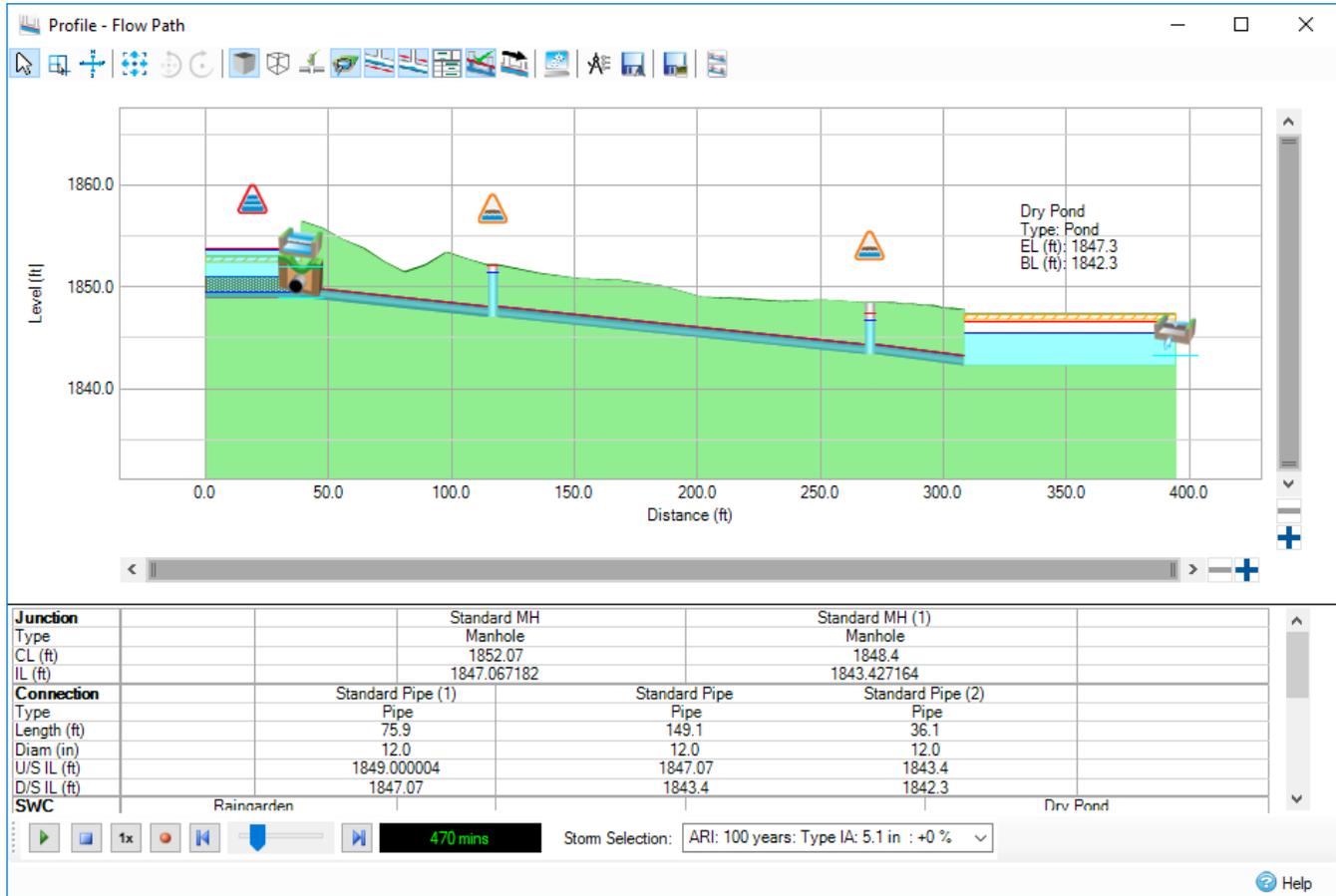


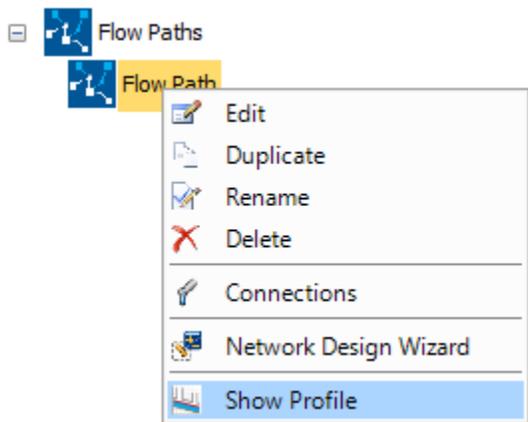
Profile

The **Profile** form allows a given **Flow Paths** to be viewed in profile, and shows the relative lengths and levels of the various **Connections**, **Stormwater Controls (SWC)**, **Simple Junction** and **Manhole** as well as the connections between them. The Summary table provides a quick look at the Profile items, allowing you to easily see and export important levels and sizes. As with the rest of InfoDrainage, the form is live and will update as the dimensions of elements shown are adjusted in the site. The profile can be exported to a CAD file, as well as most image formats.



Viewing a Profile

To view the profile for a given Flow Path, either double-click the flow path in the Tree View, or right-click and select **Show Profile**.



Accessing Data Forms

The property form of each element in the profile can be accessed by double-clicking the element. Choosing a connection will produce the Connections window (that contains all connections), where the selected connection will be highlighted. Selecting a Junction or SWC will open up the relevant property window for editing. Changes will be reflected on the Profile view once they are applied.

Toolbar Items

The toolbar provides easy access to a variety of functions.



Navigation

- The **Select** icon will change the cursor to Select mode. This mode is the default mode, and allows opening property windows via double-clicking, as detailed in **Accessing Data Forms**.
- The **Band Zoom** icon will change the cursor to Band Zoom mode. This enables a rectangle to be drawn in the profile window by clicking and dragging, which zooms the display to the selected area.
- The **Pan** icon will change the cursor to Pan mode. This allows easy movement around a zoomed in view by clicking and dragging.

History

- The **Full Extents** icon will revert all zooming and panning done since the form's opening, once more displaying the default extents.
- The **Previous** icon will step backwards to the previous view, undoing the most recent change. This can be selected multiple times to continue stepping backwards.
- The **Next** icon will step forward, if possible. This allows you to redo a change you undid via the **Previous** button.

Display Settings

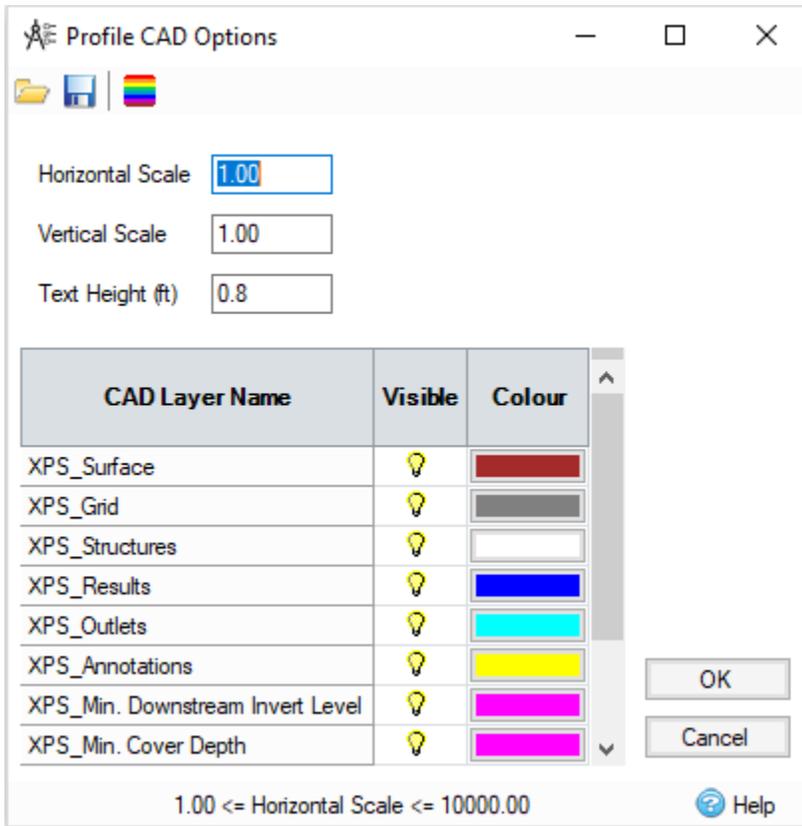
- The **3D View** will add a 3D effect to suitable objects displayed in the Plan, such as manholes and circular pipes. Either this option or Wireframe must be selected.
- The **Wireframe** view will turn off all 3D effects, instead displaying simple block colours. Either this option or 3D View must be selected.
- The **Show Branch Lines** option allows toggling of the additional Branch Line annotations.
- The **Toggle Outlet Locations** option allows display of the **Outlets** types and their invert levels, for all nodes.
- The **Toggle Invert Level Line** option allows display of the Minimum Downstream Invert Level line.
- The **Toggle Cover Depth Line** option allows display of the Minimum Cover Depth line.
- The **Toggle Summary Table** option will show or hide the Summary Table at the bottom of the screen.
- The **Show HGL** option will toggle the visibility of the red Hydraulic Grade line. Note that the button will only be enabled if the current file has been analysed.
- The **Reverse Orientation** option will invert the entire profile, rendering bottom to top. This setting perpetuates to all export options; CAD and Image.
- The **Display Settings** option will open the **Display Settings** menu, where most colours on the profile can be changed.
- The **CAD options** icon will open the CAD options window.

Exporting

- **Export to CAD** allows you to save the full profile view to a CAD design file.
- **Export to Image** allows you to save the current profile view to an image in your desired format.
- The **Plot** option will open the current Flow Path in the **Plot Profile** window, ready to be exported to the print device of choice.

CAD Options Window

The CAD Options form is used to set up the CAD Export options. From here, colours can be selected for each layer, as well as the HGL, and layers can be turned off, if not desired, using the light bulb icons. Scaling factors can be chosen for both horizontal and vertical axes, and a text height can be applied to ensure all text is a suitable height. Settings can be saved and re-loaded using the toolbar icons. The toolbar also contains a Reset button to revert all colours and settings to their default values.



Right-click menu

The right-click menu allows quick access to all of the items in the toolbar. See the relevant Toolbar Items section for more information. Some additional items are available:

- Show results will open the results form for the item being clicked on. This option is only available if the current site has been analysed.
- Edit item will open the clicked item's data form, in the same way as double clicking the profile item.

Annotations

Information is provided about the displayed profile items via Annotations. These are small snippets of information about the Junctions, Connections and SWC that can be seen at a glance. Annotations will only be displayed if there are enough space for them. You may need to zoom in to see the desired information, or else open the property window as described in Accessing Data Forms.

To toggle the visibility of the annotations, use the [Display Settings](#) page.

Ground and Surface

Where a surface file has been imported, the Profile will draw the correct ground level above each profile item, and fill in the resulting ground in green. If no surface file is included in the site, an artificial surface is supplied instead for ease of viewing. This merely draws straight lines from node to node using the supplied cover levels. This artificial surface is not used except as a visual aid.

Several Profile items have specific interactions with the ground and surface:

- Connections have their surface sampled along their length.
- Drainage systems are generally assumed to be open at the top, and thus no ground will be drawn above them. Closed drainage systems such as the [Chamber](#) or [Tank](#) will instead use the specified Exceedence level as the surface.
- Notional Connections and Simple Junctions will take their cover levels from nearby real items.

Summary Table

The summary table provides a concise view, containing a small summary of information about the profile items. Summary items are aligned with their respective items on the Profile. The summary table will be exported along with the profile only if it is currently visible.

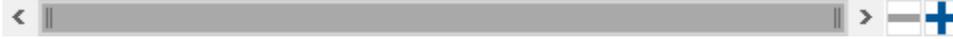
The summary table can be resized using the splitter bar above it, as well as hidden with the Toolbar option. If the summary table is not large enough to display all the contained information, a scrollbar will be displayed.

Items within the Summary Table can be edited directly from the form. Double-clicking an entry will create a text box, allowing the value to be changed. Pressing Enter or clicking away will commit the change and create a new undo marker. Pressing Escape will cancel the edit, leaving the original value. This allows minor changes to be made seamlessly from within the Profile form.

When adjusting the levels of Dual Drainage systems (e.g. bioretentions or swales), only the ponding area will be resized.

Alternate Navigation

Along with the Band Zoom and Pan options, the profile can also be manipulated using the mouse wheel or the scrollbars. The mouse wheel will zoom in or out based on the current cursor position. The scrollbars can be used to scroll normally, and have additional functionality.



Using the + and - buttons to the right or bottom of the scrollbar will zoom into the centre of the profile on that axis.

The ends of the scrollbars can be manipulated much like a splitter window. Hover the mouse over the ends until the cursor changes, then click and drag. This will increase or decrease the size of the scrollbar, with a corresponding adjustment in the scale of the profile. Note that while adjusting one of the ends of the scrollbar, the other end remains static, allowing zooming in or out in one direction.

All navigation can be undone or redone with the Full Extents, Previous and Next toolbar/right-click menu items.

Results

When there are analysis results, the maximum water level will be shown in each SWC as a horizontal line (using the **Max Water** colour in the Display Settings dialog box) to show how well the storage is being utilised for the current event. In the case of the more complex SWC such as bioretention and swale (with trench), the water level in each subsystem is calculated in the analysis, and will be drawn individually on the SWC.

Levels for drainage systems with slopes (swales, bioretentions, infiltration trenches and porous pavings), as well as sloped connections, are shown with equal depths along them. This view more accurately reflects how the internal analysis behaves.

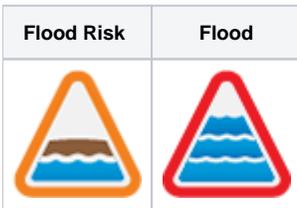
Animation

Video controls appear on the form when results have been generated, which allows you to view their water level animation. If more than one profile form is open, the water level animation will be synchronised between them. The same video controls also appear on the [Status Bar](#).



Flood/Flood Risk Indicators

In addition to animating the water level within the results, the profile will also display a warning triangle above a Junction or SWC when the current water level enters the freeboard (Flood Risk, SWC only) or Floods. The images used are:



Storm Selection

The Storm Selection combo box on the profile form (on the right of the video controls) allows you to select the storm whose results you wish to see animated in the profile form. Note that the storm selector is also available on the Status Bar, and these storm selectors are synchronized with each other.