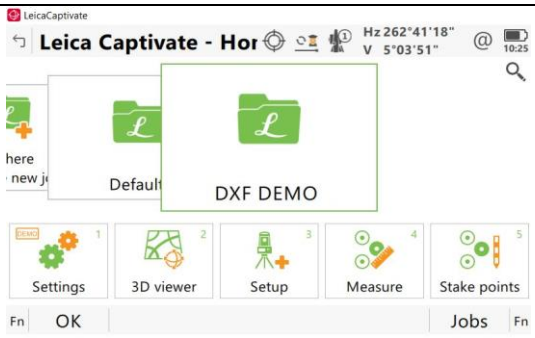
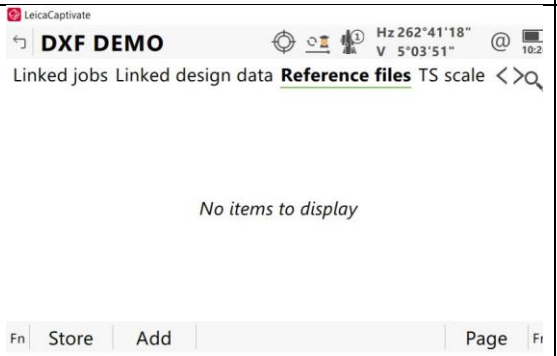
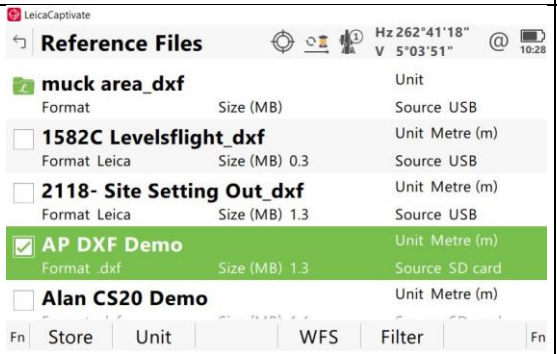
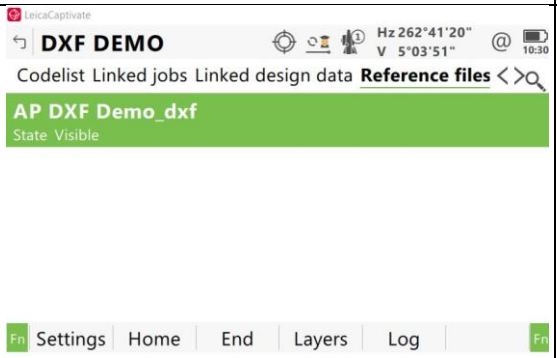
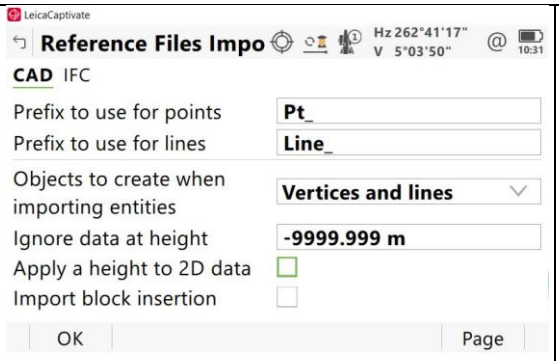
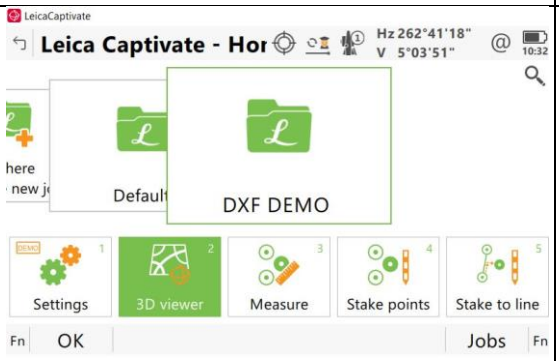
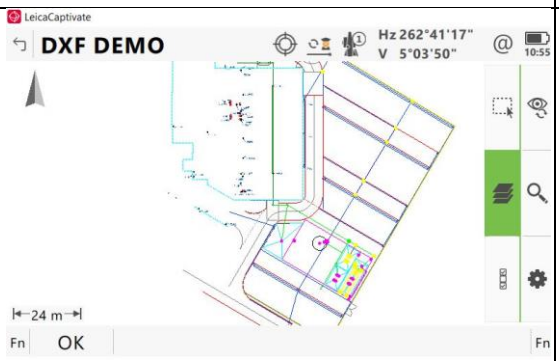
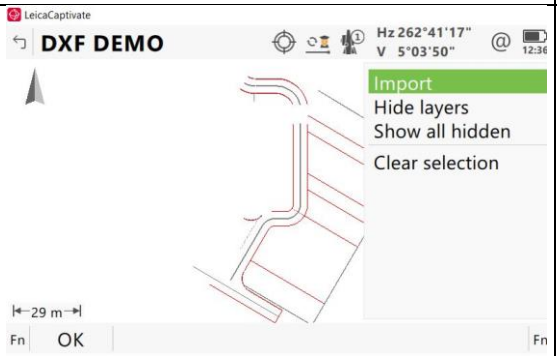
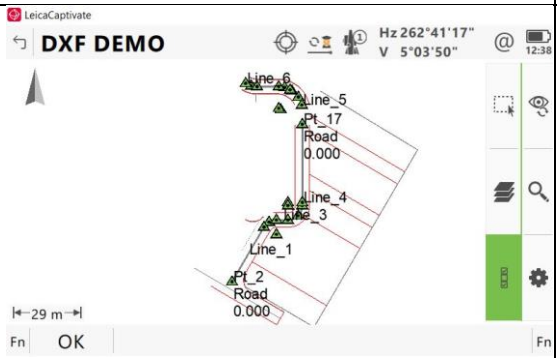
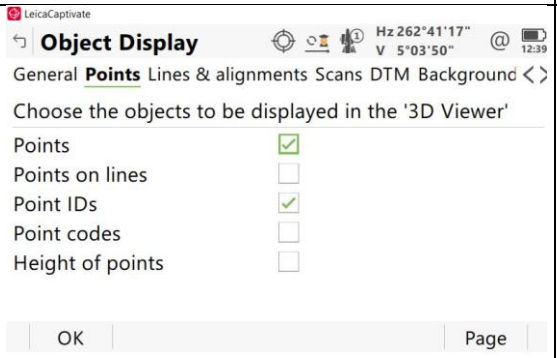
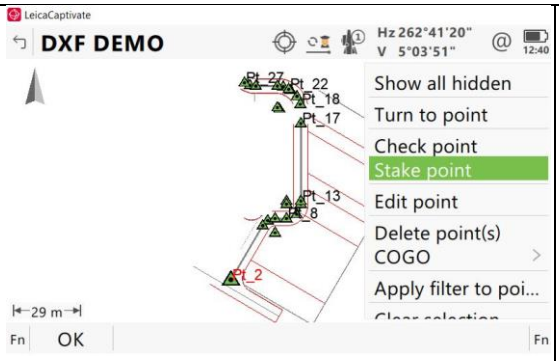
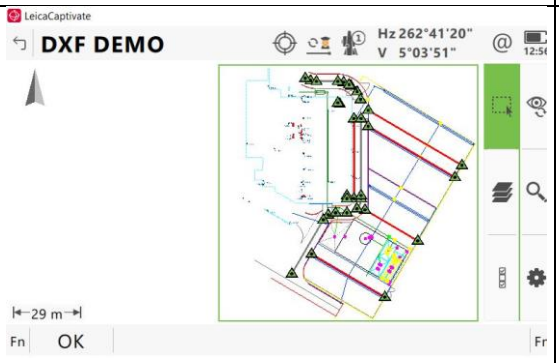
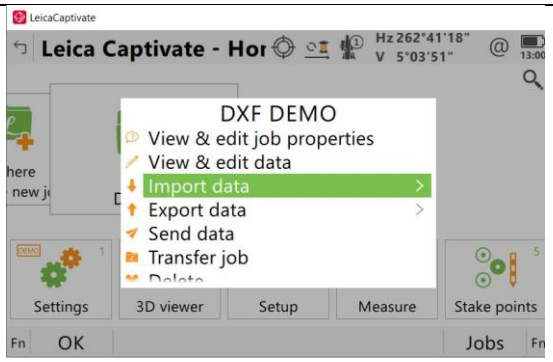
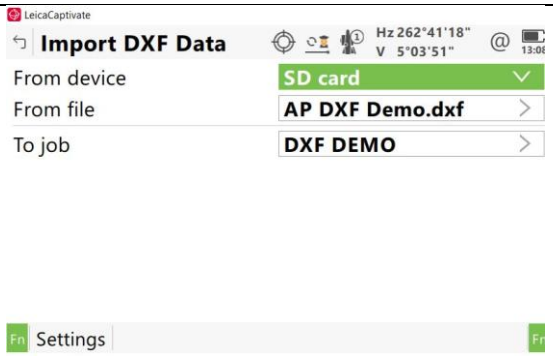
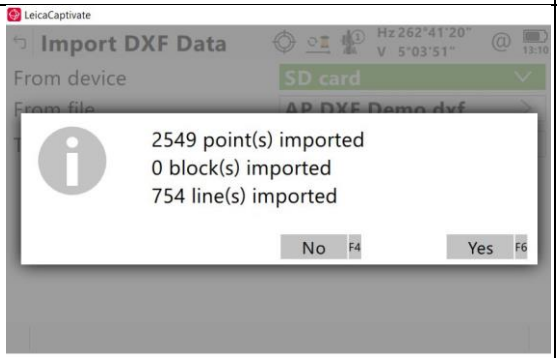
Leica Captivate: Attaching and Working with data from a DXF/DWG

1		In this guide I will be working purely from the 3D viewer. Any data that you import via there will be available in your view and edit data screen or via any app that you wish to use. Click on the working job and select **View & edit job properties**.
2		**Page** across to Reference files either using the **< >** at the top or **F6 (Page)** bottom right. Click **Add**.
3		Here you can see I have data on both my SD card and my USB. Select the file you want by checking the box to the left of it. Press **F2 Unit** to change to the correct units for the DXF/DWG the press **F1 (Store)**.
4		You can now see the file has been loaded. Notice the state is Visible. If you were uploading more than one drawing you could press **F5 (state)** and change it to Hidden. Now press **Fn (Function)** and select **Settings**.

5		The only setting I have changed in here is **Objects to create when importing entities.** The dxf that I'm attaching is just the line drawing given to me from the designer. I can let Captivate generate points at the Vertices and lines for me. This will make my setting out faster with less chance of error. Press **OK**.
6		Once back at the home screen, go straight into the **3D viewer**. The onboard viewer is a powerful tool and will allow you to do a lot of work directly from that screen saving a lot of button pressing going in and out of applications.
7		If you find yourself zoomed out miles away from the data as I have here on my simulator use the zoom window to draw small boxes around the data. Soon it will be much clearer.
8		This dxf has multiple layers, including concrete slab positions, roads, drainage, tanks and manholes. For just now all I'm interested in is setting out the road and the foul drainage. Click the **settings cog** (bottom right) then the **layers** icon which is highlighted in green on my screengrab. This can also be accessed by pressing **Fn – Layers**.

9		In Layer Management you can highlight each layer and press **F5(State)** to cycle through Visible, Selectable and Hidden. You can press **Fn F6(All)** to change the state of all layers at once. I changed everything to Hidden then changed the Road and Kerbs layer to Selectable.
10		Now I just have the data I require today on my screen. I have clicked on and highlighted the centreline of the road. Hold the pen down on the screen and a menu will appear. Select **Import**. This will create the points at the vertices and lines.
11		Captivate has imported 6 lines forming the centre line and 16 setting out points for me. Click the **settings cog** again and go into the display options. This can also be found via **Fn – Display**. I am going to clean up the viewer some more.
12		I am going to turn on **Points on lines** and turn off **Point IDs**. Then I will **page** across to Lines & alignments and turn off my **Line IDs**. These display settings will save as you change them so remember to have a look in there if you import more data.

13		Highlight the point you want to stake out, keep the pen pressed on the screen and select **Stake point**. Captivate will take you straight into the stake out screen. Rather than selecting a point you can now click and hold the road centre line and choose **Stake Line**. This will take you straight into you ref line offsets page eliminating quite a few button presses!
14		I have finished marking out my road and now I need to mark the foul line. There are many ways to play with your data, I am going to clean up my viewer. I can re import any points at any time by just clicking on the linework and pressing import. Press **FN – Layers**. State **All Visible**. **OK**. Settings cog, selection box and highlight everything. Hold the pen on the screen and **delete all objects**.
15		You can see I am back to where I started. Now I will go back into **Fn – Layers**, turn everything to **Hidden** except my drainage.
16		I have left the rainwater drainage(blue) as Visible and the Foul(green) as selectable. This means when I'm clicking on the screen, I can't highlight or interact with the wrong data. Anything you want to work with, set out, offset or query hold the pen down, press **import**. This is the best way to work with a DXF/DWG

17		This time rather than attaching the drawing let's try importing it to see the difference. This can be a good way to import if you have a small amount of data. Click on the working job and go to Import data then **Import DXF** (Please note you cannot import a DWG).
18		Select the correct file. Press **Fn – Settings**. It is likely you will want objects to be created at vertices and lines. This way of importing is ideal for small works. You will see here it is a disadvantage importing the data that I am using this way.
19		Not fun.
20		I now have far too much information on my screen. It may not look too bad but if I click on one of those points it will constantly ask me to choose between several points which will get very time consuming and annoying. You will have zero layer control.