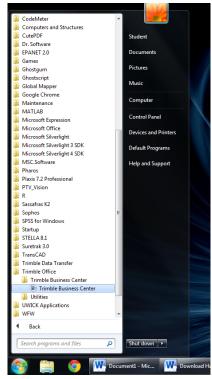
## CEE 317 GeoSurveying Trimble M3 Total Station: Download Data Handout

## To Begin:

- 1. Connect USB cord in the TS Case with the smaller jack into the Total Station.
- 2. Wait for Windows Mobile Device Center window to open. Minimize the window.



3. Open Trimble Business Center (TBC).



## To Export Data:

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- 1. Click Start a new project or click File>>New Project
- 2. Choose US Survey Feet and click OK.

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3. Look for a Device pane on the right hand side. If it is not there, hit F10 on the keyboard or go to View>>Device Pane. To ensure that the TS is always connected to the computer, make sure the TS is turned on and tap the touchscreen periodically to keep the TS from going to standby by default.

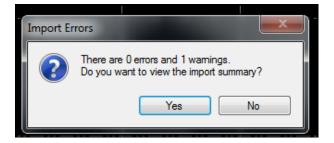
Click the + box next to Trimble Access to expand. Click the + box next to Geoline. Under Geoline, click and drag your job file (i.e. LabAA\_Group1\_Proj1.job) from the Device Pane to the Black Map.

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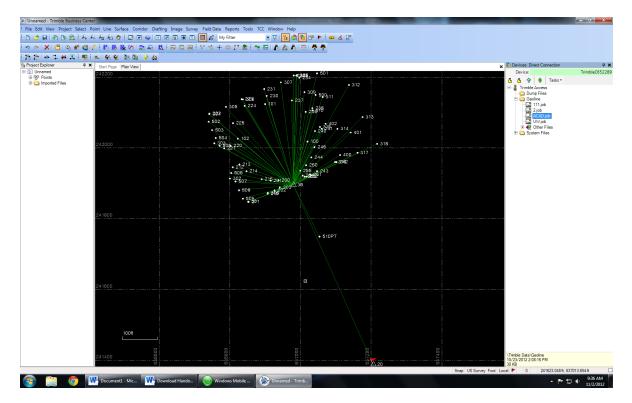
5. A project definition window will open and ask you for a scale factor. DO NOT enter in any other value then 1. Do NOT change it if already listed as 1. Click OK.

Impor	ting File	
File	Projection Definition	
	The imported file has a scale-only projection. The scale factor can be modified in the field below. Scale: 1.0000000000 OK	
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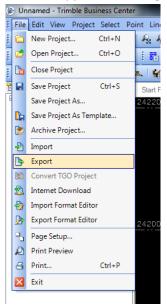
6. A window with import errors MAY arise showing you errors or warnings. Click Yes to read the summary if necessary and document any errors. Close that window and return to TBC.

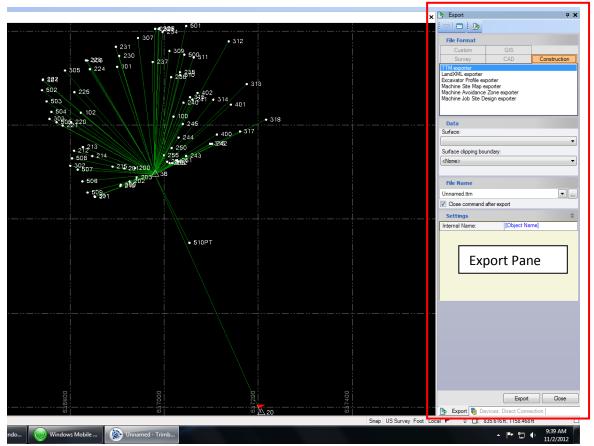


7. The job should be imported on the map and you can pan and zoom in as necessary. Click and hold the scroll on your mouse to pan the map. Scroll towards the monitor to zoom in and scroll away from the monitor to zoom out.



8. Click File>>Export and an Export Pane will appear on the right.





9. For File Format, click CAD and select DWG exporter (2<sup>nd</sup> option). This will export the file as a .dwg (AutoCAD drawing file).

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10. Under Data, click Options>>Select All. If by any chance you need to remove a few points, look at the left hand side for a Project Explorer pane. Next to Points, click on the + box to expand all the points and hold the Ctrl button and click on the points to remove.

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11. Under File Name on the Export Pane, click the ... box.

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12. A "Save As" window will open. To ensure you know where the file will be saved, click Desktop to save the file on the desktop, name the file (Proj1\_Group1\_LabAA.dwg, for example) and click Save.

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13. Under Settings, click on the box to the right of DWG version: and select dwg\_2010 from the list.

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14. Click the Export button on the Export pane.

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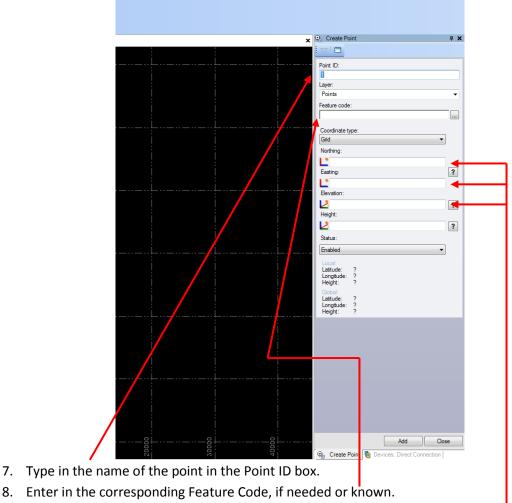
15. Go to the Desktop and save your dwg file to your USB or email it to yourself.

Adding Points through Trimble Business Center (Stakeout Points):

- 1. Connect the TS to the computer.
- 2. Once connected, open Trimble Business Center.
- 3. Click Start a new project or click File>>New Project
- 4. Choose US Survey Feet and click OK.
- 5. Click Point>>Create Points.

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6. Pane on the right hand side should appear.



9. Enter in Northing, Easting and Elevation in corresponding boxes.

10. Click Add on the bottom right hand corner of pane.

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11. Continue to do so until all points have been added. (Notice that as points are added, you will see them appear on the map.) Click Close once done.

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- 12. Click File>>Export and an Export Pane will appear on the right.
- 13. For File Format, click Custom and select P, N, E, elev, Code. This will export the file as a .csv (Comma Seperated Delimited file).

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14. Under Data, click Options>>Select All. If by any chance you need to remove a few points, look at the left hand side for a Project Explorer pane. Next to Points, click on the + box to expand all the points and hold the Ctrl button and click on the points to remove.

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- 15. Under File Name on the Export Pane, click the ... box.
- 16. A "Save As" window will open. To ensure you know where the file will be saved, click Desktop to save the file on the desktop, name the file (Stakeout\_Pts\_Grp#\_LabAA.csv, for example) and click Save.

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17. Click the Export button on the Export pane.

18. Open the Windows Mobile Device Center window again (originally minimized) and click Connect without setting up your device.



Windows Mobile Device Center     Home      Quick Connect		2) -
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19. Scroll over File Management, and click Browse the Contents of your device.

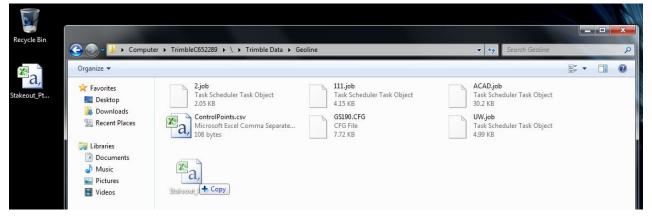
20. Double click the "\" icon.

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21. Double click the Trimble Data Folder. Then double click the Geoline folder.

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22. From there, copy and paste the .csv file on your Desktop to the Geoline Folder.



- 23. Close the window.
- 24. Go to the TS touch screen. Open General Survey if it isn't already up. Tap Jobs>>Import/Export>>Import fixed format files.
- 25. Make sure the File format is Comma Delimited.
- 26. For the From name:, tap the folder box. Tap \ to expand the folder, tap Trimble Data, tap Geoline, and click your .csv file. Tap Accept and wait for a Transfer Complete window. Once returned to the General Survey screen, points will have been successfully imported and you are ready to stakeout points.