

## TBC, Trimble Access and Feature Codes




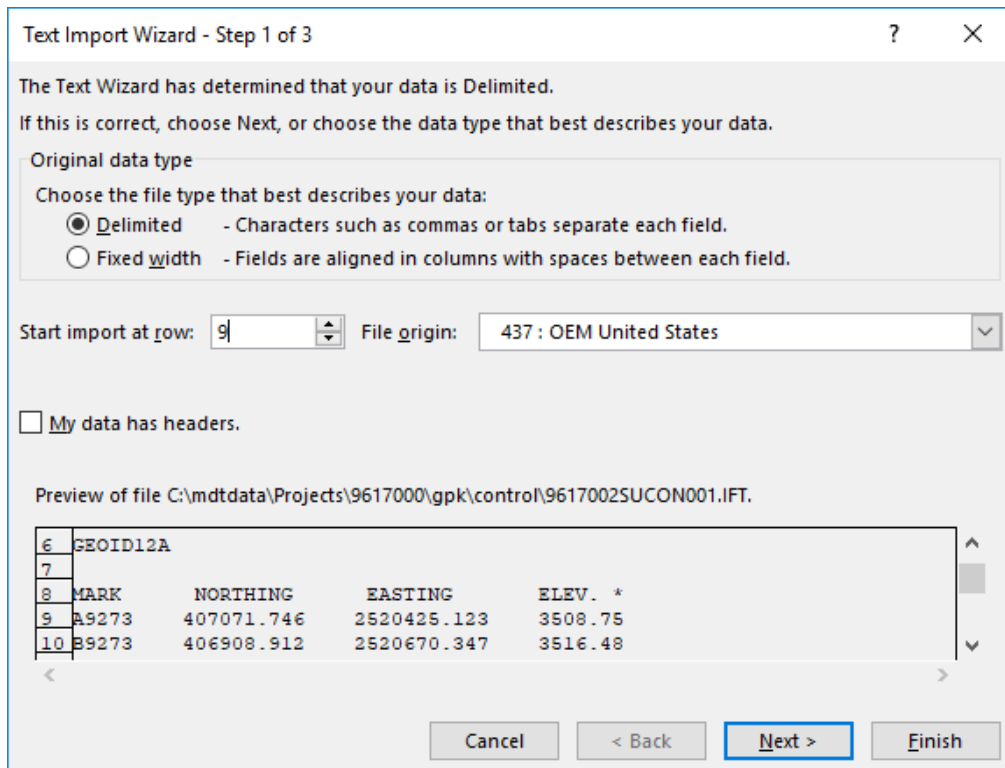
## **TBC, Trimble Access and Feature Codes**

This guide is intended to help create the necessary data to setup, collect and process survey data needed for the creation of an MDT Engineering Survey. This example will be based on data created from an RTK unit but also applies to conventional data collection.

### **Convert the project IFT file to a comma delimited CSV file**

The .IFT file needs to be converted to a format that TBC will accept. The most commonly accepted file is a CSV (comma delimited) file. This can be done with the use of the program **Excel**.

1. Save a copy of the .IFT file to work with. In this example the file 9617002SUCON001.IFT will be used.
2. Open **Excel** with **Windows**  or the **Excel** icon.
3. Now click **File, Open**, change the file type to **All Files (\*.\*)** and navigate to the .IFT file. This will open the **Excel Import Wizard**.
4. Choose **Delimited**, then select what row to start importing (first row of coordinates) then select **NEXT**.



Text Import Wizard - Step 1 of 3

The Text Wizard has determined that your data is Delimited.  
If this is correct, choose Next, or choose the data type that best describes your data.

Original data type

Choose the file type that best describes your data:

**Delimited** - Characters such as commas or tabs separate each field.

**Fixed width** - Fields are aligned in columns with spaces between each field.

Start import at row: 9 File origin: 437 : OEM United States

My data has headers.

Preview of file C:\mtd\data\Projects\9617000\gpk\control\9617002SUCON001.IFT.

6	GEOID12A			
7				
8	MARK	NORTHING	EASTING	ELEV. *
9	B9273	407071.746	2520425.123	3508.75
10	B9273	406908.912	2520670.347	3516.48

Buttons: Cancel, < Back, **Next >**, Finish

5. Select **Comma** then **Next**.

Text Import Wizard - Step 2 of 3

This screen lets you set the delimiters your data contains. You can see how your text is affected in the preview below.

**Delimiters**

Tab

Semicolon

Comma

Space

Other:

Treat consecutive delimiters as one

Text qualifier: -

**Data preview**

```
PROJECT NUMBER: IM 90-9(130)528
PROJECT NAME: I-90 CULVERT - LODGE GRASS
UPN: 9617002
CSF: 0.99964524
```

Cancel < Back **Next >** Finish

6. Select **General** and **Finish**.

Text Import Wizard - Step 3 of 3

This screen lets you select each column and set the Data Format.

**Column data format**

General

Text

Date: MDY

Do not import column (skip)

'General' converts numeric values to numbers, date values to dates, and all remaining values to text.

Advanced...

**Data preview**

```
General
PROJECT NUMBER: IM 90-9(130)528
PROJECT NAME: I-90 CULVERT - LODGE GRASS
UPN: 9617002
CSF: 0.99964524
```

Cancel < Back Next > **Finish**

7. Save the file by clicking the **Save As** button and navigating to the proper location. In the file type drop-down window, select **CSV (comma delimited).csv** and click **Save**.

	A	B	C	D	E
1	A9273	407071.7	2520425	3508.75	
2	B9273	406908.9	2520670	3516.48	
3	C9273	406882.9	2520397	3497.39	
4	D9273	406864.5	2520042	3499.19	
5	E9273	406841.9	2519839	3524.64	
6					

Example of the data properly displayed in Excel.

8. Open the file in Notepad to verify the data is in the correct format.

```
9617002SUCON001.csv - Notepad
File Edit Format View Help
A9273,407071.746,2520425.123,3508.75
B9273,406908.912,2520670.347,3516.48
C9273,406882.86,2520396.659,3497.39
D9273,406864.471,2520042.351,3499.19
E9273,406841.928,2519838.856,3524.64
```

Example of the file in Notepad in the correct format.

## Creating a new Trimble Business Center Project.

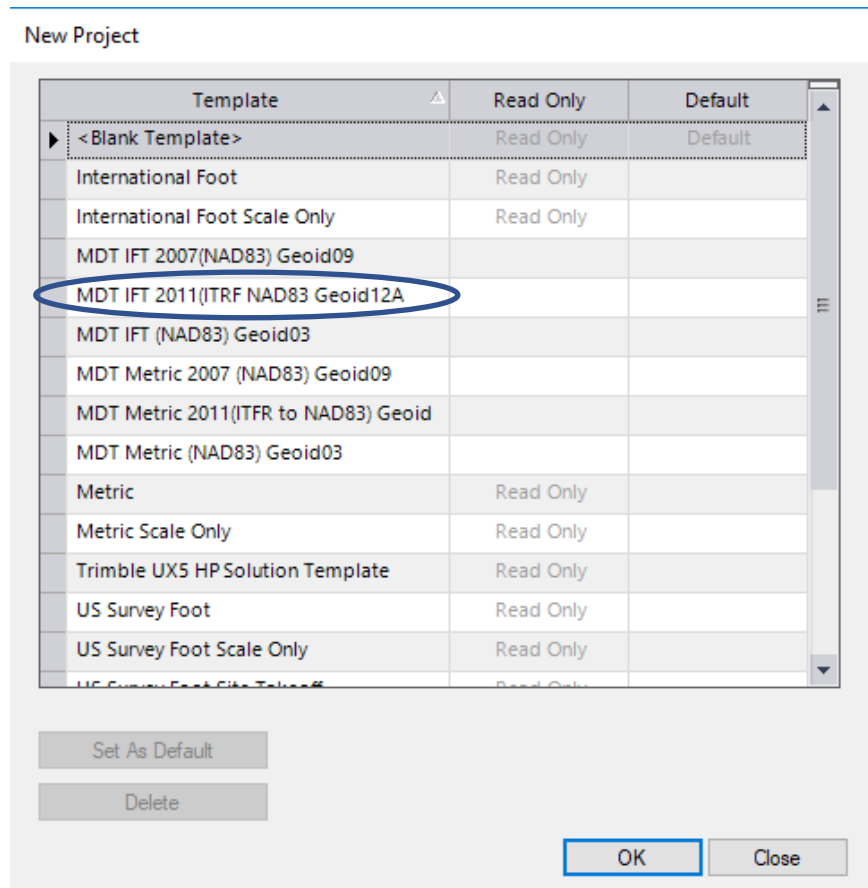
The IFT Control file and the Read Me file from DMS will be used to setup the project settings.

1. Open Trimble Business Center through Windows  or with the Trimble icon



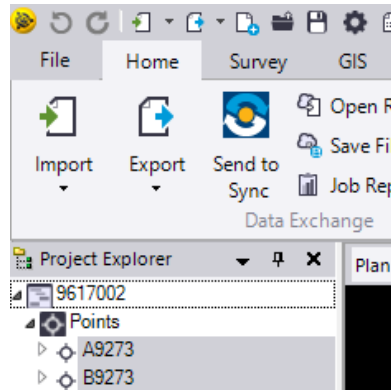
2. Click on the **+New Project** button 
3. Select the correct **Template** for the Job and click **OK**.

**NOTE:** The Templates will be provided and loaded into TBC prior to Job creation. The correct template must be chosen based off the **Read Me** file and the **IFT** file. For this example, MDT IFT 2011(ITRF NAD83) Geoid 12A will be used.

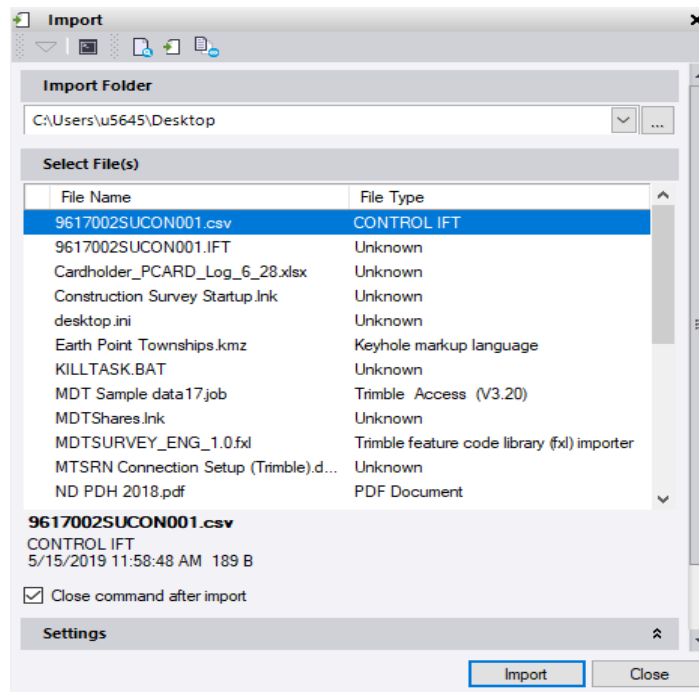


4. Save the project to the proper location.

5. Select the **Import** button in the **Home** Tab.



6. Navigate to the file and select the CSV file that was created and click the Import button.



- This will open the **TBC Import Wizard**. Select the correct **definition** in the **Import Format Editor**. For this example, we want P, N, E, elev, Code (Control), (Point, Northing, Easting, Elevation, Code, and have it imported as control.) Click **Import**.

Import Format Editor - P,N,E,elev,Code (Control) ×

Select definition.  
Select a definition from the list below and press Next button...

Definition Name	Enabled	Extension	Store Point As	Show Editor
P,L,L,h,Code (Global)	<input checked="" type="checkbox"/>	.CSV	Points	<input checked="" type="checkbox"/>
P,L,L,h,Code (Local)	<input checked="" type="checkbox"/>	.CSV	Points	<input checked="" type="checkbox"/>
P,N,E,elev,Code (Control)	<input checked="" type="checkbox"/>	.CSV	Points	<input checked="" type="checkbox"/>
P,N,E,elev,Code (Unknow	<input checked="" type="checkbox"/>	.CSV	Points	<input checked="" type="checkbox"/>
PNT	<input checked="" type="checkbox"/>	.pnt	Points	<input checked="" type="checkbox"/>
ProMark Field	<input checked="" type="checkbox"/>	.CSV	Points	<input type="checkbox"/>

Only show enabled definitions Restore All

Test << < Back Next > Import Finish Cancel

C:\Users\u5645\Desktop\9617002SUCON001.csv Read File

Import Preview

Point ID	Northing	Easting	Elevation	Feature Code
A9273	407071.746	2520425.123	3508.75	
B9273	406908.912	2520670.347	3516.48	
C9273	406882.86	2520396.659	3497.39	
D9273	406864.471	2520042.351	3499.19	

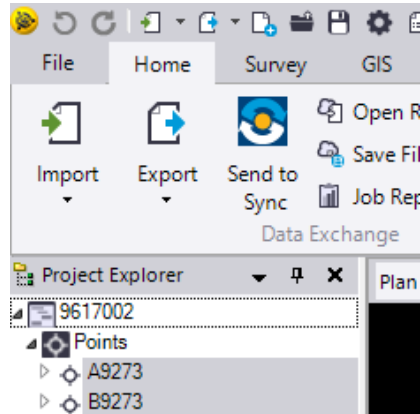
File View


```
A9273,407071.746,2520425.123,3508.75
B9273,406908.912,2520670.347,3516.48
C9273,406882.86,2520396.659,3497.39
D9273,406864.471,2520042.351,3499.19
E9273,406841.928,2519838.856,3524.64
```

**NOTE:** Notice how the **Import Preview** and **File View** show us exactly how we want to see the data displayed. This is another check to make sure the correct definition was selected.

## Creating a .JOB file for the Data collector.

1. Highlight the data to be exported. Either window around the points to select them or select the desired points using the **Points** drop down in **Project Explorer** tab.
2. Click on the **Export** button in the **Home** tab.



3. This will bring up the **Export Wizard** to export the selected data in the correct format. Select the file format under the **Survey** tab depending which data collector that will be used. Scroll down to the bottom of the list to find **Trimble Access Job File Exporter** or **Survey Pro Job File Exporter** and select one.
4. The **Data** box shows the number of elements selected. The **Options** button gives a variety of ways to select the necessary data.
5. The **File Name** box is the place to name the file to be exported. Use the proper naming convention and navigate to the TBC project folder. A copy of all exported files should remain in the project folder for the permanent record. The first export of control will be the master file and named accordingly. For example, 9617002\_Control.job. For each day's work the control file will be renamed using the naming convention of 9617002\_TP01.job. The next day would be named TP02 and so on.
6. **Settings**. Here is where you must make sure to specify what settings you want for the equipment being used. You will need to know what **File Version** the collector you choose is currently running. To check the **File Version** the data collector is running, click on the Trimble symbol in the upper left-hand corner of the screen on a **TSC2** or **TSC3** and click **About**. For the **TSC7**, click the  icon and then click **About** for version information.

For **Survey Pro**, go to **File** and then click **About** for version information

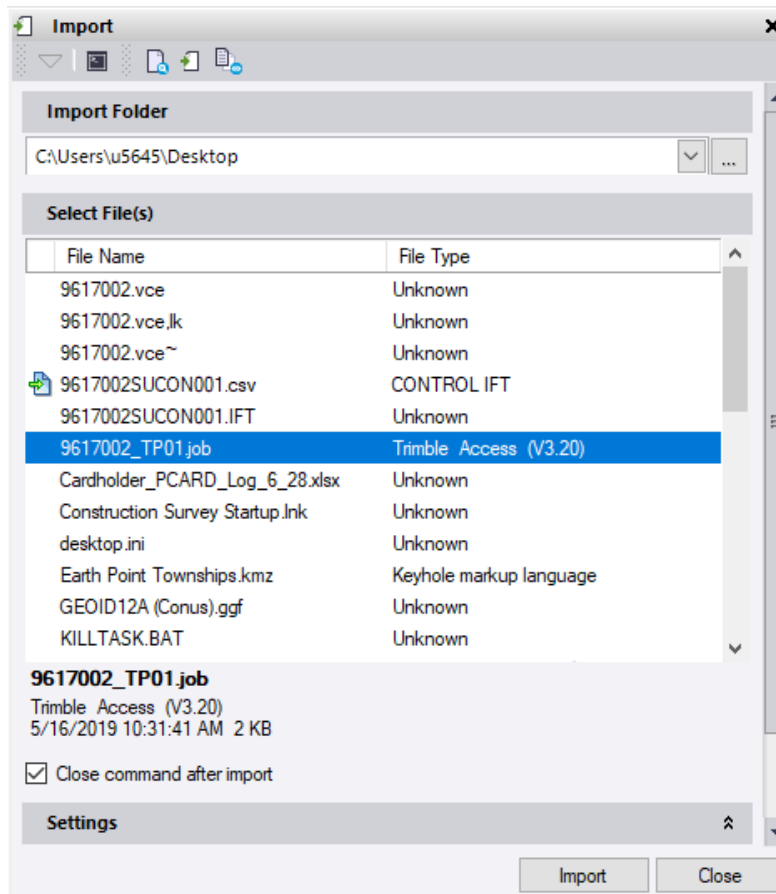
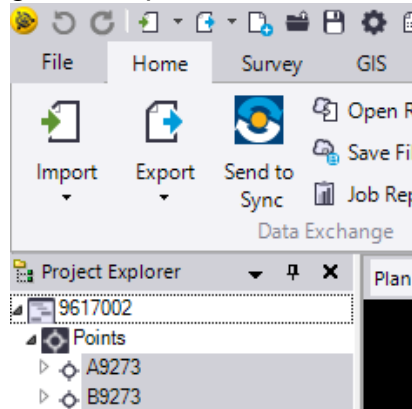




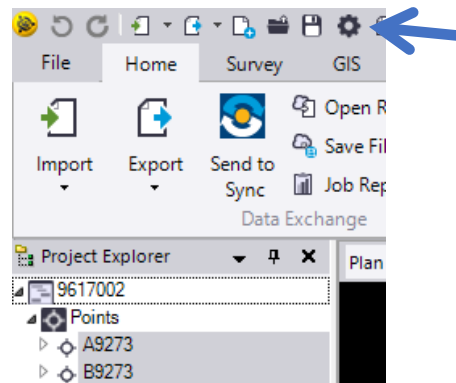
7. With all the correct settings, click **Export**. The JOB file can be copied, renamed and uploaded to the collector.

## Processing Survey Data with Feature Codes

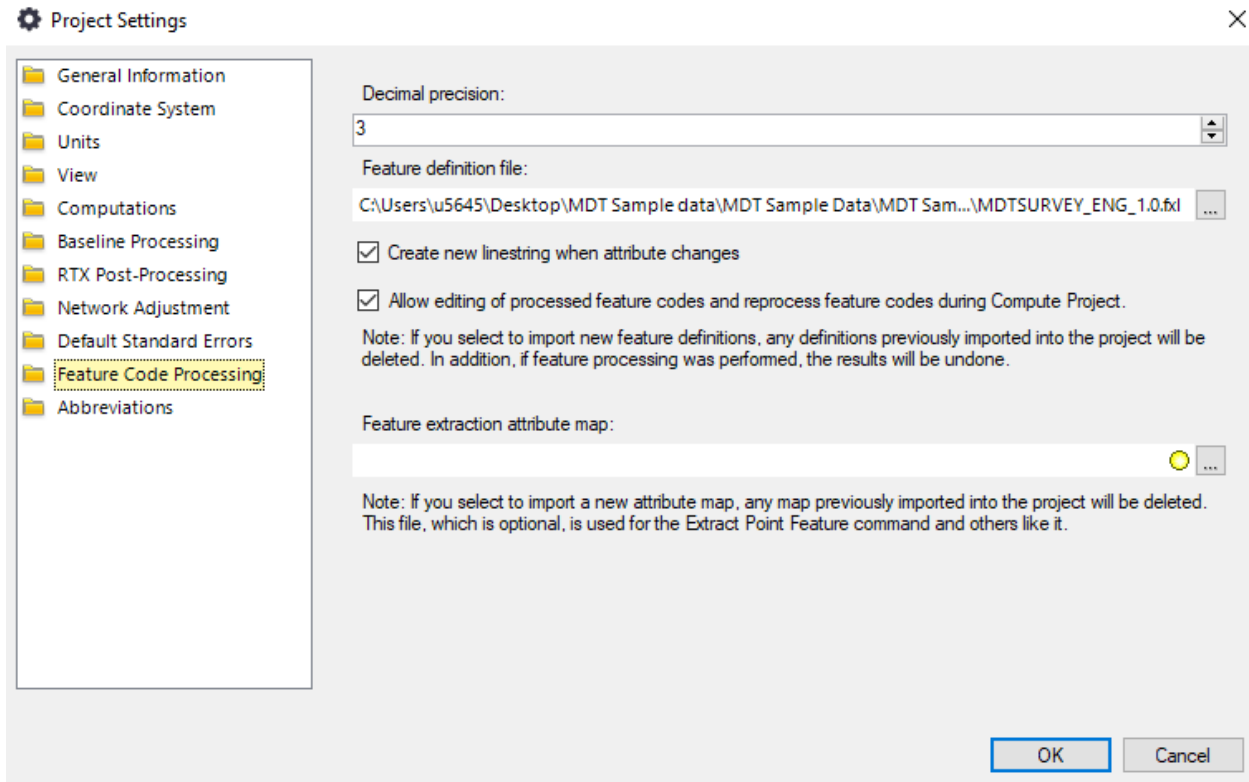
1. Open the existing Trimble Business Center project that the original .JOB file was created from.
2. Click the **Import** button in the **Home** tab. Navigate to the proper location and select that day's file. TBC will recognize the file format and automatically import the data. You can also drag and drop the file into TBC to import the data.



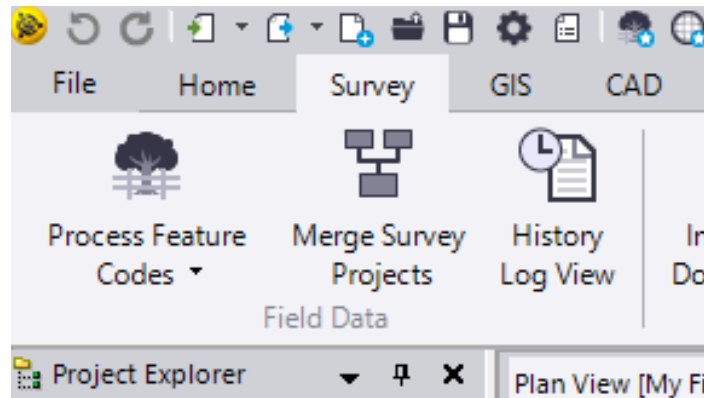
- To link the Feature Codes to the project, click on the Project settings button. This button is in the top ribbon.



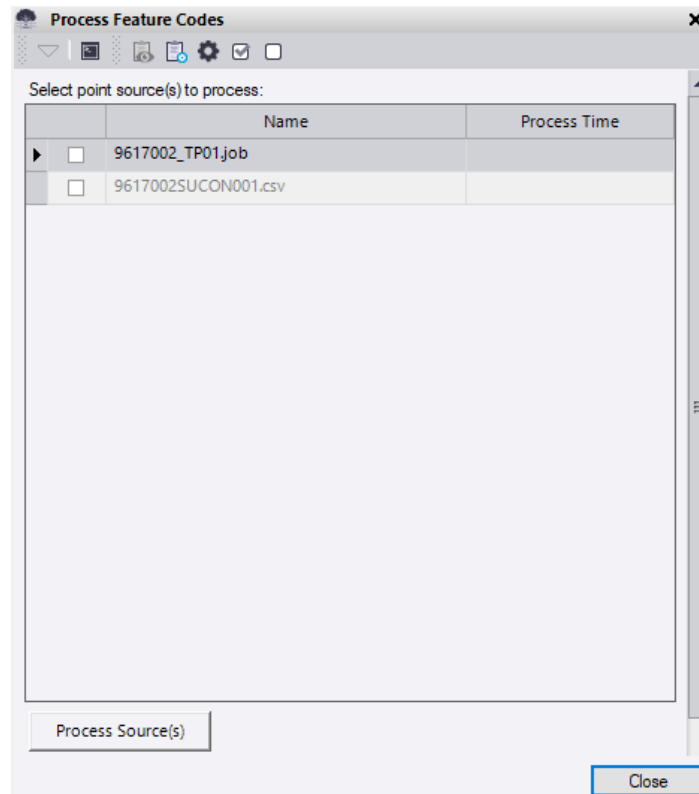
- In **Project Settings**, open the **Feature Code Processing** folder and in the **Feature definition file**, navigate to the proper Feature Code List. Click **OK**.



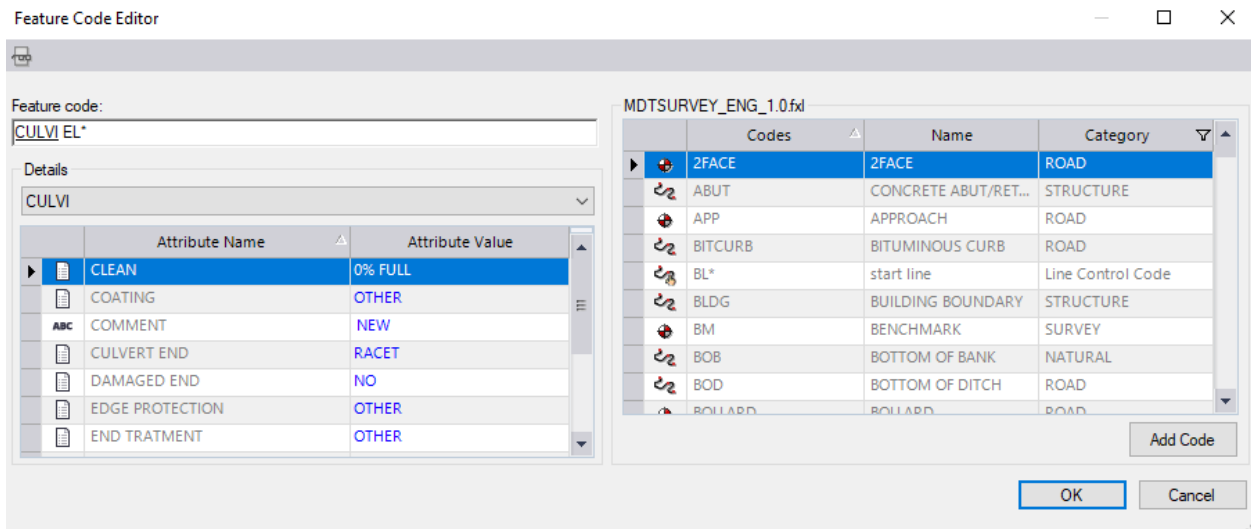
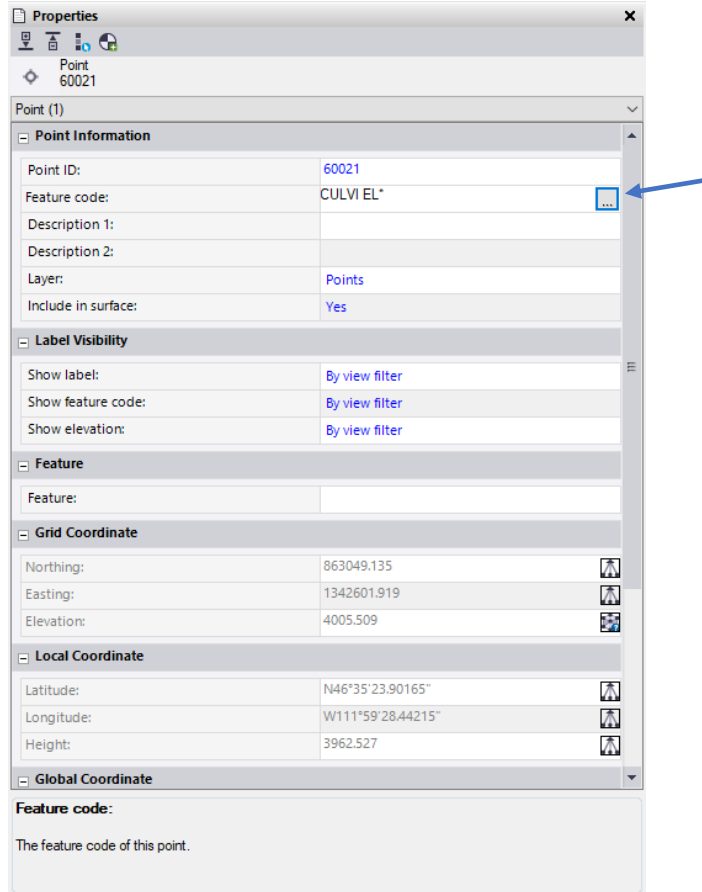
5. With the Feature Codes attached, click the **Survey** tab and click **Process Feature Codes** in the **Field Data** ribbon.



6. This will bring up the **Process Feature Codes Wizard**. Select the file(s) you wish to process and click on **Process Source(s)**. Multiple files can be selected and processed or reprocessed each time.

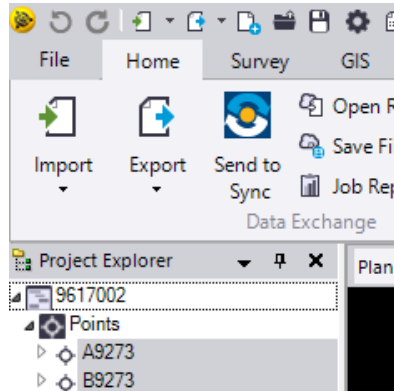


- To change a code or attributes of a code, select the point number and right click to view the properties of that point. Click on the box in the Feature Code to access and change/add any attributes. After making any changes or all changes, run **Process Feature Codes** again to see updated linework.



## Exporting Points for MicroStation.

1. Highlight the data you wish to export. Either window around the points to select them or select the desired points using the **Points** drop down in **Project Explorer** tab.
2. Click on the **Export** button in the **Home** tab.



3. This will bring up the **Export Wizard** to export the selected data in the correct format. Select the **Custom** tab and **MDTSURVEY\_ENG**. See **Creating a Custom Export Format in Trimble Business Center** to create a custom style
4. Navigate to the correct location to store the file and click on **Export**.

**NOTE:** This custom format will create a .csv file for Open Roads Survey. When the file is created, headers are created naming each column's information. Remove these headers before import into Open Roads Survey or an error will occur.

