

## Files required for general operation

**Linework file** – .DWG, .DXF

**TIN/DTM file** – .DWG, .DXF, .FLT (Carlson), .TIN (Carlson), .GRD (Carlson), .MESH (our format), .GRID (our format), .DTM (DI grid), .NTR (DI grid), .GGF (Trimble grid)

**Localisation file** – .COT (GE), .LOC (Carlson), .LOCAL (our format), .CAL (Trimble, certain versions only)

Alternatively the WGS84 Lat, Long, Height, and Local Northing, Easting, Elevation can be entered manually in the localisation tab in job setup, and a one step transformation will occur in the software to tie the job to the localised coordinates.

**NOTE: Ensure that the Linework strings and the TIN files are separated. Do not use one file for both!**

## Files required in certain use cases, OR created by GM

**Index file** – contains the information that ties the job together such as units of measurement, which file relates to what, projection information etc. This is created by GM when a job is created using the “New Job” interface

**GEOID file** – .GGF (Trimble Geoid File), .GSF (ASCII), .BIN (National Geodetic Survey BINARY format)

contains geoid information.

**Supplementary (non required) files** – such as guidelines and topo files. Generally these are proprietary GM formats that can be exported to other formats within GM. There will be expansion on this in future releases, however topo can be exported (not imported) to CSV.

I have created a few scenarios below, which will help to determine the path to file setup

### Scenario 1

**Machine moved to a new, established site, that runs of a local site calibration (not geoid/projection)**

#### Option A

If Topcon files are available, import the TP3 (Topcon project) file into 3D Office.

Export the Linework as a DXF or DWG.

Export the TIN as a DXF or DWG

Export the control as a .gc3

Import the .gc3 into SiteMetrix Carlson. SiteMetrix Carlson will automatically create a .loc file. Export the .loc out of sitemetrix (Tools > File Utilities > Copy, select the .loc file from the list and copy it to another directory such as USB drive)

The .loc file can then be imported into GradeMetrix “New Job” along with the Linework DXF/DWG and the TIN DXF/DWG

#### Option B

Create a new job on GradeMetrix

Input the various files for Linework and TIN

Obtain control information from survey team (csv/txt etc)

Type in the LLH/NEZ into the localisation tab

### Scenario 2

**New design change for an existing site**

#### Option A

Create a new job entering in the new linework, tin model etc

When prompted for localisation, select the existing job and re-select the localisation that is already on the screen (provided that localisation/base station hasn't changed between design changes!!)

**Option B**

Modify job and select new linework file from directory

Delete TIN file and select new TIN file from directory

**Importing/Exporting Jobs**

Alternatively a “Job Folder” can be preconfigured on the simulator desktop software to make it easier for site users to load a job without having to go through all of the individual settings.

To do this, create a new job on the GradeMetrix demo (simulator) PC app.

Once happy with these settings, go to menu > Job tools > Export Job and export it to desired directory such as USB drive.

On the machine, go to “Open Job”, select the USB (or other directory) that the exported job is stored. Ensure “Copy selected job to the data folder” is ticked on the bottom left hand corner, then select the desired Job and “Open”.

This will copy the job from the directory into the Machine’s GradeMetrix directory for future use, and is the preferred method of loading files onto machines without having a surveyor present.