BCC Feature Code Library

BCC Feature Codes (V1.4).FXL

October 2020

Contents

Revisions:	Release Date:	Changes:
BCC Feature Codes (1.3) (First release)	1/8/2020	N/A
BCC Feature Codes (1.4)	30/10/2020	Date and time attribute added to all points and strings. Feature Code Groups added.

Introduction

This guide looks at the details included in the BCC Feature code library put together by UPG. This library has been designed to match as closely as possible the current feature library outlined by BCC.

This contains the feature codes which have been mapped with the colours, blocks and symbols and line styles (note: some line styles are missing as they could not be created) as defined in their guide. This has been built against the current BCC coding standards Version 202002.

The line feature points once processed in TBC will all end up on Layer "0".

The code of the linestrings has been placed in front of the string name to allow mapping in 12D.

Rotation for Pavement arrows

Due to the way some features are defined by BCC, a rotation attribute is used for the *orientation of the pavement arrow markings*. This is to allow for rotation of symbols to match field pickups.

As described by Brisbane City Council City Projects Office Survey Coding Standard, locate the bottom left corner of the pavement arrow, capture the point and record the type using the given attributes. The rotation attribute can then be used to orientate the block with the arrows facing east at 0 rotation and rotate in a clockwise direction.

See the attached photo to the right as an example of code PM A Straight Left arrow and how the rotation attribute is applied.
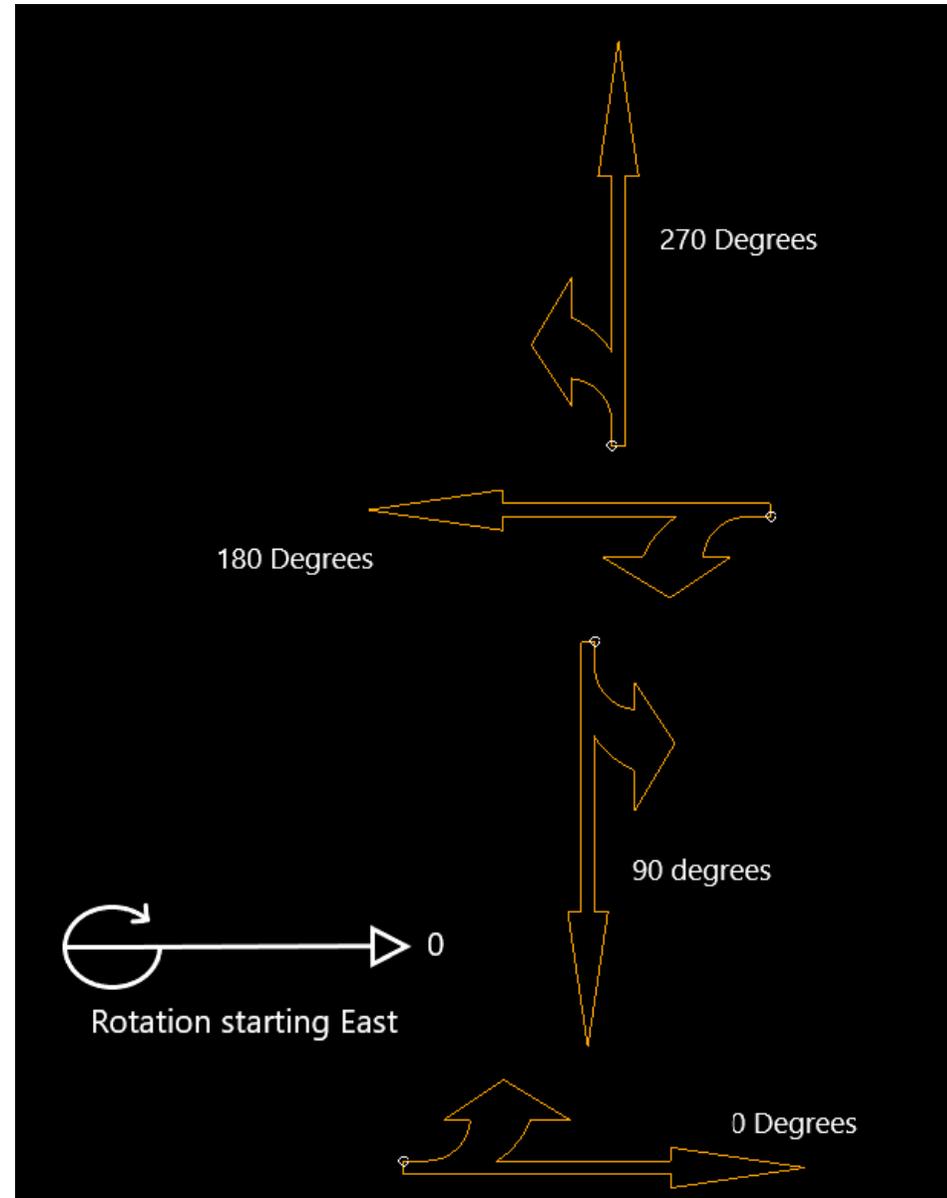
Scaling for tree (code OS TRE)

The scaling for the tree feature (OS TRE) in the open space category is scaled by the spread attribute e.g. a spread of 1m equates to a symbol size of 1m in diameter. The illustration to the right depicts this.


Spread: 1

Spread: 2

Spread: 5
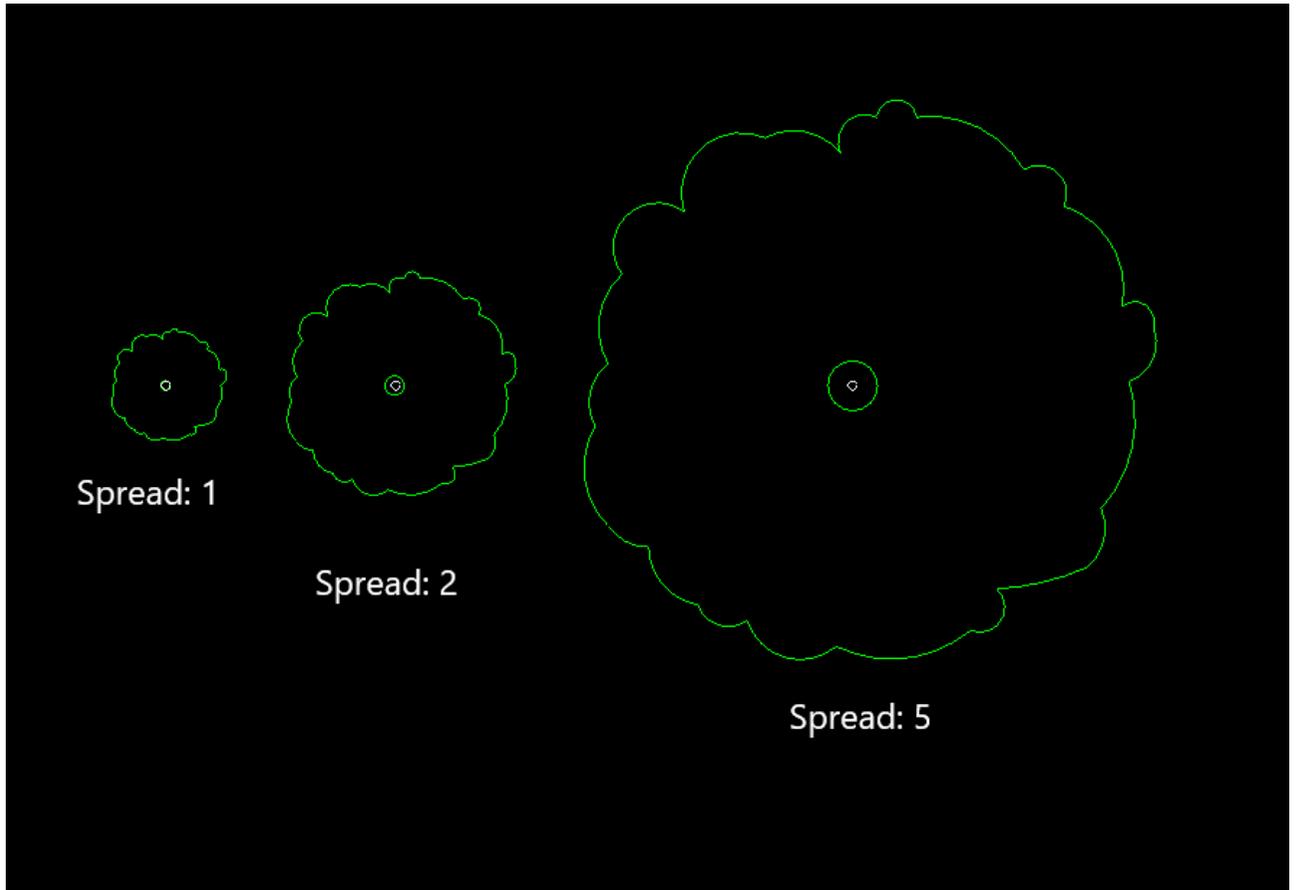
Gate Block

The symbol for the gate block (FE GA) is displayed in the picture to the right. Two points are required to place and to orientate the gate block.

fe ga

fe ga
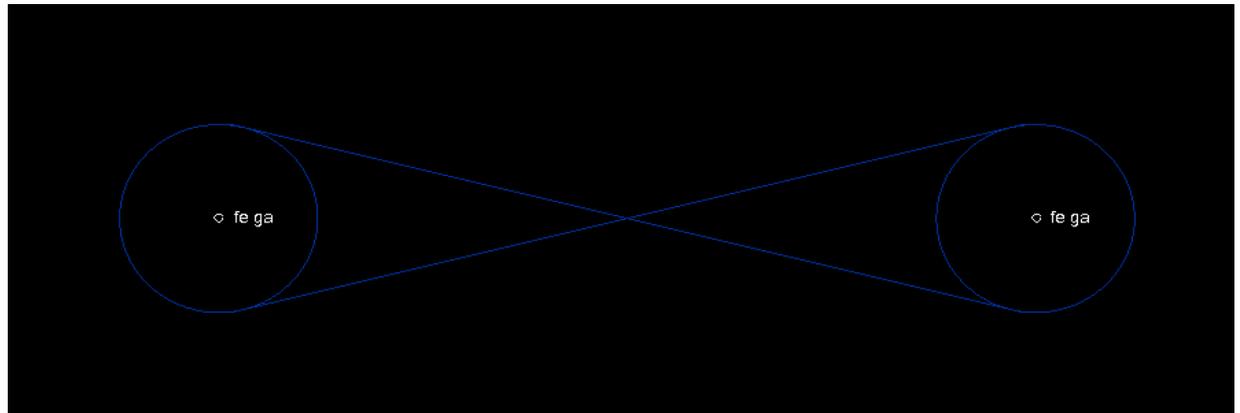
Door Symbols

When using the BCC feature library, the pickup procedure for building doors (BU DOR) and tunnel doors (TN DOR) is to locate the centre of door and record that as a single point. A rotation attribute has been added to allow the user to rotate the door to the orientation they choose. The image to the right shows the orientation of the door symbols at different degrees of rotation.

Please note, the symbols have a standard size of one metre across. As the pickup procedure involves one point the scaling of the symbol has to be done in the draughting software i.e. TBC, after the feature codes have been processed. Note: the same process is used for pavement symbols (PM SYM).
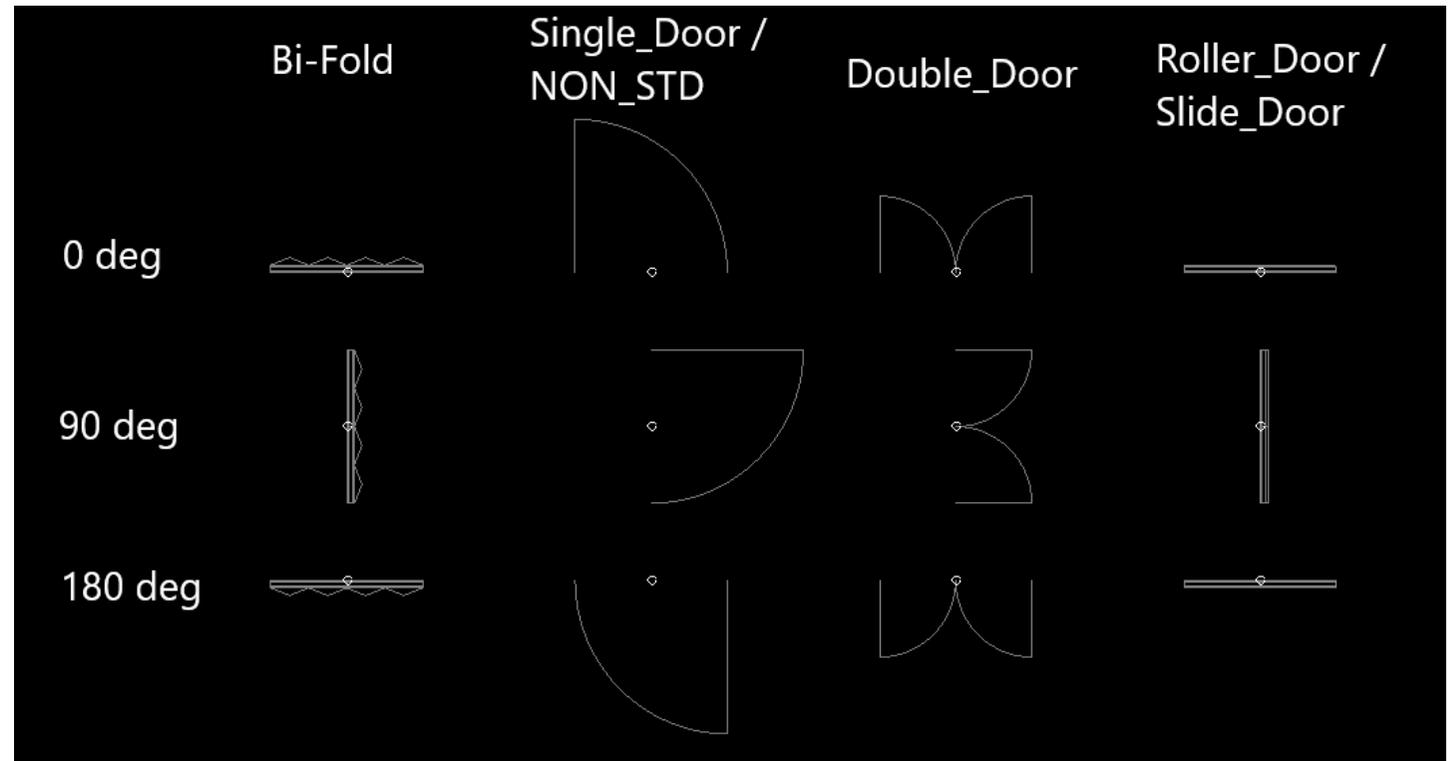
Importing a JXL file into 12d

You are able to export a JXL file from your controller and import it straight into 12d. The following steps demonstrates the process to import the BCC codes that include a space in the coding:
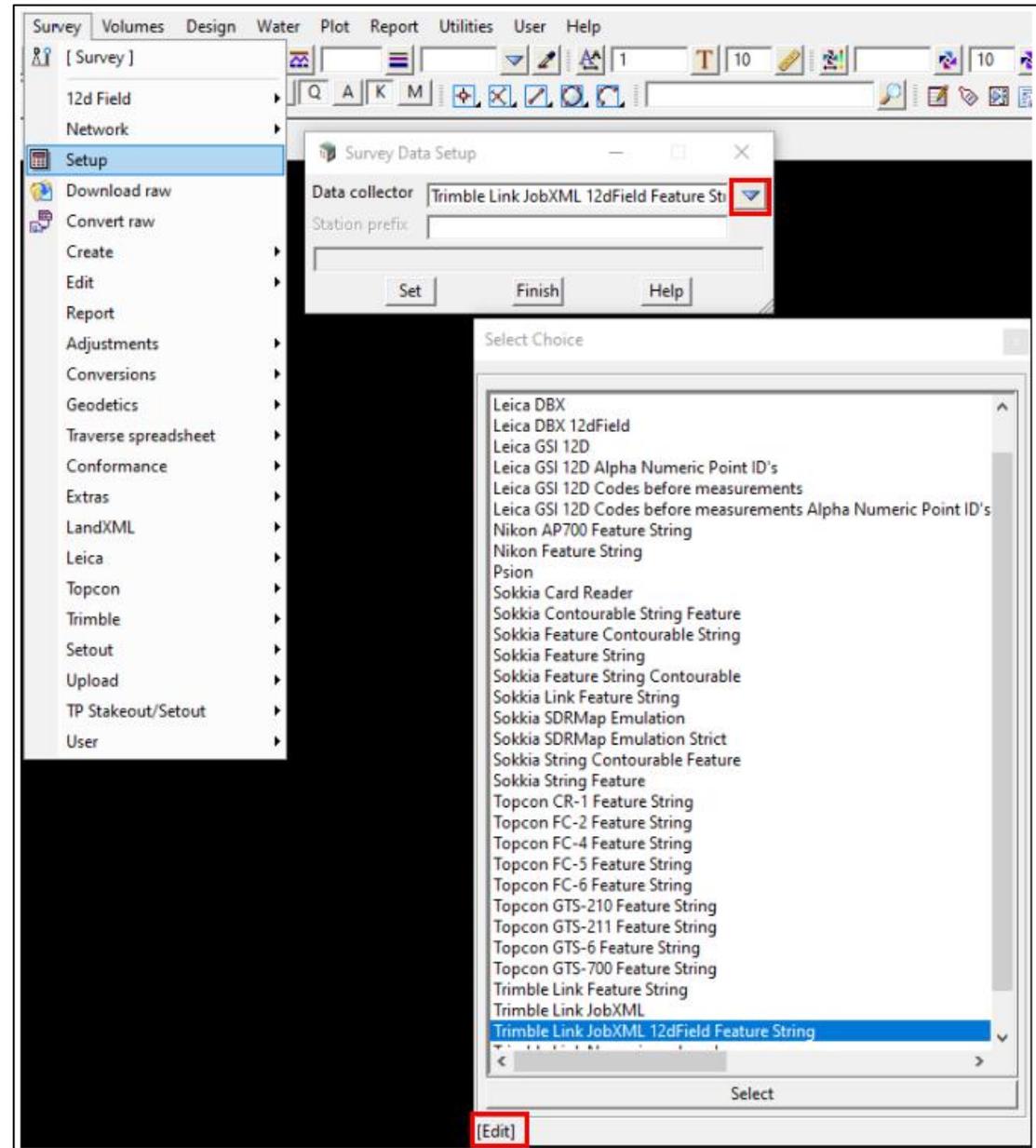
Step 1.

Launch a new 12d project.

Under the Survey tab *select* **Setup**.

The *Survey Data Setup* window will display.

Click the **Down Arrow** and scroll to **Trimble Link JobXML 12d Field Feature String** and *select* it.

Click **Edit** in the bottom left hand corner of the window.

Step 2.

In the *Edit* window. *Select* the **Delimiters** tab.

In the *Comment* box it will look as if there is nothing there. However, there is a space. *Delete* the space and change it to a **Comma.**

Next, *select* the **Feature Coding** tab. Ensure the **Allow Spaces in Feature Codes** box is *ticked.*

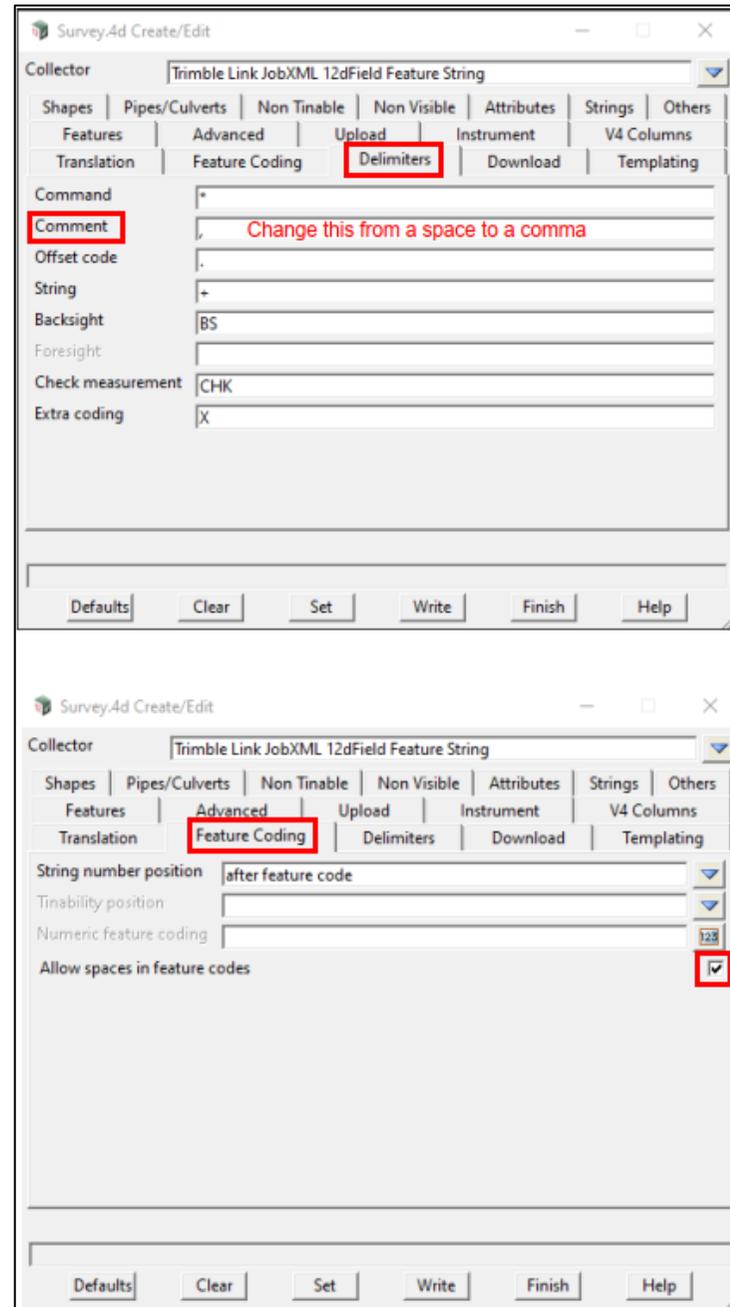*Click* **Set** then **Finish.**

Note: By clicking set these settings will save for the project, however once you close and reopen the project the settings will be back to default.

To save these settings *click* **Write**. Displaying the window below.
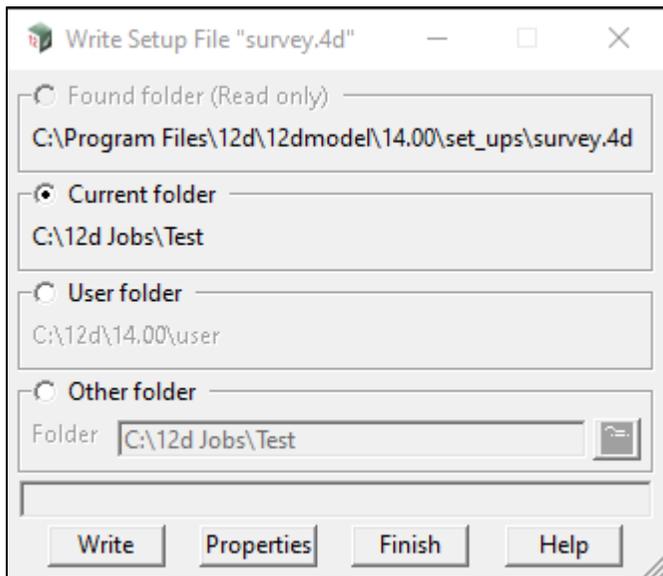
Select **Current folder** if you wish to save the settings for this project only or *select* **User Folder** to save the settings for all future projects.
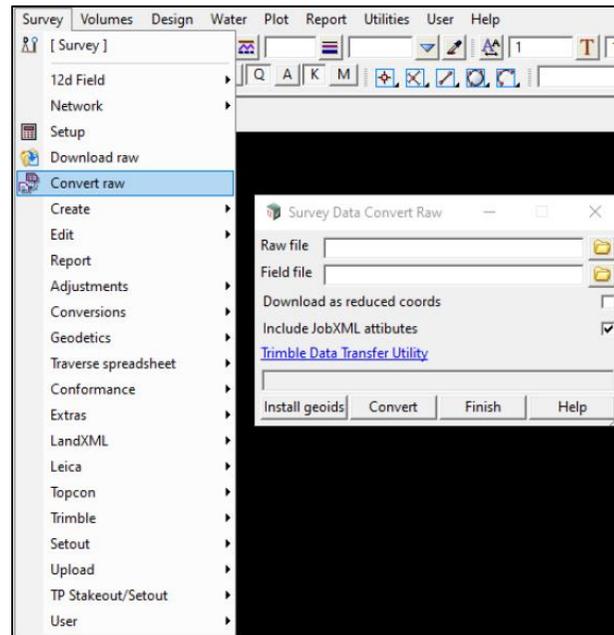
Click **Write** then **Finish.**

Step 3.

Next, under the *Survey* tab *click* **Convert Raw.**

The **Survey Data Convert Raw** window will display. *Click* the **folder icon** next to the Raw file box. Navigate to the **JXL file** you wish to use and *select* it.

Click **Convert** then **Finish.**

Step 4.

Finally, select the *survey* tab and in the *create* list *click* **Field file**.

Input a **Function name** and **Default model.**

Select the *field files* tab. Your converted JXL file should be in the file list as a 12dfield file.

Click **Reduce** then **Finish.**

The points, lines and polygons from your JXL should now be in your 12d project.

Note: You can also select a map file under the map file tab. This associates the line styles, colours and layers with the correct feature codes.
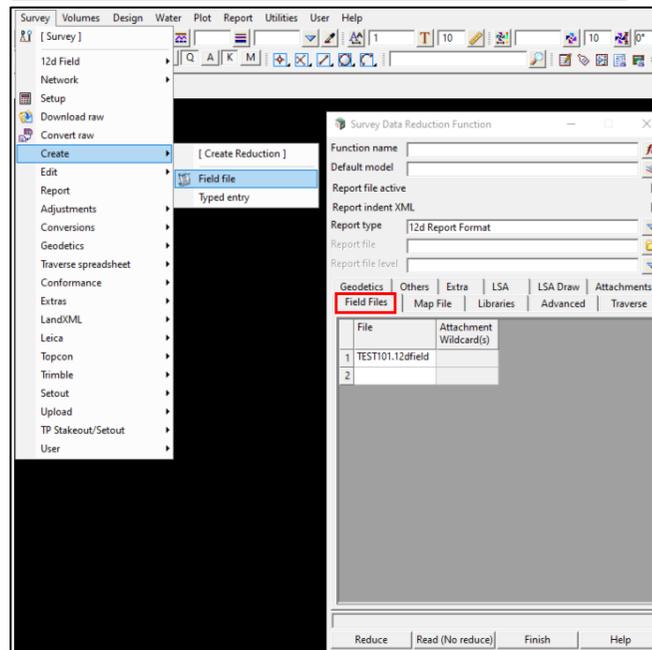
Control Codes

Control codes have been included in this library for enhancing field pickup if desired and allowing for greater editing in TBC through the use of editing feature codes.

Control codes give extra line joining control in the field for creating arcs, shapes, start new line sequences, close figures, and join specific points. They are defined as seen below:

XXXX # - space and then the control code is entered

So, a code would look like:
EJ02 1

Line Control Codes	
Name	Code
Line - Start	1
Smooth Curve - Start	10
Smooth Curve - End	11
Circle Edge - Start	12
Circle Centre - Start	13
Rectangle - Start	14
Horizontal Offset	15
Vertical Offset	16
Line - End	2
Joint to Point	3
No Join	4
Close Line	5
Tangential Arc - Start	6
Tangential Arc - End	7
Non-Tangential Arc - Start	8
Non-Tangential Arc - End	9
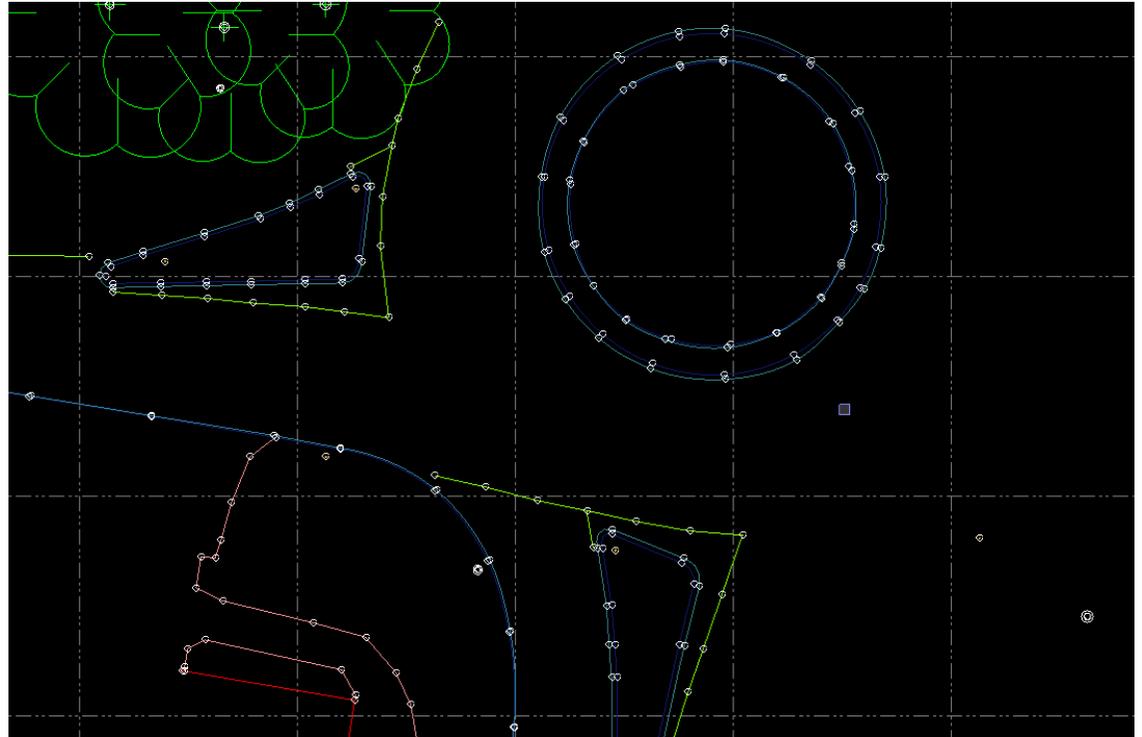
Other Items

EDITING:

We recommend not editing the FXL and providing UPG with any required edits, however you are able to do any required editing within TBC or the Feature Definition Manager.

ATTRIBUTES:

We have strived to ensure that attribute information is correct, however this may change moving forward with updates, requiring an update to the FXL.

CODING:

The coding for the FXL matches the BCC standards except for some string codes. In the FXL manager codes for points and lines cannot be identical. To overcome this for codes that have both strings and points we have added a suffix of *S* (meaning STRING) to string codes. For example, the bridge NDF code for the point is BR NDF and for the string it is BR NDFS. The same convention is used throughout the FXL. Also note, there can only be a single line style for one code. However, there are instances that a code has more than one line style depending on the attribute, e.g. for code FE GR (safety fence) there are different line styles for the type attribute, a standard line style (handrail) has been used as the line style for this code. For other instances where multiple line styles occur an appropriate standardised line style has been used.

FINAL NOTE

UPG is committed to supporting the BCC code library and enhancing functionality to assist with the use of this feature code library. Please contact us with any requests and suggestions that can be made to this library and also for any enhancements that could be made in TBC to improve the user experience when working with BCC, and we will try to accommodate them.