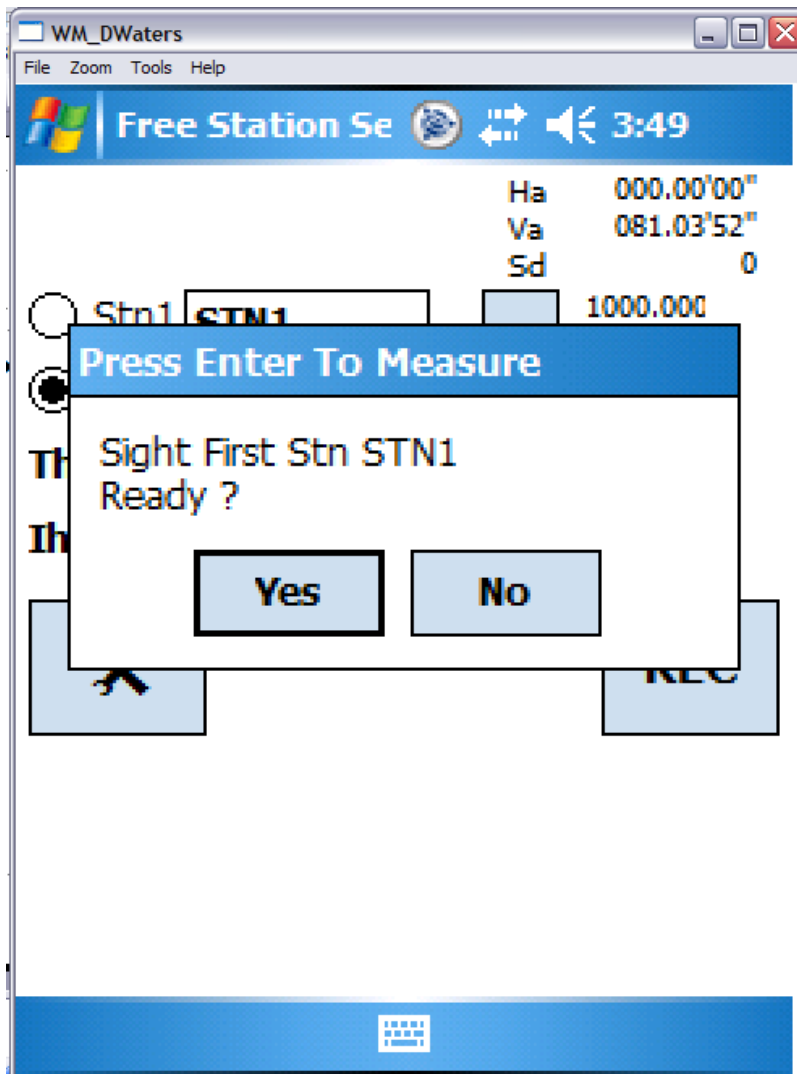
1 - Station 1 co-ordinates

2 - Station 2 co-ordinates

3/4 - Enter the 2 station heights plus your own instrument height

Then press **REC**

Setting up by Resection - 4

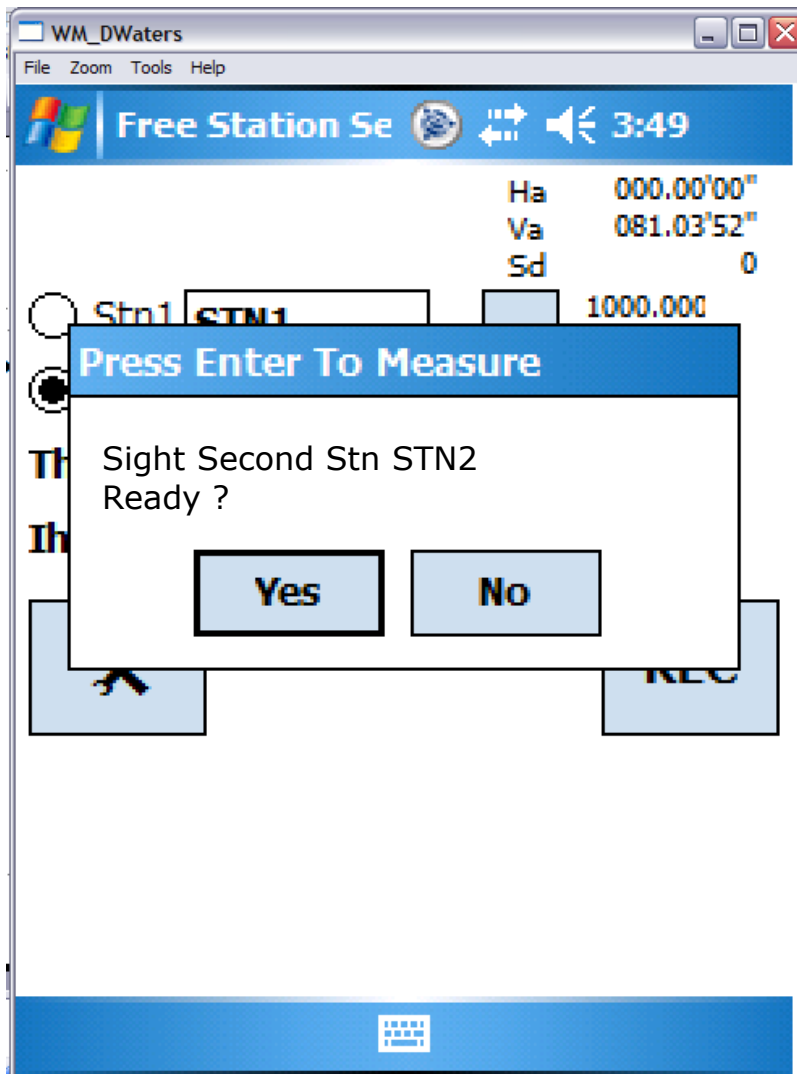


Sight the Stations

1 – **Sight Stn1** when requested

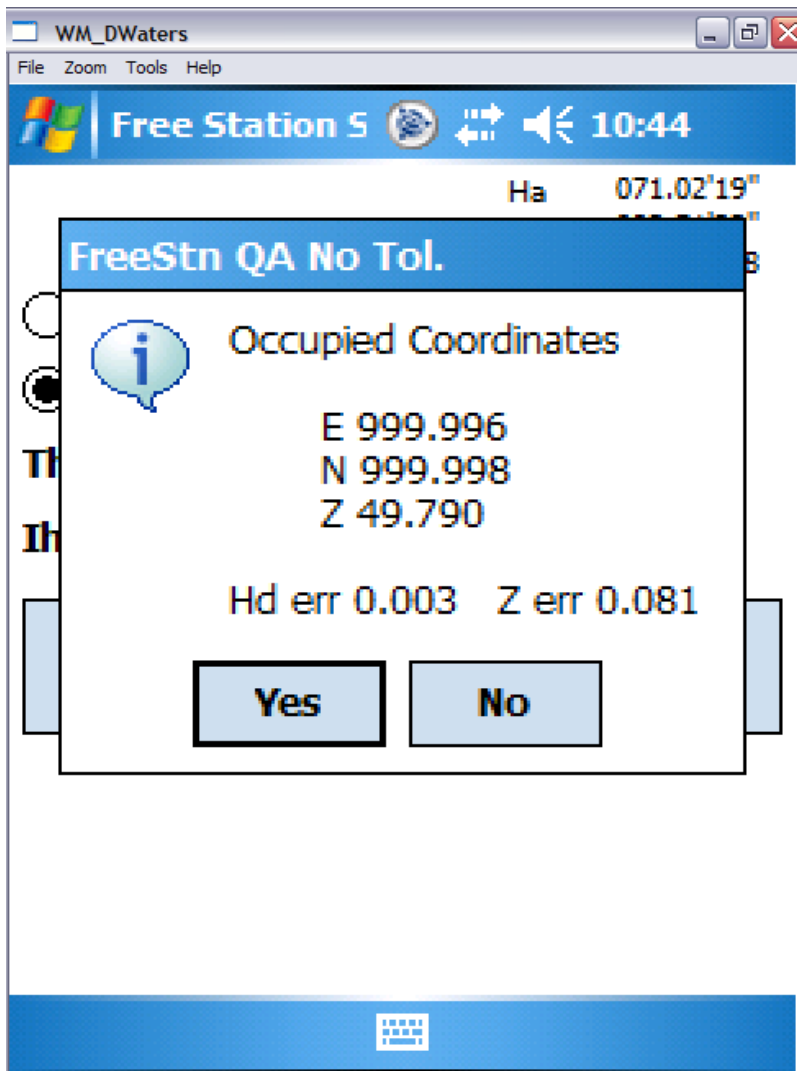
2 – **Sight Stn2** when requested

Setting up by Resection - 5



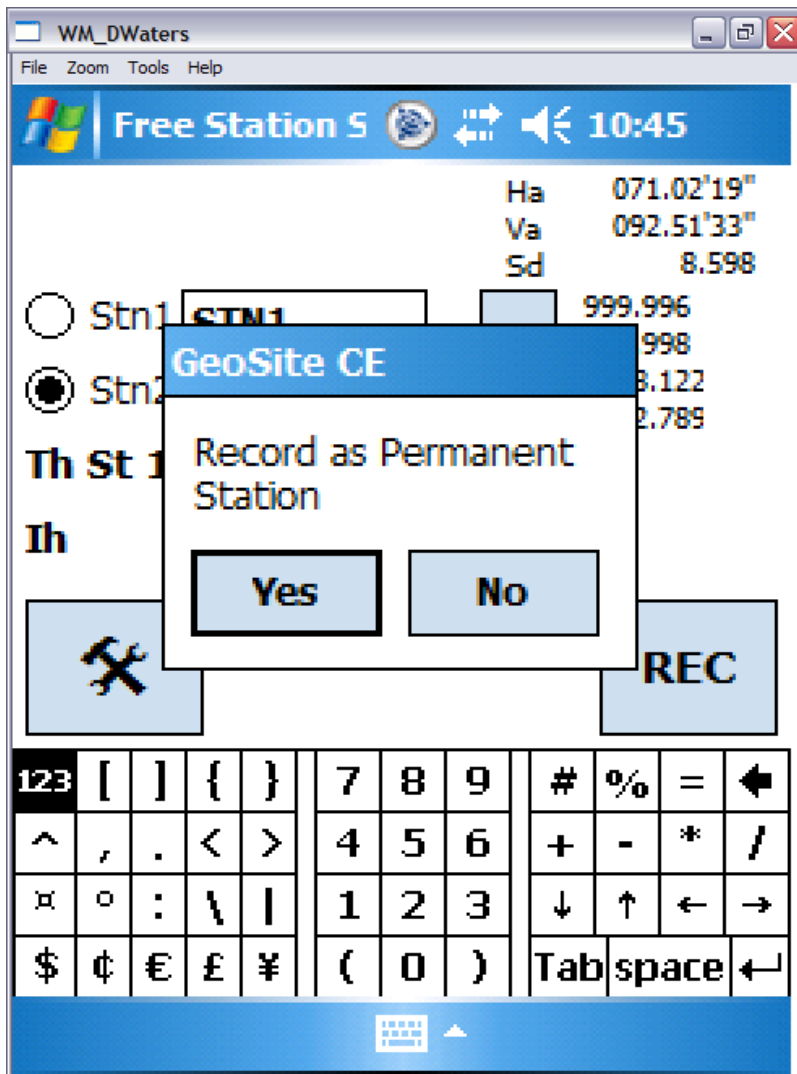
When you have sighted Stn2 leave the theodolite sighted at that station until the logger software has finished the full process.

Setting up by Resection - 6



The co-ordinates of your current location are then calculated and displayed together with the tolerances.

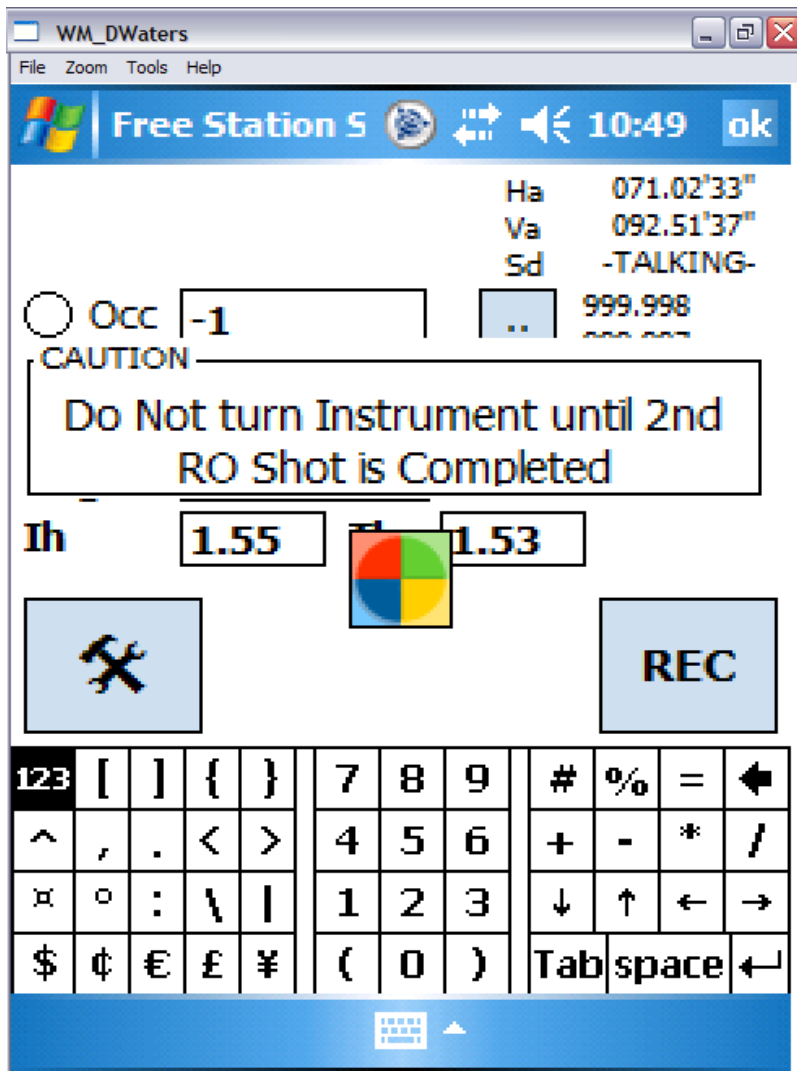
Setting up by Resection - 7



You will be given the opportunity to **record your current location as a station**.

This is optional. Save it with a new STN name if required, but remember there is no point recording a location unless a permanent peg/nail is used to identify this location.

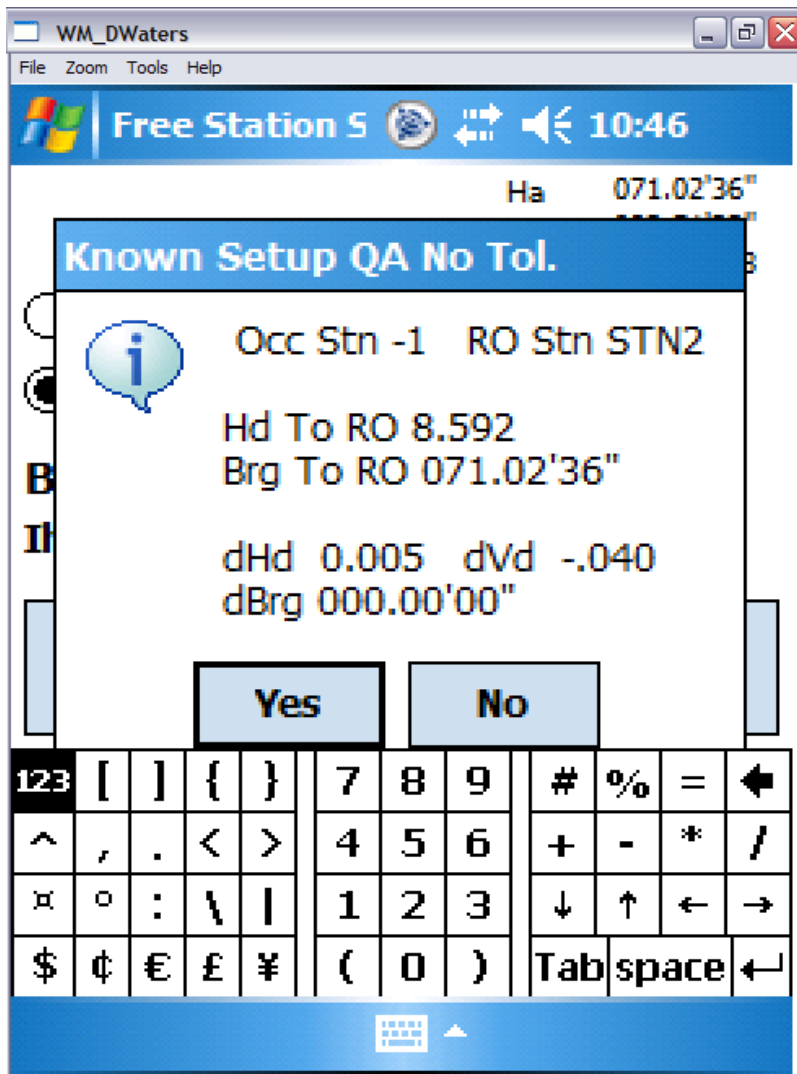
Setting up by Resection - 8



As mentioned in resection slide 5 you should leave the theodolite sighted at the second station until the logger software has finished the full process. If the screen 'sticks' at that shown here just press **MSR1** on the logger to force the completion of the set up process.



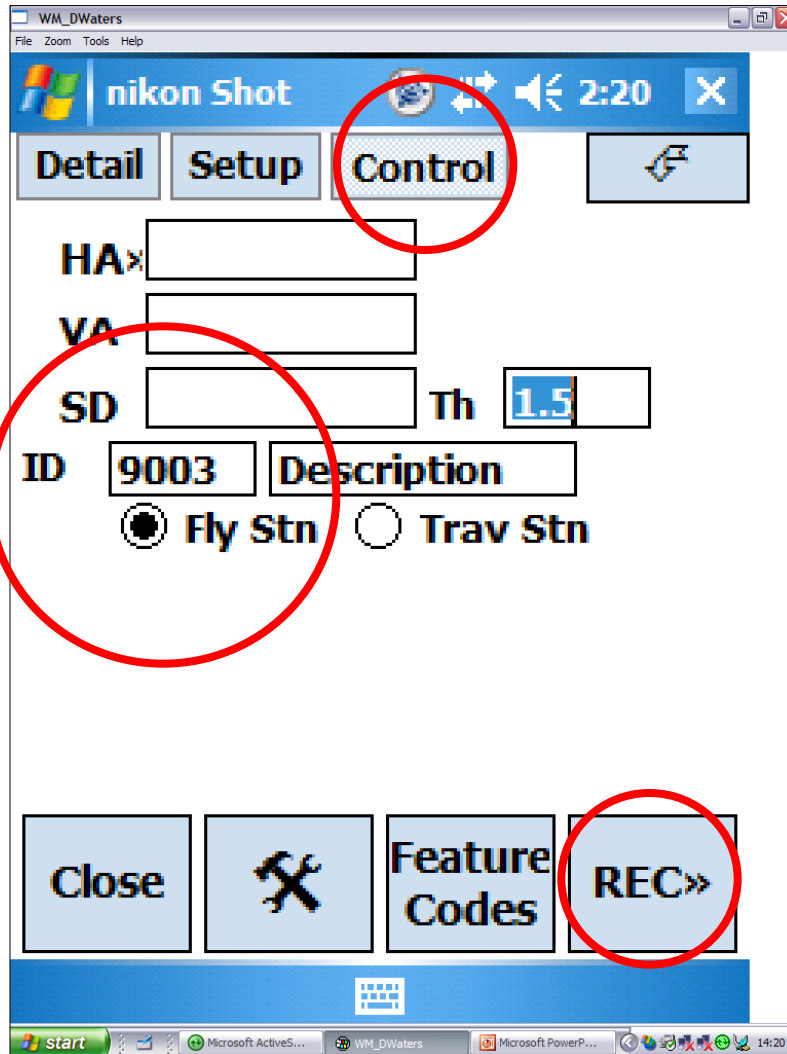
Setting up by Resection - 9



Finally you should see the tolerances of the set up.

If you OK these results you should find yourself in the '**Detail**' survey screen ready to select feature codes and start surveying as you did with a 'Known' station setup

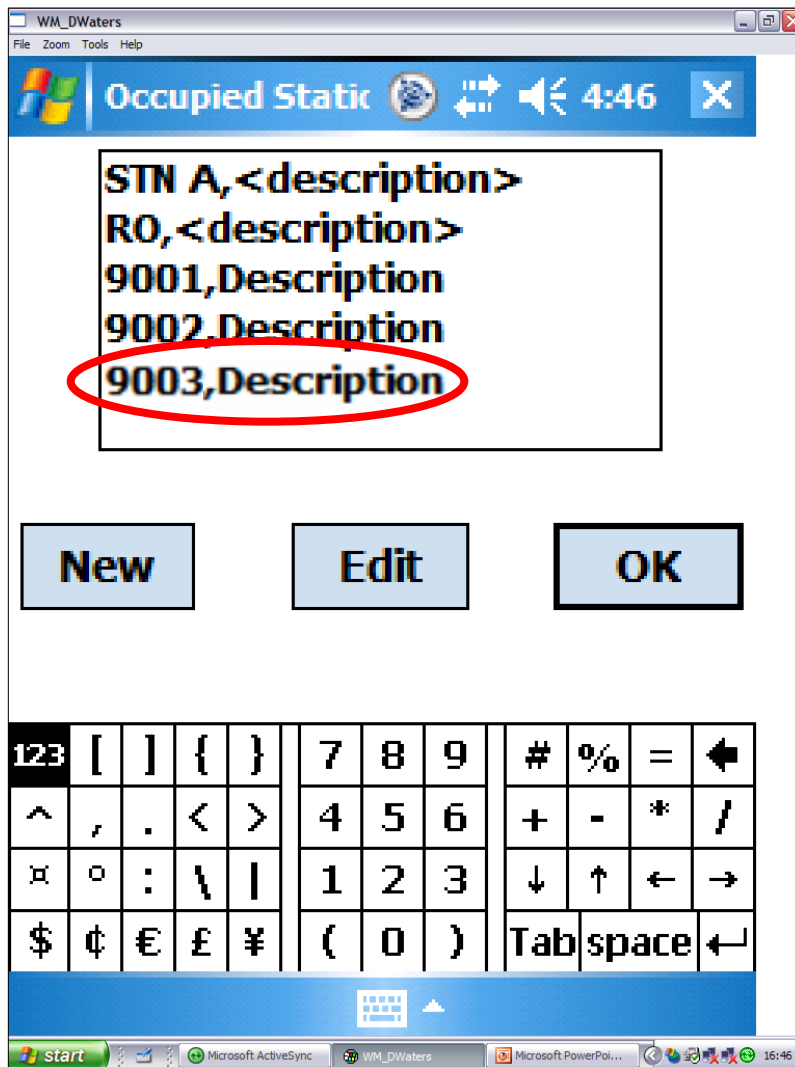
Station Shots – Setting up a new station



Using the **Control** feature create a **Fly Stn** with new **ID**

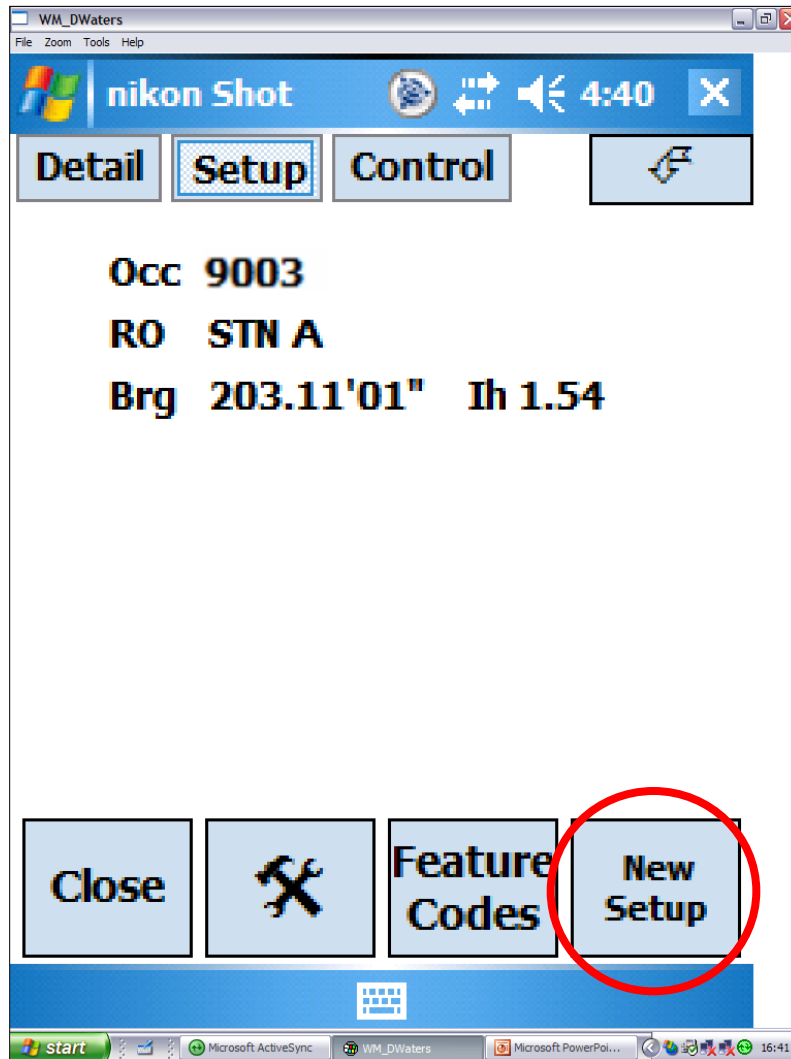
Target and **REC**

New Station



The new **FLY STN** will now appear in the list with your other stations.

Setting up (Fly station or re-setting).

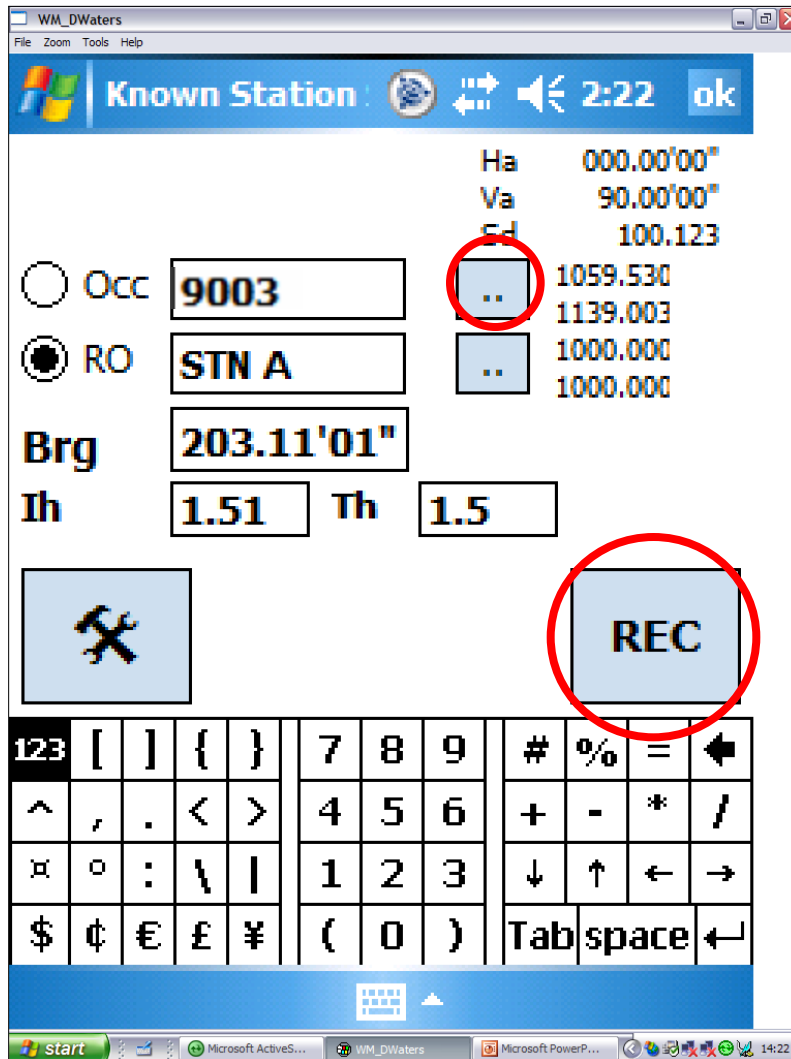


Use **NEW SETUP**

(If re-setting after a break then must use same **STN** & **RO** and re-set the **IH**.)

(If setting up over a new **FLY** station, then that new station must be selected and the previous station sighted)

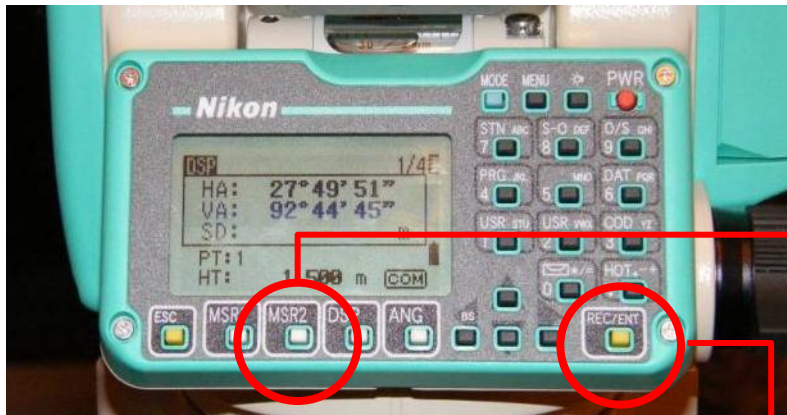
RO on previous station (using 'Known Station' method)



Set up over new station (as previously shown) and sight previous **STN** as new **RO**.

Click **REC** and continue the survey.

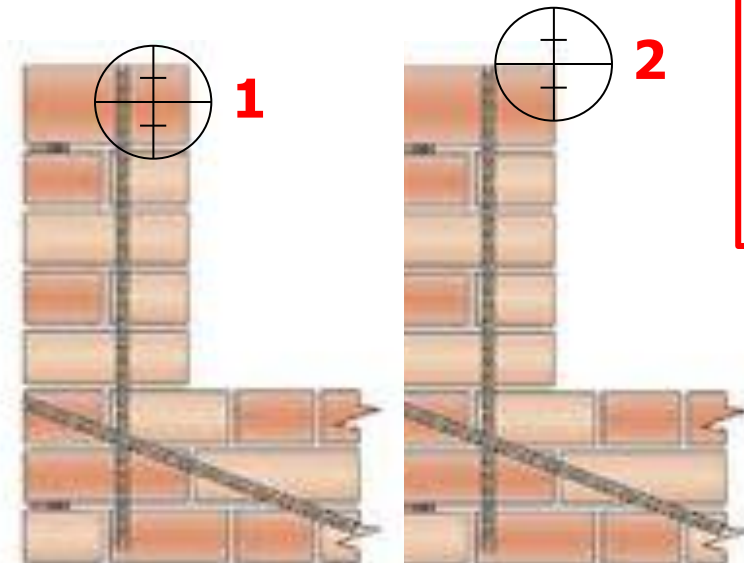
Reflectorless Reading



Select the appropriate **feature code** on the logger and **Sight** the desired point to be read:

1 - If that point is on the edge of a building, move the cross-hairs of the telescope so they are fully on the wall and press **'MSR2'** on the theodolite.

2 - Now move the cross-hairs back to the edge of the building and press **'REC/ENT'** on the theodolite and the point will be recorded on the logger



Don't forget – Target Height **(TH)** should be set on Zero **(0)**