SEEQUENT

OpenGround

Tutorial TSF5

How to Create a Section Template

Last updated: March 2026

Seequent, The Bentley Subsurface Company

1. Contents

1. Contents 1
2. Introduction 3
3. Accompanying Files 4
4. Setting up a Section Template 5
   - 4.1 Starting Template Studio 5
   - 4.2 Selecting a Project 6
   - 4.3 Setting up the Section Template 6
   - 4.4 Designing the Header Area 10
   - 4.4.1 Inserting a Logo 10
   - 4.4.2 Inserting Dynamic Text 12
   - 4.4.3 Inserting Spacing 12
   - 4.4.4 Inserting Client Text 13
   - 4.4.5 Inserting Client Lookup 13
   - 4.4.6 Inserting Project Title Text 15
   - 4.4.7 Inserting Project Title Lookup 15
   - 4.4.8 Inserting Vertical Scale Text 16
   - 4.4.9 Inserting Vertical Scale Lookup 16
   - 4.4.10 Inserting Project Name Text 17
   - 4.4.11 Inserting Project Name Lookup 18
   - 4.4.12 Inserting Project Location Text 18
   - 4.4.13 Inserting Project Location Lookup 19
   - 4.4.14 Inserting Horizontal Scale Text 19
   - 4.4.15 Inserting Horizontal Scale Lookup 20
   - 4.4.16 Inserting Spacing 20
   - 4.5 Inserting Section Properties 22
   - 4.5.1 Creating a Strip Area 22
   - 4.5.2 Creating spacing for the Legend Block Area 23
   - 4.5.3 Creating a Legend Block Area 25
   - 4.5.4 Creating a Horizontal Axis Text 28
5. Creating Strips for Sections 32
   - 5.1 Creating a Strip Template 32

5.1.1 Setting up the Depth Area 33
5.1.2 Formatting the Template 42
5.1.3 Setting up the SPT Column 43
5.1.4 Setting up the Legend Column 45
5.1.5 Setting up the Depth Column 46
5.1.6 Setting up the Lab Tests Column 46
5.1.7 Saving the CPT Template 49
6. Creating a Strip Profile 51
6.1 Creating the Strip Profile 51
7. Applying all of the settings to the Section Template 55
8. Final Template Output 67

2. Introduction

This guide has been developed to assist users in producing a Section Template. It will demonstrate the basics of creating the template and using the functions of the Template Studio application.

Section Templates were remade in 2025 to support more enhanced functionality. It is still possible to create the old version of Section Templates (labelled as Legacy in the interface), however this guide shows how to create a new Section Template.

A Section Template will show different Strip Templates across a section line depending on a condition (such as the type of location). They also expand to support hide and show conditions for certain columns (such as hiding a column if no data is present) to show a more complex and customized output.

This will be done in the format of a tutorial, which can be followed along with producing a replica output while introducing core concepts and ideas.

This guide can be followed from the beginning to create a finialised output or can be used to jump to a specific section along with the accompanying files that have been provided as a ‘jumping in’ point.

Users are expected to have a basic understanding of how OpenGround is set up and how configurations function within the scope of configuration packs. In this tutorial, users are also expected to have a basic knowledge of how a template is setup, it is recommended to follow through ‘Tutorial TSF1 – How to Create a Borehole Log’ if this is not the case.

Note that this guide has been created with the US market in mind, hence the dimensions and outputs being suited to a US output. Due to this, the US configuration pack has been used.

However, this guide can be applied by users across the world as needed.

3. Accompanying Files

Note that the following downloads are also available to help users compare the output at the end of each section, or to allow users to skip to the section that they wish to work through.

The example project used has the Project ID of SEQ-BEN-000 and can be found here;

1. SEQ-BEN-000.zip

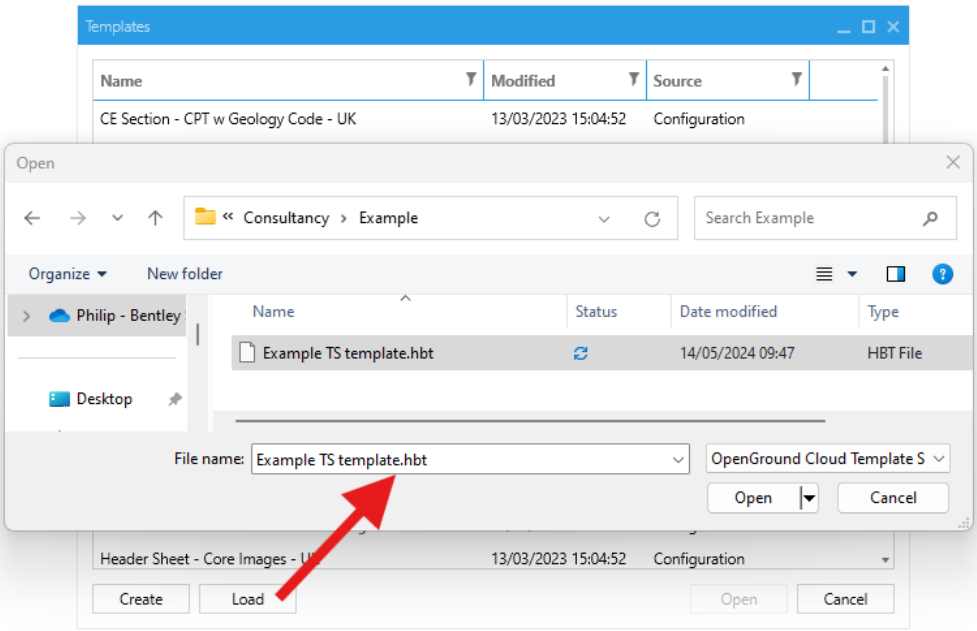
The templates that can be used along with this guide can be found here;

1. Section Template Blank.hbt
2. Section Template after Header Setup.hbt
3. Section Template after Section Properties Added.hbt
4. Strip Template – Boreholes.hbt
5. Strip Template – CPTs.hbt
6. Section Template Final.hbt

Full HBC files can be found here;

1. Tutorial Section Template.hbc
2. Master Strip Profile.hbc
3. Strip Templates.hbc

Templates can be saved as an external file to allow them to be distributed. To load such a template file (.hbt) click the Load button and browse to the file:



Note that you will need to save the template manually to store it on the system.

4. Setting up a Section Template

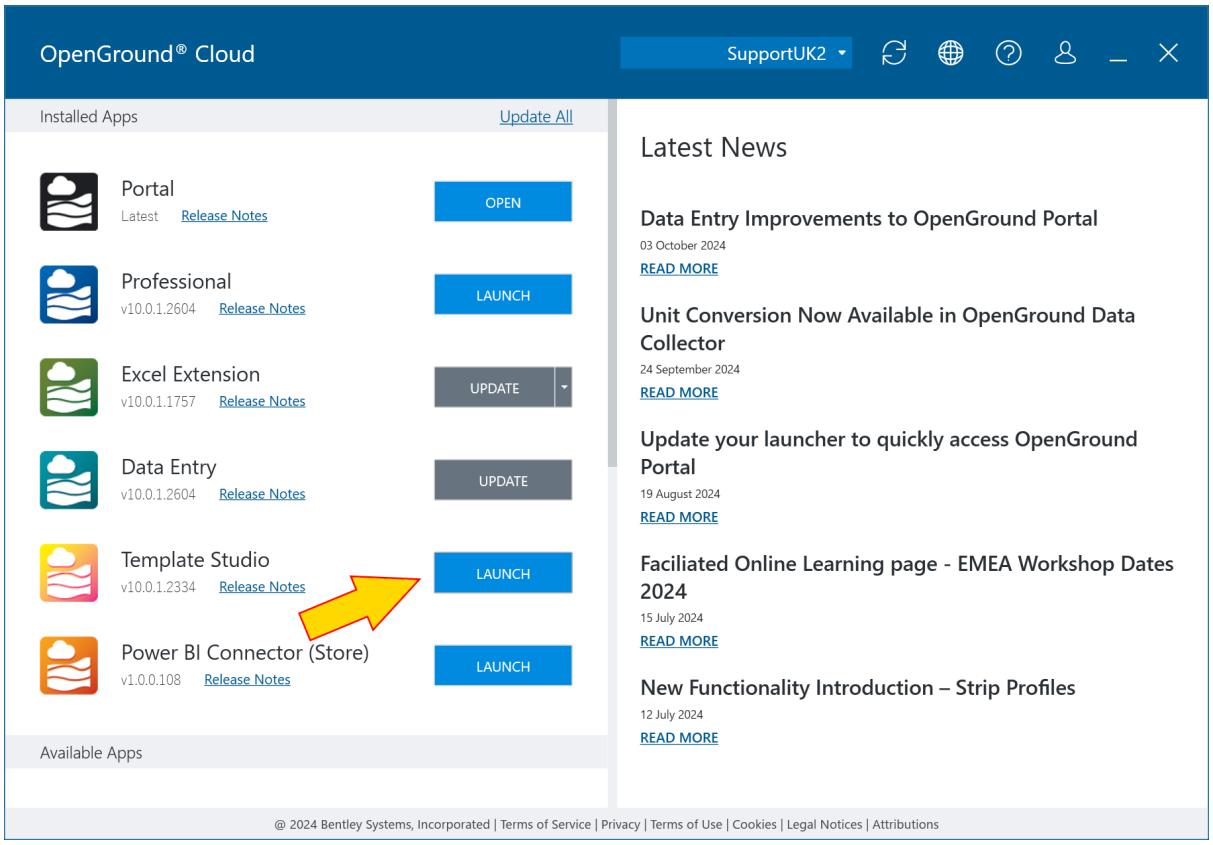
At the end of this tutorial, a user should be able to create a Section Template, along with two different strips that have conditional display functionality to show data on the Section Template.

Please note that the SEQ-BEN-000 example project is used in this tutorial. Please see this guide on how to setup this project if following along and not using other data.

This tutorial is also based as a follow on to the TSF1 – How To Create a Borehole Log tutorial. If the user has a basic understanding of Template Studio then this can be skipped and this tutorial started at the stepping on point file.

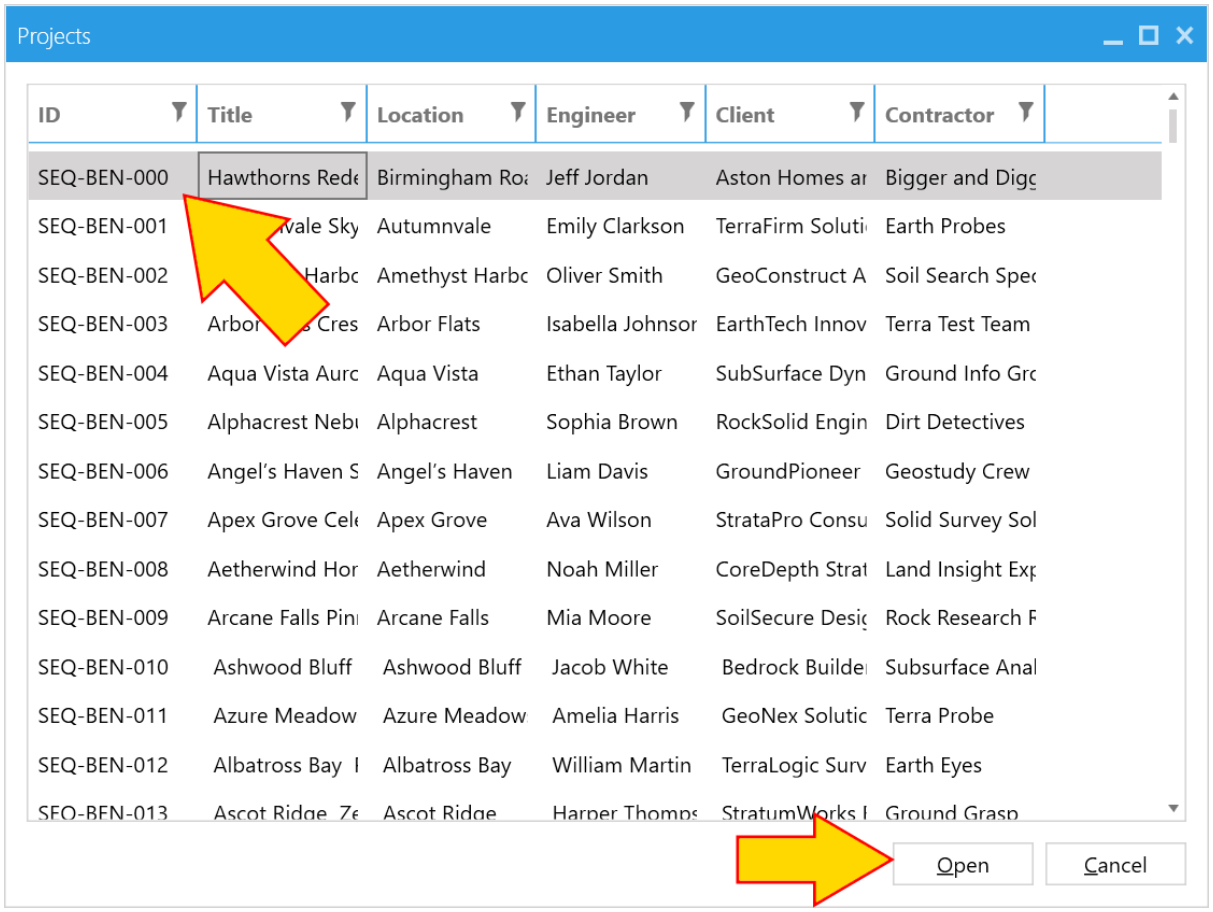
4.1 Starting Template Studio

Template Studio is launched from the OpenGround Launcher. Assuming that no updates are available for the application, press the Launch button next to the Template Studio application to launch the software.



4.2 Selecting a Project

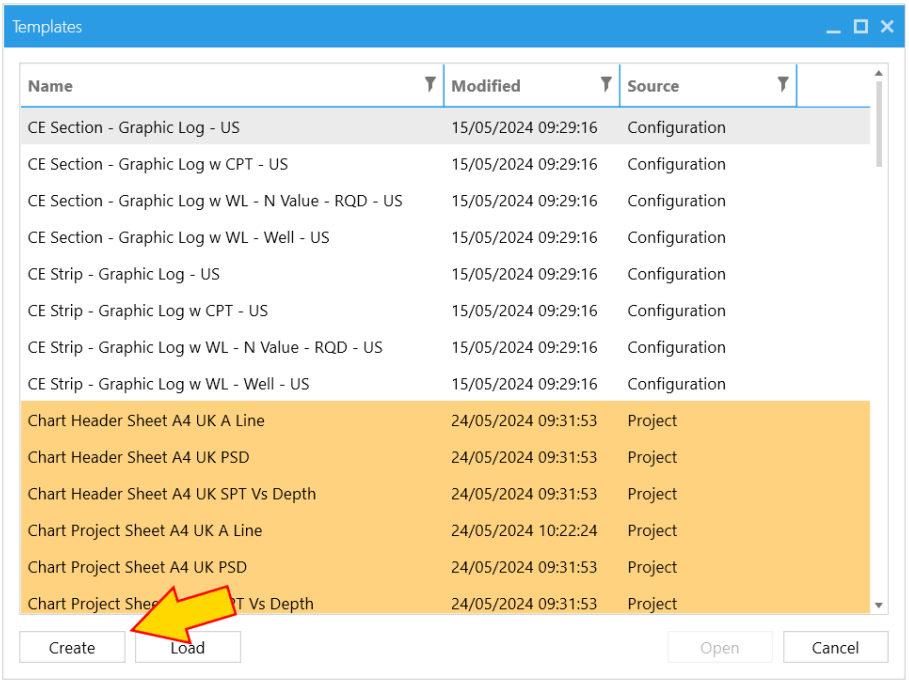
Template Studio works on the basis that a user will be creating a template with the use of project data, therefore it allows for a project to be selected once it has been launched. Any data that is then previewed within Template Studio will use the live project data to give a preview that is indicative of what the finished template would look like. To select the relevant project, simply find the project in the list, select it by clicking on it, then double click on it or click the Open button to advance to the next window.



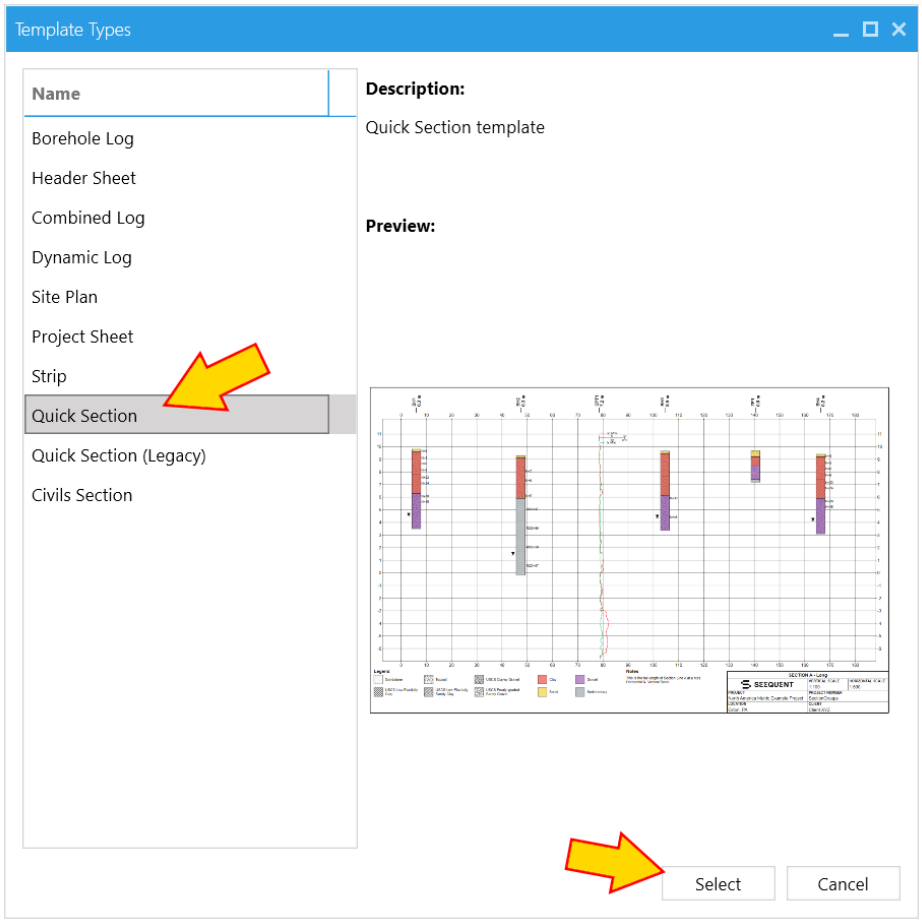
4.3 Setting up the Section Template

This guide will start with creating a Section Template before then guiding on how to create Strips that will function with it and then adjusting these together to produce the best output.

To begin, at the Template Selection window, select the option for Create.



Select the Quick Section option and then press the Select button.

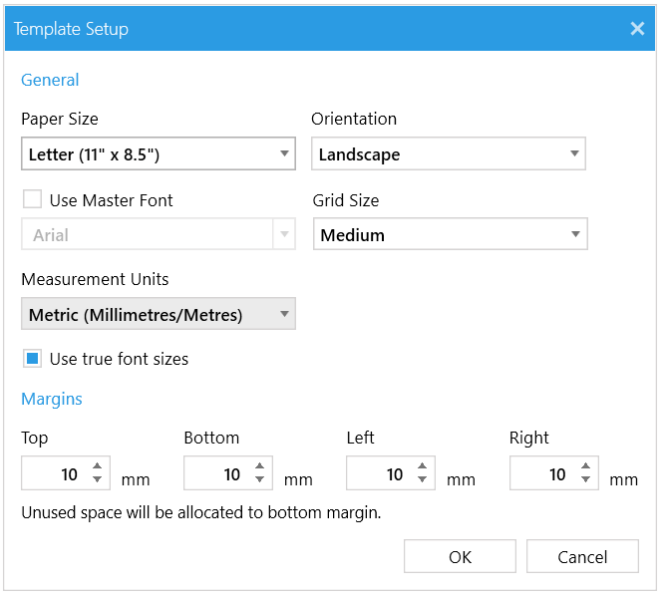


Section Templates were remade in 2025 to support more enhanced functionality. It is still possible to create the old version of Section Templates (labelled as Legacy in the interface), however this guide shows how to create a new Section Template.

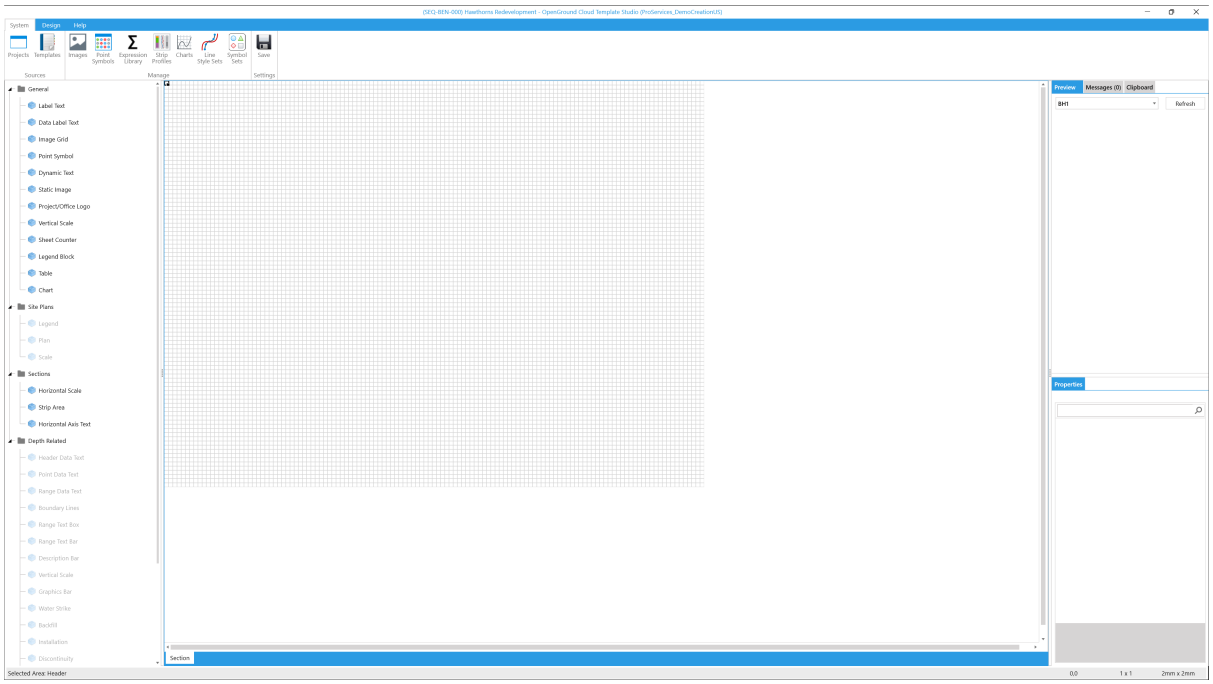
The Template Setup window will then appear allowing for the properties of the Quick Section template to be set. Set the values so that they are as follows;

- **Paper Size** – Letter (11” x 8.5”)
- **Orientation** – Landscape
- **Use Master Font** – Not Selected
- **Grid Size** – Medium
- **Measurement Units** – Millimeters/Metres

- **Use True Font Sizes** – Enabled
- **Margin Top** – 10mm
- **Margin Bottom** – 10mm
- **Margin Left** - 10mm
- **Margin Right** – 10mm



This will create the Quick Section Template and allow for the header area to be designed as needed. This will appear as an empty grid, similar to a Microsoft Excel workbook.



As the grid size was set to Medium, that means that each cell in the grid is 2mm by 2mm in size. All of the instructions in this guide will reference both the amount of cells being selected and the actual size.

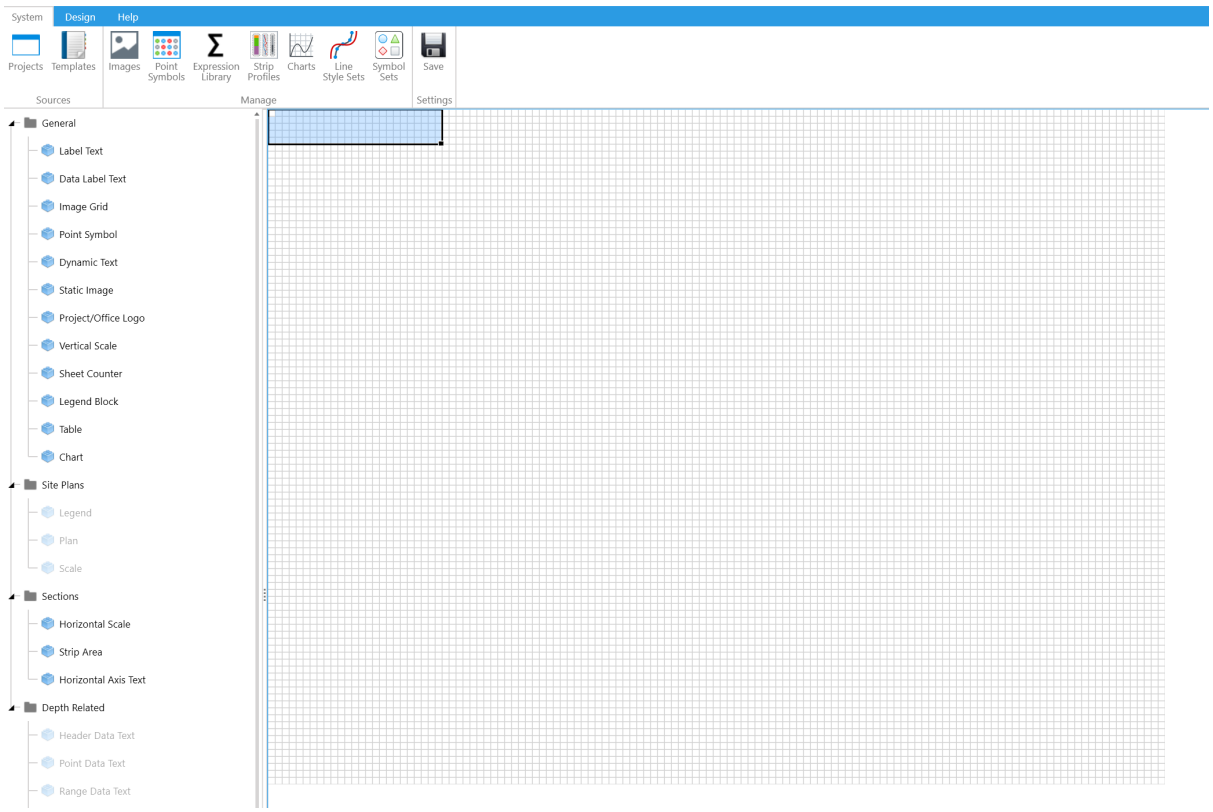
4.4 Designing the Header Area

Now that the Section template has been setup and is ready to be manipulated, it is time to start creating some areas to insert Library Items into.

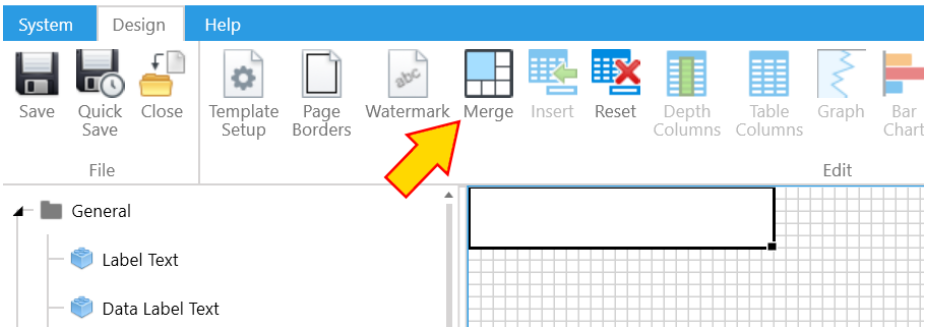
The tutorial can be continued on from Section Template Blank.hbt

4.4.1 Inserting a Logo

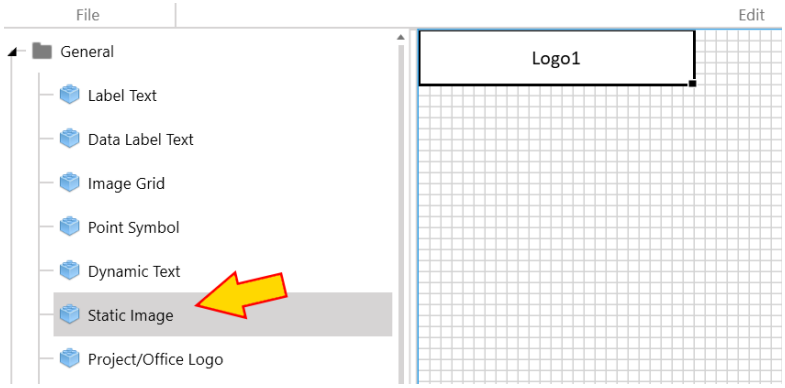
Select the top left most available cell and then highlight the cells so that an area that is 25 cells wide and 5 cells high (50mm x 10mm).



Then select the Design tab in the ribbon and then select Merge.

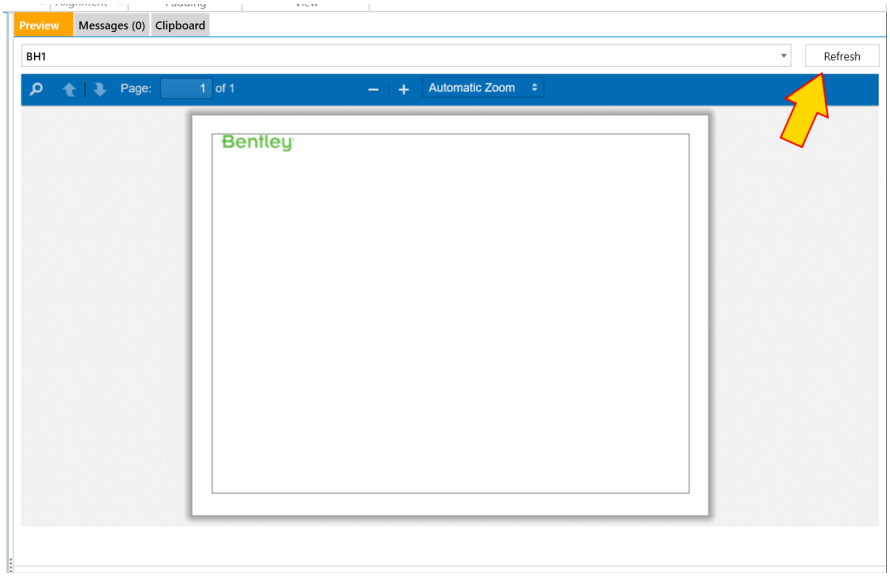


This then creates a merged area. Select the newly created merged area and then double click on the Static Image library item.



Assuming that the standard logo hasn't been changed in the configuration pack, this will place the Logo1 item (which by default is the Bentley Logo) into the merged area.

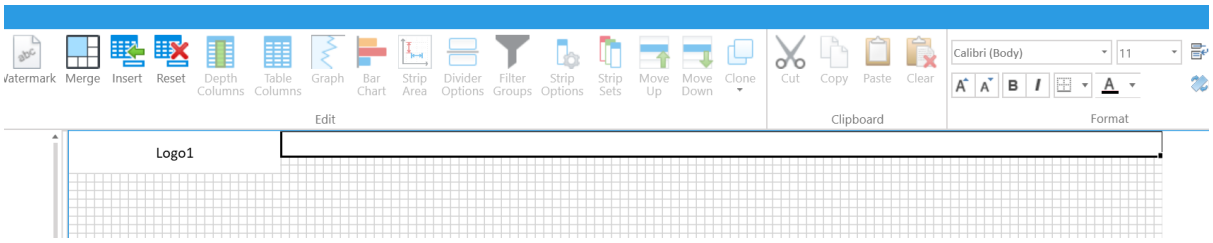
Select the Refresh button in the Preview window to view the changes that have been made.



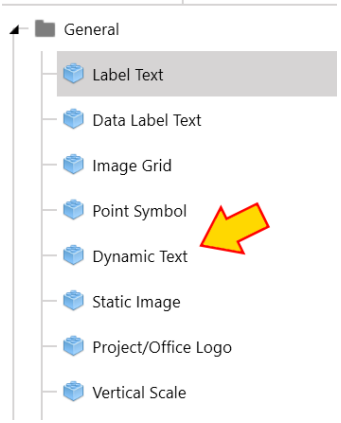
To find out more about how to change the default logo that is used on templates. See this How To guide here.

4.4.2 Inserting Dynamic Text

Select the Top Left most available cell to the right of the merged area that was just created, then create a selection that is 104 cells by 3 cells (208mm x 6mm) and select the Merge option to create a new merged area.



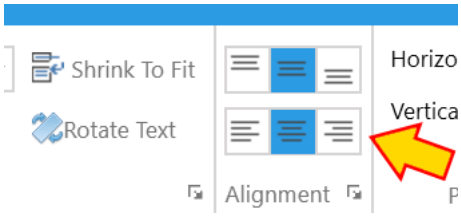
Click on the newly merged area and then double click on the Dynamic Text library item.



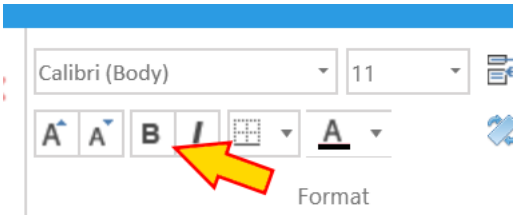
Set the following information in the Properties window.

- **InitialValue** – Section Line
- **Key** – Title

Set the text to be right aligned by selecting the Right Align option in the ribbon.

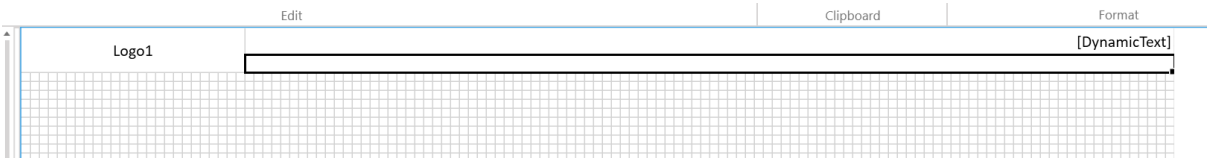


Set the text to be bold by selecting the Bold option in the ribbon.



4.4.3 Inserting Spacing

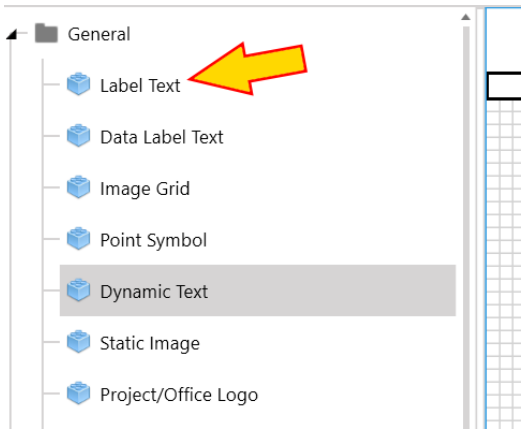
Select the Top Left most available cell to the right of the merged area that was just created, then create a selection that is 104 cells by 2 cells (208mm x 4mm) and select the Merge option to create a new merged area.



4.4.4 Inserting Client Text

Select the Top Left most available cell underneath the merged cells that were just created, then create a selection that is 6 cells by 2 cells (12mm x 4mm) and select the Merge option to create a new merged area.

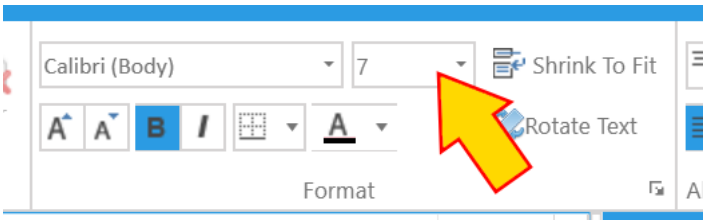
Double Click on the Label Text Library item



Change the Text property in the Properties window to state the following;

- **Text** – CLIENT

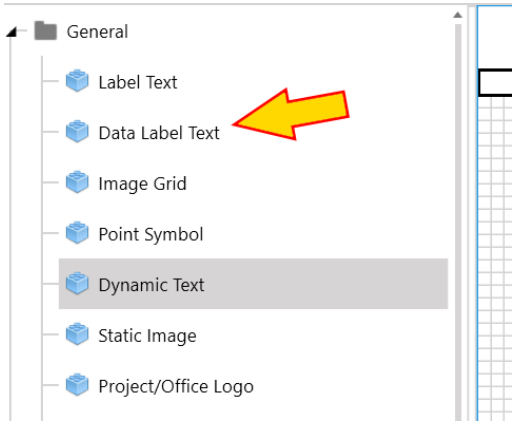
Change the text alignment to be left aligned, and select the option to Bold the text. Also change the Font Size to be 7.



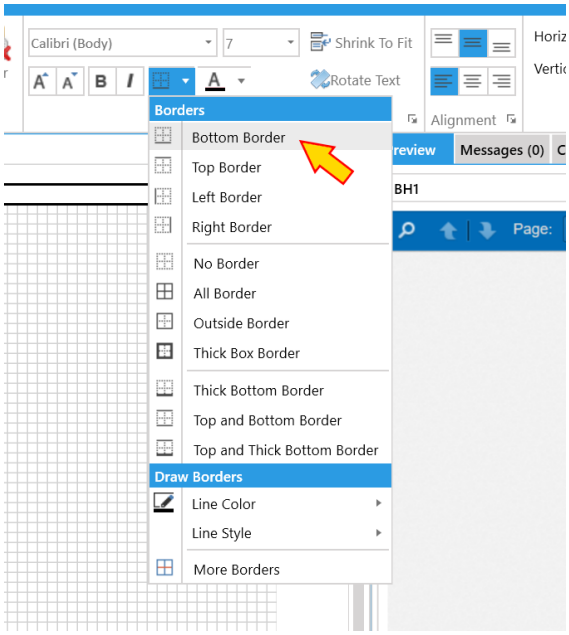
4.4.5 Inserting Client Lookup

Select the Top Left most available cell to the right of the merged area that was just created, then create a selection that is 36 cells by 2 cells (72mm x 4mm) and select the Merge option to create a new merged area.

Double Click on the Data Label Text Library item



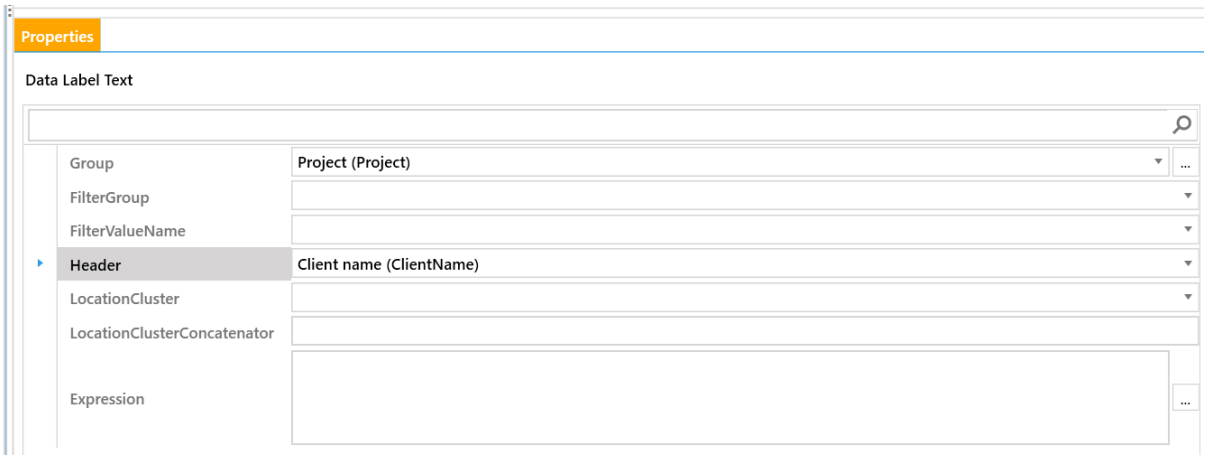
Change the text alignment to be left aligned and also change the Font Size to be 7. Select the Border option and select the option for Bottom Border.



Change the following in the Properties window;

- **Group** – Project (Project)
- **FilterGroup** – (NULL)
- **FilterValueName** – (NULL)
- **Header** – Client name (ClientName)

- **LocationCluster** – (NULL)
- **LocationClusterConcatenator** – (NULL)
- **Expression** – (NULL)



4.4.6 Inserting Project Title Text

Select the Top Left most available cell to the right of the merged area that was just created, then create a selection that is 11 cells by 2 cells (22mm x 4mm) and select the Merge option to create a new merged area.

Double Click on the Label Text Library item.

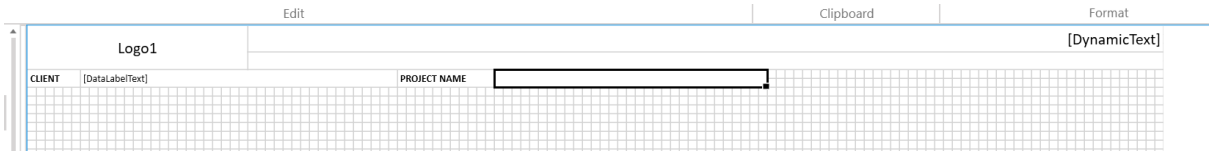
Change the Text property in the Properties window to state the following;

- **Text** – PROJECT NAME

Change the text alignment to be left aligned, and select the option to Bold the text. Also change the Font Size to be 7.

4.4.7 Inserting Project Title Lookup

Select the Top Left most available cell to the right of the merged area that was just created, then create a selection that is 31 cells by 2 cells (62mm x 4mm) and select the Merge option to create a new merged area.

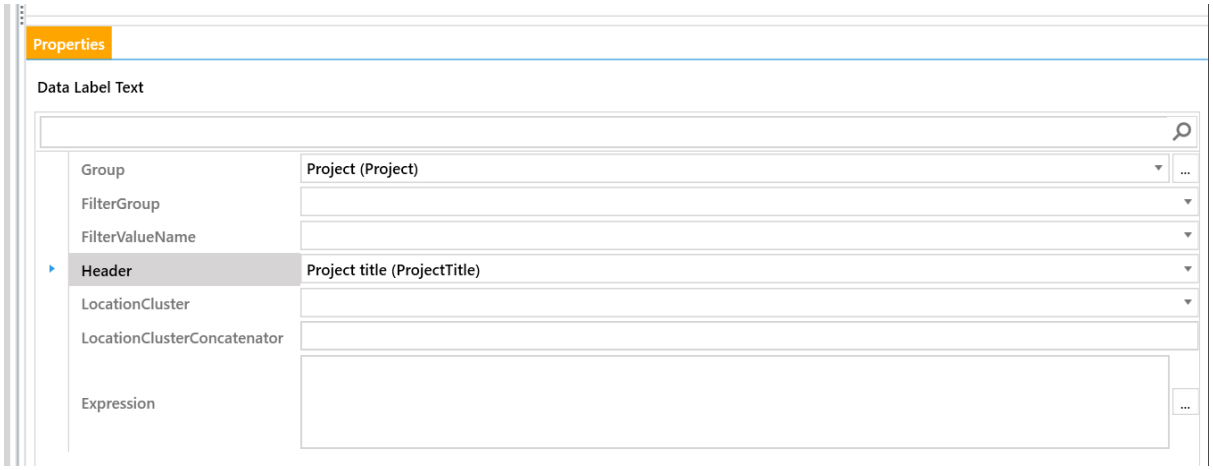


Double Click on the Data Label Text Library item.

Change the text alignment to be left aligned and also change the Font Size to be 7. Select the Border option and select the option for Bottom Border.

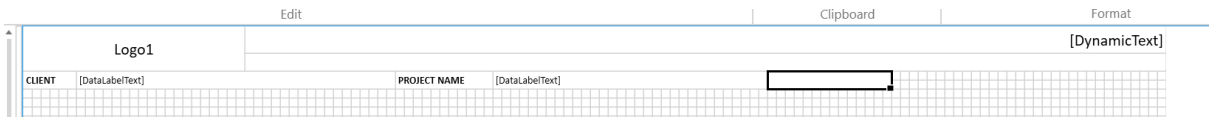
Change the following in the Properties window;

- **Group** – Project (Project)
- **FilterGroup** – (NULL)
- **FilterValueName** – (NULL)
- **Header** – Project title (ProjectTitle)
- **LocationCluster** – (NULL)
- **LocationClusterConcatenator** – (NULL)
- **Expression** – (NULL)



4.4.8 Inserting Vertical Scale Text

Select the Top Left most available cell to the right of the merged area that was just created, then create a selection that is 14 cells by 2 cells (28mm x 4mm) and select the Merge option to create a new merged area.



Double Click on the Label Text Library item.

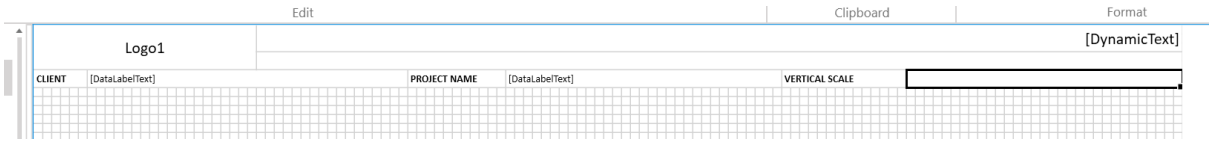
Change the Text property in the Properties window to state the following;

- **Text** – VERTICAL SCALE

Change the text alignment to be left aligned, and select the option to Bold the text. Also change the Font Size to be 7.

4.4.9 Inserting Vertical Scale Lookup

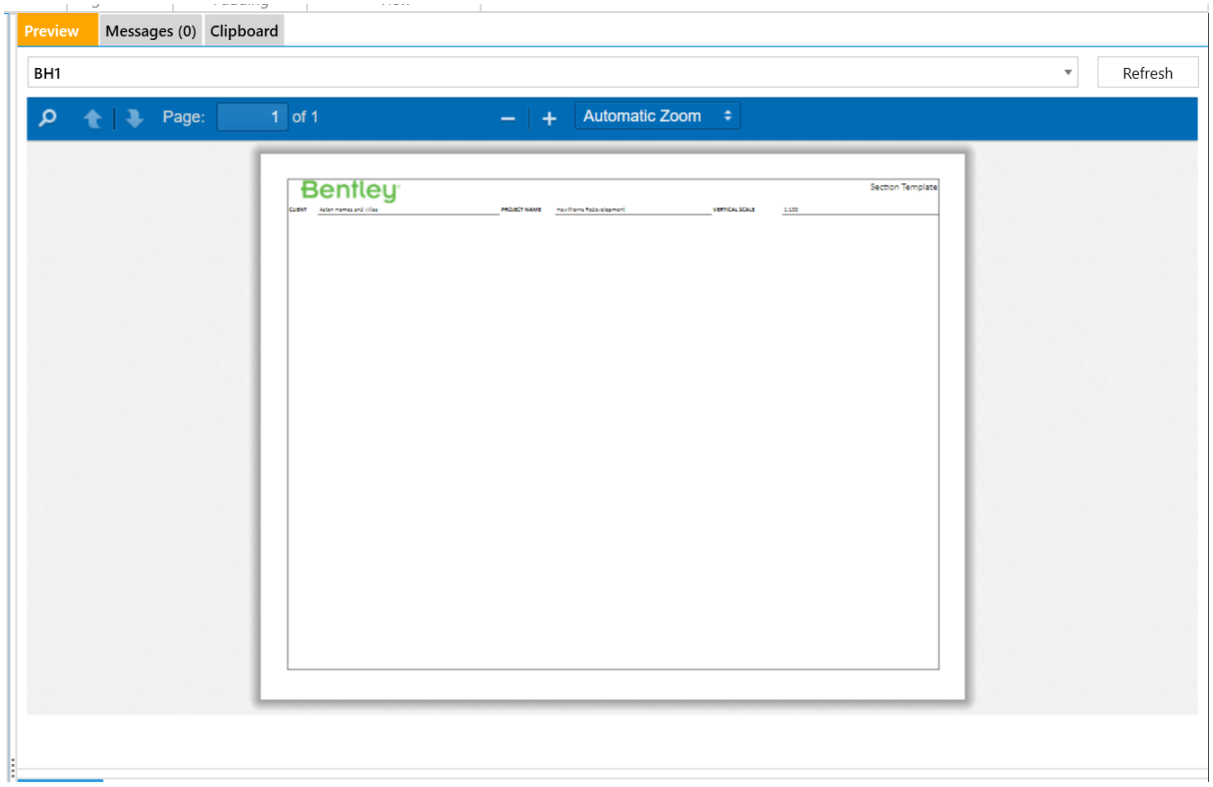
Select the Top Left most available cell to the right of the merged area that was just created, then create a selection that is 31 cells by 2 cells (62mm x 4mm) and select the Merge option to create a new merged area.



Double Click on the Vertical Scale Library item.

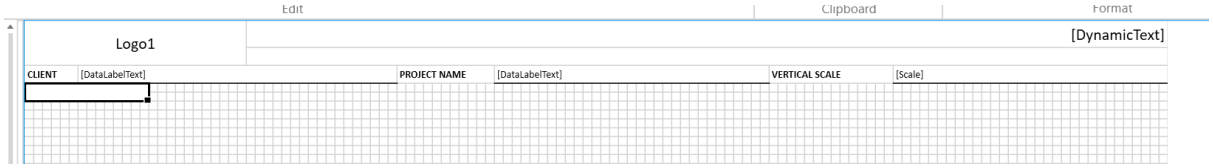
Change the text alignment to be left aligned and also change the Font Size to be 7. Select the Border option and select the option for Bottom Border.

Select the Refresh button in the Preview window to view the changes that have been made.



4.4.10 Inserting Project Name Text

Select the Top Left most available cell underneath the merged cells that were just created, then create a selection that is 14 cells by 2 cells (28mm x 4mm) and select the Merge option to create a new merged area.



Double Click on the Label Text Library item.

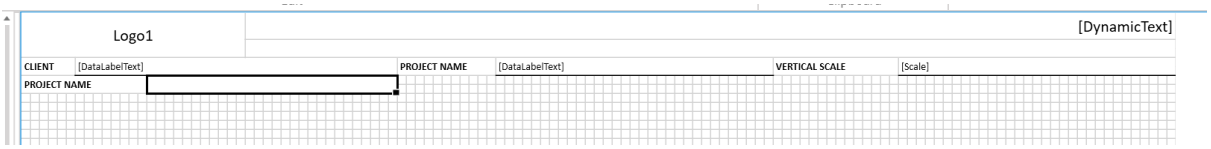
Change the Text property in the Properties window to state the following;

- **Text** – PROJECT NAME

Change the text alignment to be left aligned, and select the option to Bold the text. Also change the Font Size to be 7.

4.4.11 Inserting Project Name Lookup

Select the Top Left most available cell to the right of the merged area that was just created, then create a selection that is 28 cells by 2 cells (56mm x 4mm) and select the Merge option to create a new merged area.



Double Click on the Data Label Text Library item.

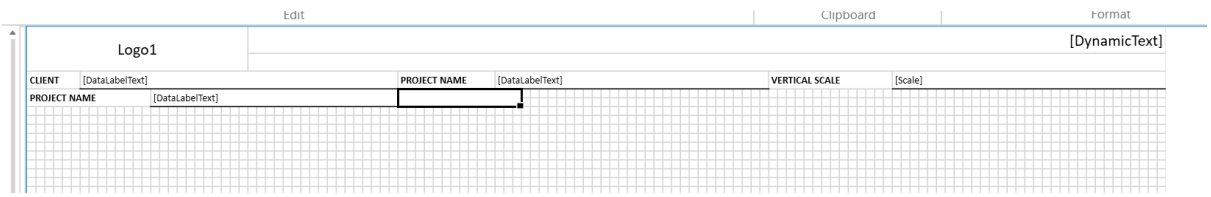
Change the text alignment to be left aligned and also change the Font Size to be 7. Select the Border option and select the option for Bottom Border.

Change the following in the Properties window;

- **Group** – Project (Project)
- **FilterGroup** – (NULL)
- **FilterValueName** – (NULL)
- **Header** – Project ID (ProjectID)
- **LocationCluster** – (NULL)
- **LocationClusterConcatenator** – (NULL)
- **Expression** – (NULL)

4.4.12 Inserting Project Location Text

Select the Top Left most available cell to the right of the merged area that was just created, then create a selection that is 14 cells by 2 cells (28mm x 4mm) and select the Merge option to create a new merged area.



Double Click on the Label Text Library item.

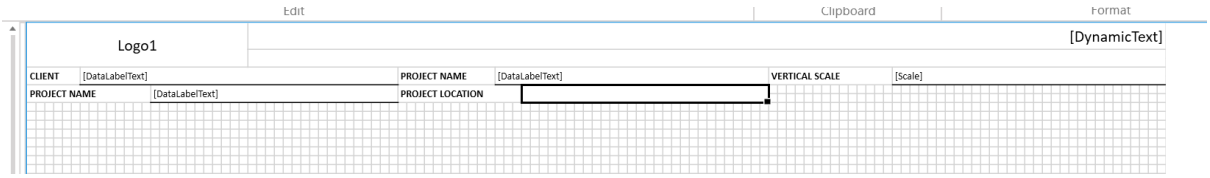
Change the Text property in the Properties window to state the following;

- **Text** – PROJECT LOCATION

Change the text alignment to be left aligned, and select the option to Bold the text. Also change the Font Size to be 7.

4.4.13 Inserting Project Location Lookup

Select the Top Left most available cell to the right of the merged area that was just created, then create a selection that is 28 cells by 2 cells (56mm x 4mm) and select the Merge option to create a new merged area.



Double Click on the Data Label Text Library item.

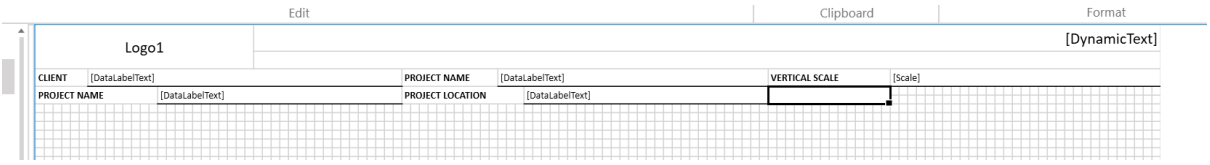
Change the text alignment to be left aligned and also change the Font Size to be 7. Select the Border option and select the option for Bottom Border.

Change the following in the Properties window;

- **Group** – Project (Project)
- **FilterGroup** – (NULL)
- **FilterValueName** – (NULL)
- **Header** – Location of site (SiteLocation)
- **LocationCluster** – (NULL)
- **LocationClusterConcatenator** – (NULL)
- **Expression** – (NULL)

4.4.14 Inserting Horizontal Scale Text

Select the Top Left most available cell to the right of the merged area that was just created, then create a selection that is 14 cells by 2 cells (28mm x 4mm) and select the Merge option to create a new merged area.



Double Click on the Label Text Library item.

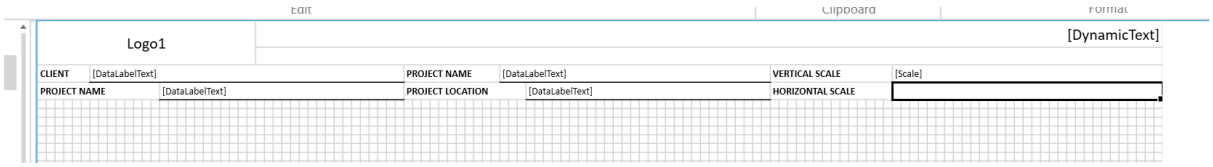
Change the Text property in the Properties window to state the following;

- **Text** – HORIZONTAL SCALE

Change the text alignment to be left aligned, and select the option to Bold the text. Also change the Font Size to be 7.

4.4.15 Inserting Horizontal Scale Lookup

Select the Top Left most available cell to the right of the merged area that was just created, then create a selection that is 31 cells by 2 cells (62mm x 4mm) and select the Merge option to create a new merged area.

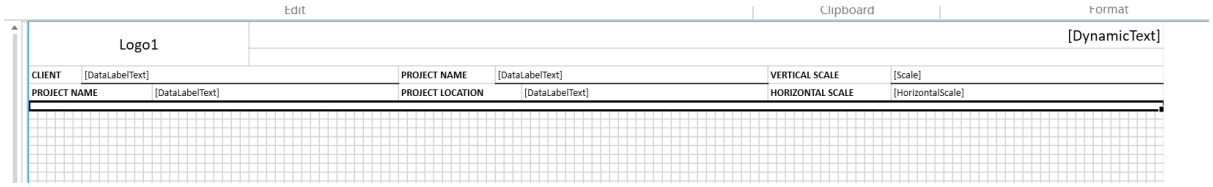


Double Click on the Horizontal Scale Library item.

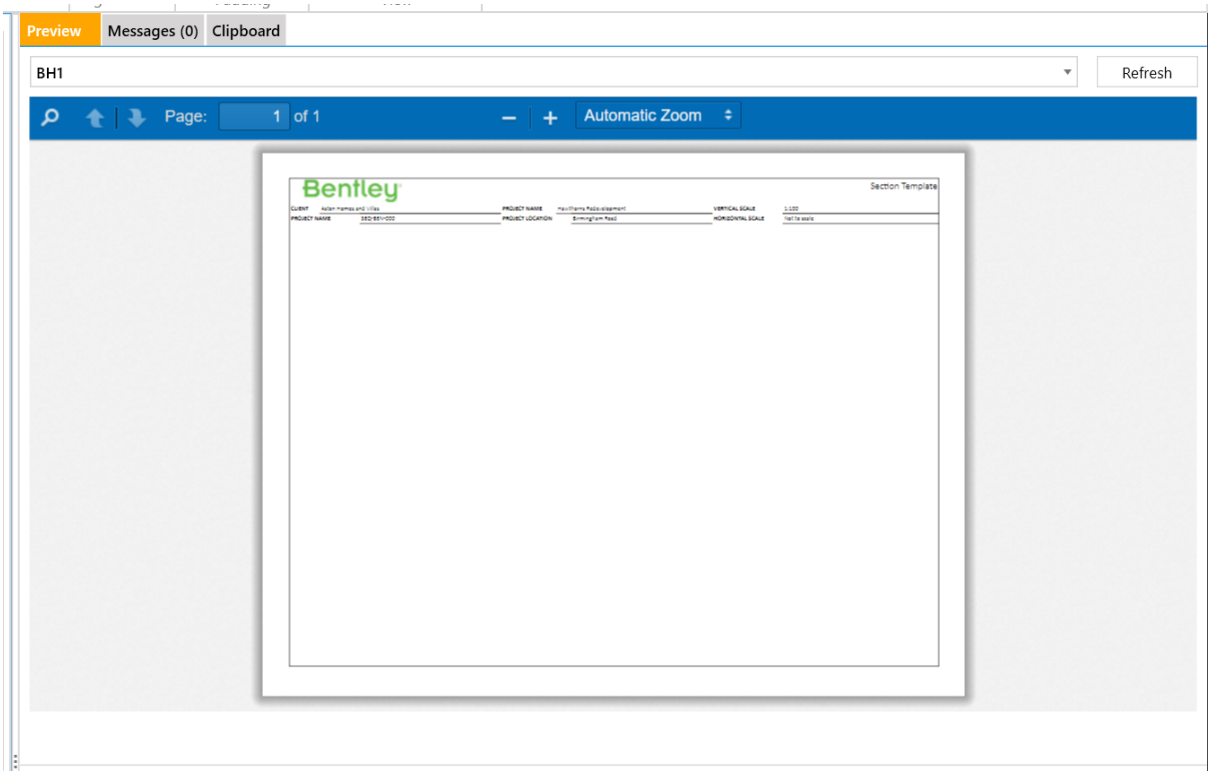
Change the text alignment to be left aligned and also change the Font Size to be 7. Select the Border option and select the option for Bottom Border.

4.4.16 Inserting Spacing

Select the Top Left most available cell underneath the merged cells that were just created, then create a selection that is 129 cells by 1 cells (258mm x 2mm) and select the Merge option to create a new merged area.



Select the Refresh button in the Preview window to view the changes that have been made.


Preview
Messages (0)
Clipboard
BH1
Refresh
Page:
1
of 1
Automatic Zoom
Bentley
Section Template

4.5 Inserting Section Properties

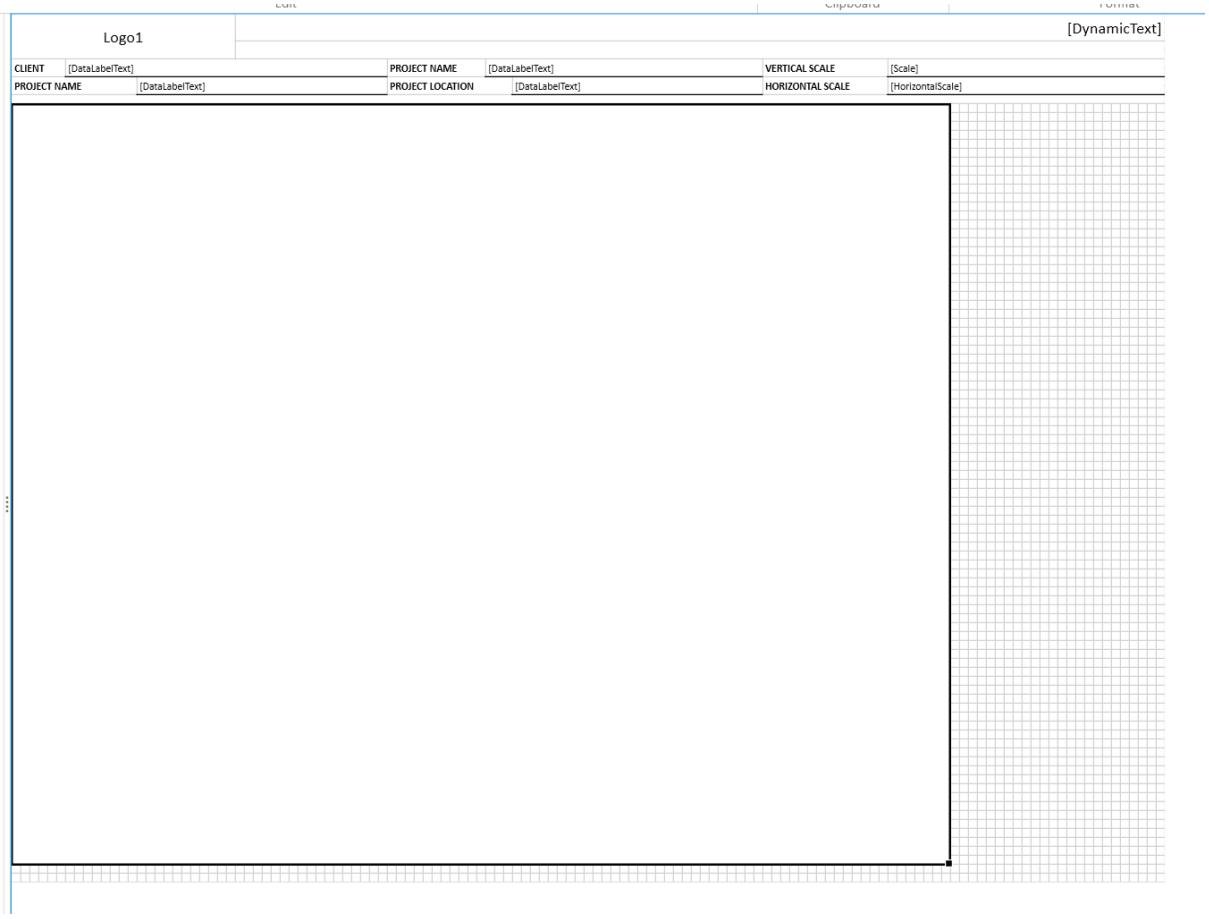
Now that the header section of the Section Profile has been setup, it is now time to start including some of the Section specific details into the rest of the design area.

The tutorial can be continued on from Section Template after Header Setup.hbt

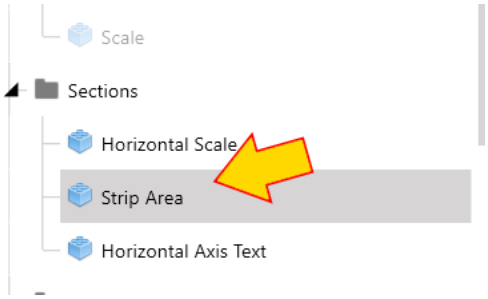
---

4.5.1 Creating a Strip Area

Select the Top Left most available cell underneath the merged cells that were just created, then create a selection that is 105 cells by 85 cells (210mm x 170mm) and select the Merge option to create a new merged area.



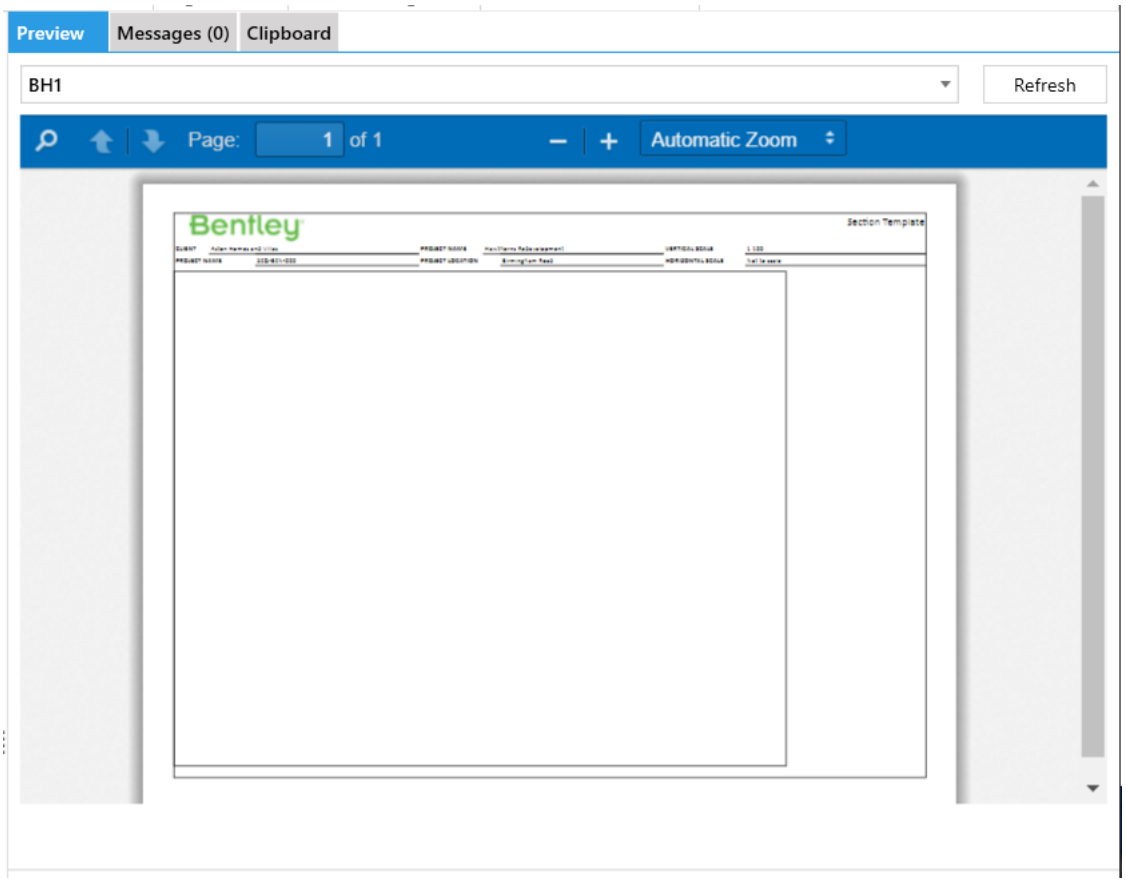
Double click the option for Strip Area.



Select the Border option and select the option for Bottom Border.

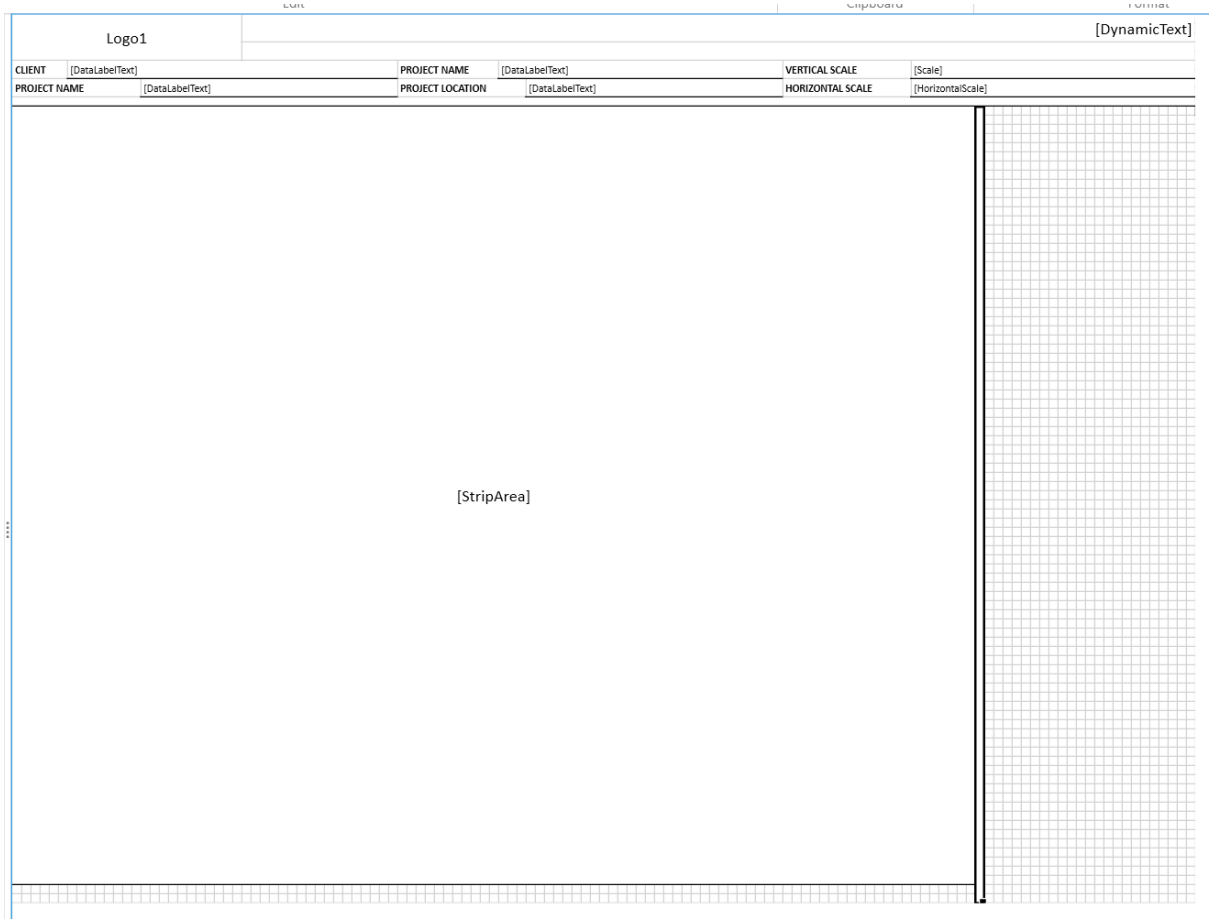
No further action is required on the setup of the Strip Area for now, this will be returned to later on in the guide after the strips have been setup.

Select the Refresh button in the Preview window to view the changes that have been made.

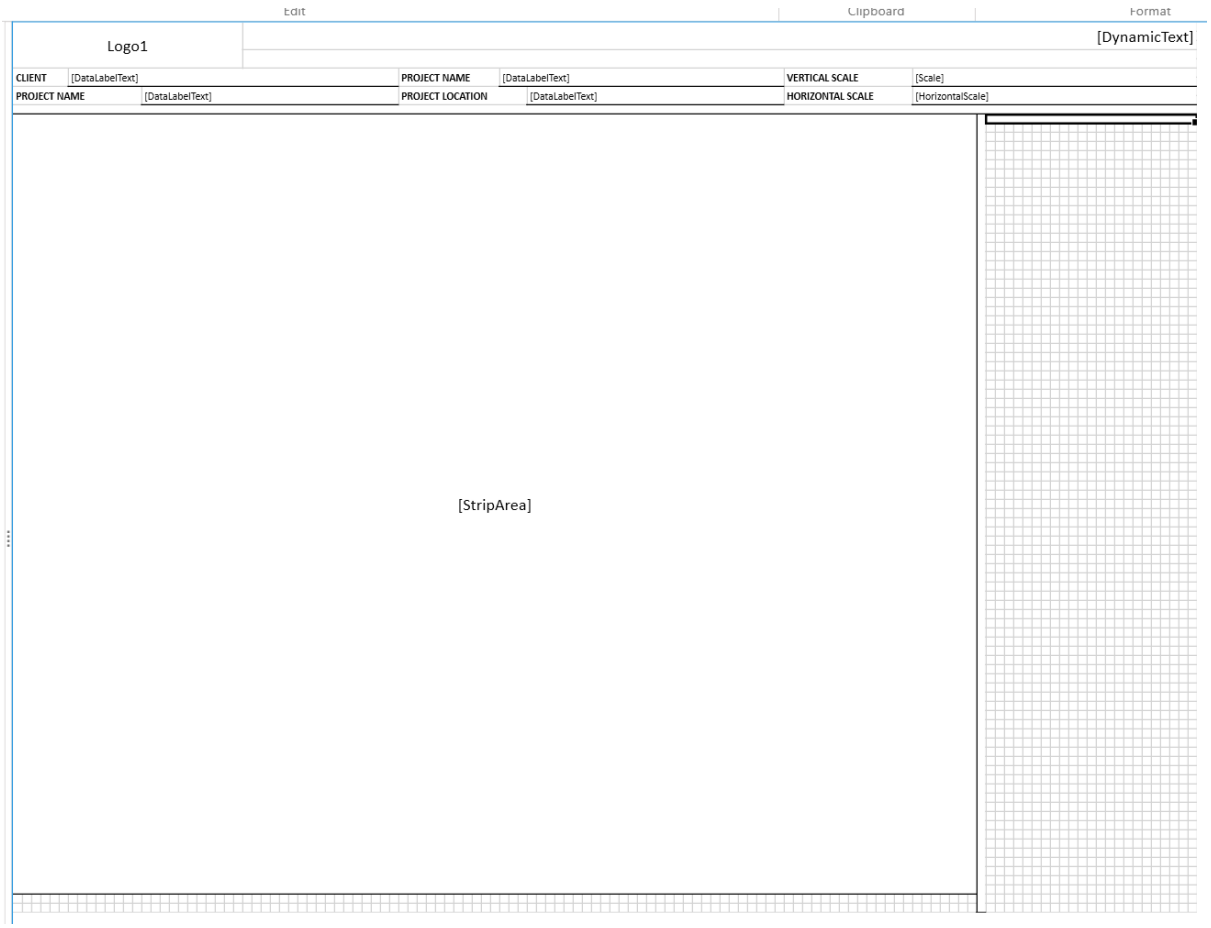


4.5.2 Creating spacing for the Legend Block Area

Select the Top Left most available cell to the right of the merged cells that were just created, then create a selection that is 1 cells by 87 cells (2mm x 174mm) and select the Merge option to create a new merged area.

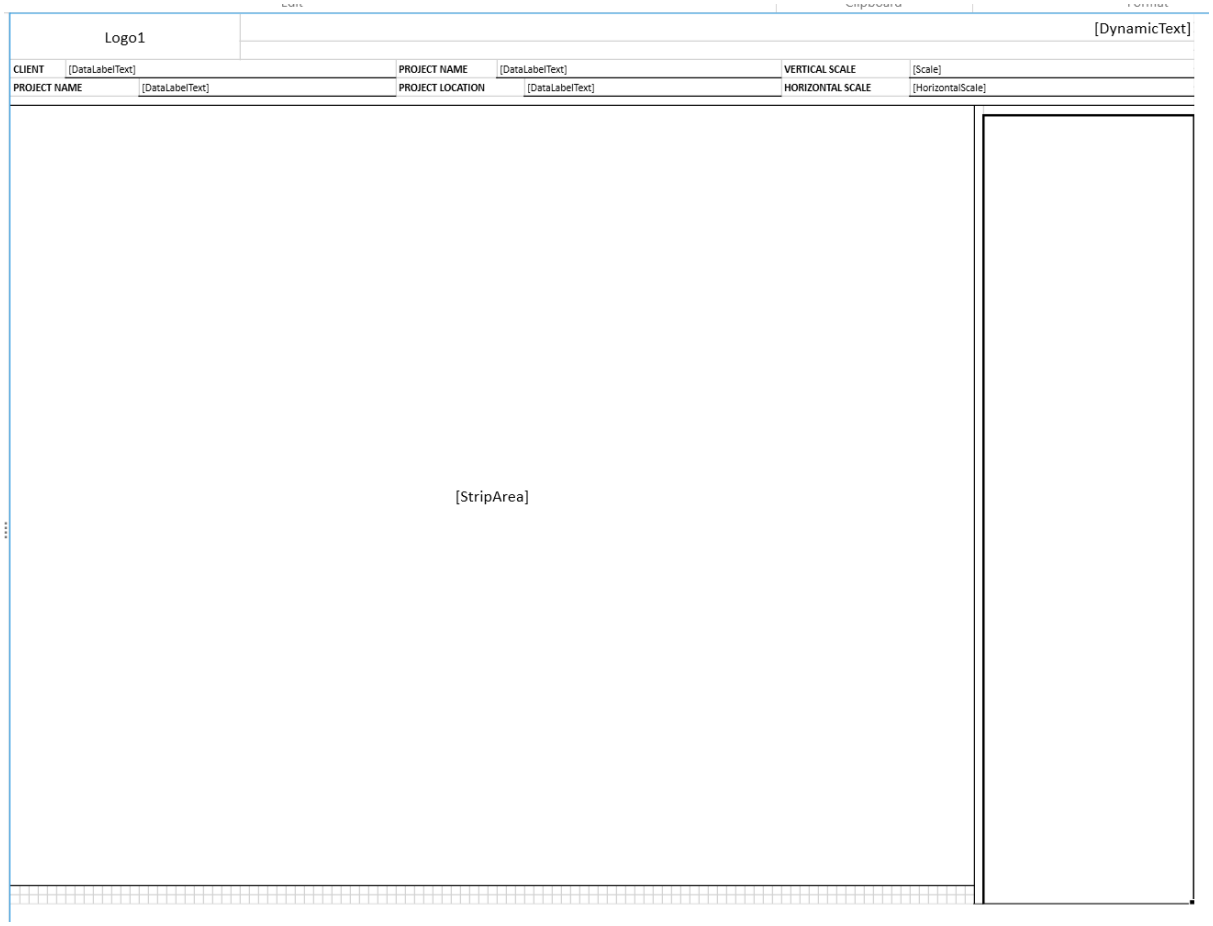


Select the Top Left most available cell to the right of the merged cells that were just created, then create a selection that is 23 cells by 1 cells (46mm x 2mm) and select the Merge option to create a new merged area.



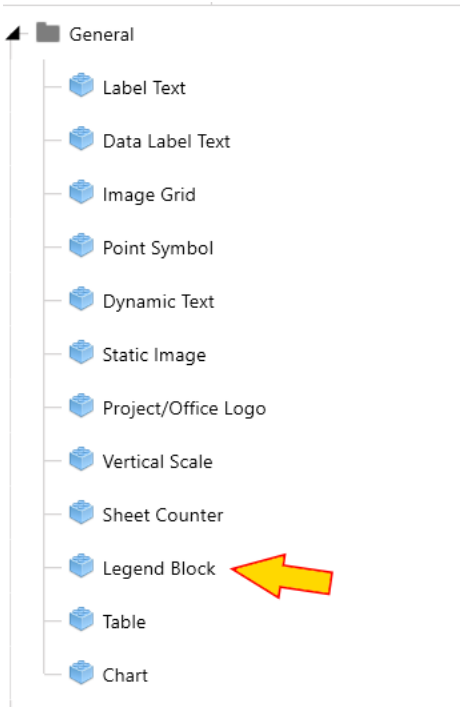
4.5.3 Creating a Legend Block Area

Select the Top Left most available cell to the right of the merged cells that were just created, then create a selection that is 14 cells by 87 cells (48mm x 174mm) and select the Merge option to create a new merged area.



Select the 3 merged areas that were just created, then select the Border option and select the option for All Borders.

Select the newly merged area and then Double click the Legend Block library item to insert this.



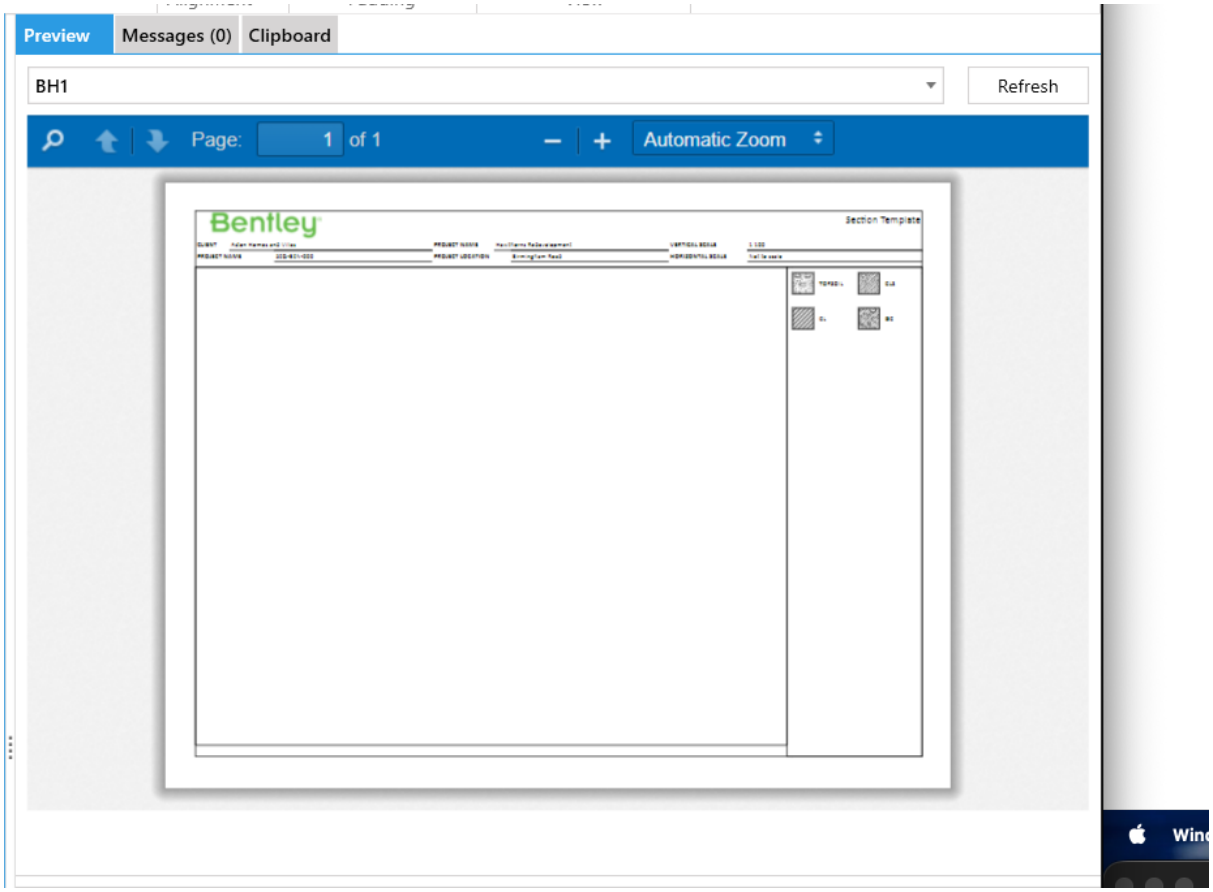
Change the text alignment to be left aligned and also change the Font Size to be 7.

Change the following in the Properties window;

- **SymbolSource** – Image
- **Group** – Field Geological Descriptions (StratumDetails)
- **DescriptionSource** – Legend Code (LegendCode)
- **Expression** – (NULL)
- **Header** – Location of site (SiteLocation)
- **NumberOfRows** – 11
- **NumberOfColumns** – 2
- **LegendFillOrder** – By Row
- **RowsGap** – 5
- **ColumnsGap** – 1
- **LegendItemHeight** – 7.5
- **SymbolWidth** – 7.5
- **SymbolDescriptionGap** – 2
- **DescriptionWidth** – 13
- **SymbolBorderThickness** – 0.5
- **SymbolBorderColour** – FF000000
- **SymbolBorderPattern** – Solid
- **SymbolBorderPatternOffset** – 0
- **PointSymbolScaleX** – 100
- **PointSymbolScaleY** – 100

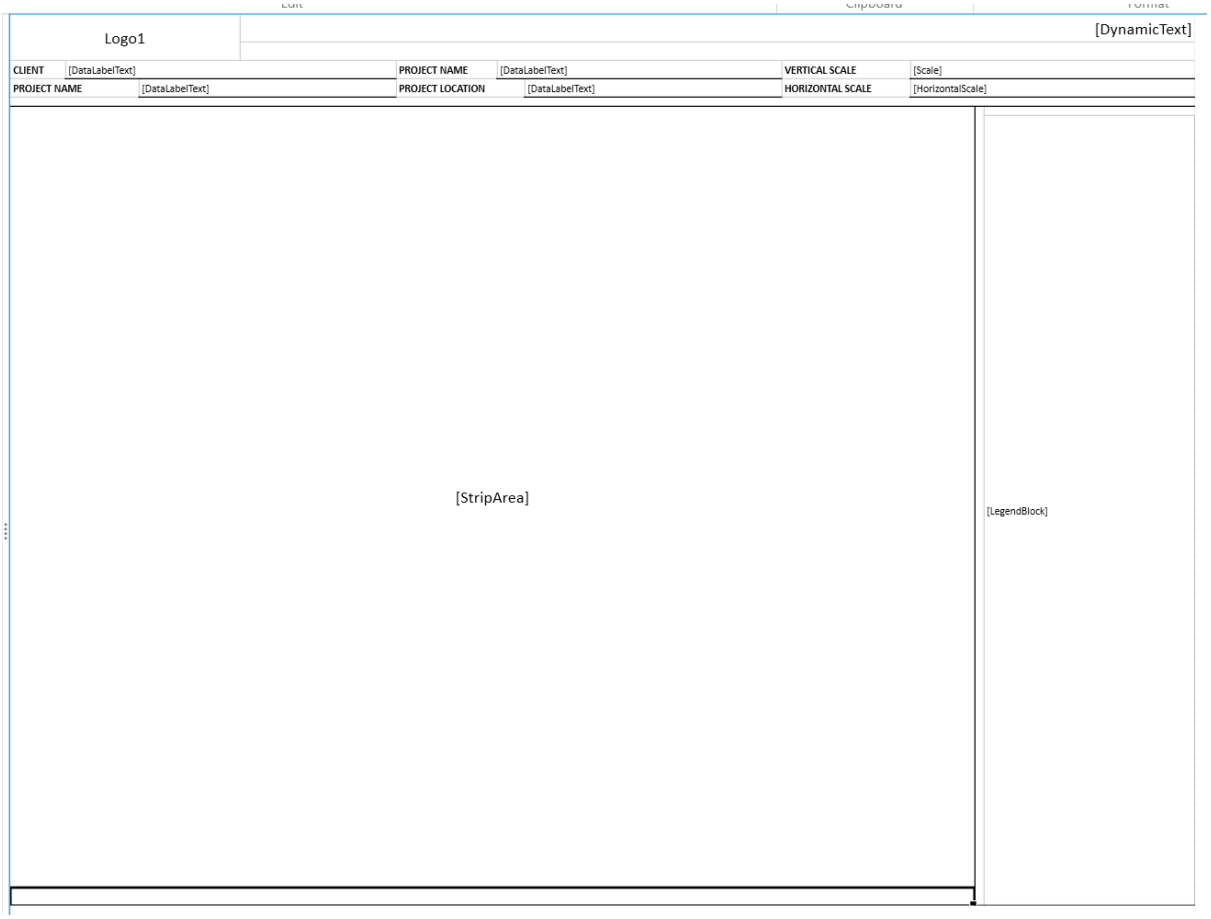
- **PointSymbolWidthPercentage** – 100
- **PointSymbolHeightPercentage** – 100
- **PointSymbolHorizontalAlignment** – Centre
- **PointSymbolVerticalAlignment** – Centre
- **OrderStratigraphically** – Enabled
- **StratigraphicallyOrderBy** – Depth Top (DepthTop)

Select the Refresh button in the Preview window to view the changes that have been made.

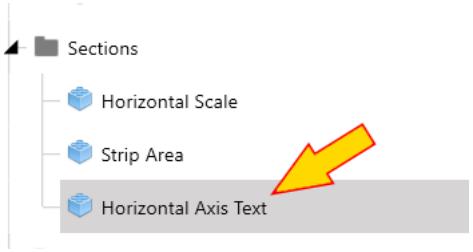


4.5.4 Creating a Horizontal Axis Text

Select the Top Left most available cell underneath all of the other merged cells that were just created, then create a selection that is 105 cells by 2 cells (210mm x 4mm) and select the Merge option to create a new merged area.



Select the newly merged area and then Double click the Horizontal Axis Text library item to insert this.



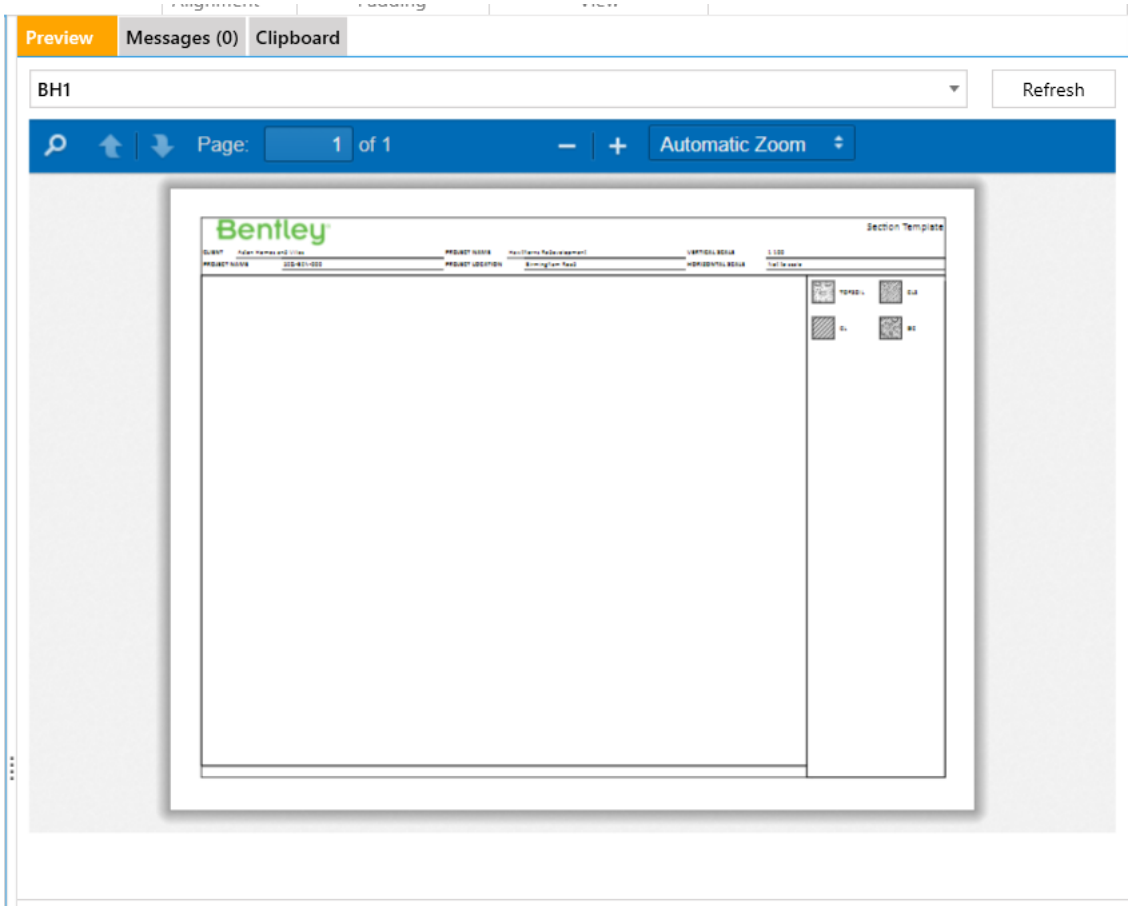
Change the text alignment to be left aligned and also change the Font Size to be 7. Select the Border option and select the option for All Borders.

Change the following in the Properties window;

- **Group** – Location Details (LocationDetails)
- **Header** – (NULL)
- **Expression** – fixed([Section.Chainage], 2, false)
- **Header** – Location of site (SiteLocation)
- **Colour** – FF000000
- **Thickness** – 0.5
- **Pattern** – Solid

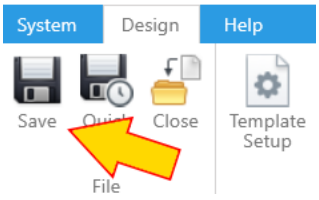
- **PatternOffset** – 0
- **ShowSectionLineStartMarking** – Enabled
- **ShowSectionLineInterimMarking** – Enabled
- **ShowSectionLineEndMarking** – Enabled

Select the Refresh button in the Preview window to view the changes that have been made.

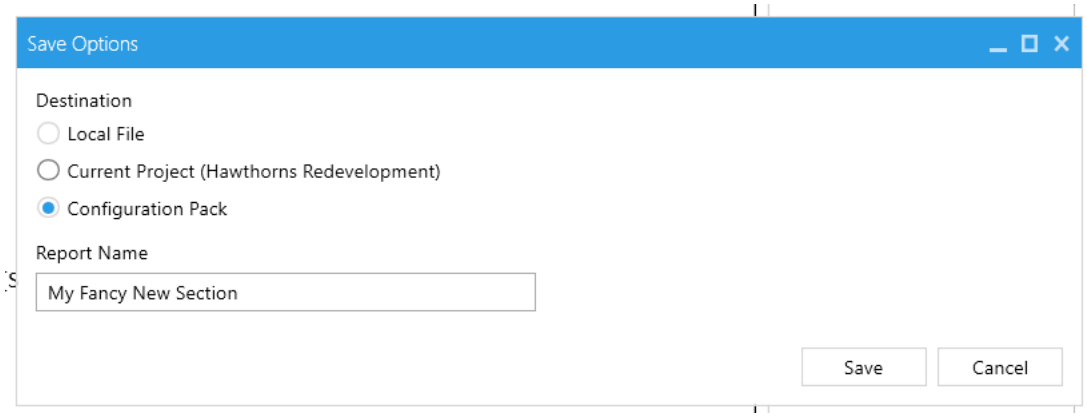


The Horizontal Scale will not show anything until a Strip Set is defined which will be shown later on in this guide.

Save the template into the Project or the Configuration Pack by Selecting the Save option in the ribbon.



Then choose the relevant save location and give the Section template a name, then press Save.



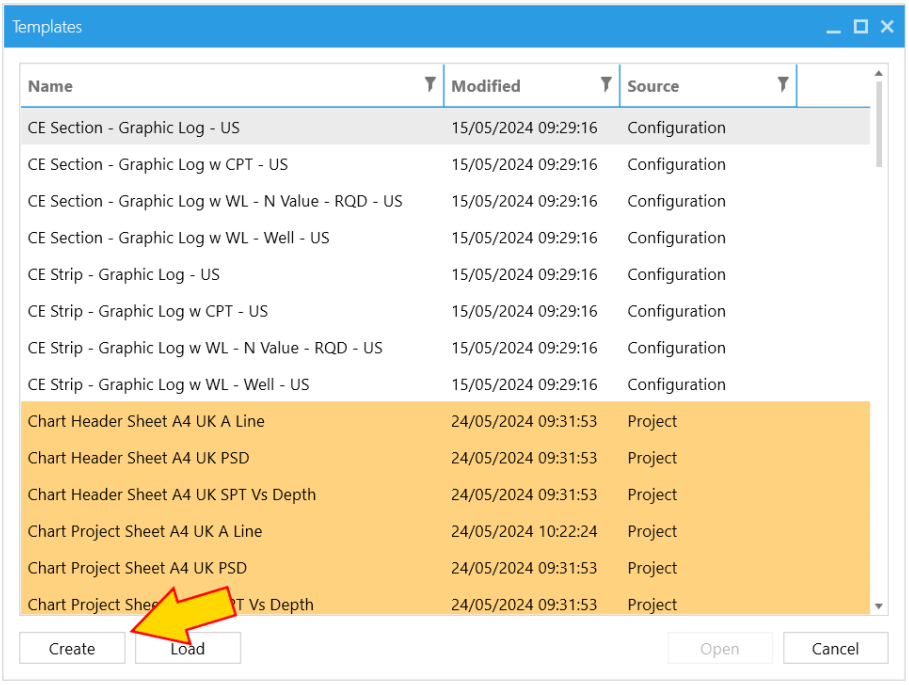
This will allow for the Section template to be loaded up again in the future after the Strips have been created.

5. Creating Strips for Sections

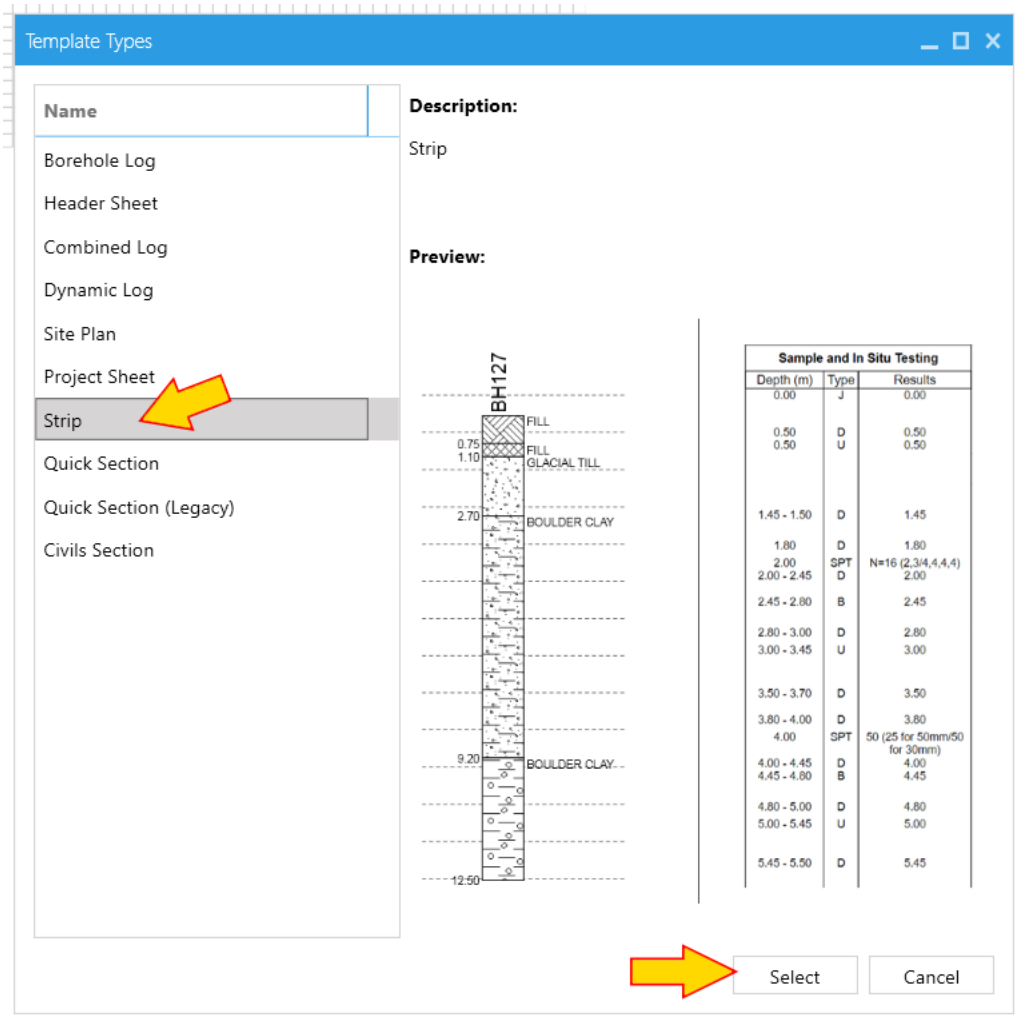
Now that the Section template has been created, it is now time to create different strips that will appear under different scenarios. In this tutorial, a strip for standard boreholes will be created, alongside a CPT data equivalent.

5.1 Creating a Strip Template

To begin, at the Template Selection window, select the option for Create.



Select the Strip option and then press the Select button.



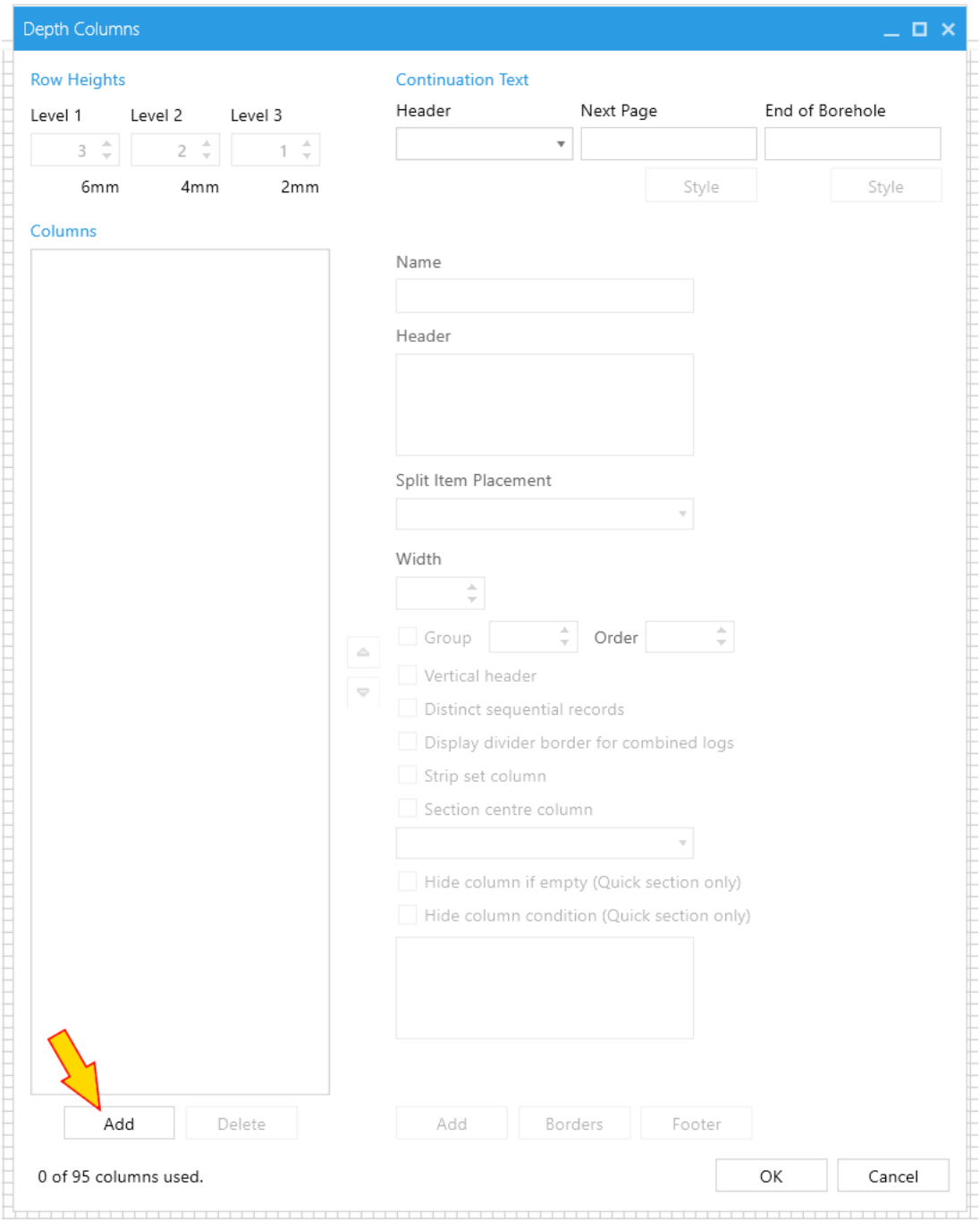
The Strip Setup window will then appear allowing for the selection of the Grid Size only. Select the Grid Size to be Medium and press OK.

As this Strip will be designed to match the previously created Section template, a Medium grid is selected, however, templates with different grid sizes can be used together with no know issues.

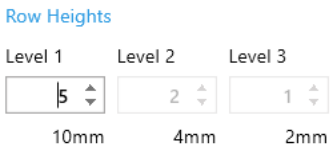
5.1.1 Setting up the Depth Area

The Depth Columns window will then appear which will allow for creation of different columns that will appear on the log template.

Select the Add button to add a new column to the Strip.



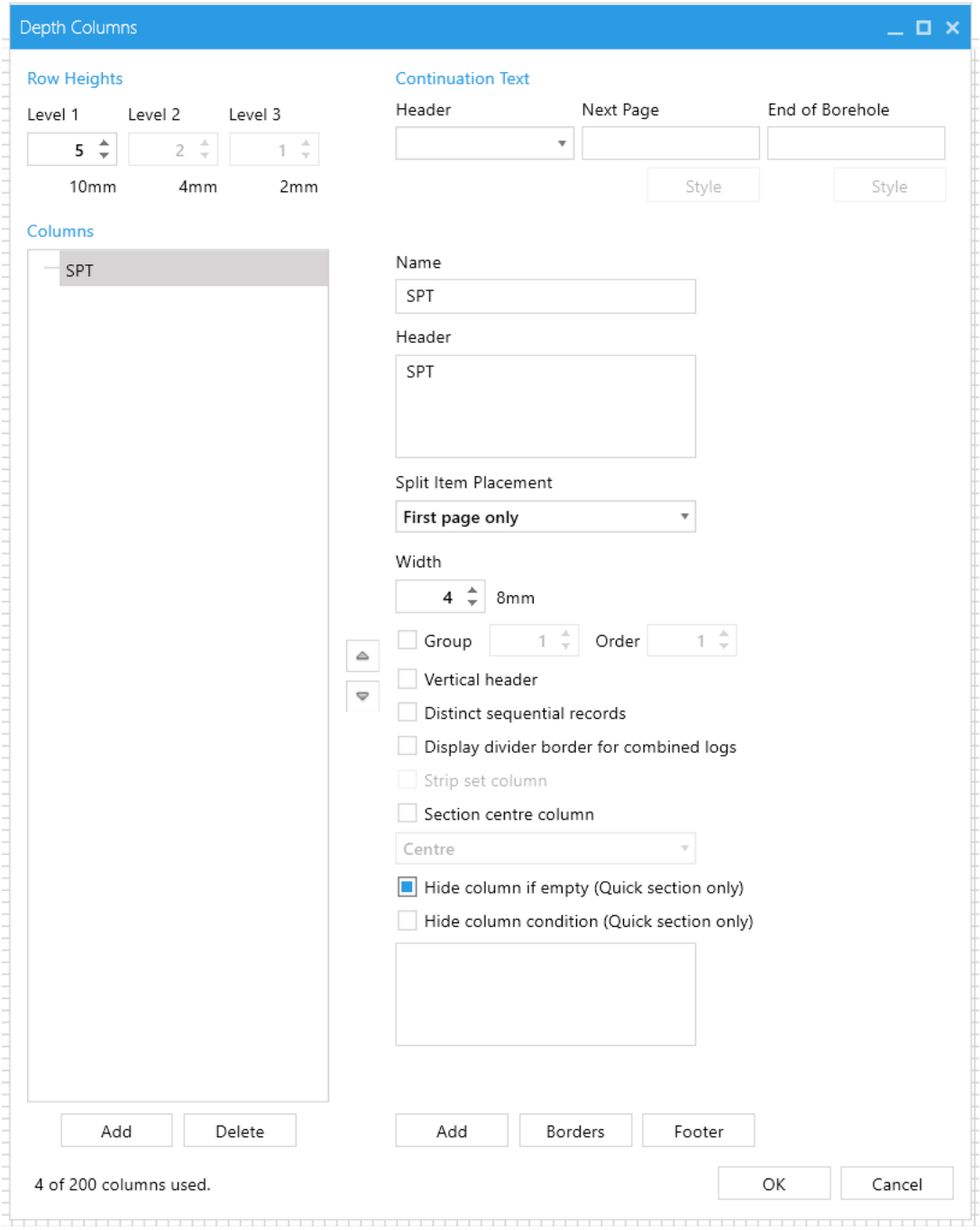
Change the Level 1 Row Height to be 10mm.



Select the newly created Column and set the details as follows;

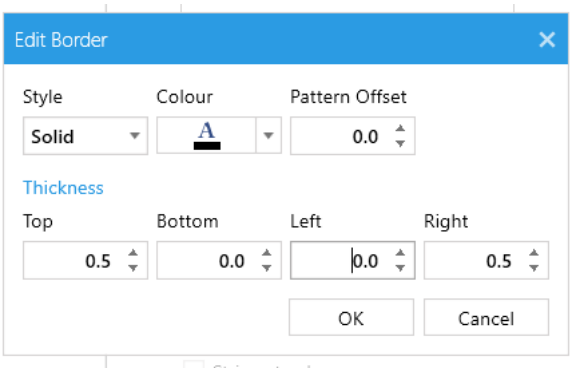
- **Name** – SPT
- **Header** – SPT

- **Split Item Placement** – First page only
- **Width** – 4 (8mm)
- **Group** – Not enabled
- **Vertical Header** – Not enabled
- **Distinct sequential records** – Not enabled
- **Display divider border for combined logs** – Not enabled
- **Section centre column** – Not enabled
- **Hide column if empty (Quick section only)** – Enabled
- **Hide column condition (Quick section only)** – Not Enabled



This column uses the simple Hide condition to hide this column if no SPT data is in the borehole that is shown. A more complex expression can be used if required

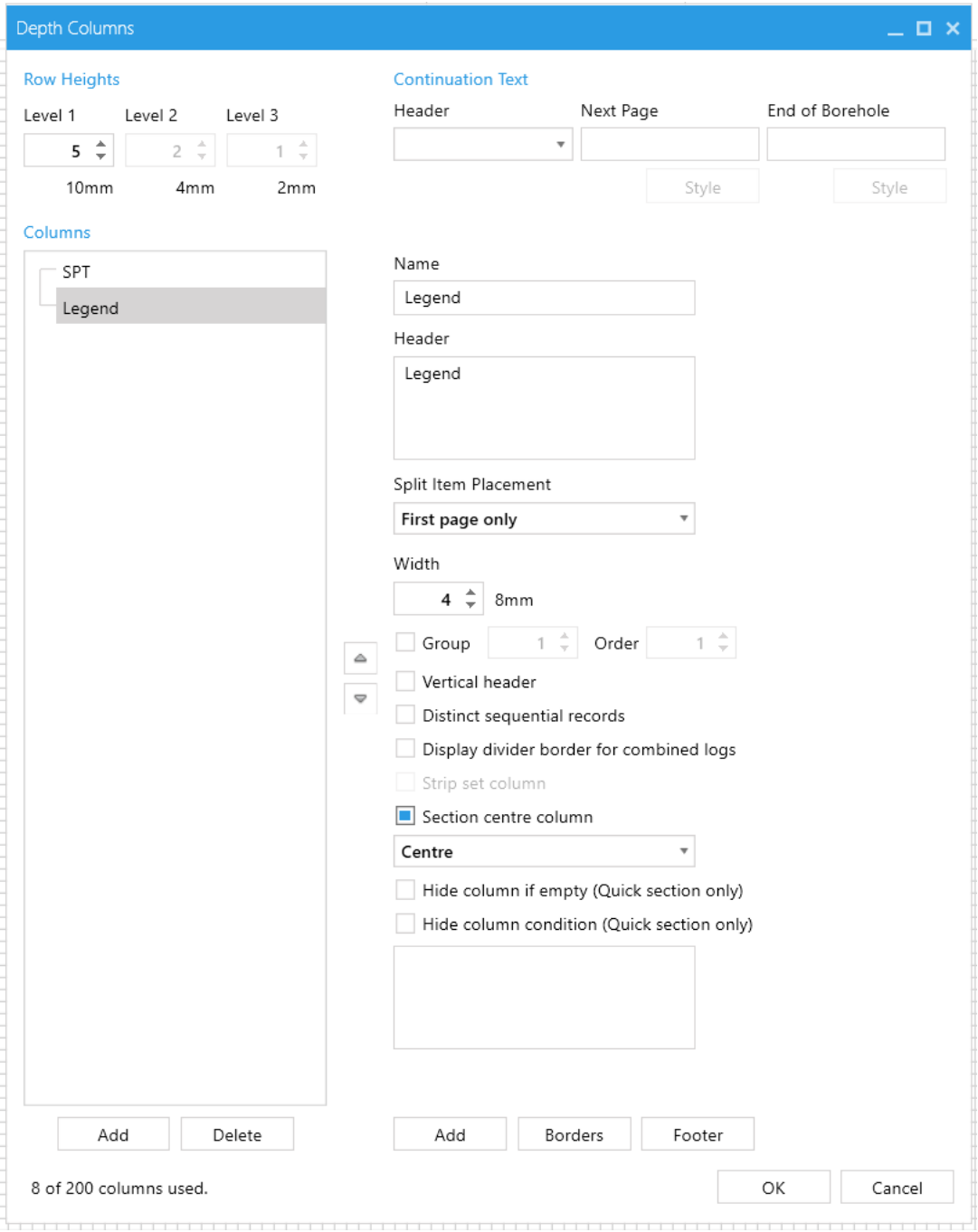
Select the Borders option and change the Style to be Solid with the Bottom and Left borders set to be 0.0 thickness, then press OK.



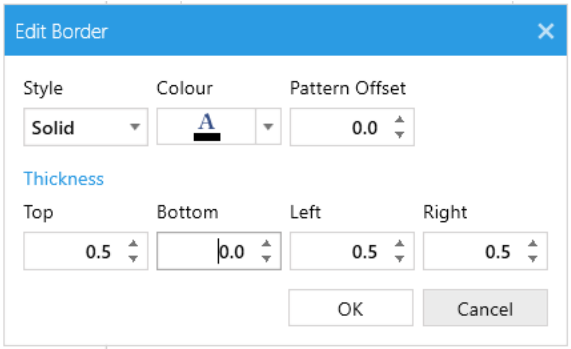
On the Depth Columns window, select the Add button to add a new column to the Strip template.

Select the newly created Column and set the details as follows;

- **Name** – Legend
- **Header** – Legend
- **Split Item Placement** – First page only
- **Width** – 4 (8mm)
- **Group** – Not enabled
- **Vertical Header** – Not enabled
- **Distinct sequential records** – Not enabled
- **Display divider border for combined logs** – Not enabled
- **Section centre column** – Enabled - Centre
- **Hide column if empty (Quick section only)** – Not Enabled
- **Hide column condition (Quick section only)** – Not Enabled



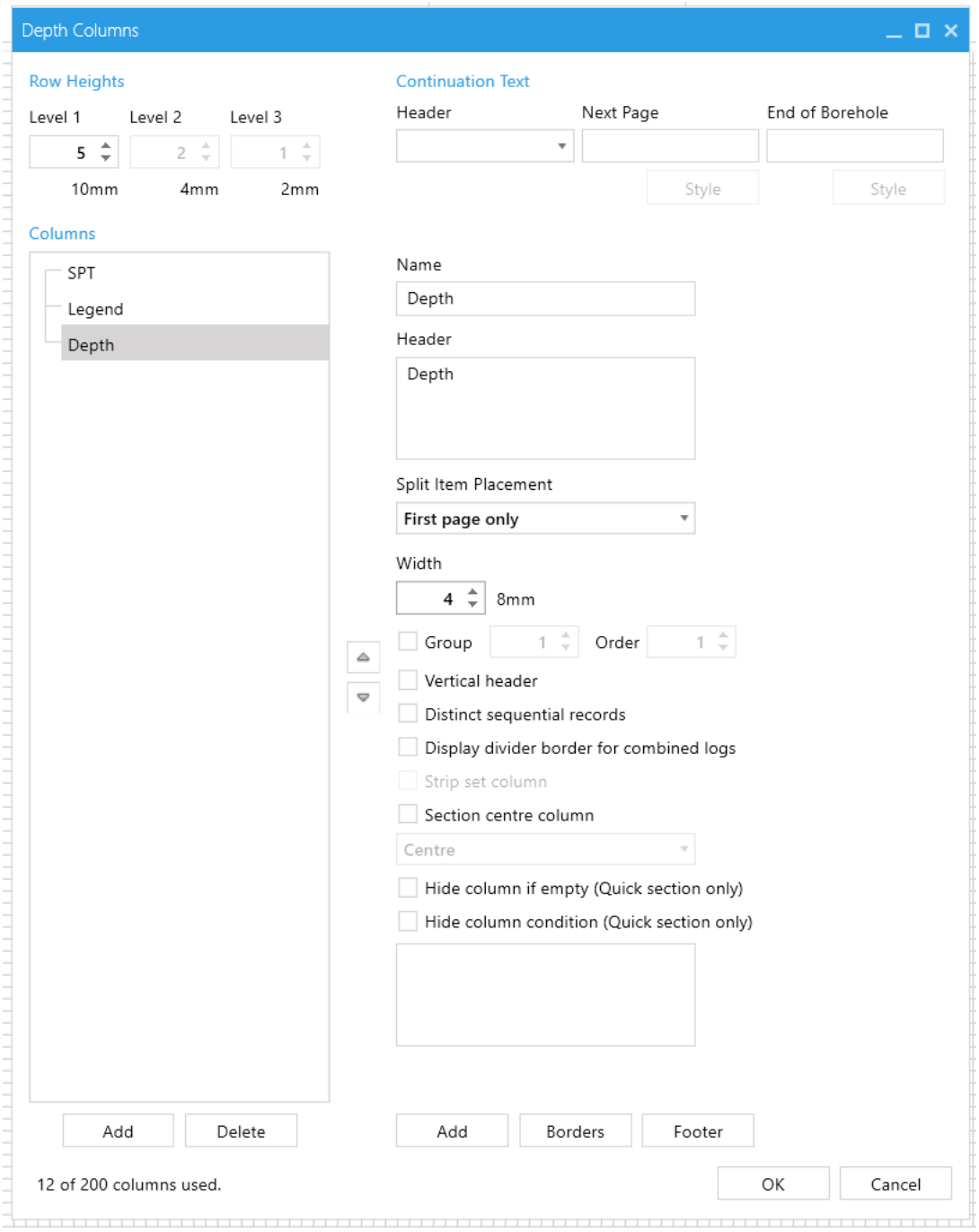
Select the Borders option and change the Style to be Solid with the Bottom border set to be 0.0 thickness, then press OK.



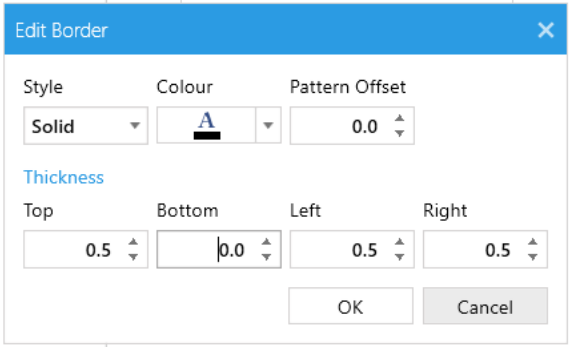
On the Depth Columns window, select the Add button to add a new column to the Strip template.

Select the newly created Column and set the details as follows;

- **Name** – Depth
- **Header** – Depth
- **Split Item Placement** – First page only
- **Width** – 4 (8mm)
- **Group** – Not enabled
- **Vertical Header** – Not enabled
- **Distinct sequential records** – Not enabled
- **Display divider border for combined logs** – Not enabled
- **Section centre column** – Not enabled
- **Hide column if empty (Quick section only)** – Not Enabled
- **Hide column condition (Quick section only)** – Not Enabled



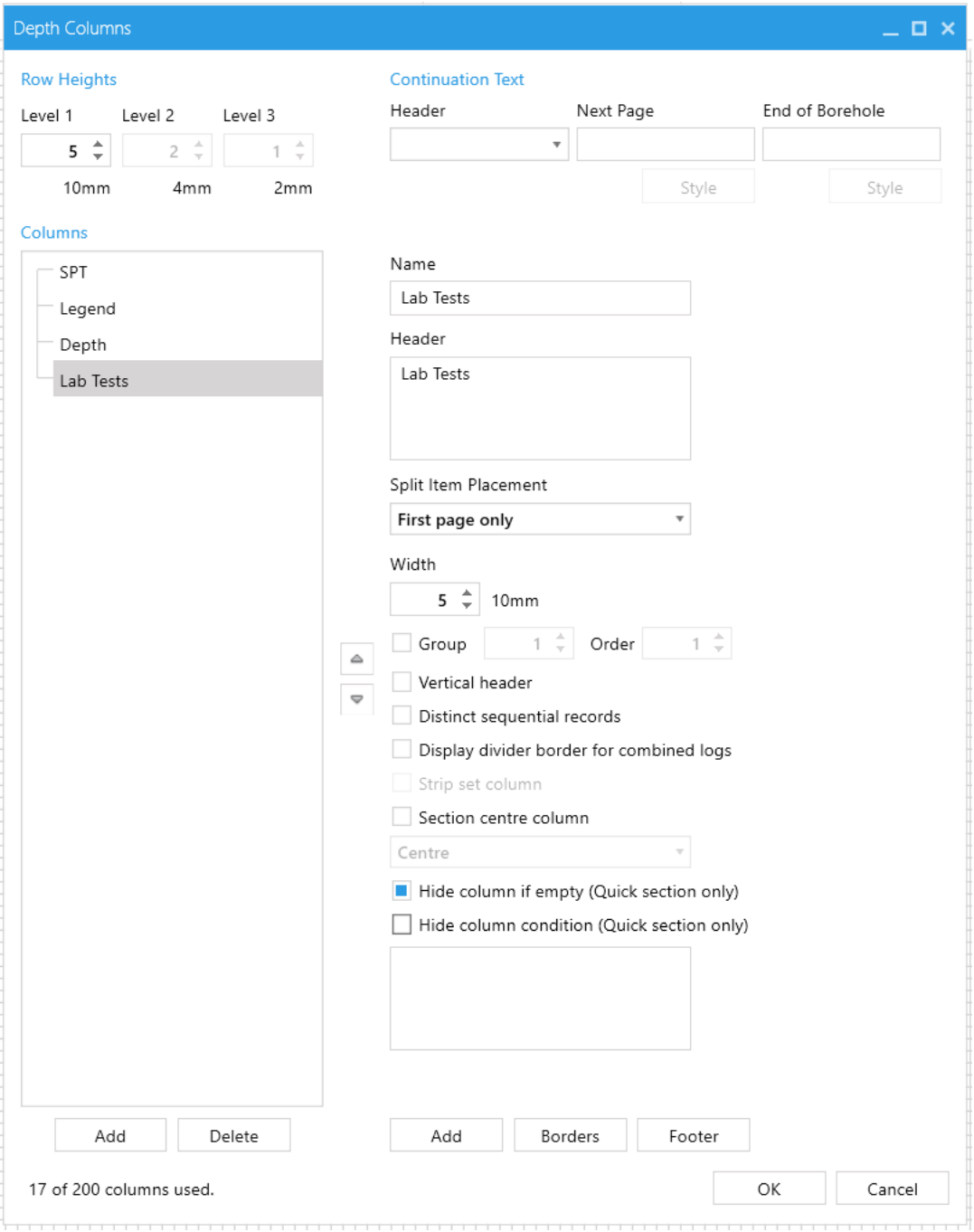
Select the Borders option and change the Style to be Solid with the Bottom border set to be 0.0 thickness, then press OK.



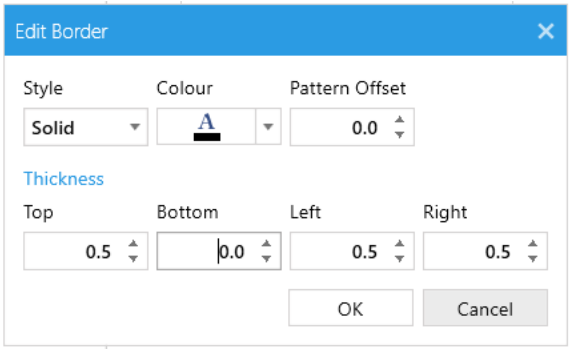
On the Depth Columns window, select the Add button to add a new column to the Strip template.

Select the newly created Column and set the details as follows;

- **Name** – Lab Tests
- **Header** – Lab Tests
- **Split Item Placement** – First page only
- **Width** – 5 (10mm)
- **Group** – Not enabled
- **Vertical Header** – Not enabled
- **Distinct sequential records** – Not enabled
- **Display divider border for combined logs** – Not enabled
- **Section centre column** – Not enabled
- **Hide column if empty (Quick section only)** – Enabled
- **Hide column condition (Quick section only)** – Not Enabled

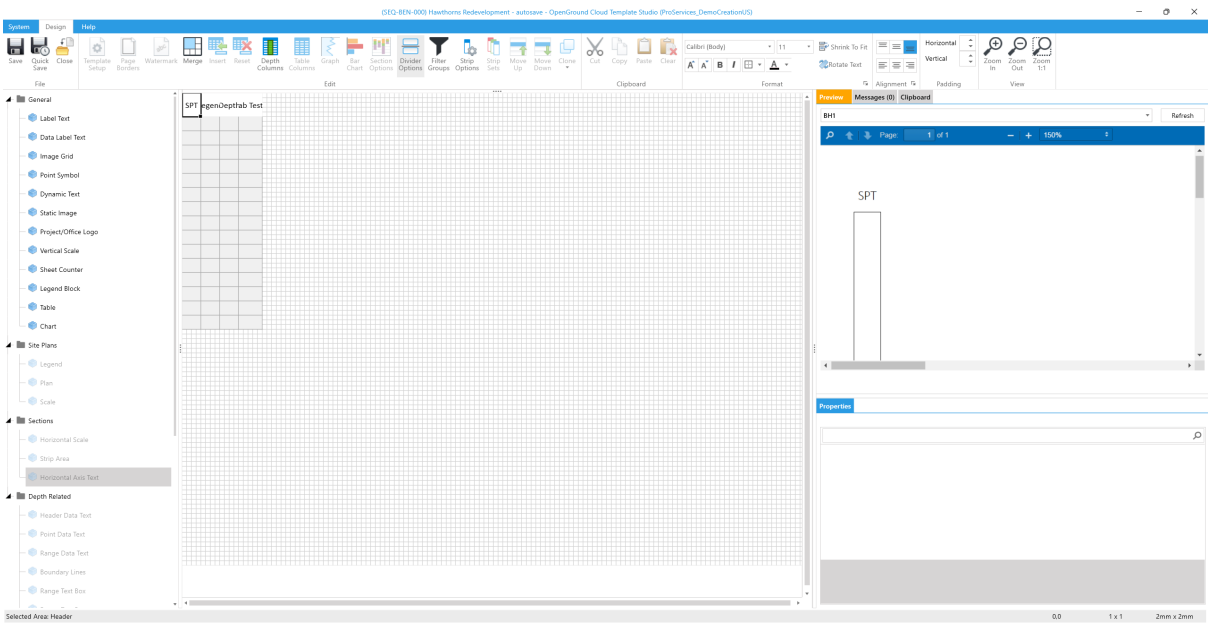


Select the Borders option and change the Style to be Solid with the Bottom border and the Right border set to be 0.0 thickness, then press OK.

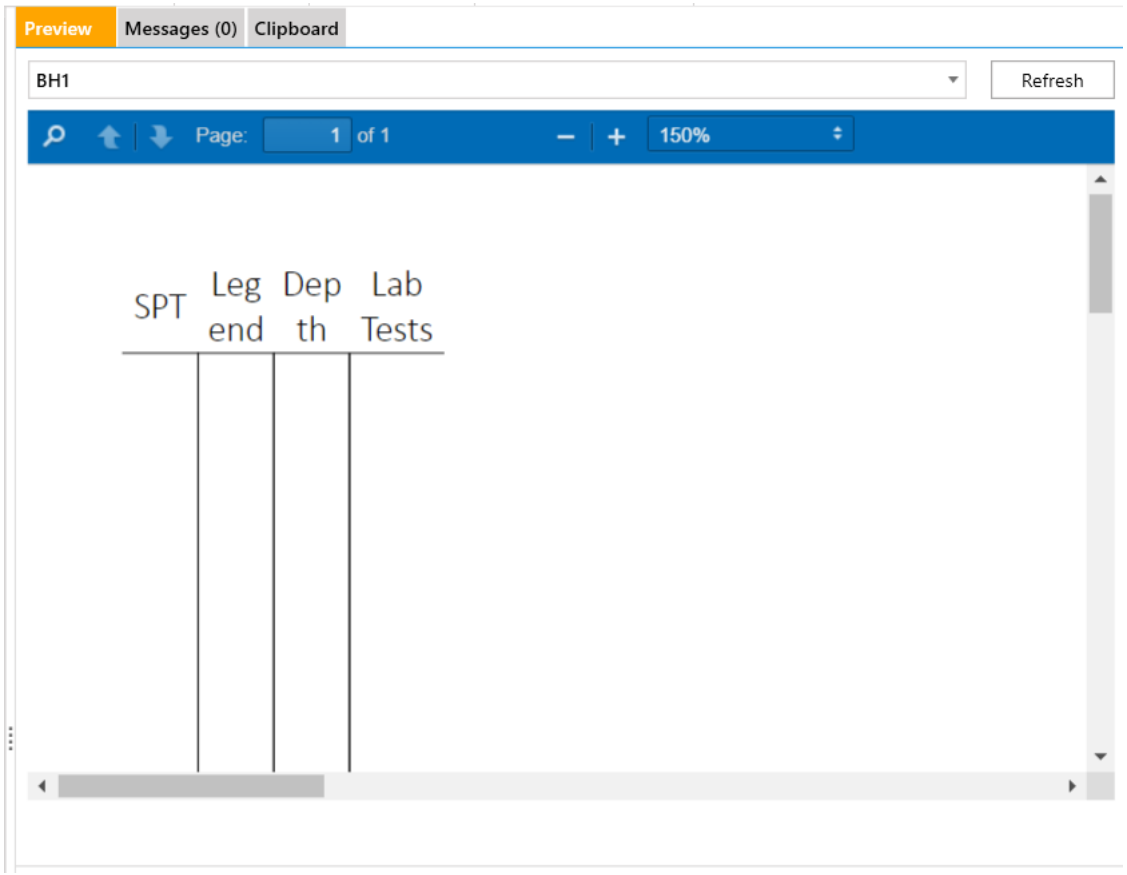


5.1.2 Formatting the Template

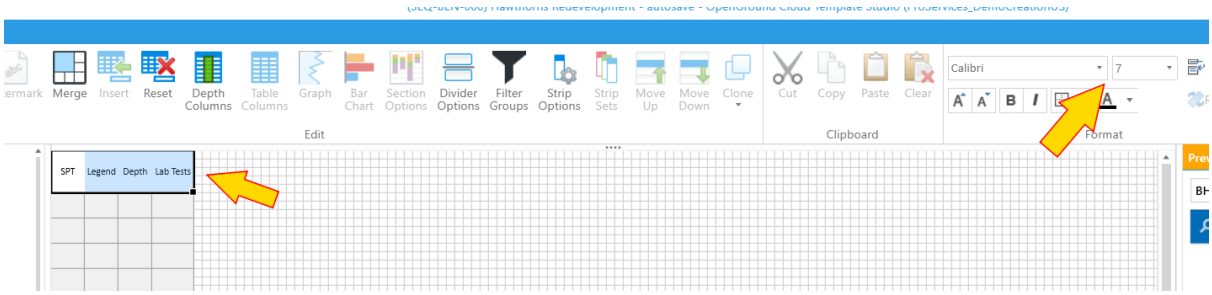
Select OK in the Depth Columns window which will shut this down, showing the Depth Grid in the interface.



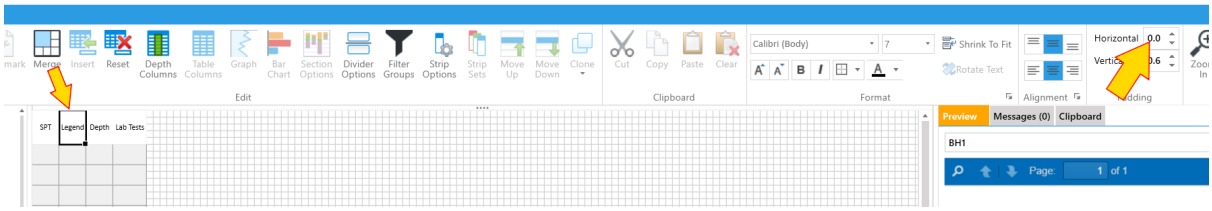
Select the Refresh button in the Preview window to view the changes that have been made.



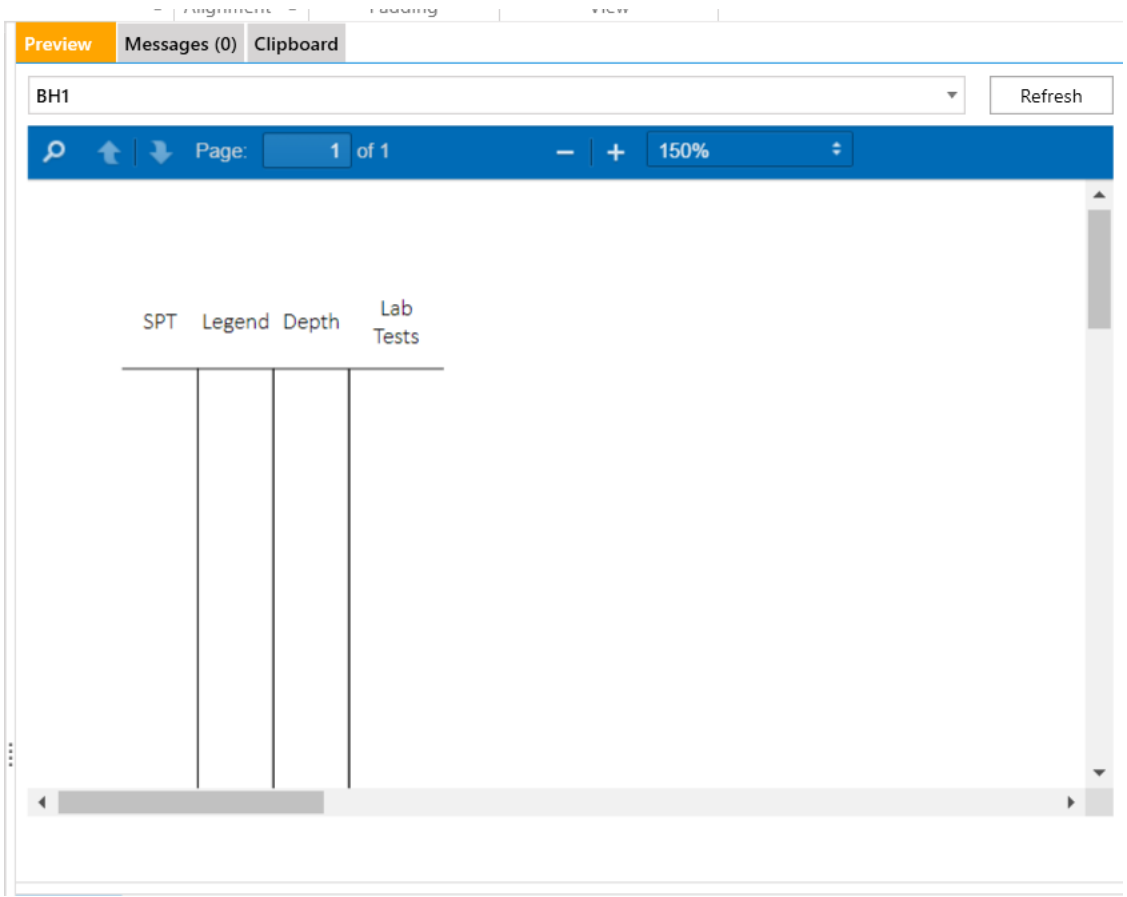
Highlight all of the Header cells in the Depth Related Area, then change the font size to be Size 7



Then Select the Legend Header Cell and Change the Horizontal Padding value to be 0.0

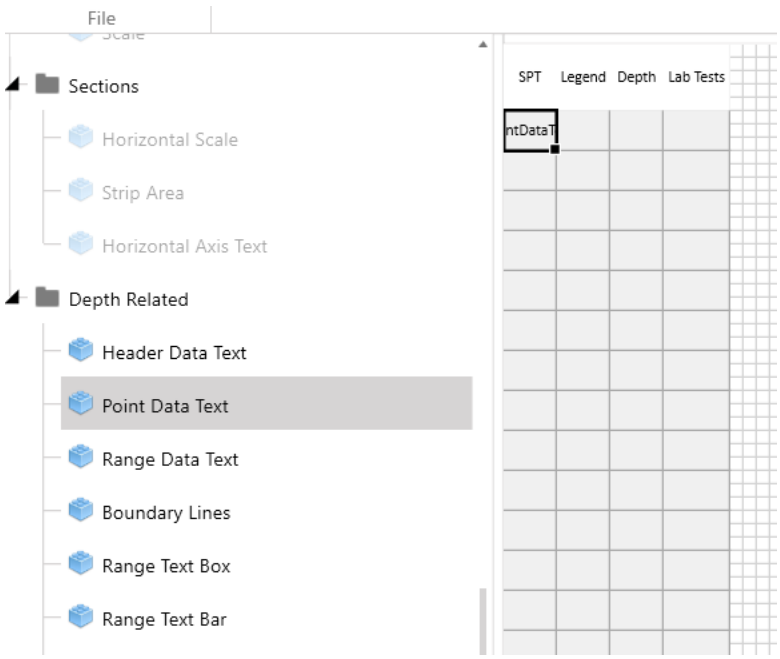


Select the Refresh button in the Preview window to view the changes that have been made.



5.1.3 Setting up the SPT Column

Select the first available cell in the Depth Area that is under the SPT header, then double click on the Point Data Text library item to insert this.



Change the Font Size to be 7.

Change the following in the Properties window;

- **Group** – Standard Penetration Test Results (SPT)
- **FilterGroup** – (NULL)
- **FilterValueName** – (NULL)
- **Header** – (NULL)
- **Depth** – DepthTop
- **LocationCluster** – (NULL)
- **Expression** – 'N=' + text(fixed([SPT.NValue], 0, false))
- **BlockAlign** – Not enabled
- **Rotate** – Not enabled
- **AddCallout** – Not enabled
- **[All Other Callout Settings]** – Leave as they are

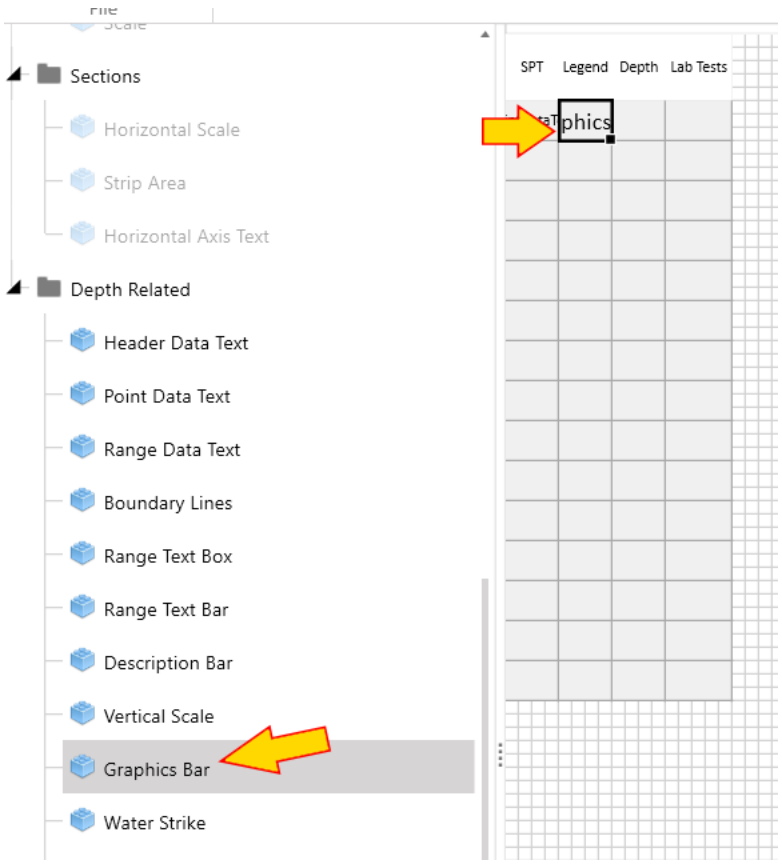
SPT results have been located in different places depending on what configuration pack is being used. Change the properties above with the below information to match what is in the configuration pack being used

If the configuration pack stores SPT data in the Sample Information table;

Group *– Sample Information (SampleInformation)*
Expression *- 'N='text(fixed([SampleInformation.Nvalue], 0, false))*

5.1.4 Setting up the Legend Column

Select the first available cell in the Depth Area that is under the Legend header, then double click on the Graphics Bar library item to insert this.



Change the following in the Properties window;

- **Group** – Field Geological Descriptions (StratumDetails)
- **FilterGroup** – (NULL)
- **Reference** – Legend Code (LegendCode)
- **BorderColour** – FF000000
- **BorderPattern** – Solid
- **BorderPatternOffset** – 0
- **BorderThickness** – 0.5
- **LocationCluster** – (NULL)
- **Merge** – Not enabled
- **FitToWidth** – Not enabled
- **HideOutsideTransition** – Not enabled

5.1.5 Setting up the Depth Column

Select the first available cell in the Depth Area that is under the Depth header, then double click on the Point Data Text library item to insert this.

Change the Font Size to be 7.

Change the following in the Properties window;

- **Group** – Standard Penetration Test Results (SPT)
- **FilterGroup** – (NULL)
- **FilterValueName** – (NULL)
- **Header** – (NULL)
- **Depth** – DepthBase
- **LocationCluster** – (NULL)
- **Expression** – fixed([StratumDetails.DepthBase], 1, false)
- **BlockAlign** – Not enabled
- **Rotate** – Not enabled
- **AddCallout** – Not enabled
- **[All Other Callout Settings]** – Leave as they are

5.1.6 Setting up the Lab Tests Column

Select the first available cell in the Depth Area that is under the Lab Tests header, then double click on the Point Data Text library item to insert this.

Change the Font Size to be 7.

Change the following in the Properties window;

- **Group** – Liquid and Plastic Limit Tests (LiquidAndPlasticLimit)
- **FilterGroup** – (NULL)
- **FilterValueName** – (NULL)
- **Header** – (NULL)
- **Depth** – Depth Midpoint (SampleInformation.DepthMidpoint)
- **LocationCluster** – (NULL)
- **Expression** – 'LL='+fixed([LiquidAndPlasticLimit.LiquidLimit], 0, false)
- **BlockAlign** – Not enabled
- **Rotate** – Not enabled
- **AddCallout** – Not enabled
- **[All Other Callout Settings]** – Leave as they are

Select the next available cell in the Depth Area that is under the Lab Tests header, then double click on the Point Data Text library item to insert this.

Change the Font Size to be 7.

Change the following in the Properties window;

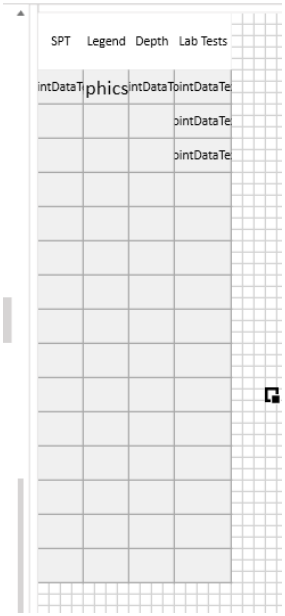
- **Group** – Liquid and Plastic Limit Tests (LiquidAndPlasticLimit)
- **FilterGroup** – (NULL)
- **FilterValueName** – (NULL)
- **Header** – (NULL)
- **Depth** – Depth Midpoint (SampleInformation.DepthMidpoint)
- **LocationCluster** – (NULL)
- **Expression** – 'PL='+fixed([LiquidAndPlasticLimit.PlasticLimitValue], 0, false)
- **BlockAlign** – Not enabled
- **Rotate** – Not enabled
- **AddCallout** – Not enabled
- **[All Other Callout Settings]** – Leave as they are

Select the next available cell in the Depth Area that is under the Lab Tests header, then double click on the Point Data Text library item to insert this.

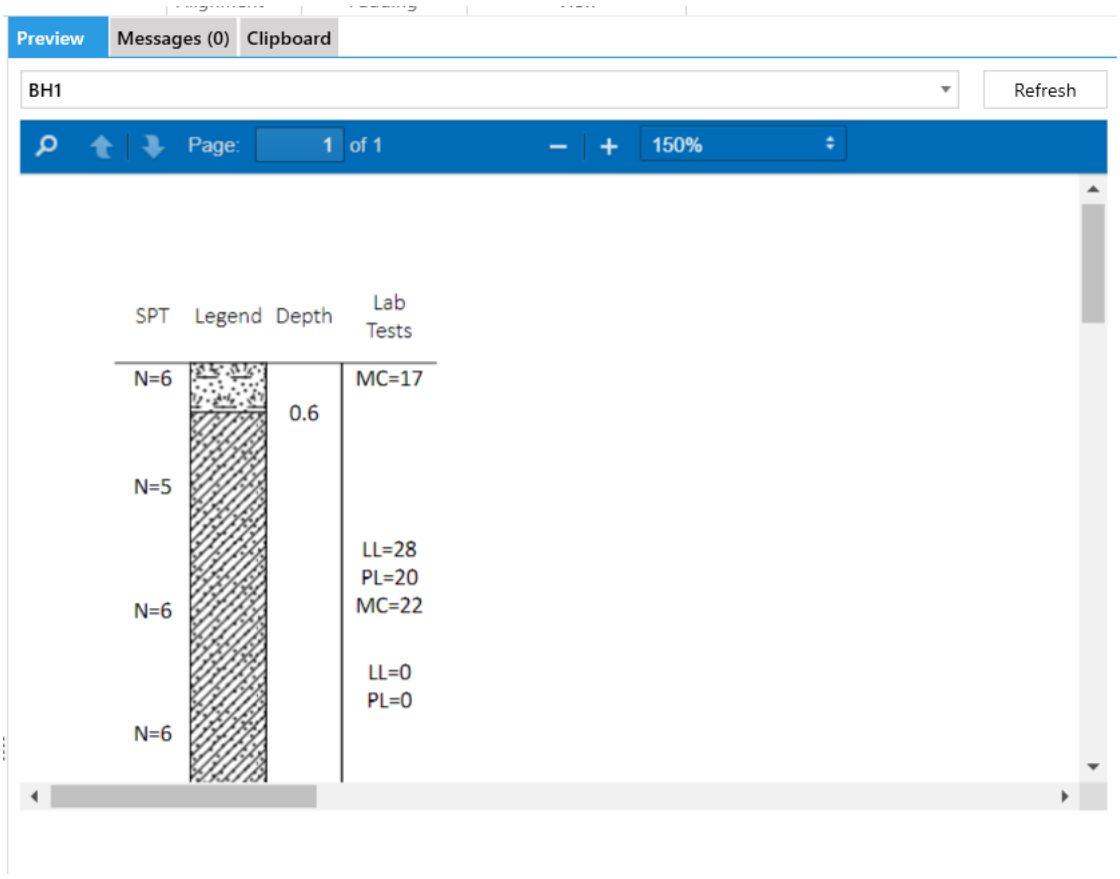
Change the Font Size to be 7.

Change the following in the Properties window;

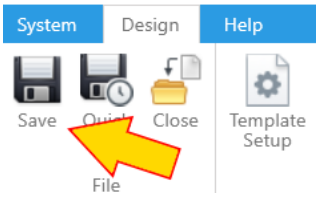
- **Group** – Moisture Content Tests (MoistureContent)
- **FilterGroup** – (NULL)
- **FilterValueName** – (NULL)
- **Header** – (NULL)
- **Depth** – Depth Midpoint (SampleInformation.DepthMidpoint)
- **LocationCluster** – (NULL)
- **Expression** – 'MC='+fixed([MoistureContent.MoistureContent], 0, false)
- **BlockAlign** – Not enabled
- **Rotate** – Not enabled
- **AddCallout** – Not enabled
- **[All Other Callout Settings]** – Leave as they are



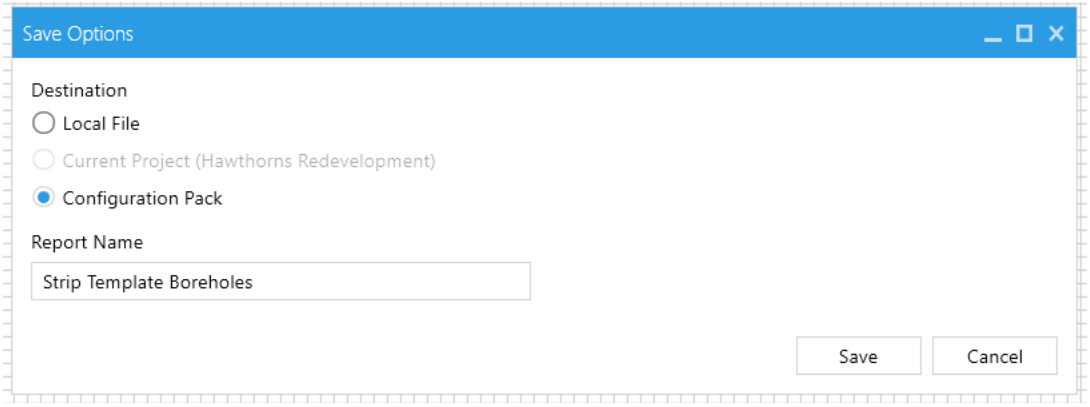
Select the Refresh button in the Preview window to view the changes that have been made.



Save the template into the Project or the Configuration Pack by Selecting the Save option in the ribbon.



Then choose the relevant save location and give the Strip template a name, then press Save.



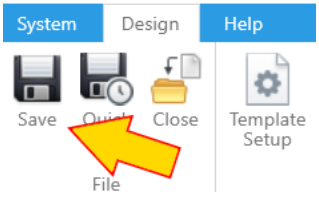
Once the template has been saved, it can then be saved into a Strip Profile, which will be done in a later step of this tutorial

5.1.7 Saving the CPT Template

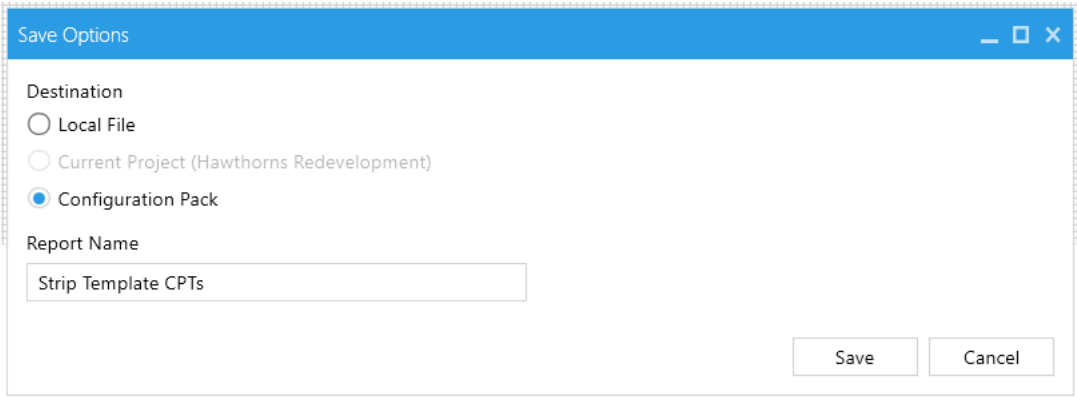
Browse through to the file called 'Strip Template – CPTs.hbt' that is included with this tutorial and then select the Open option.

The CPT strip profile has been included as a file in this tutorial ready to be loaded instead of a guide of how to create it

Save the template into the Project or the Configuration Pack by Selecting the Save option in the ribbon.



Then choose the relevant save location and give the Section template a name, then press Save.

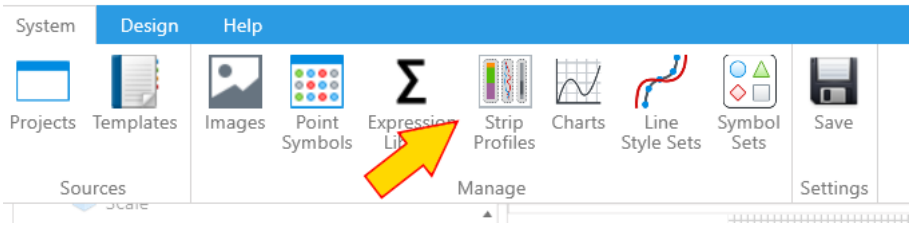

Save Options
Destination
Local File
Current Project (Hawthorns Redevelopment)
Configuration Pack
Report Name
Strip Template CPTs
Save
Cancel

6. Creating a Strip Profile

Now that the Section Template has been created, and the Strips that will plot the depth data are also available, it is time to create a Strip Profile which essentially combines the Strips together so that they will plot under the correct conditions.

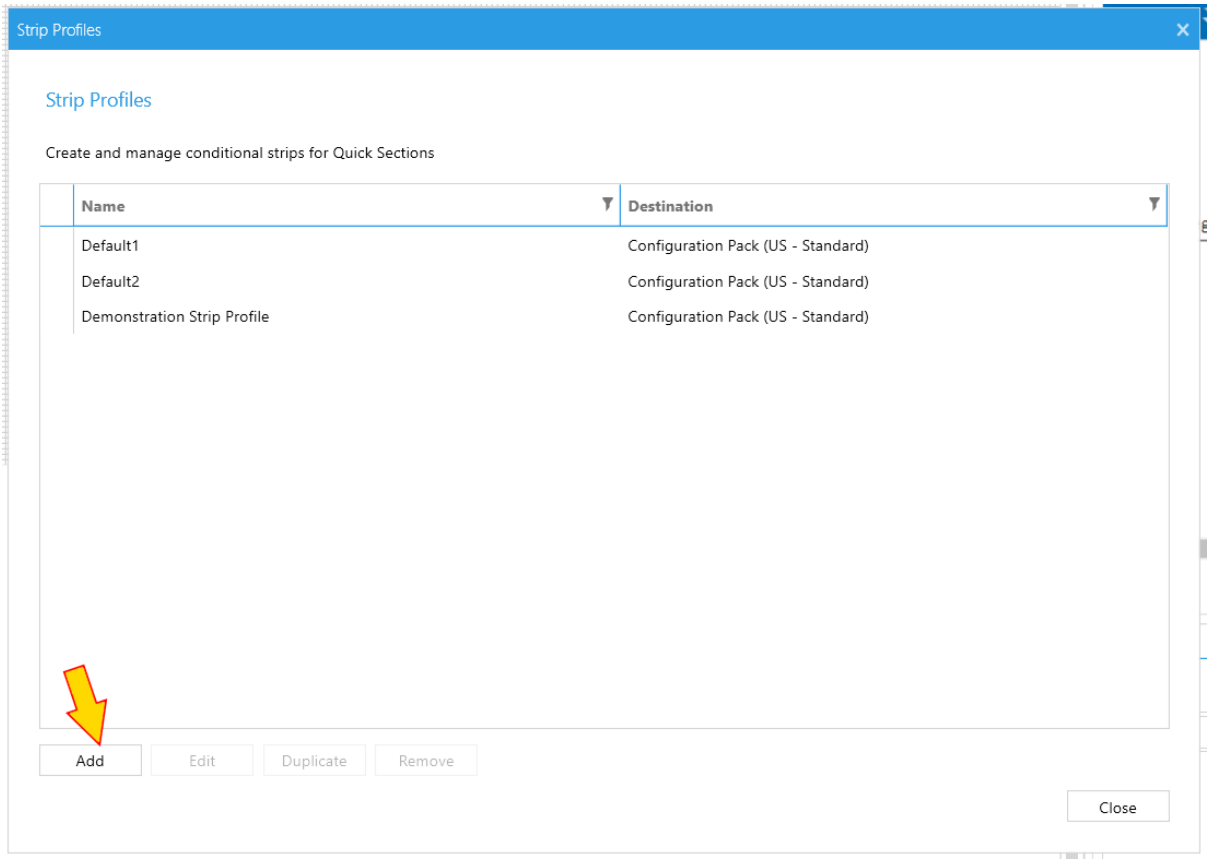
6.1 Creating the Strip Profile

Select the Strip Profiles button from the Manage section of the System ribbon.



As Strip Profiles are separate from Log Templates or Section Templates, they can be accessed from anywhere within Template Studio, whether a template is open or not. This also means that a Strip Profile can be created once and used on multiple Section Templates.

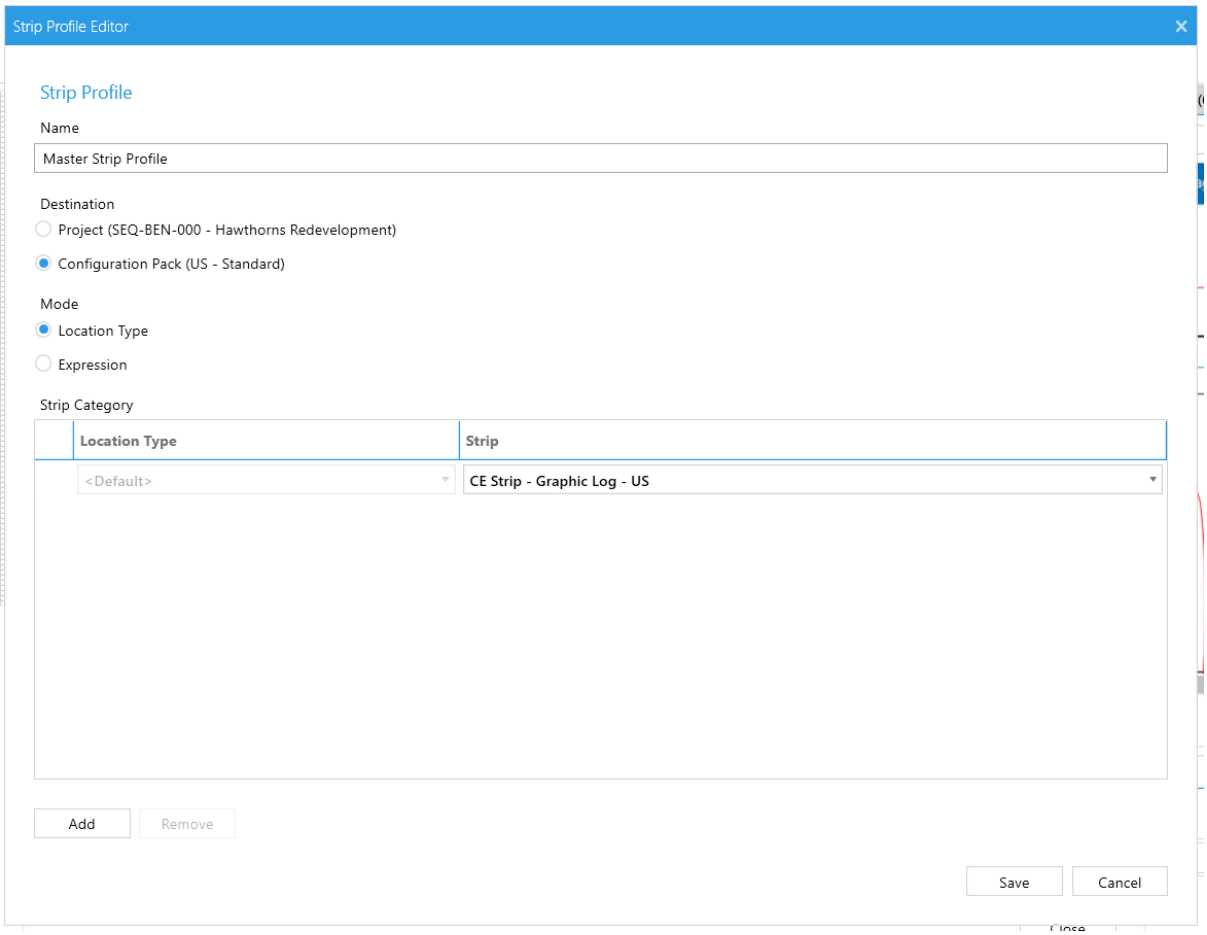
The Strip Profiles window will appear. Select the Add button to add a new Strip Profile.



Enter the following information for the selections at the top of the Strip Profile Editor window.

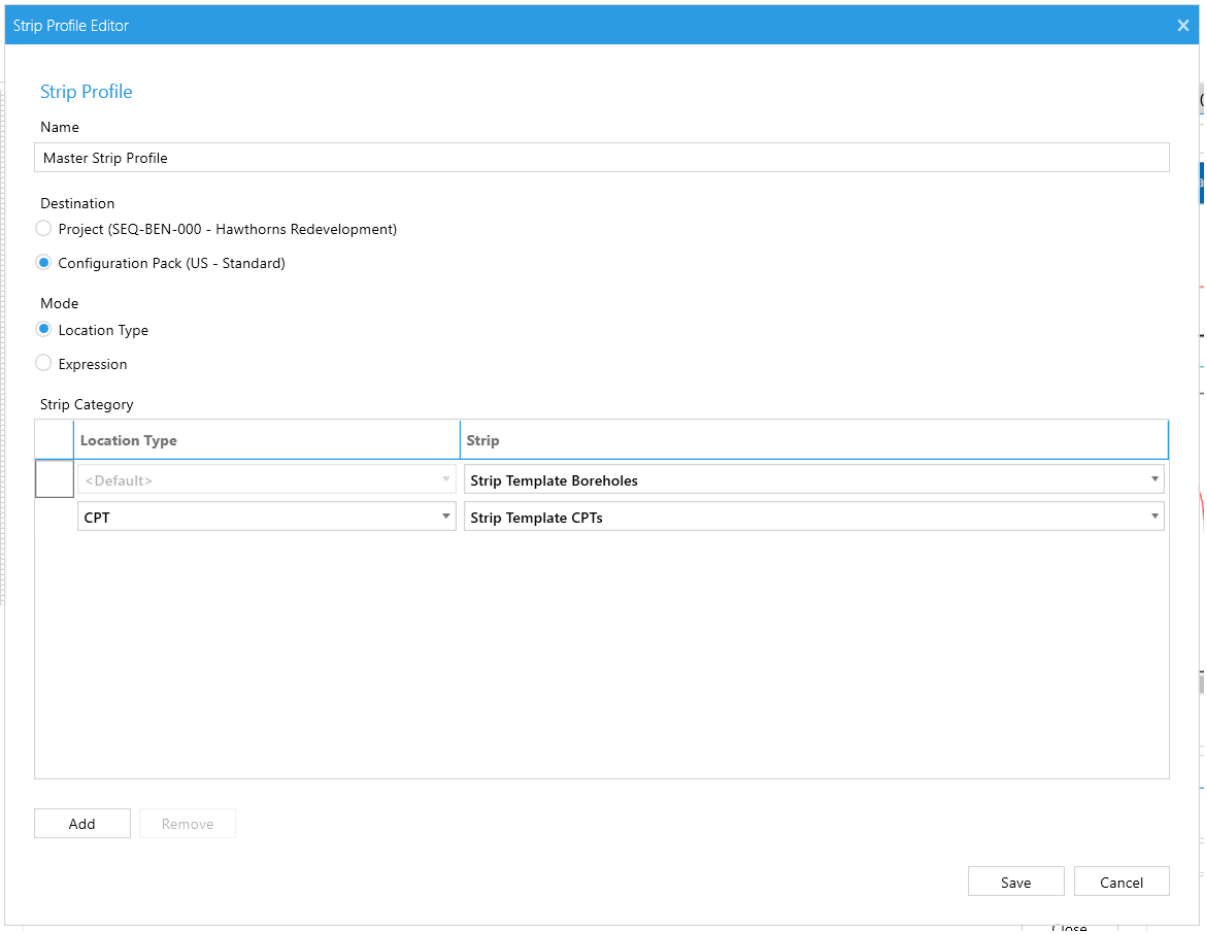
- **Name** – Master Strip Profile (This can be changed to whatever is appropriate)
- **Destination** – [This should match the location that the Strips and the Section Template have been saved to]
- **Mode** – Location Type

This tutorial keeps things simple by using the Location Type as the Mode, however, it is possible to use expressions to do more complex conditions to swap strips. The Strip Profile Editor Communities page explains this in more detail.



In the Strip Profile Editor, under the Strip Category, set the properties to be as follows.

Location Type	**Strip**
<Default>	Strip Template Boreholes
CPT	Strip Template CPTs



The Default option is the option used whenever another Strip Condition isn't met. In this case, things are kept simple where only CPT locations will show a different strip type but it is possible to add as many rows as needed

Press the Save button in the Strip Profile Editor window, and then press the Close button to Close the Strip Profiles window.

7. Applying all of the settings to the Section Template

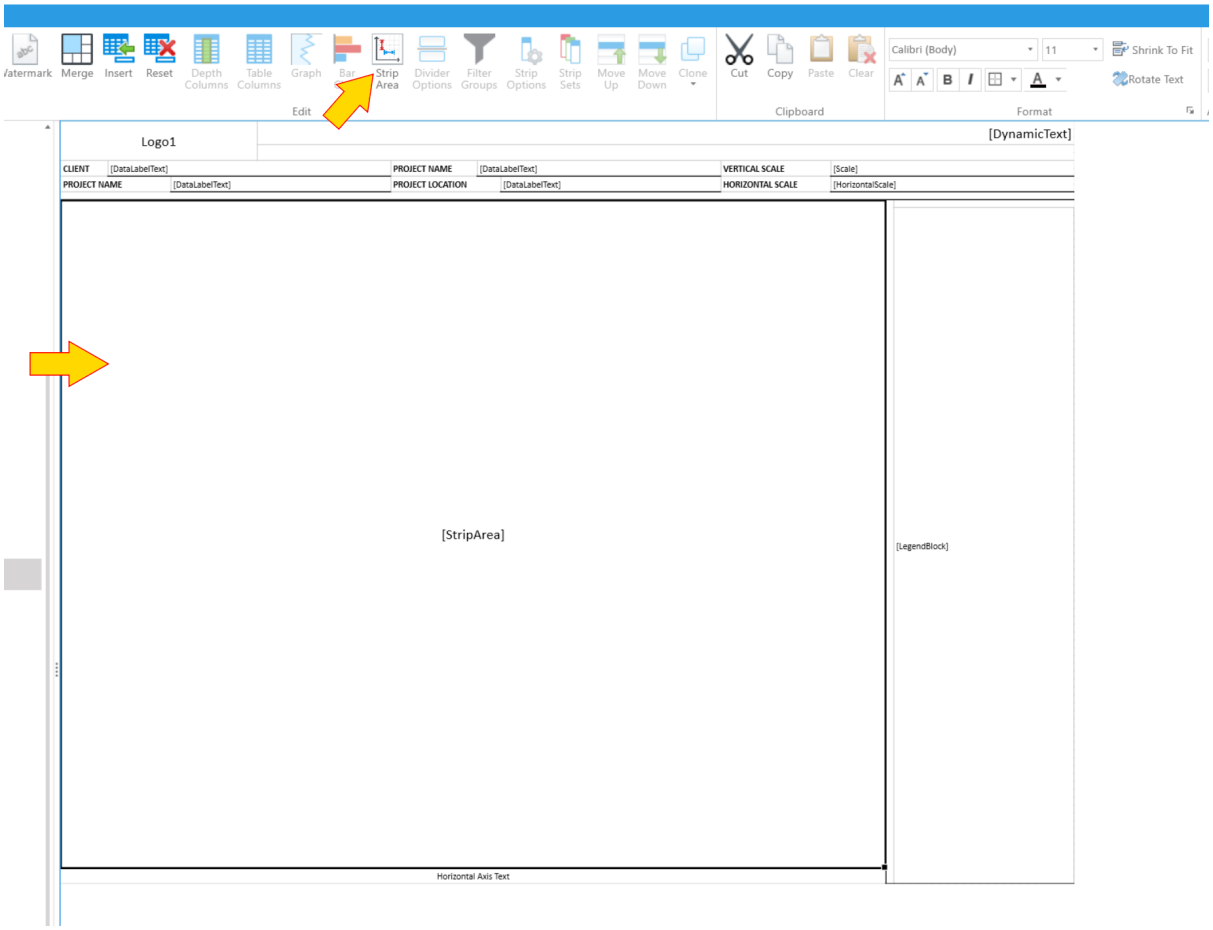
All of the required elements to get a Section Template functioning are now in place, now it is time to update the Section Template to work with the Strip Profile that was created.

7.1 Setting up the Strip Area

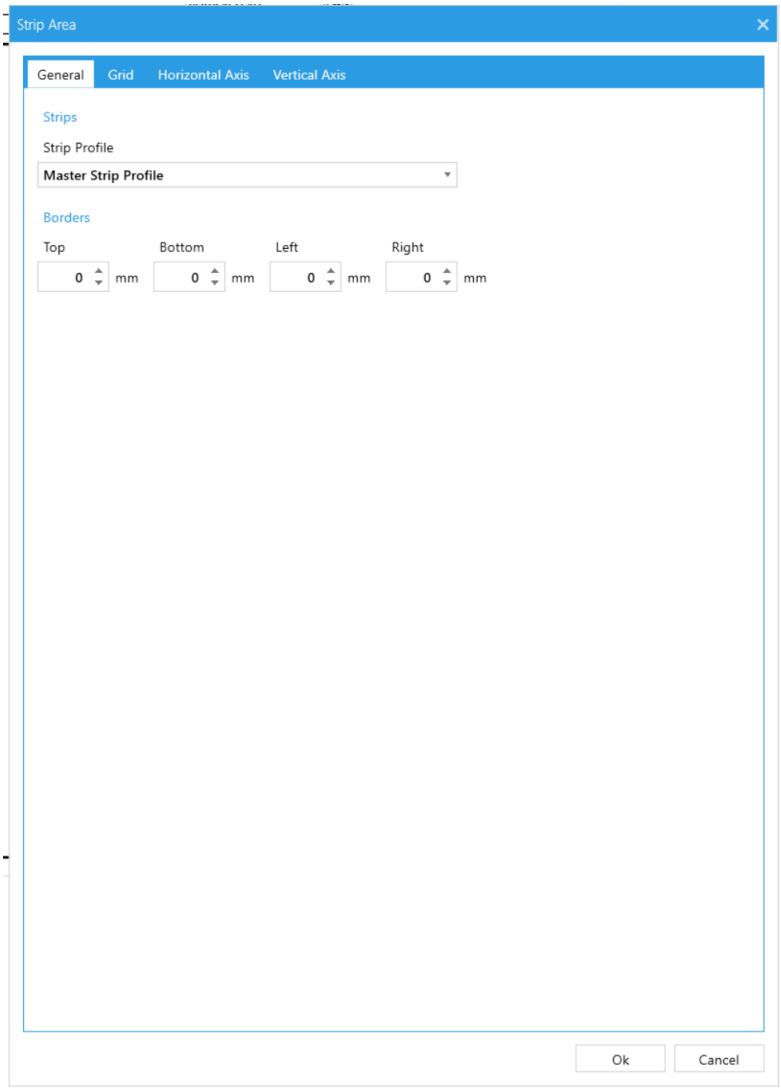
Reopen the Section Template that was created in the 4th step of this guide.

Alternatively the template can be opened by loading the Section Template after Section Properties Added.hbt template included with this tutorial.

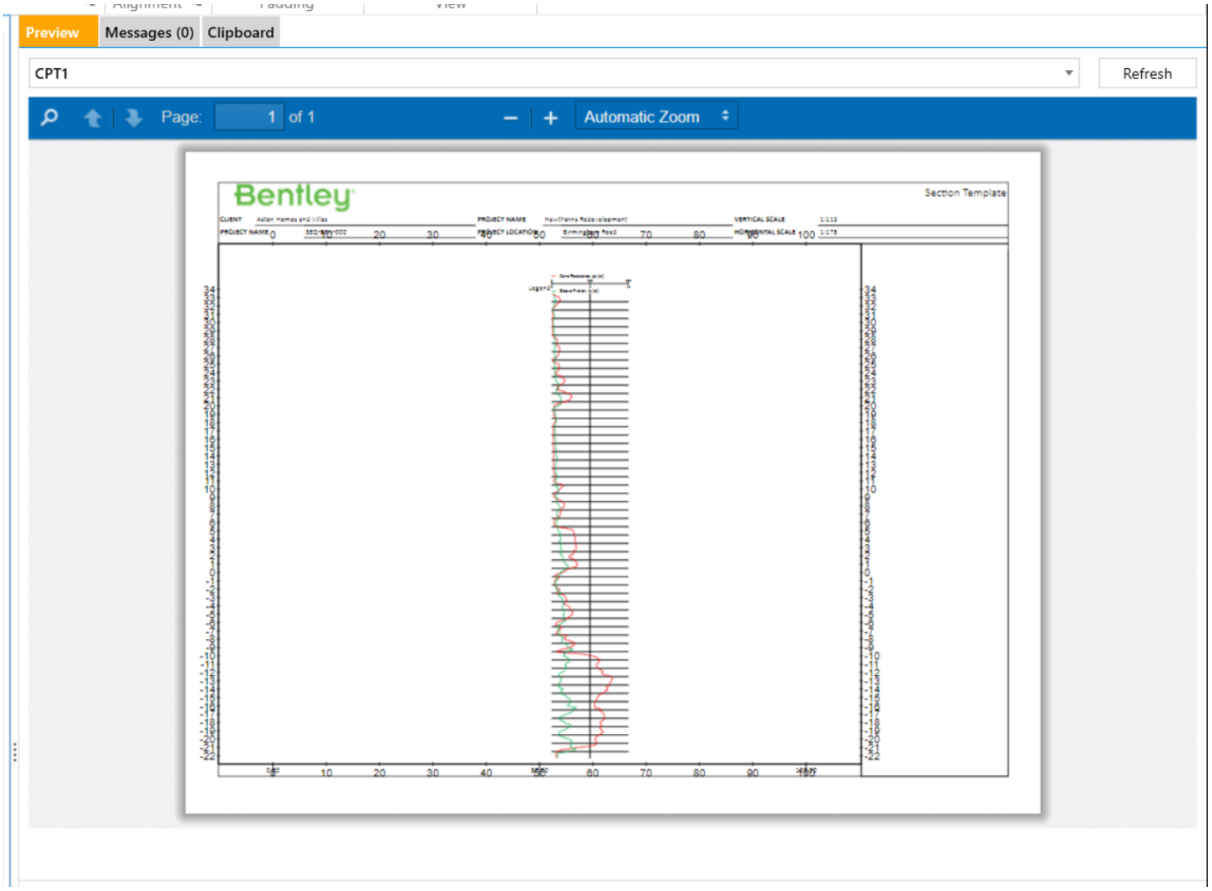
Select the merged area where the Strip Area was setup in a previous step, then select the Strip Area button in the ribbon.



The Strip Area window will then appear. Firstly, select the Strip Profile that was created in the 6th step of this tutorial. Then press OK to close the window.



Select the Refresh button in the Preview window to view the changes that have been made.



At present, the scale bars appear outside the bounds of the Strip Area. Select the Strip Area merged area and then select the Strip Area button on the ribbon.

Select the Horizontal Axis tab and then ensure the values are set as follows.

Change the following in the Properties window;

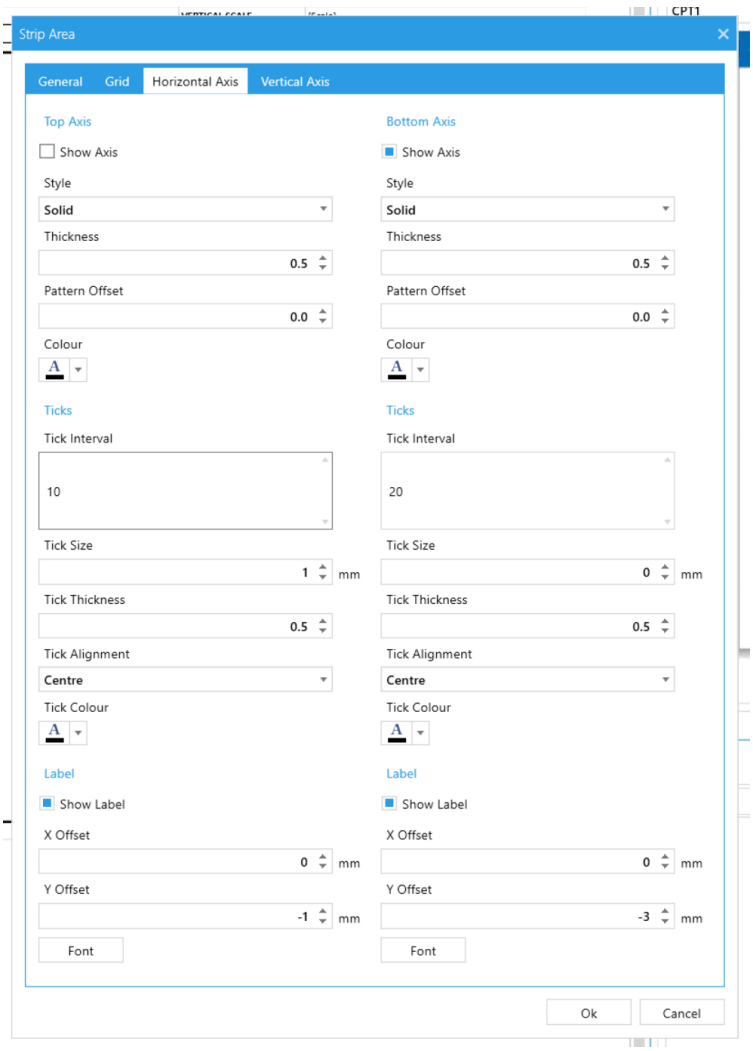
Top Axis

- **Show Axis** – Not enabled
- **Other Settings** – [Not Changed]

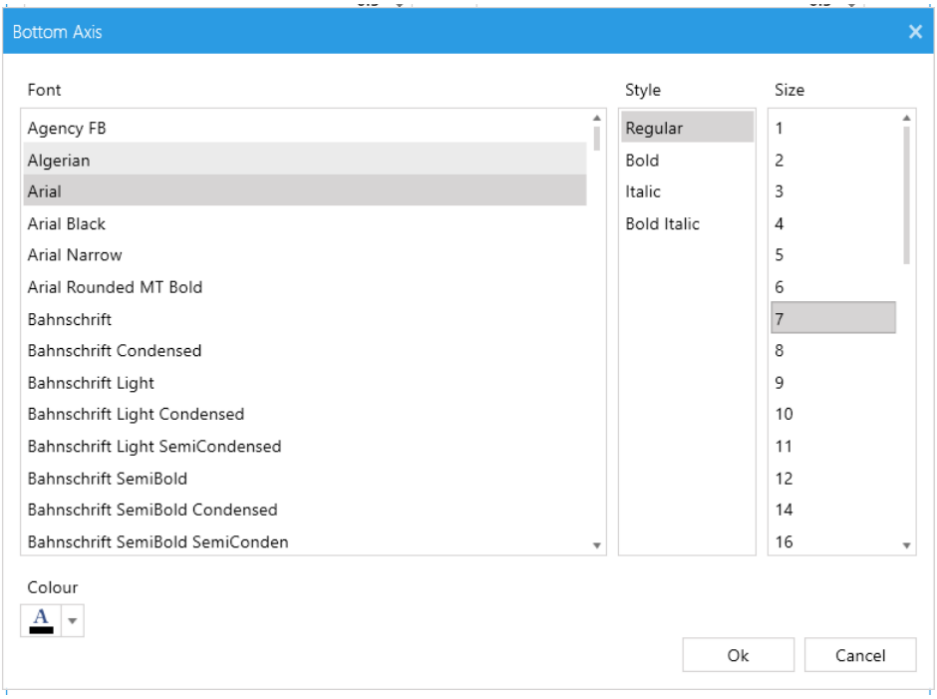
Bottom Axis

- **Show Axis** – Enabled
- **Style** – Soild
- **Thickness** – 0.5
- **Pattern Offset** – 0.0
- **Colour** – Black
- **Tick Interval** – 20
- **Tick Size** – 0mm
- **Tick Thickness** – 0.5
- **Tick Alignment** – Centre
- **Tick Colour** – Black
- **Show Label** – Enabled

- **X Offset** – 0mm
- **Y Offset** – -3mm



Select the Font button at the bottom of the Bottom Axis column, then select the font size to be size 7.



Select the Vertical Axis tab and then ensure the values are set as follows.

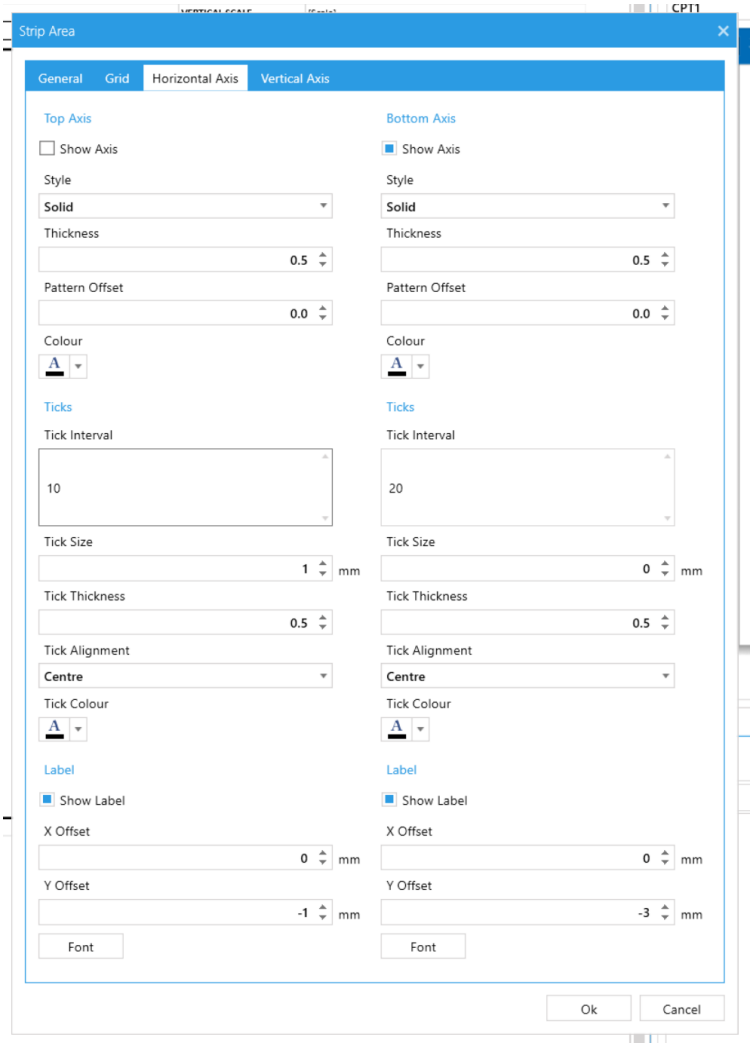
Change the following in the Properties window;

Left Axis

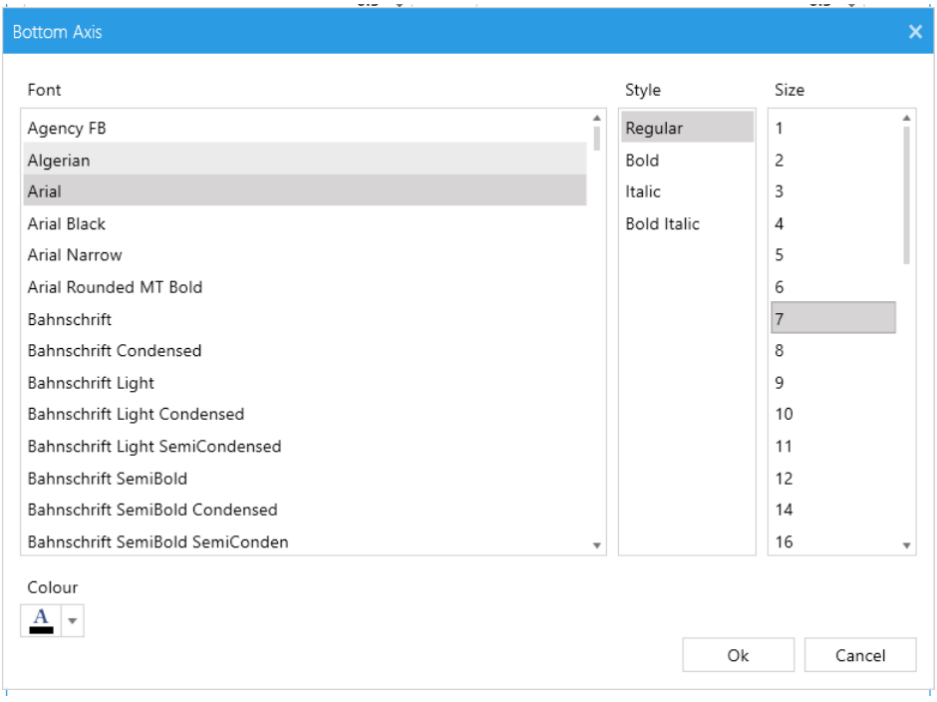
- **Show Axis** – Enabled
- **Style** – Soild
- **Thickness** – 0.5
- **Pattern Offset** – 0.0
- **Colour** – Black
- **Tick Interval** – 5
- **Tick Size** – 0mm
- **Tick Thickness** – 0.5
- **Tick Alignment** – Centre
- **Tick Colour** – Black
- **Show Label** – Enabled
- **X Offset** – 0mm
- **Y Offset** – 4mm

Right Axis

- **Show Axis** – Not enabled
- **Other Settings** – [Not Changed]



Select the Font button at the bottom of the Bottom Axis column, then select the font size to be size 7.



Finally select the Grid tab in the Strip Area window, then set the values as follows.

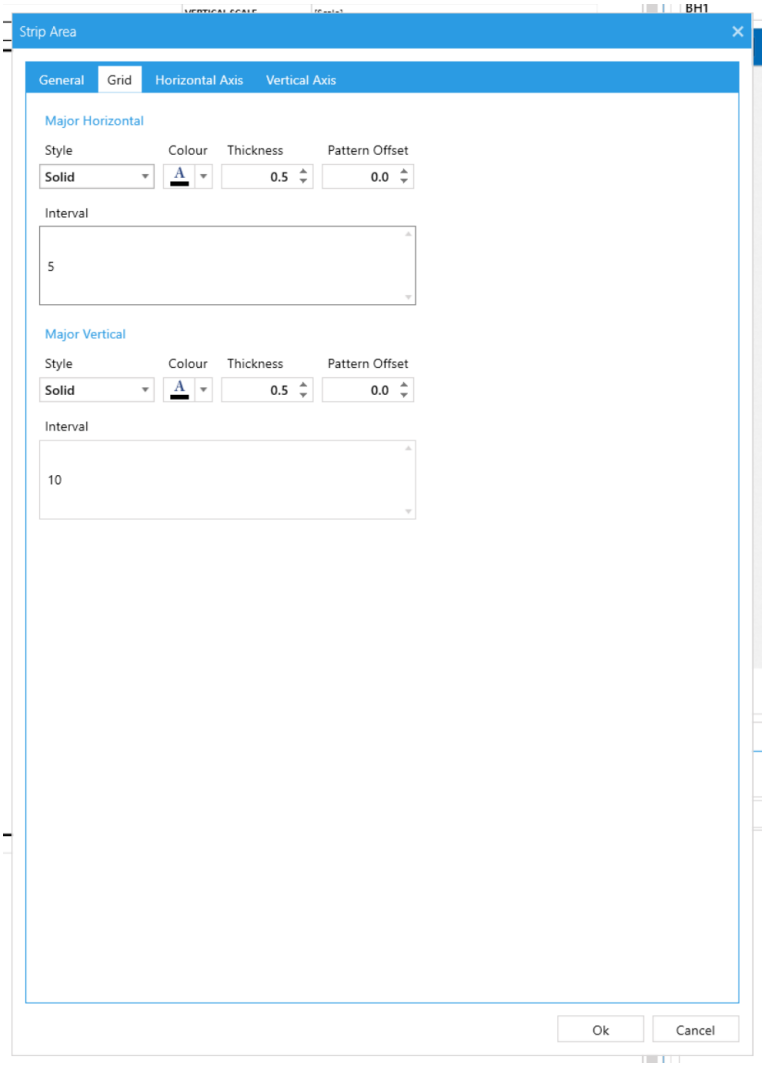
Major Horizontal

- **Style** – Solid
- **Thickness** – 0.5
- **Pattern Offset** – 0.0
- **Colour** – Black
- **Interval** – 5

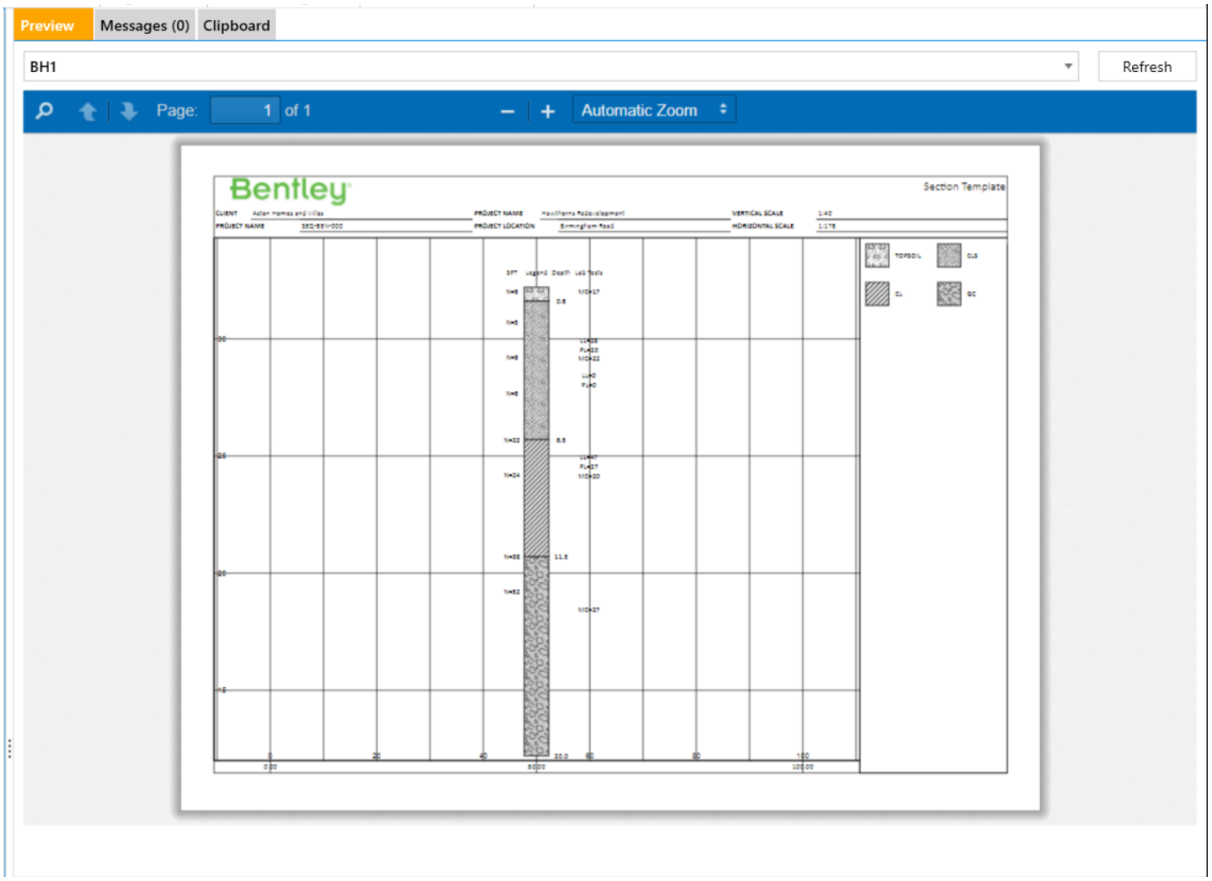
Major Vertical

- **Style** – Solid
- **Thickness** – 0.5
- **Pattern Offset** – 0.0
- **Colour** – Black
- **Interval** – 10

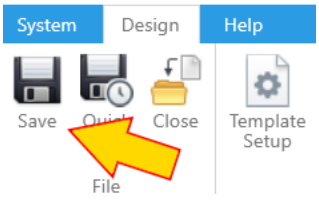
Then press OK to close the window.



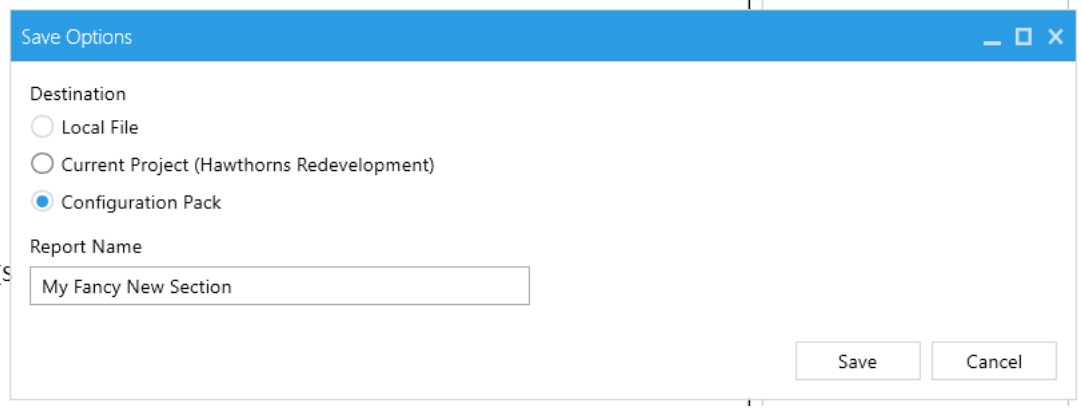
Select the Refresh button in the Preview window to view the changes that have been made.



Save the template into the Project or the Configuration Pack by Selecting the Save option in the ribbon.



Then choose the relevant save location and give the Section template a name, then press Save.



Note that Section Templates do not save the Strip Profile with them. Therefore, if the user wishes to transfer the Strips, Strip Profiles and Section Template then these will need to be exported as separate files.

*Strip Profiles can only be saved as a *.hbc from within Professional and then imported within Professional*

8. Final Template Output

Note that this is the point that the example file 'Tutorial 3 - Final Output.hbc' has been created. If comparing the final output with an output produced by a user, use this file.