



WHAT'S NEW DEVOTECH iDAS 2027.0

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Devotech iDAS 2027.0
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SUPPORTED CIVIL 3D VERSIONS

Autodesk Civil 3D 2025-2027.

OLD DRAWINGS COMPATIBILITY

Drawings from the previous iDAS 2026.0 are fully compatible with the iDAS 2027.0.

NEW COMMANDS

TUFLOW Analysis

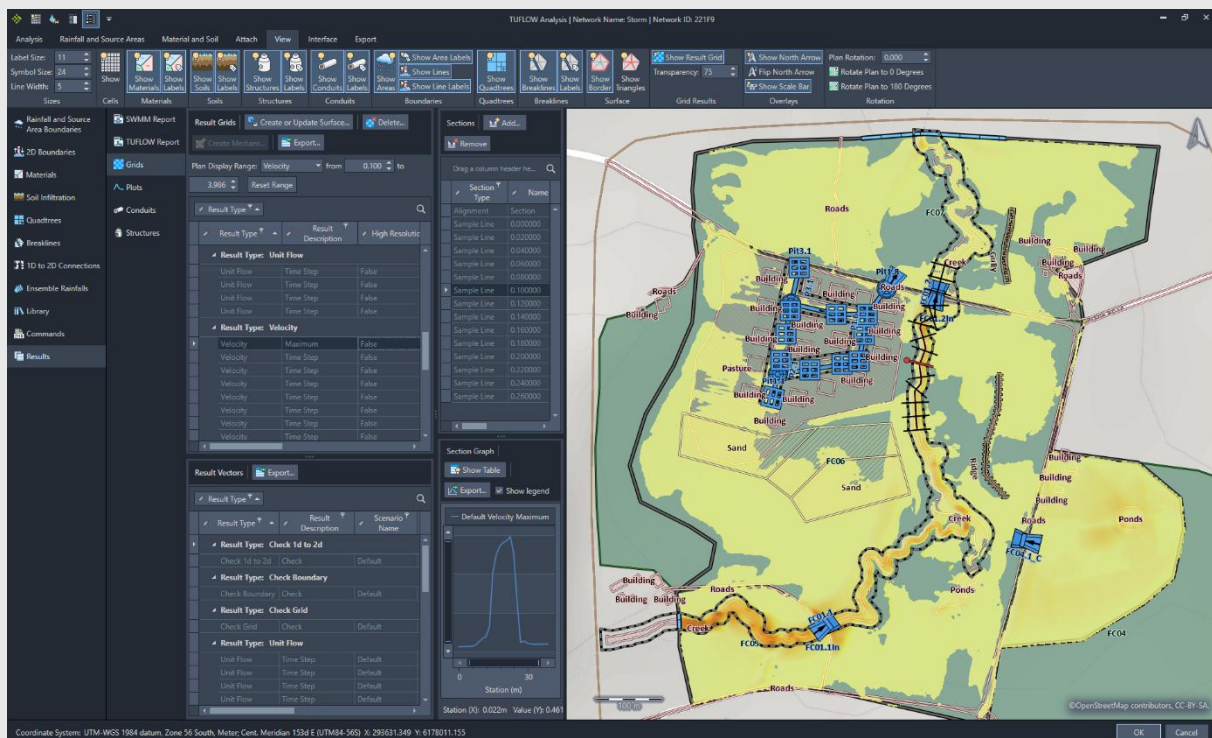
Perform advanced flood modelling directly within the iDAS Manage and Analyze interface. The integration enables the creation of connected 1D and 2D hydraulic models, streamlining the workflow between drainage design, catchment analysis, and flood simulation. Devotech iDAS support TUFLOW version 2025.2.2 by default, but custom versions can be specified.

Devotech iDAS provides an interface to the TUFLOW engine to simplify setting up a TUFLOW project, analysing the project with the TUFLOW engine, and displaying the results in Devotech iDAS. Devotech iDAS does not include a TUFLOW license; however, models can be run in TUFLOW's demo mode.

Demo mode has the following limitations:

- 100 000 total cells and 30 000 active (potentially flooded) cells.
- 100 1D channels.
- There can only be one CPU 2D domain (M2D is not supported). HPC Quadtree is supported.
- A simulation time of 10 minutes.
- CPU and GPU compute are supported.

The TUFLOW engine is extensive and supports many different types of analyses. The TUFLOW / Devotech iDAS integration focuses on the commands that complement the types of analyses performed in Devotech iDAS. As a result, Devotech iDAS supports a defined subset of TUFLOW commands. If additional commands are required, Devotech iDAS provides a location for users to enter custom TUFLOW commands to augment the generated TUFLOW project.

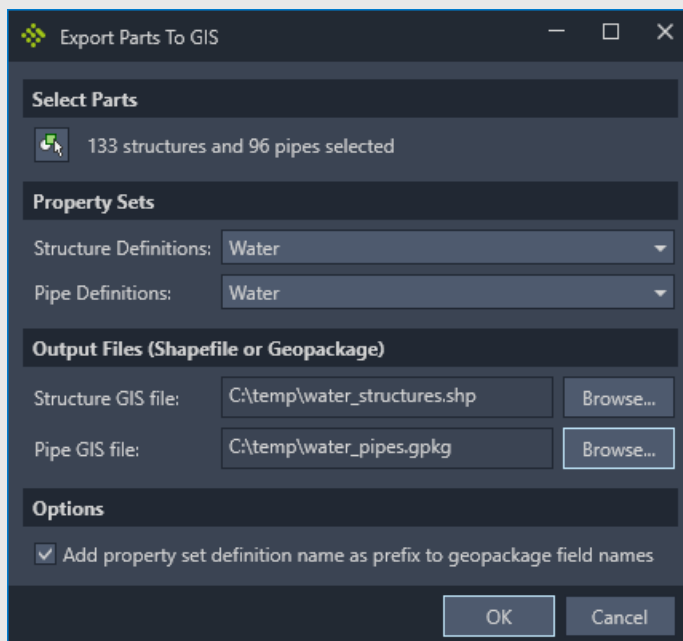


Copy Elevation Analysis Command / Copy Elevation Analysis Command

Copies a surface elevation analysis from a source surface to multiple destination surfaces.

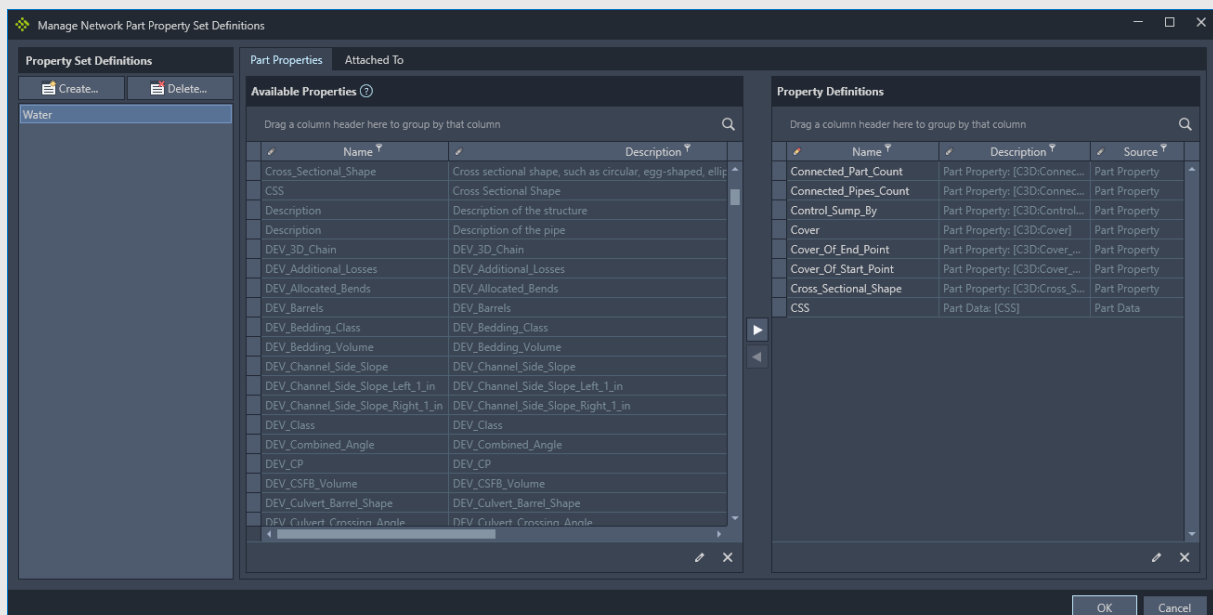
Export to GIS Command / Export to GIS Command

Exports a network to GIS formats including property set data. Multiple property sets can be exported. The resulting file types can either be Shapefiles or GeoPackages.



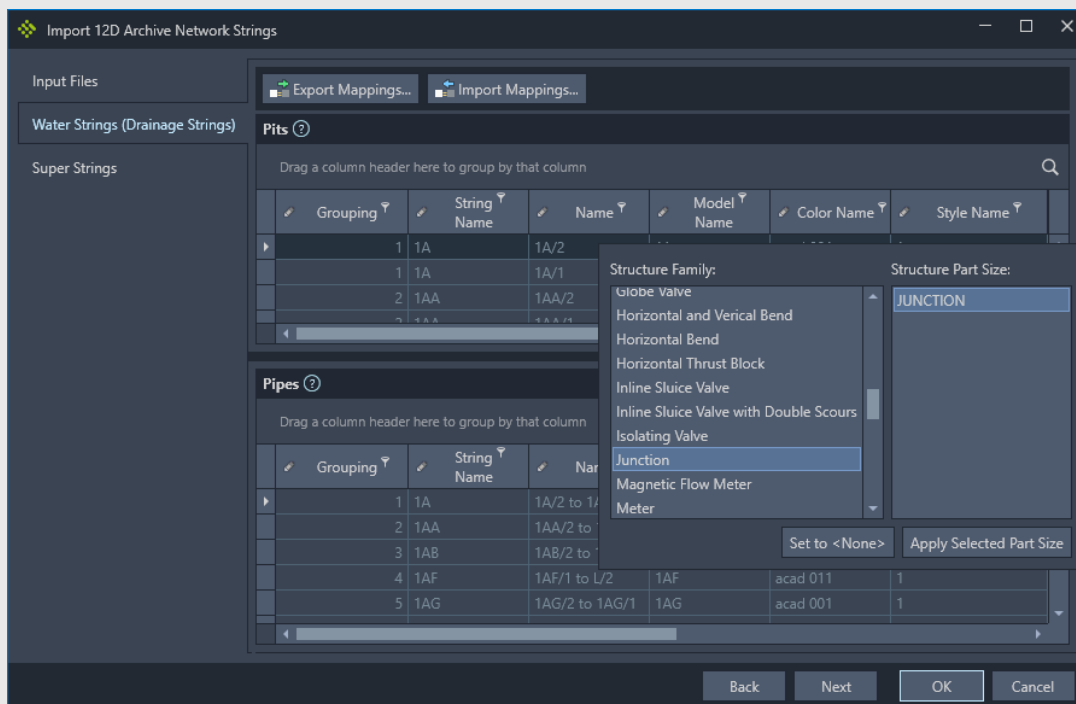
Manage Part Property Sets Command / Manage Part Property Sets Command

Links property set fields to network part and analytical data. This is useful if the analytical data or the part data need to be displayed in Civil 3D tables, labels, etc. Additionally, the resulting property sets can be exported with the new **Export to GIS** command.



Import 12d Network / Networks Command

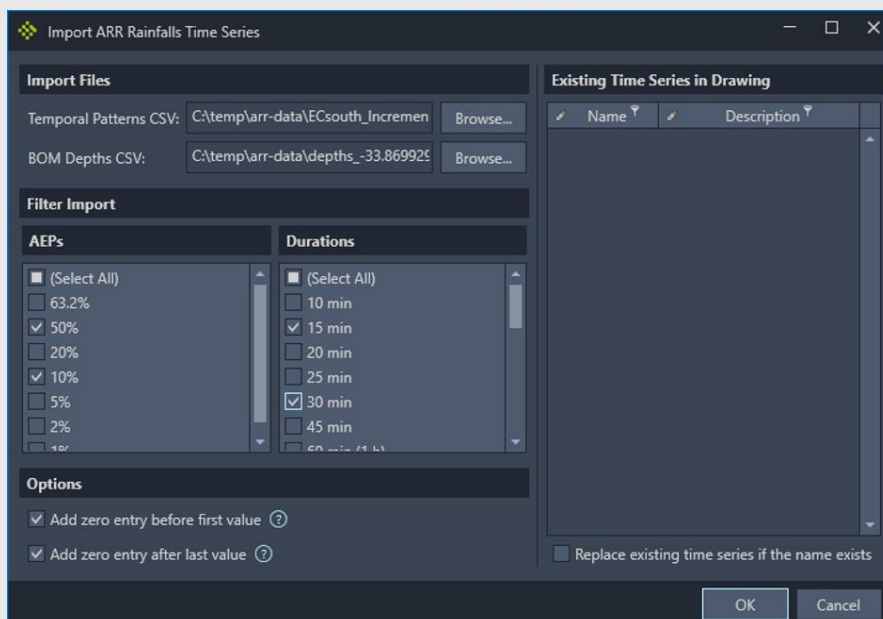
Creates a network from a 12d archive (.12da) or 12d zipped archive (.12daz) file containing drainage and super strings.



Import ARR Rainfalls Command / Import ARR Rainfalls Command

Imports Australian Rainfall and Runoff (ARR) data and creates rainfall time series patterns to be used by the TUFLOW analysis.

This command imports temporal patterns from the ARR Data Hub website (<https://data.arr-software.org>), and the rainfall depths from the Bureau of Meteorology website (<https://www.bom.gov.au>), and combines them to create rainfall time series that can be used for storm analysis. The imported time series will be added to the pipe manager / manage and analyze library.



Find & Replace Descriptions Command / Find & Replace Command

Finds and replaces text in pipe or structure descriptions. It is useful if multiple descriptions need to be changed at once.

COMMAND IMPROVEMENTS

General

Theme applied to all dialogs

Theming of all dialogs are now consistent. Dialogs that were previously grey, now are themed with the same dark blue theme.

Register Command / Register iDAS Command

New interface for new licensing system

The license manager interface has been redone and simplified in order to support the new licensing system.

The screenshot shows the 'iDAS License Manager' window with a dark blue theme. At the top, it features the Devotech and iDAS logos. Below the logos, there is a section for company and product information. The 'License Details' section lists various attributes like product name, version, and status. The 'Credentials' section includes fields for username and password, along with a 'Logout' button. The 'License Management' section at the bottom has buttons for 'Get license from server' and 'Return license to server', and a 'Close' button at the very bottom right.

Devotech Oceania Ltd www.devotechgroup.com activations@devotechgroup.com	Product name: Devotech iDAS® Product version: 2027.0.8.25 Supported Civil 3D: 2025-2027
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License Details
Devotech iDAS®: 2025-2027
Seat/Machine ID: 4872754862332918829
Customer name: Devotech
Offering: Perpetual Cloud New with 12 Month Subs (2027)
Activation method: Password
License status: **Active**

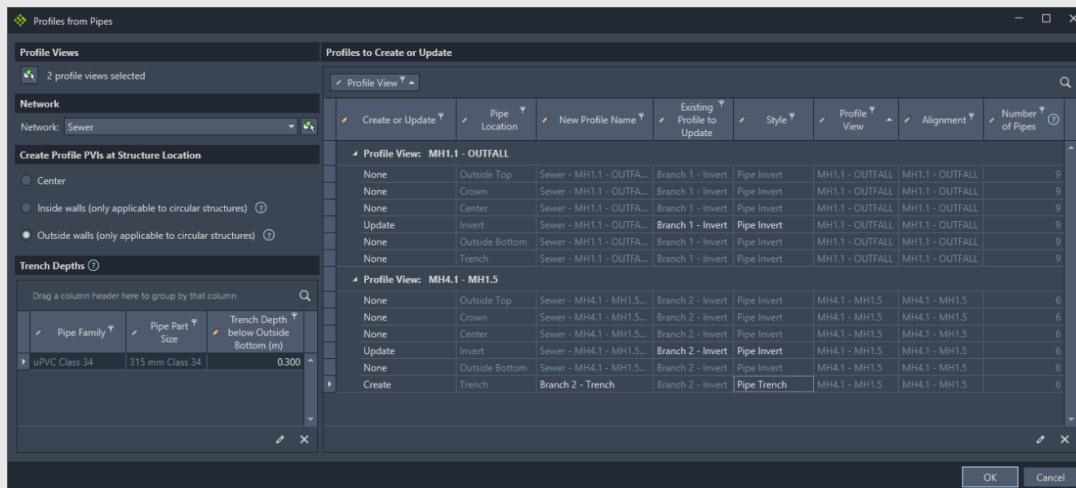
Credentials
Type: Username and Password
Username:
Password:

License Management
License:

Profile from Pipes Command / From Pipes Command

Overhaul command

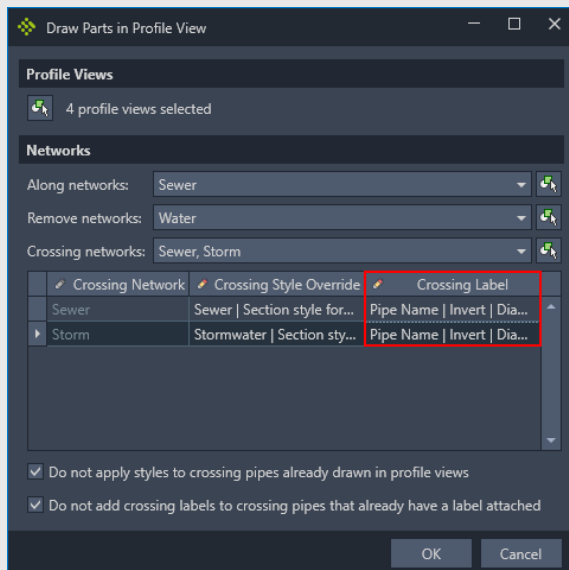
The command has been overhauled to make it more streamlined. It now supports creating profiles for multiple profile views at once, as well as different trench depths based on pipe part size.



Clean Up Command / Draw Parts Command

Add an option to assign crossing labels

An option has been added to assign a crossing label per network for crossing pipes. Due to a limitation in the Civil 3D API, this option is only available for Civil 3D 2026 and newer.



Storm Water Wizard Command / Sewer Wizard Command / Gravity System Command

Additional match location options added

The options to set the conduit levels based on a match location has been expanded. The options **Outside Bottom** and **Outside Top** have been added. The match option **As per pipe** has been removed as it provided no functionality in this context. The UI has also been improved to make it clear that the **Elevations** and **Match Location** options are related.

Catchment Delineation Command / Catchment Delineation Command

Updated UI to group options more logically

The UI has been updated in order to more logically group the various options. The new layout should improve the catchment delineation workflow.

Catchment Delineation

Surface
Select surface to analyze: Final Surface

Areas to Include in Analysis
0 polylines selected

Areas to Exclude from Analysis
0 polylines selected

Discharge Locations from Polylines
☒ Polyline layer: Pipe-Sewer-Priv

Discharge Locations from Structures and Points
0 structures selected
Filter by part families: <None>
0 AutoCAD or COGO points selected
COGO point groups: <None>
Discharge location area: 1.000 m²
Discharge location length: 1.000 m

Analytical Surface Options
Meters per cell: 10.000 m
No. of horizontal cells: 232 cell
No. of vertical cells: 245 cell
Total No. of cells: 56840
Elevation method: At grid point

Analysis Options
☐ Min. watershed area: 1.000 m²
☒ Fill depressions
☒ Export GIS files: C:\Users\KyleLancaster\Desktop

Polyline Creation and Layer Options

Option	Erase	Layer
☐ Watersheds	☐	0
☒ Catchments	☒	Catchments
☒ Discharge location areas	☒	Discharges
☐ Watershed flow paths	☐	0
☒ Catchment flows paths	☒	Flow Paths
☒ Longest catchment flows paths	☒	Longest Flow P

Flow Path Creation Options
☐ Weed by accumulation: 1.000 %
☒ Weed by flow path order: 1 No.
☒ Apply thickness to flow paths

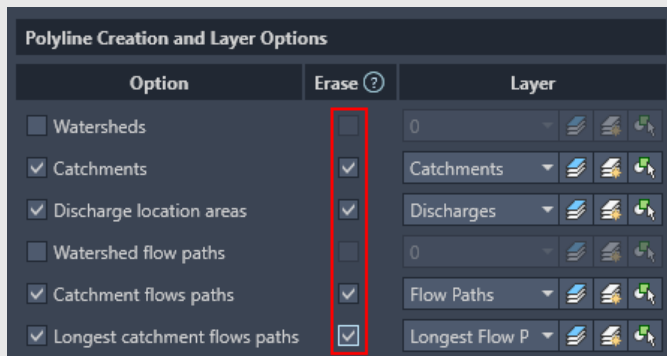
OK Cancel

Improve cell size change performance

When the **Meters per cell** option was changes in drawings with very large surfaces, the dialog would become unresponsive for some time, while performing calculations. The performance of changing this property has been vastly improved, and now working with large surfaces will not slow down the dialog as drastically.

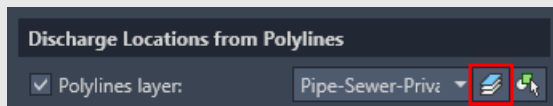
Clear layer option

An option has been added to each of the **Polyline Creation and Layer Option** layers, that will delete all polylines on the selected layer before creating new polylines. This allows the user to easily rerun the analysis without needing to clean up the drawing beforehand.



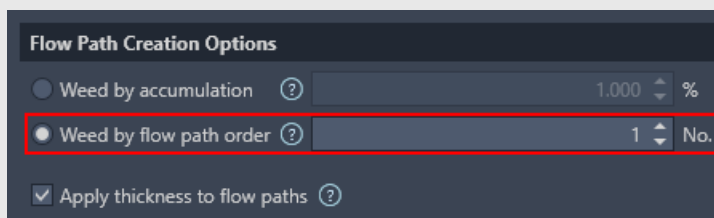
Discharge current layer option

An option to set the current layer as the discharge polyline layer has been added.



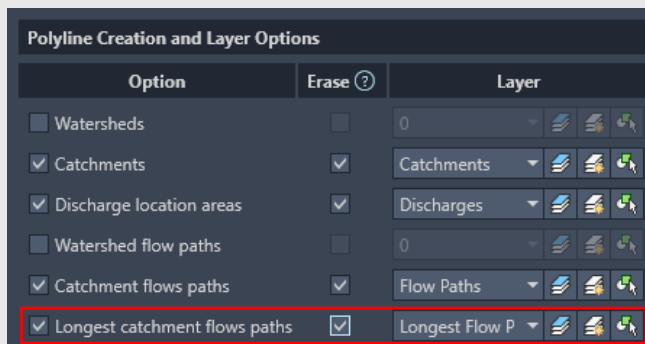
Additional weeding option

An additional weeding option has been added that produces better results in some cases. Each segment of a flow path polyline has an order number starting at 1 at the most upstream segment, and increasing as the flow goes downstream. The new options allow for the removal of an order number and all order numbers below the specified order number. This effectively trims the start of the flow paths, thus allowing the user to only start showing flow paths when the water has accumulated to a sufficient depth.



Option to generate longest flow path for each catchment

An option has been added to generate the longest flow path per catchment. The flow path can then be used in further analyses, such as analyzing catchments in the Pipe Manger / Manage an Analyze dialog.



Alignment Tags Command / Segment Labels

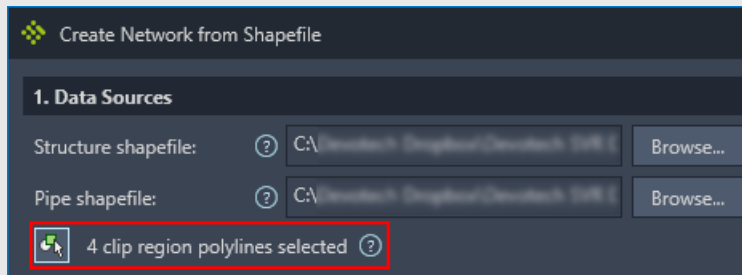
Child styles for alignment tags

Child styles for alignment tags have been added to the following commands: sewer wizards, storm water wizard and alignments tags.

Import Shapefile Command / Shapefile Command

Option to limit the import to a specific area of the drawing

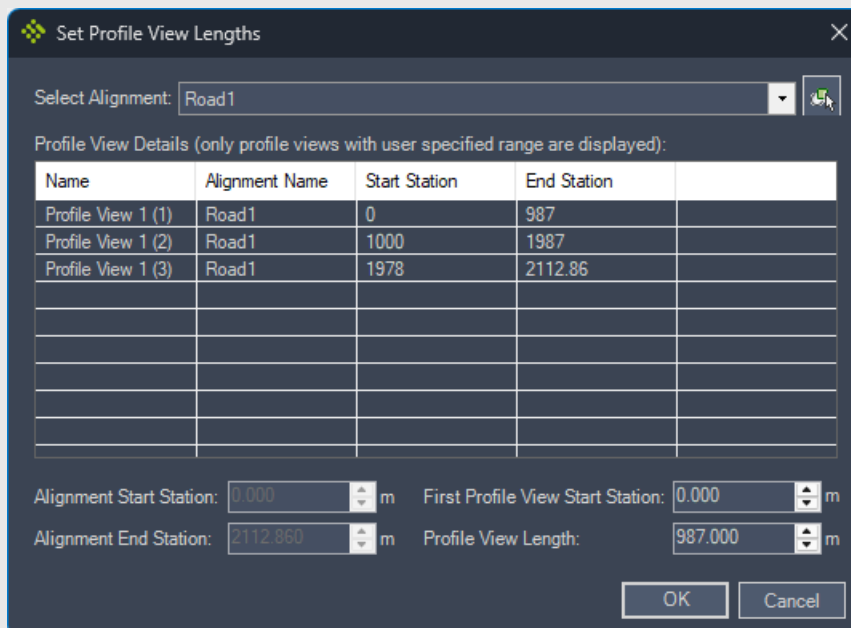
An option has been added to limit the shapefile import to a specific regions of the drawing as defined by polylines.



Set Length Command / Set Lengths Command

Set profile view length for multiple alignment

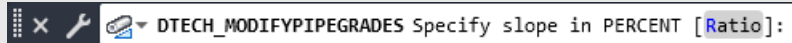
The command has been improved to allow the selection of an alignment. The dialog has also been improved to make it more user friendly.



Grade Pipes Command / Grade Branch Command

Changed the slope input method to a keyword option

Previously, slopes were entered as percentages by default. Users could enter a ratio by adding **1:** before the value, but this was tedious for those who primarily use ratios. The command now prompts for the slope type and remembers that selection until it is changed.



Match Pipe Inverts Command / Match Inverts Command

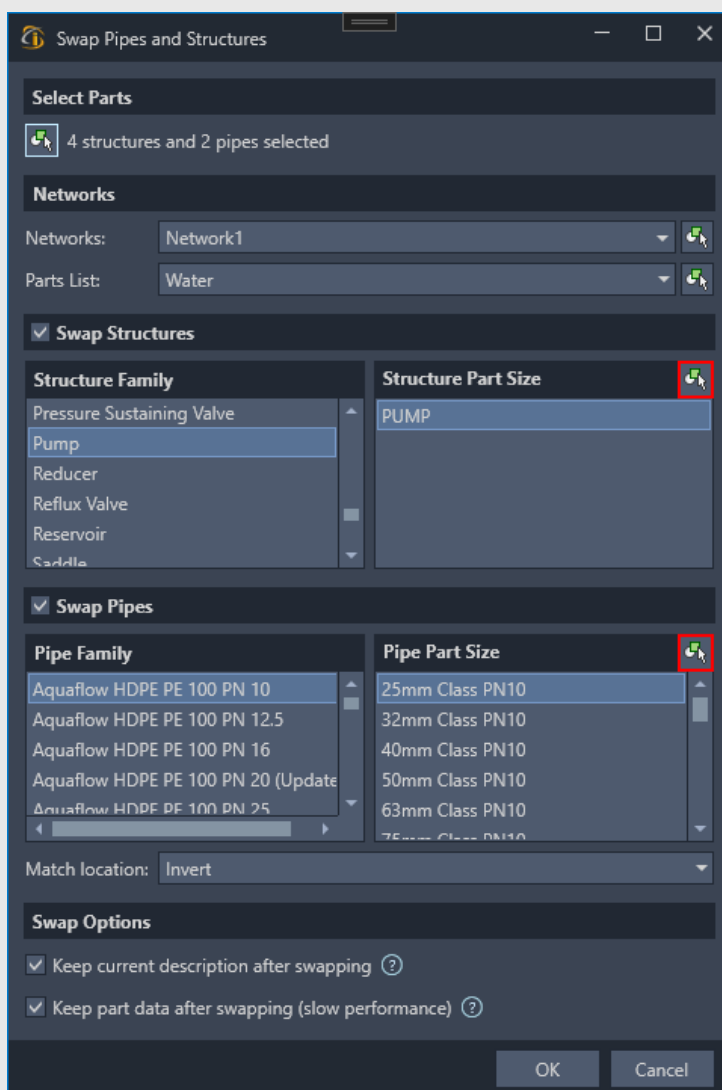
Additional match location options added

Two options have been added to the match location prompt: **Outside Top** and **Outside Bottom**.

Swap Parts Command / Swap Parts Command

Added option to select a part family and size from an existing part

Select buttons have been added at the top right of the **Structure Part Size** and **Pipe Part Size** lists, which can be used to select a part family and part size from an existing structure in the drawing.



Add As Per Pipe option to match location

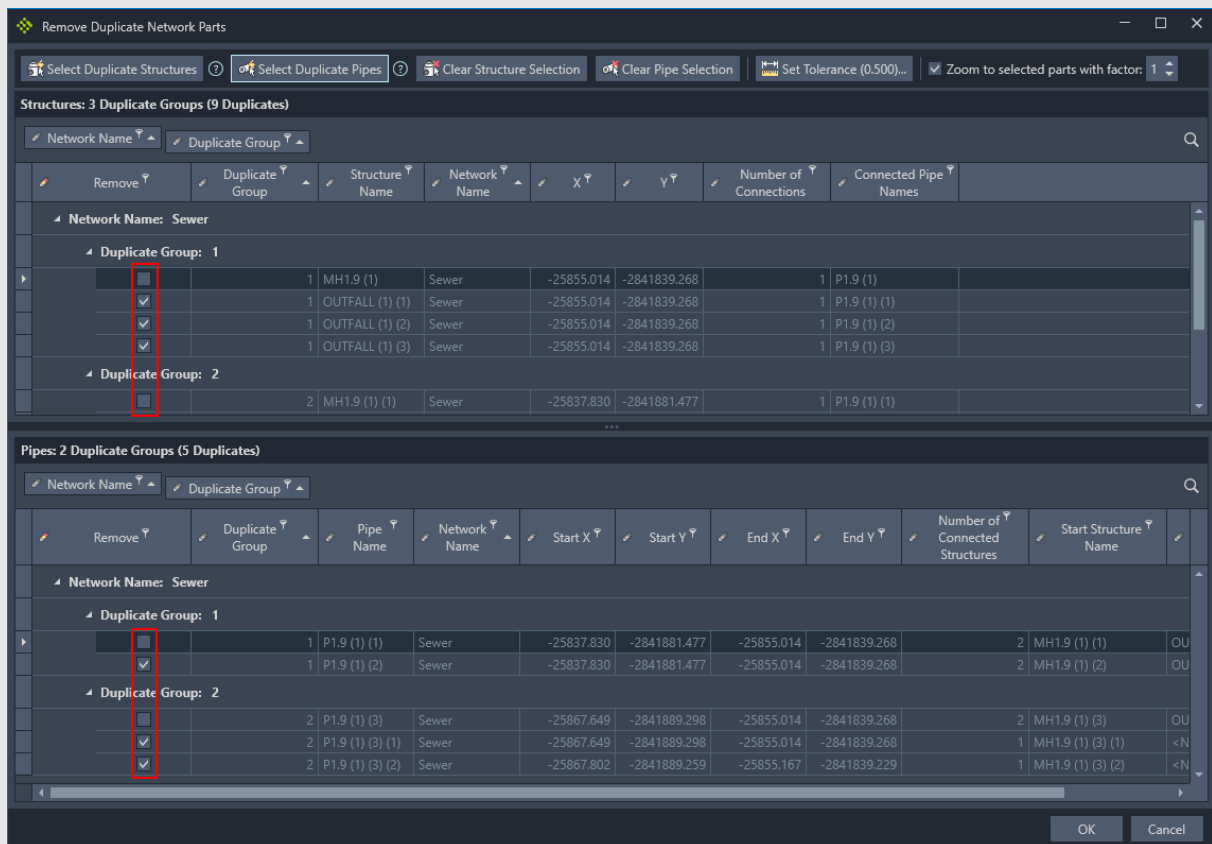
As Per Pipe option has been added to the **Match location** options. This will use the location setting as defined in a pipe's part data to determine the location about which to swap the pipe.

Remove Duplicates Command / Duplicates Command

Overhaul command to make it easier to identify and remove duplicates

This command has been completely redone to improve the functionality and make it easier to identify and remove duplicate parts. Some of the new features are:

1. Automatically identify duplicate parts.
2. Set a custom tolerance distance from which duplicates will be identified.
3. Easily filter and group duplicates to quickly select which duplicates to delete.



PIPE MANAGER IMPROVEMENTS

All Networks

Missing units in BOM table headers

Units were missing from the BOM table headers. This has been fixed, and all appropriate columns now include units.

Incorrect values in last column of BOM structure summary

The last column would display all zeros even if a structure fell into that category. This has now been fixed and the correct number of structures will be displayed for the last category.

Parts not on the surface would display incorrect error message in the BOM tables

If a pipe or structure was not contained fully within a surface, then an incorrect error message would be displayed in the BOM tables. This has been fixed, and more appropriate messages will now display, indicating that the pipe or structure is not contained within the surface.

As-built displays incorrect closest pipe

Under some circumstances the as-built table would display the incorrect closest pipe to the as-built text. This has now been fixed.

Swapping pipes does not update the description

When swapping pipe sizes through the various pipe/conduit tables, the description column would not update, and would show the old description. This has been fixed, and the new description, after the swap, is now displayed.

Imported curves always add the number 1 to the curve name

When importing curves in the library tab the new imported curves would get the number 1 added to the end of their name. This has been fixed and a number will only be added if a duplicate name exists.

Multiple consecutive spaces in a network's name causes an error

If a network name contained multiple consecutive spaces, then when switching networks, an error message would be displayed. This has now been fixed, and network names can contain multiple spaces.

Storage nodes shown as flooded in the node flooding summary

Occasionally, storage nodes would be shown as flooded in the node flooding summary under the reports section. They would continue to be shown as flooded until the dialog was closed and reopened. This has been fixed and the flooding status of the storage nodes will now be displayed correctly.

Imported IDF curves can create duplicate names

When importing IDF curves with names that already exist in the library, the names are duplicated. This has been fixed, and incremental number will now be added to the back of the name for duplicate names.

Importing IDF curves from poorly formatted spreadsheets throws an error

When importing IDF curves from spreadsheets that are not formatted correctly, a generic error is shown. This has been changed to inform the user that there is a formatting error in the spreadsheet.

Graph slider gets stuck with last values

If the results graph slider is used, and then a pipe or structure graph toggled on and off, then the slider would get stuck at the last values used until the dialog was closed and reopened. This has now been fixed.

Renaming an IDF curve prevents graphs from updating

After renaming an IDF curve, and then editing the IDF curve values, the graph would not reflect the changes until the IDF curve was selected again. This has been fixed, and the graphs will now update immediately.

Missing SWMM5.exe message improved

If the SWMM5.exe is missing (possibly due to a corrupt installation), then a message will be shown in the analysis results tab instead of the results, informing the user of the problem.

```
Unable to run SWMM5.exe  
The following error occurred: The system cannot find the file specified
```

Storm Water and Sewer Networks

Sewer and storm link flow summary right-click options incorrect

Right-click options for sewer and storm networks, in the link flow summary table, displayed options for structures instead of conduits. This has been fixed, and now the standard options for conduits are displayed.

Nothing happens when creating profiles from pipes when a network contains loops

If a network contains a loop (pipes connected in a circle), then when running the profile views from pipes command does nothing. This has been changed, so that when a network contains a loop, and the command is run, then a message box will inform the user that it is not possible to create the profile views due to the presence of loops.

Sewer and storm surcharge summary table not updating

After an analysis the surcharge summary table does not always refresh, and may show old information. This has been fixed, and the table will always refresh after an analysis.

Swapping pipes clears results

When swapping pipes all analyzed results would be cleared. This has been fixed and the results will no longer be cleared, only the applicable results for the swapped pipes will be cleared.

Incorrect columns displayed in structure tables

A **Maximum Allowed Inflow** column was displayed in some structure tables. This column was now meant to be added to the tables, and has been removed.

Add descriptions, loss coefficients and min. elevations to surface channels table

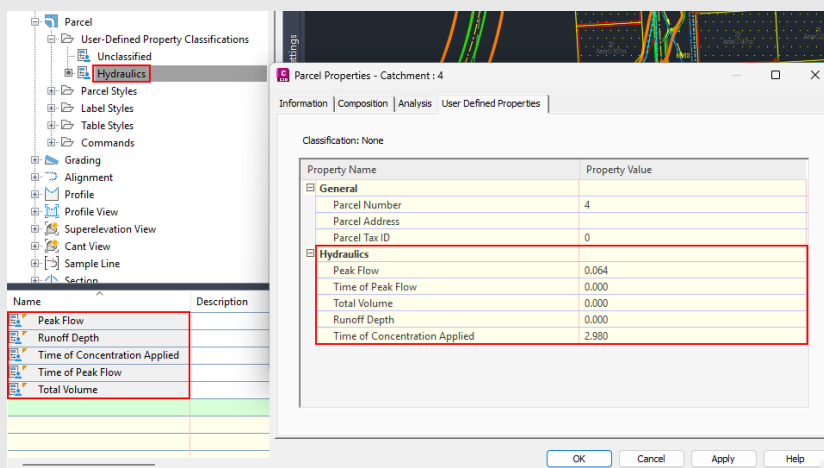
Five columns have been added to the sample lines table in the surface channels tab: **Description**, **Minimum Elevation**, **Exit Loss Coefficient**, **Entrance Loss Coefficient** and **Average Loss Coefficient**.

Sample line names added to INP file for surface channels

Sample lines that are used for a surface channel are now added to the INP that is generated for the analysis. This is useful if the INP file is used in other software, where the name will be imported as a description.

Hydraulic classification properties added to parcels

When updating results back to Civil 3D a new parcel classification is created called **Hydraulics**. This classification contains information about the catchments associated with a parcel.



Storm Water Networks

Multiple Subcatchment fixes

The following issues relating to subcatchments have been fixed:

- Unable to remove a subcatchment when there is only a single subcatchment present
- Incorrect subcatchment area display
- Error when removing all subcatchments, including the calculated subcatchment
- Error when trying to delete the calculated subcatchment
- Unable to add a manual subcatchment for the rational method

Surface channel crash when creating profiles from nodes

A crash would sometimes occur when creating a profile from surface channel nodes. This has now been fixed.

Deleted profiles prevent surface channels from being created

If a user deletes a profile that is linked to a surface channel, then an error occurs when trying to update a linked profile. This has now been fixed, and profiles will be correctly updated.

Line drawn from node to origin in map for surface channels

If a structure a sample line is connected to is positioned directly on top of the sample line's center point, then a line is drawn from the sample line to the map origin (0, 0). This has been fixed and the line will now not be drawn if it's length is zero.

Sewer Networks

Pressure map button displayed for sewer networks

For sewer networks a button to create pressure maps was incorrectly displayed in the **Civil 3D** tab. The button has been removed.

Cannot interact with sewer house connections in the map

Sometimes it would be impossible to select sewer house connections in the map area. This was caused by the parcels being drawn on top of the sewer house connections. The map draw order has now been fixed, and the sewer house connections can now be interacted with in the map.

Removing a private sewer causes an error

When removing a private sewer from the sewer house connections, it would sometimes cause an error to be shown. This has now been fixed.

Sewer house connections inflow displayed incorrectly when changing peak flow

When the peak flow was changed, the inflow in the structure tables would display incorrectly until the dialog was reopened. This has now been fixed, and the correct inflows will be displayed.

Deleted house connection structures and polylines cause errors

If a user deletes a house connection structure or polyline in the model space, then multiple error dialogs appeared when the dialog was closing. Also, some functionality, such as Move HC, did not work. This has been fixed.

Some house connection table columns show as editable when they are not

The **Connection Elevation**, **Depth Below FGL**, and **Rim to Sump** columns were shown as editable, but they were not meant to be editable. This is now fixed, and the columns can no longer be edited.

House connection ribbon properties limited to a maximum value of 100

Some sewer house connection properties in the ribbon had a maximum value of 100. The maximum value has now been increased.

Water Networks

Export water results does not export headloss

When exporting water results to a CSV file the headloss column would always contain zero values. This has now been fixed, and the actual headloss is now exported. Alos, an additional column for the m/km headloss has been added.

Sewer house connection tab visible

Sometimes the sewer house connection tab would remain visible for water networks. This has been fixed, and the tab will not be visible when working with water networks.

HGL and EGL values show zero in the profiles tab

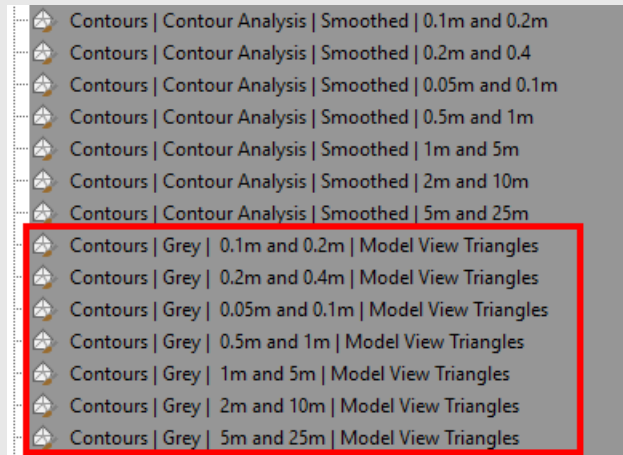
In the profiles tab the HGL and EGL values would report as zero until the dialog was closed and opened again. This has been fixed and the values now correctly display.

CIVIL 3D TEMPLATE IMPROVEMENTS

Surface Styles Updates

New Surface Styles Displaying Tringles in Model View

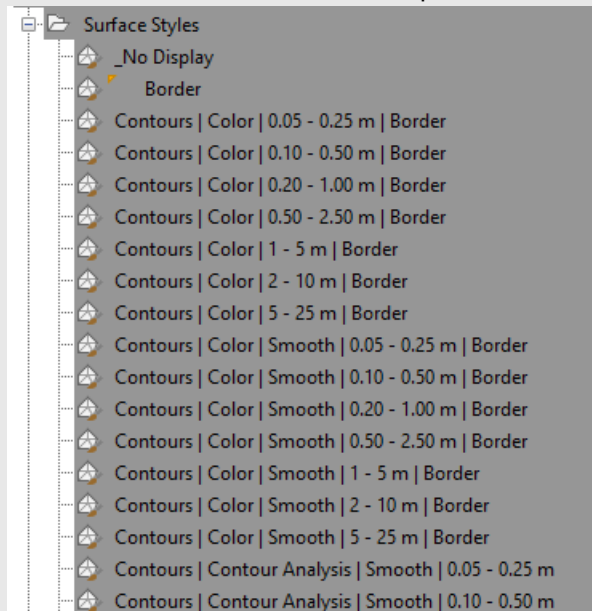
These new surface styles were developed to improve surface appearance in the Model Viewer:



Surface Style Names Update to Improve Sorting

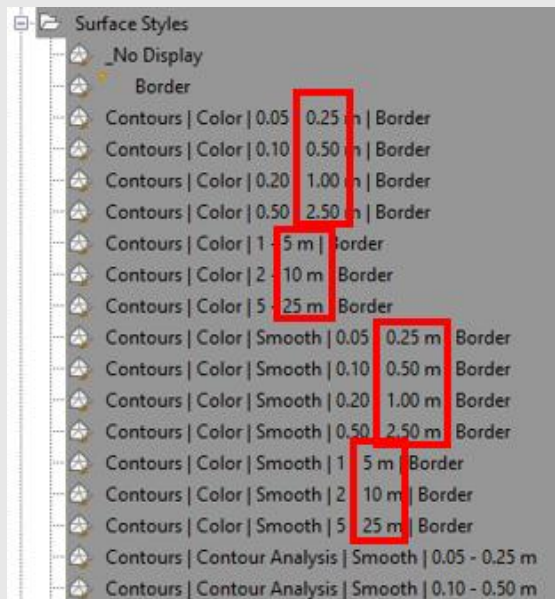
The following updates were made to the surface style names:

1. "Coloured" was changed to "Color"
2. "Smoothed" was changed to "Smooth"
3. Contour intervals descriptions were simplified, for example:
"0.05 m and 0.25 m" was updated to "0.05 – 0.25 m"



Major Contour Interval Adjustment

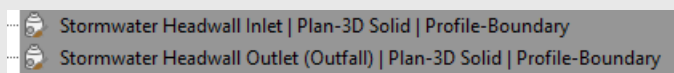
In accordance with standard cartographic conventions, every fifth (or, in some cases, fourth) contour line is designated as a major (index) contour. Surface styles that did not adhere to this convention have been adjusted accordingly:



New Structure Styles

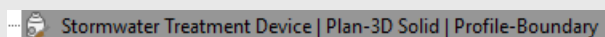
New Structure Styles for Headwall Structures

New structure styles for headwall were added into template:



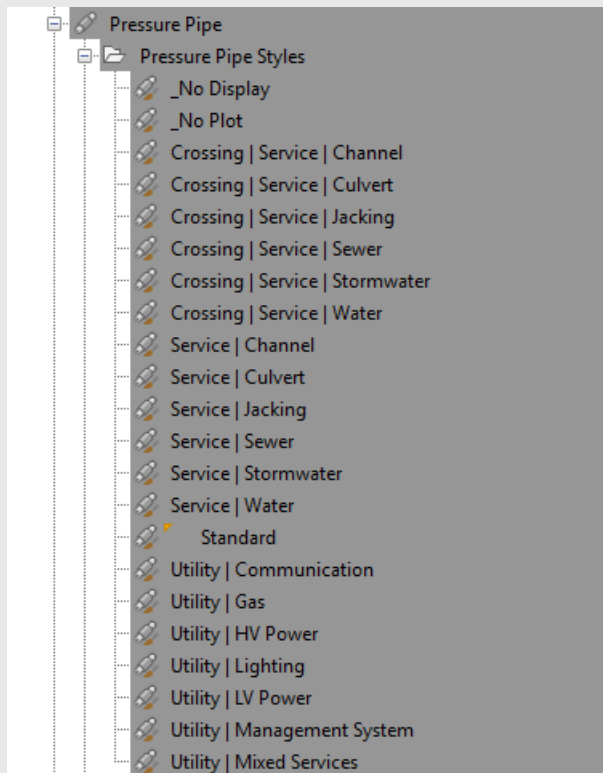
New Structure Style for Treatment Device Structures

A new structure style for treatment devices was added into template:



New Pressure Pipe Styles

Specific gravity pipe styles were added to pressure pipe styles:



Part Lists Improvements

Sinvac Sinvac-lite HDPE Pipes and Structures

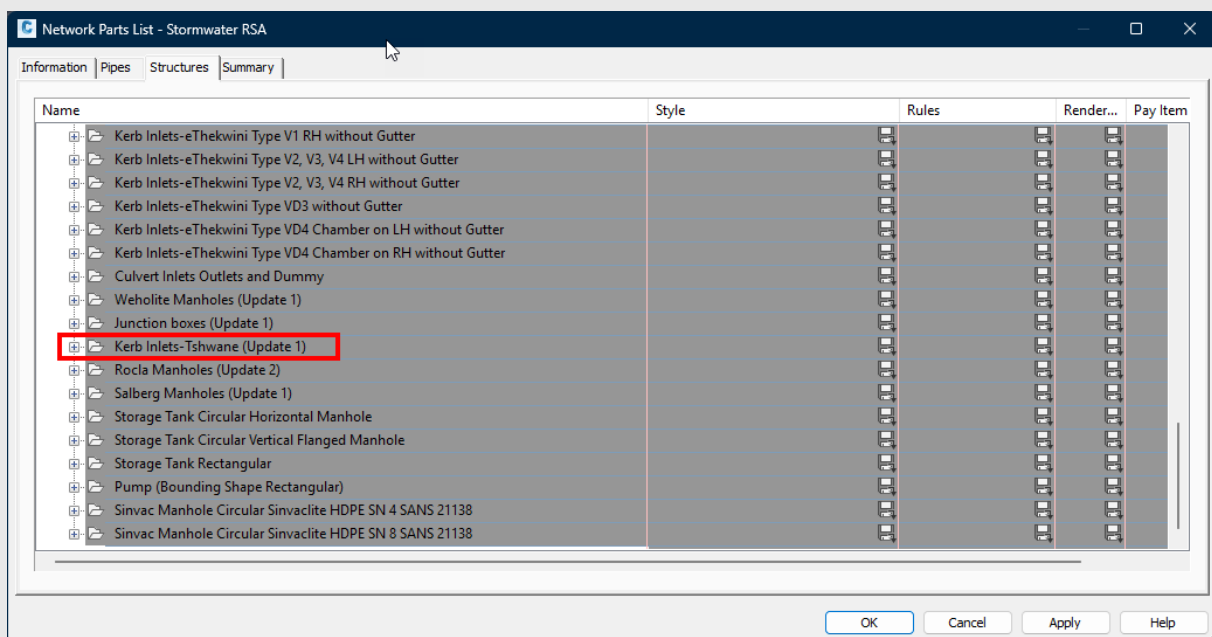
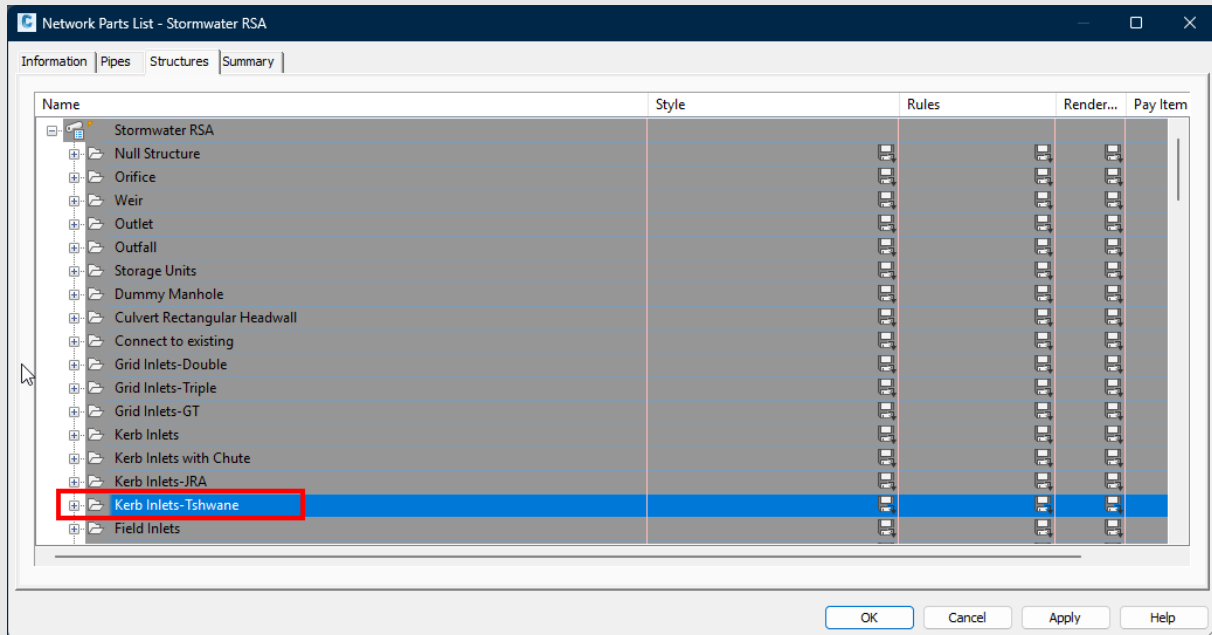
The Stormwater RSA and Sewer RSA part lists have been updated to include Sinvac Sinvac-lite HDPE pipes and structures:

Network Parts List - Sewer RSA		
Information	Pipes	Structures
Summary		
Name	Style	
Marley HDPE PE 100 Class PN20		
Marley HDPE PE 100 Class PN25		
Marley HDPE PE 100 Class PN34		
Concrete with HDPE Lining Spigot and Socket Class 100D		
Sinvac Pipe Circular Sinvac-lite HDPE SN 4 SANS 21138		
DN 300 CLASS SN 4 HDPE	Sewer	
DN 350 CLASS SN 4 HDPE	Sewer	
DN 400 CLASS SN 4 HDPE	Sewer	
DN 450 CLASS SN 4 HDPE	Sewer	
DN 500 CLASS SN 4 HDPE	Sewer	
DN 560 CLASS SN 4 HDPE	Sewer	
DN 600 CLASS SN 4 HDPE	Sewer	
DN 700 CLASS SN 4 HDPE	Sewer	
DN 800 CLASS SN 4 HDPE	Sewer	
DN 900 CLASS SN 4 HDPE	Sewer	
DN 1000 CLASS SN 4 HDPE	Sewer	
DN 1100 CLASS SN 4 HDPE	Sewer	
DN 1200 CLASS SN 4 HDPE	Sewer	
DN 1500 CLASS SN 4 HDPE	Sewer	
Sinvac Pipe Circular Sinvac-lite HDPE SN 8 SANS 21138		
DN 300 CLASS SN 8 HDPE	Sewer	
DN 350 CLASS SN 8 HDPE	Sewer	
DN 400 CLASS SN 8 HDPE	Sewer	
DN 450 CLASS SN 8 HDPE	Sewer	
DN 500 CLASS SN 8 HDPE	Sewer	
DN 560 CLASS SN 8 HDPE	Sewer	
DN 600 CLASS SN 8 HDPE	Sewer	
DN 700 CLASS SN 8 HDPE	Sewer	
DN 800 CLASS SN 8 HDPE	Sewer	
DN 900 CLASS SN 8 HDPE	Sewer	
DN 1000 CLASS SN 8 HDPE	Sewer	
DN 1100 CLASS SN 8 HDPE	Sewer	
DN 1200 CLASS SN 8 HDPE	Sewer	
DN 1500 CLASS SN 8 HDPE	Sewer	

Network Parts List - Sewer RSA	
Information	Pipes
Structures	Summary
Name	Style
Storage Tank Circular Horizontal Manhole	
Storage Tank Circular Vertical Flanged Manhole	
Storage Tank Rectangular	
Pump (Bounding Shape Rectangular)	
Sinvac Manhole Circular Sinvaclite HDPE SN 4 SANS 21138	
DN 300	Sewer Manhole
DN 350	Sewer Manhole
DN 400	Sewer Manhole
DN 450	Sewer Manhole
DN 500	Sewer Manhole
DN 560	Sewer Manhole
DN 600	Sewer Manhole
DN 700	Sewer Manhole
DN 800	Sewer Manhole
DN 900	Sewer Manhole
DN 1 000	Sewer Manhole
DN 1 100	Sewer Manhole
DN 1 200	Sewer Manhole
DN 1 500	Sewer Manhole
Sinvac Manhole Circular Sinvaclite HDPE SN 8 SANS 21138	
DN 300	Sewer Manhole
DN 350	Sewer Manhole
DN 400	Sewer Manhole
DN 450	Sewer Manhole
DN 500	Sewer Manhole
DN 560	Sewer Manhole
DN 600	Sewer Manhole
DN 700	Sewer Manhole
DN 800	Sewer Manhole
DN 900	Sewer Manhole
DN 1 000	Sewer Manhole
DN 1 100	Sewer Manhole
DN 1 200	Sewer Manhole
DN 1 500	Sewer Manhole

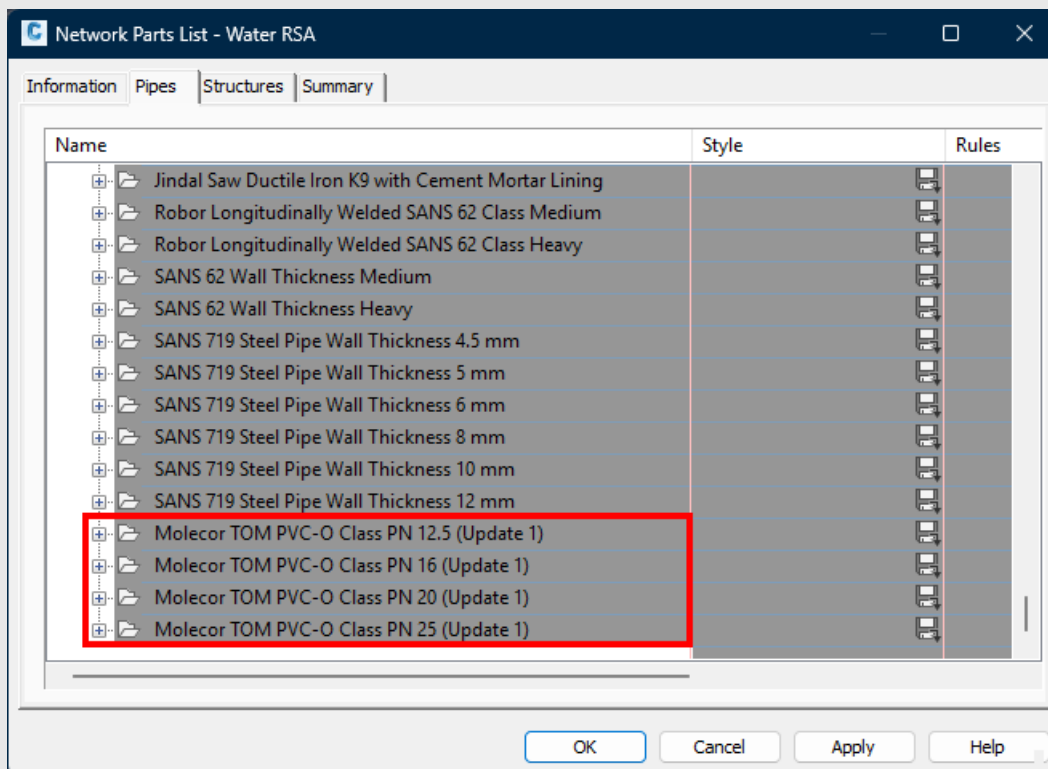
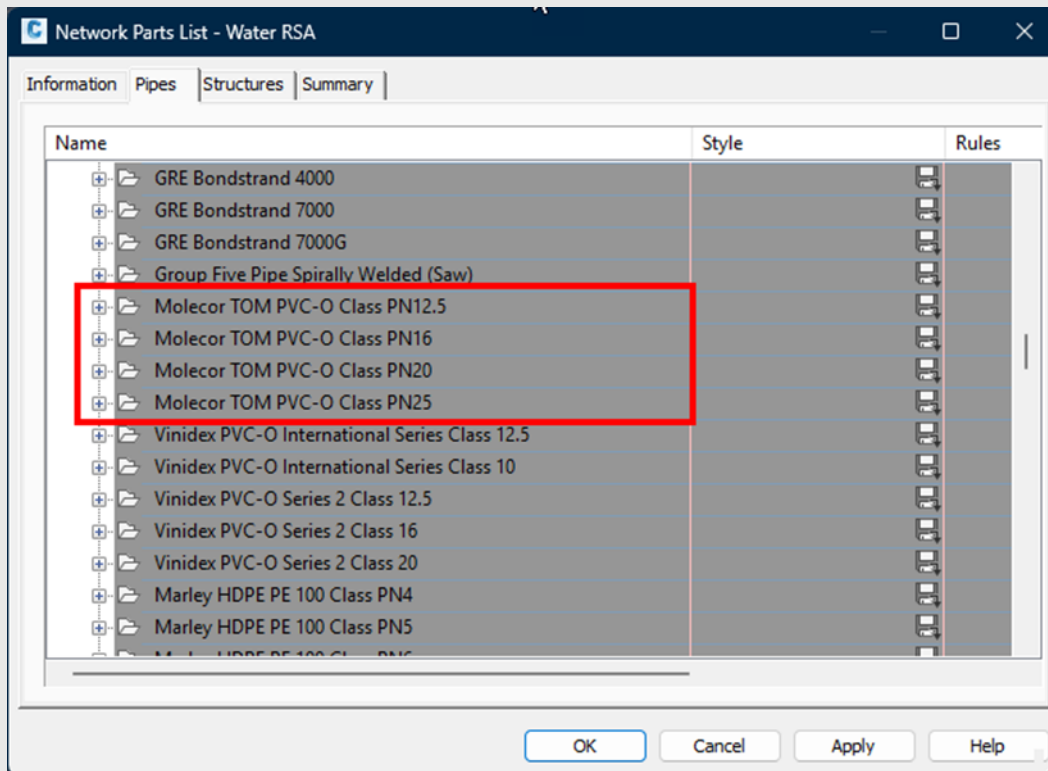
Kerb Inlets-Tshwane Family Removal

The **Kerb Inlets-Tshwane** family has been removed from the **Stormwater RSA** part list as the updated version **Kerb Inlets-Tshwane (Update 1)** should rather be used:



Molecor TOM PVC-O (Update 1) Pipe Families

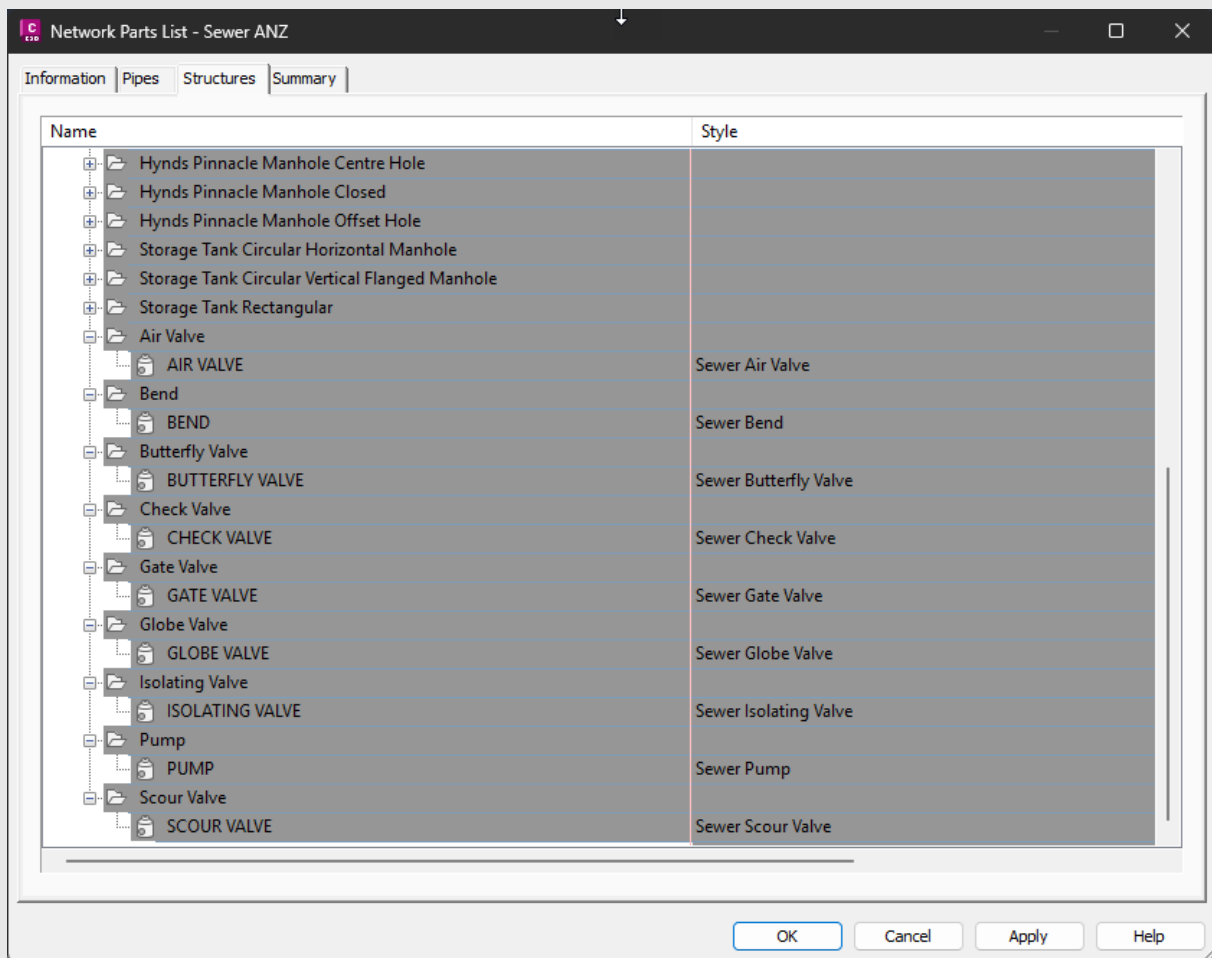
The **Molecor TOM PVC-O** family has been replaced with the **Molecor TOM PVC-O (Update 1)** family in the **Water RSA** part list.



Valves, Bend and Pump Structures Added to Sewer Part Lists

The following structures have been added to the **Sewer ANZ** and **RSA** parts lists:

- Air Valves
- Bend Structure
- Butterfly Valve
- Check Valve
- Gate Valve
- Globe Valve
- Isolating Valve
- Pump
- Scour Valve



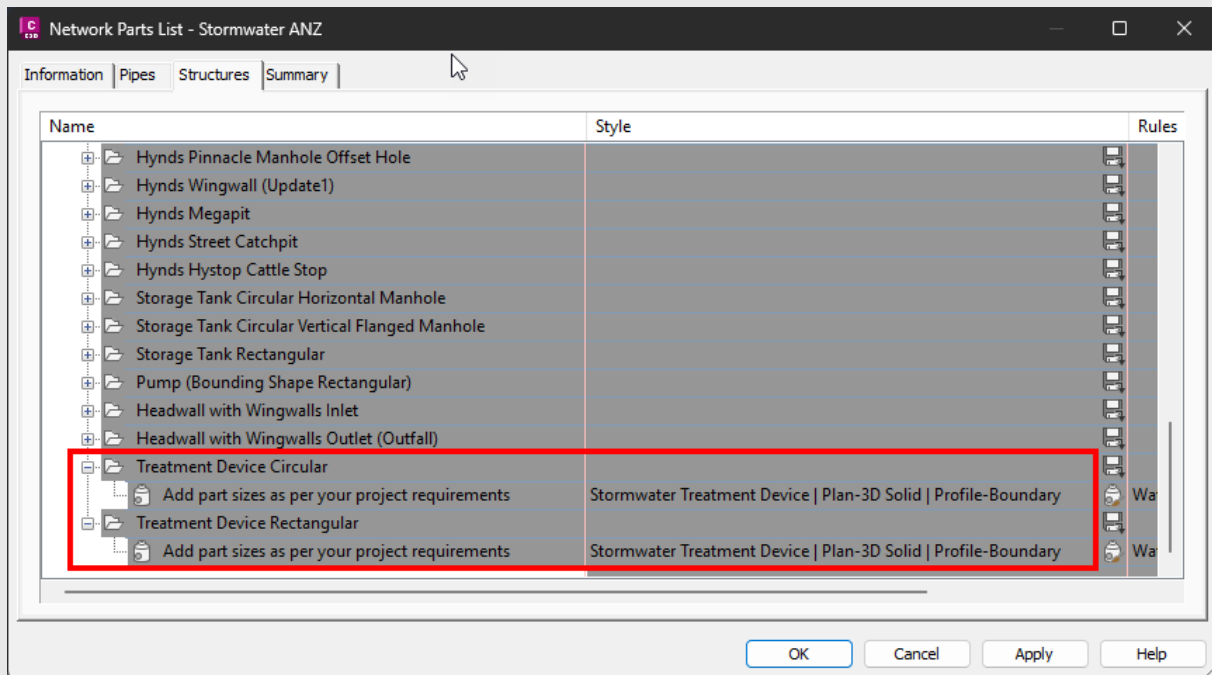
Generic Headwall with Wingwalls Structures in Stormwater Part Lists

Generic **headwall with wingwalls** structures have been added to the **RSA** and **ANZ Stormwater** part lists together with some typical sizes:

Network Parts List - Stormwater ANZ						
Information Pipes Structures Summary						
Name	Style	Rules	Render...	Pay Item	Structu...	
Storage Tank Rectangular					<no...	
Pump (Bounding Shape Rectangular)					<no...	
Treatment Device Circular					<no...	
Treatment Device Rectangular					<no...	
Headwall with Wingwalls Inlet					<no...	
Add other sizes as per your project requirements	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 300 HwTh 80 ApronL 300 WwTh 80 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 375 HwTh 80 ApronL 375 WwTh 80 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 400 HwTh 80 ApronL 400 WwTh 80 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 450 HwTh 80 ApronL 450 WwTh 80 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 500 HwTh 80 ApronL 500 WwTh 80 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 525 HwTh 80 ApronL 525 WwTh 80 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 560 HwTh 80 ApronL 560 WwTh 80 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 600 HwTh 80 ApronL 600 WwTh 80 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 675 HwTh 80 ApronL 675 WwTh 80 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 750 HwTh 80 ApronL 750 WwTh 80 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 825 HwTh 90 ApronL 825 WwTh 90 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 900 HwTh 90 ApronL 900 WwTh 90 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 1 050 HwTh 100 ApronL 1 050 WwTh 100 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 1 200 HwTh 100 ApronL 1 200 WwTh 100 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 1 350 HwTh 110 ApronL 1 350 WwTh 110 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 1 500 HwTh 110 ApronL 1 500 WwTh 110 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 1 650 HwTh 120 ApronL 1 650 WwTh 120 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 1 800 HwTh 120 ApronL 1 800 WwTh 120 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 2 000 HwTh 120 ApronL 2 000 WwTh 120 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 2 100 HwTh 120 ApronL 2 100 WwTh 120 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 2 250 HwTh 120 ApronL 2 250 WwTh 120 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 2 400 HwTh 120 ApronL 2 400 WwTh 120 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 2 500 HwTh 150 ApronL 2 500 WwTh 150 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 3 000 HwTh 150 ApronL 3 000 WwTh 150 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 3 600 HwTh 150 ApronL 3 600 WwTh 150 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 4 000 HwTh 200 ApronL 4 000 WwTh 200 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 4 500 HwTh 200 ApronL 4 500 WwTh 200 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 5 000 HwTh 200 ApronL 5 000 WwTh 200 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 5 500 HwTh 250 ApronL 5 000 WwTh 250 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 6 000 HwTh 250 ApronL 5 000 WwTh 250 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 6 500 HwTh 250 ApronL 5 000 WwTh 250 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 7 000 HwTh 250 ApronL 5 000 WwTh 250 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 7 500 HwTh 250 ApronL 5 000 WwTh 250 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 8 000 HwTh 300 ApronL 5 000 WwTh 300 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		
HwW 8 500 HwTh 300 ApronL 5 000 WwTh 300 FlareL 45° FlareR 45°	Stormwater Headwall Inlet Plan-3D Solid Profile-Boundary	Stor...	ByLa...	[none]		

Generic Treatment Device Structures in Stormwater Part Lists

Generic **treatment device** structures have been added to the **RSA and ANZ Stormwater** part lists:



Hynds Wingwall Inlet and Outlet (Outfall) Structures

New Hynds wingwall inlet and outlet structures have been added to Stormwater ANZ part list:

Network Parts List - Stormwater ANZ	
Information Pipes Structures Summary	
Name	Style
Headwall with Wingwalls Inlet	
Headwall with Wingwalls Outlet (Outfall)	
Hynds Wingwall Inlet	
Hynds Wingwall Outlet (Outfall)	
WW0300N	Stormwater Headwall Outlet (Outfall) Plan-3D Solid Profile-Boundary
WW0300M	Stormwater Headwall Outlet (Outfall) Plan-3D Solid Profile-Boundary
WW0600	Stormwater Headwall Outlet (Outfall) Plan-3D Solid Profile-Boundary
WW0600TW	Stormwater Headwall Outlet (Outfall) Plan-3D Solid Profile-Boundary
WW0600TW.M.FA	Stormwater Headwall Outlet (Outfall) Plan-3D Solid Profile-Boundary
WW0600.TYPE2	Stormwater Headwall Outlet (Outfall) Plan-3D Solid Profile-Boundary
WW0750DBL	Stormwater Headwall Outlet (Outfall) Plan-3D Solid Profile-Boundary
WW0900DBL	Stormwater Headwall Outlet (Outfall) Plan-3D Solid Profile-Boundary
WW1050	Stormwater Headwall Outlet (Outfall) Plan-3D Solid Profile-Boundary
WW1050.M.DU	Stormwater Headwall Outlet (Outfall) Plan-3D Solid Profile-Boundary
WW1050.SPLIT	Stormwater Headwall Outlet (Outfall) Plan-3D Solid Profile-Boundary
WW1050DBL	Stormwater Headwall Outlet (Outfall) Plan-3D Solid Profile-Boundary
WW1350	Stormwater Headwall Outlet (Outfall) Plan-3D Solid Profile-Boundary
WW1350.M.DU	Stormwater Headwall Outlet (Outfall) Plan-3D Solid Profile-Boundary
WW1350.SPLIT	Stormwater Headwall Outlet (Outfall) Plan-3D Solid Profile-Boundary
WW1800	Stormwater Headwall Outlet (Outfall) Plan-3D Solid Profile-Boundary
WW1800.M.DU	Stormwater Headwall Outlet (Outfall) Plan-3D Solid Profile-Boundary
WW1800.SPLIT	Stormwater Headwall Outlet (Outfall) Plan-3D Solid Profile-Boundary
WW2050L WW2050R	Stormwater Headwall Outlet (Outfall) Plan-3D Solid Profile-Boundary
WW2300L WW2300R	Stormwater Headwall Outlet (Outfall) Plan-3D Solid Profile-Boundary
WW2500L WW2500R	Stormwater Headwall Outlet (Outfall) Plan-3D Solid Profile-Boundary

VortCapture Structures

The **VortCapture** structures have been added to **Stormwater ANZ** part list:

Network Parts List - Stormwater ANZ	
Information	Pipes Structures Summary
Name	Style
Hynds Pinnacle Manhole Offset Hole	
Hynds Megapit	
Hynds Street Catchpit	
Hynds Hystop Cattle Stop	
Storage Tank Circular Horizontal Manhole	
Storage Tank Circular Vertical Flanged Manhole	
Storage Tank Rectangular	
Pump (Bounding Shape Rectangular)	
Treatment Device Circular	
Treatment Device Rectangular	
Headwall with Wingwalls Inlet	
Headwall with Wingwalls Outlet (Outfall)	
Hynds Wingwall Inlet	
Hynds Wingwall Outlet (Outfall)	
VortCapture	
VC40	Stormwater Treatment Device Plan-3D Solid Profile-Boundary
VC50	Stormwater Treatment Device Plan-3D Solid Profile-Boundary
VC60	Stormwater Treatment Device Plan-3D Solid Profile-Boundary
VC70	Stormwater Treatment Device Plan-3D Solid Profile-Boundary
VC80	Stormwater Treatment Device Plan-3D Solid Profile-Boundary

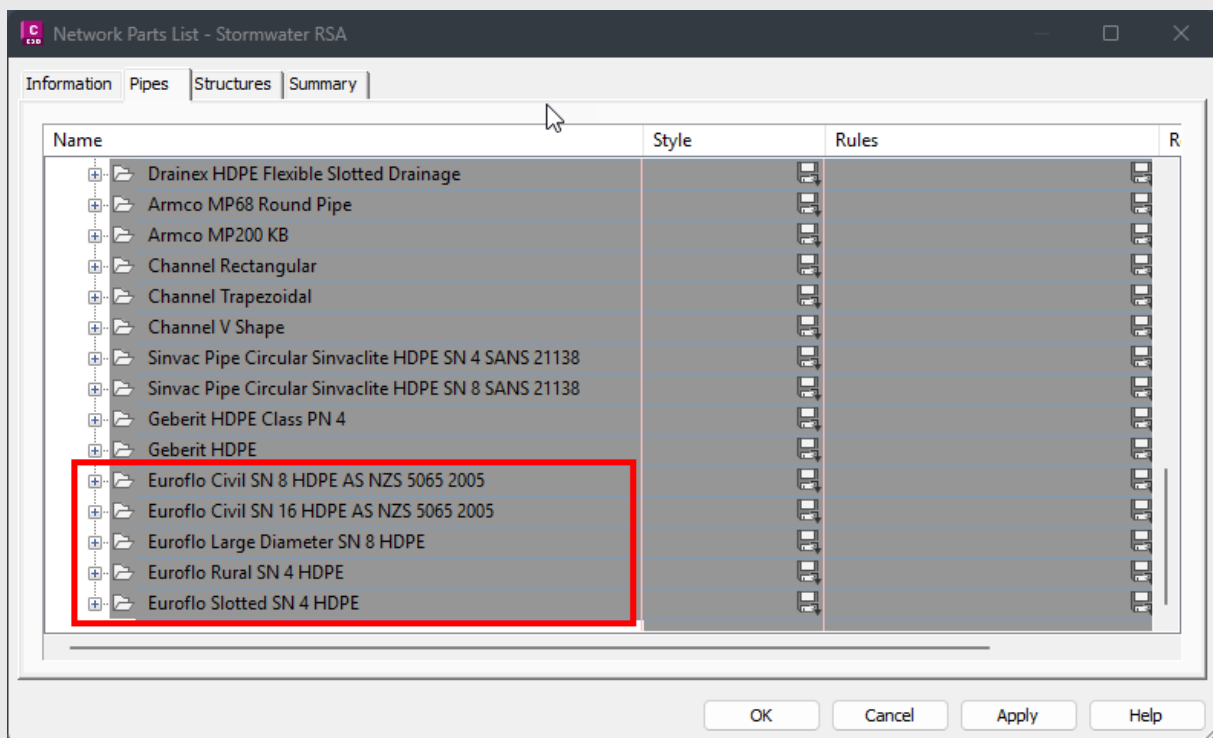
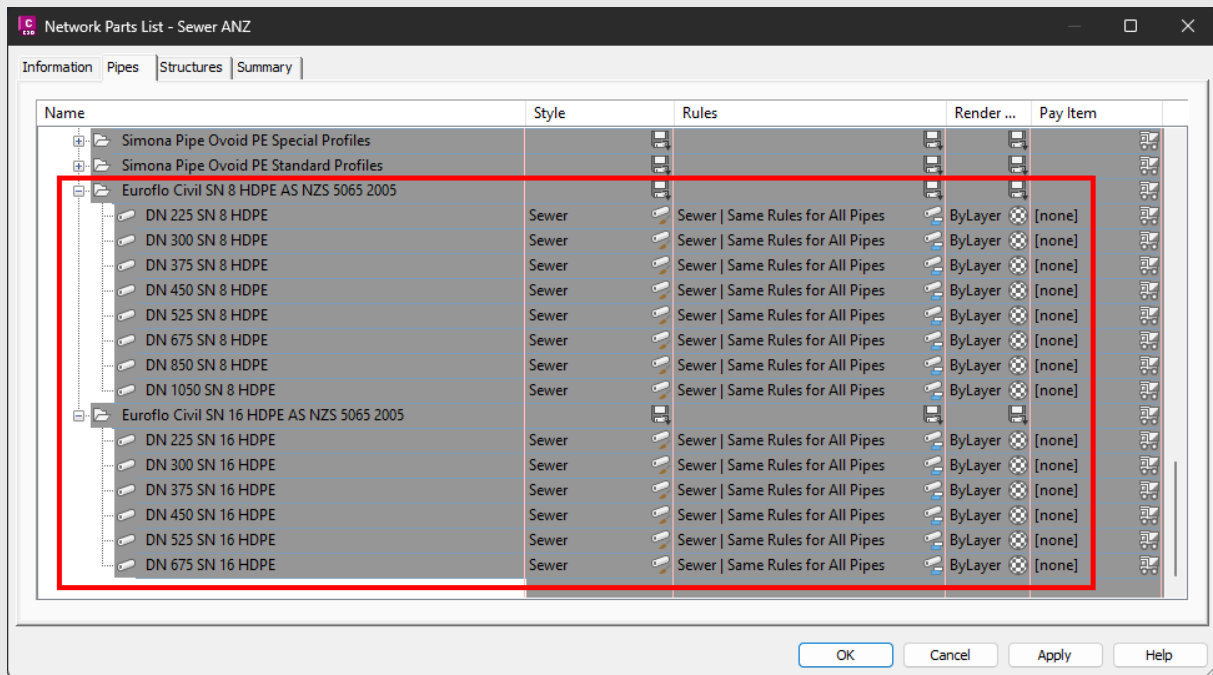
Geberit HDPE Pipes

The Geberit HDPE pipes have been added to Stormwater RSA and Sewer RSA part lists:

Network Parts List - Stormwater RSA					
Information	Pipes	Structures	Summary		
Name	Style	Rules	Render ...	Pay Item	
Sinvac Pipe Circular Sinvac-lite HDP...					
Geberit HDPE Class PN 4					
DN 200 CLASS PN 4 HDPE	Stormwater	Stormwater Same Rules for All Pip...	ByLayer	[none]	
DN 250 CLASS PN 4 HDPE	Stormwater	Stormwater Same Rules for All Pip...	ByLayer	[none]	
DN 300 CLASS PN 4 HDPE	Stormwater	Stormwater Same Rules for All Pip...	ByLayer	[none]	
Geberit HDPE					
DN 40 CLASS PN 8.1 HDPE	Stormwater	Stormwater Same Rules for All Pip...	ByLayer	[none]	
DN 50 CLASS PN 6.4 HDPE	Stormwater	Stormwater Same Rules for All Pip...	ByLayer	[none]	
DN 56 CLASS PN 5.7 HDPE	Stormwater	Stormwater Same Rules for All Pip...	ByLayer	[none]	
DN 60 CLASS PN 5.0 HDPE	Stormwater	Stormwater Same Rules for All Pip...	ByLayer	[none]	
DN 70 CLASS PN 4.1 HDPE	Stormwater	Stormwater Same Rules for All Pip...	ByLayer	[none]	
DN 90 CLASS PN 4.0 HDPE	Stormwater	Stormwater Same Rules for All Pip...	ByLayer	[none]	
DN 100 CLASS PN 4.0 HDPE	Stormwater	Stormwater Same Rules for All Pip...	ByLayer	[none]	
DN 125 CLASS PN 4.0 HDPE	Stormwater	Stormwater Same Rules for All Pip...	ByLayer	[none]	
DN 150 CLASS PN 4.0 HDPE	Stormwater	Stormwater Same Rules for All Pip...	ByLayer	[none]	
DN 200 CLASS PN 3.2 HDPE	Stormwater	Stormwater Same Rules for All Pip...	ByLayer	[none]	
DN 250 CLASS PN 3.2 HDPE	Stormwater	Stormwater Same Rules for All Pip...	ByLayer	[none]	
DN 300 CLASS PN 3.2 HDPE	Stormwater	Stormwater Same Rules for All Pip...	ByLayer	[none]	

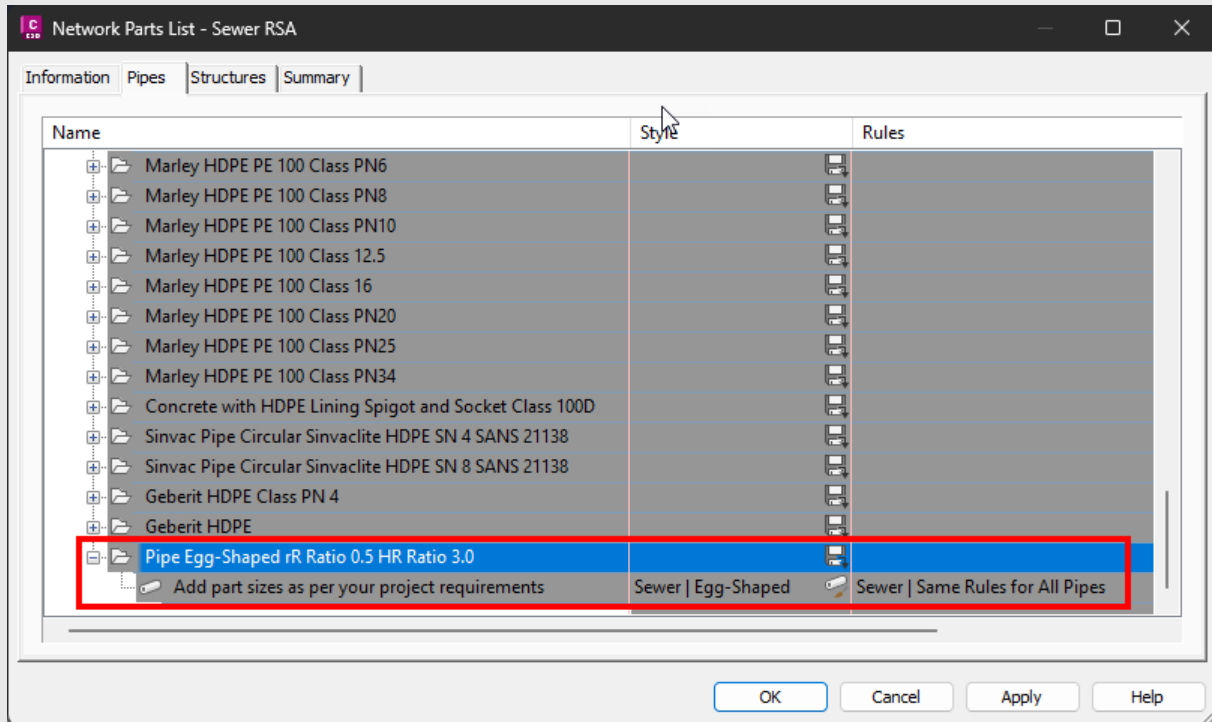
Euroflo HDPE Pipes

The Euroflo HDPE pipes have been added to Stormwater ANZ and Sewer ANZ part lists:



Pipe Egg-Shaped rR Ratio 0.5 HR Ratio 3.0

The Egg-Shaped pipes have been added to Stormwater ANZ, Sewer ANZ, Stormwater RSA and Sewer RSA part lists:



Typical Sizes for Culverts and Pipe Circular family

The typical sizes were added to **Culvert Circular** families, **Culvert Rectangular** families and **Pipe Circular** family:

Network Parts List - Stormwater ANZ

Information Pipes Structures Summary

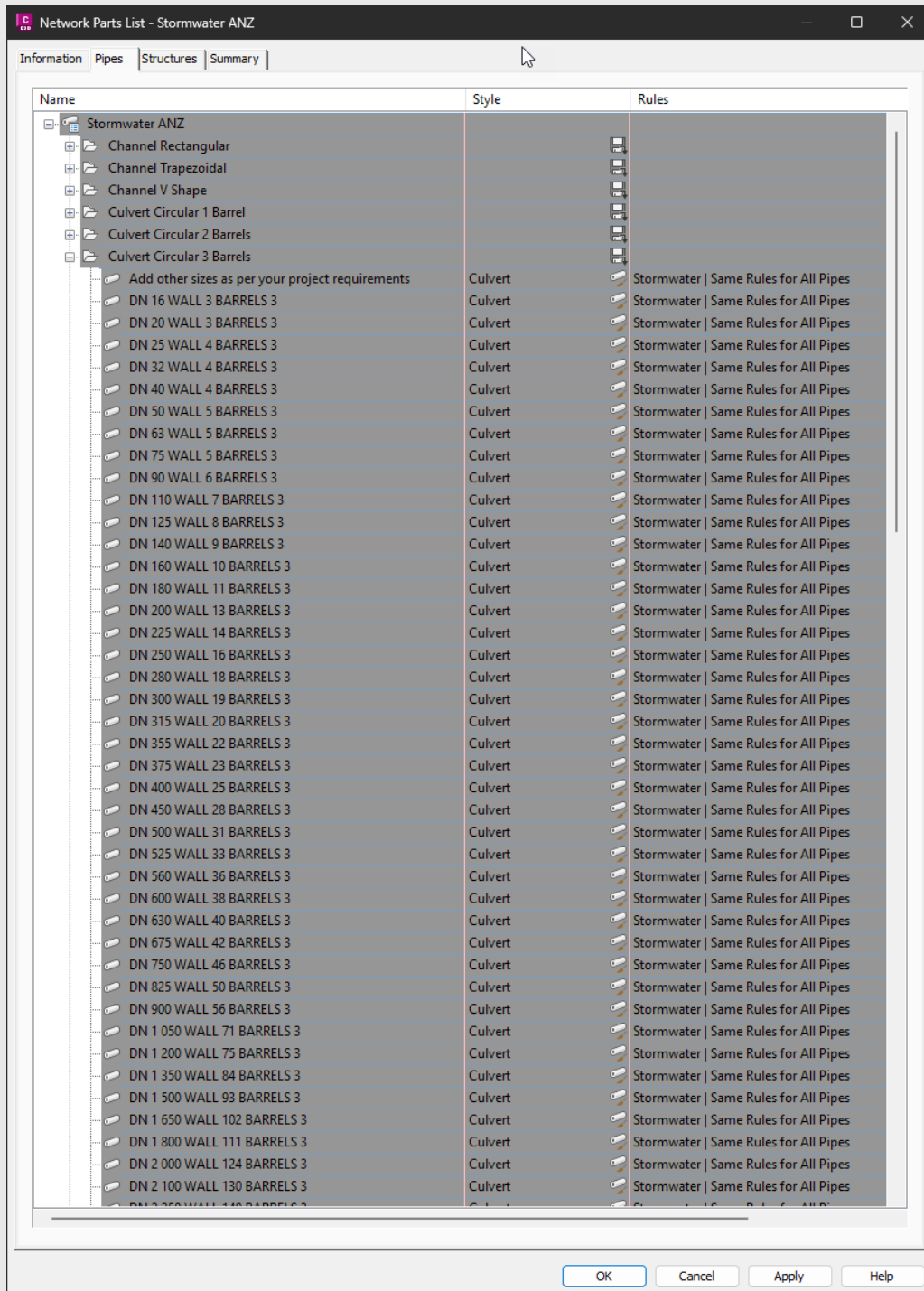
Name	Style	Rules
Stormwater ANZ		
Channel Rectangular		
Channel Trapezoidal		
Channel V Shape		
Culvert Circular 1 Barrel		
Culvert Circular 2 Barrels		
Culvert Circular 3 Barrels		
Culvert Circular 4 Barrels		
Culvert Circular 5 Barrels		
Culvert Circular 6 Barrels		
Culvert Circular 7 Barrels		
Culvert Circular 8 Barrels		
Culvert Circular 9 Barrels		
Culvert Circular 10 Barrels		
Culvert Rectangular 1 Barrel		
Culvert Rectangular 2 Barrels		
Culvert Rectangular 3 Barrels		
Culvert Rectangular 4 Barrels		
Culvert Rectangular 5 Barrels		
Culvert Rectangular 6 Barrels		
Culvert Rectangular 7 Barrels		
Culvert Rectangular 8 Barrels		
Culvert Rectangular 9 Barrels		
Culvert Rectangular 10 Barrels		

Network Parts List - Stormwater ANZ

Information Pipes Structures Summary

Name	Style	Rules
PVC-U SN 8 AS NZS 1260		
PVC-U SN 10 AS NZS 1260		
PVC-U SN 16 AS NZS 1260		
Rocla Flush Joint Concrete Class 2 AS NZS 4058 2007		
Rocla Flush Joint Concrete Class 3 AS NZS 4058 2007		
Rocla Flush Joint Concrete Class 4 AS NZS 4058 2007		
Rocla Rubber Ring Joint Concrete Class 2 AS NZS 4058 2007		
Rocla Rubber Ring Joint Concrete Class 3 AS NZS 4058 2007		
Rocla Rubber Ring Joint Concrete Class 4 AS NZS 4058 2007		
Vinindex StormFLO PE SN 6 AS NZS 5065 2005		
Vinindex StormFLO PE SN 8 AS NZS 5065 2005		
Vinindex StormPRO PP SN 8 AS NZS 5065 2005		
Simona Pipe Ovoid PE Special Profiles		
Simona Pipe Ovoid PE Standard Profiles		
Pipe Egg-Shaped rR Ratio 0.5 HR Ratio 3.0		
Euroflo Civil HDPE SN 8 AS NZS 5065 2005		
Euroflo Civil HDPE SN 16 AS NZS 5065 2005		
Euroflo Large Diameter HDPE SN 8		
Euroflo Rural HDPE SN 4		
Euroflo Slotted HDPE SN 4		
Pipe Circular		

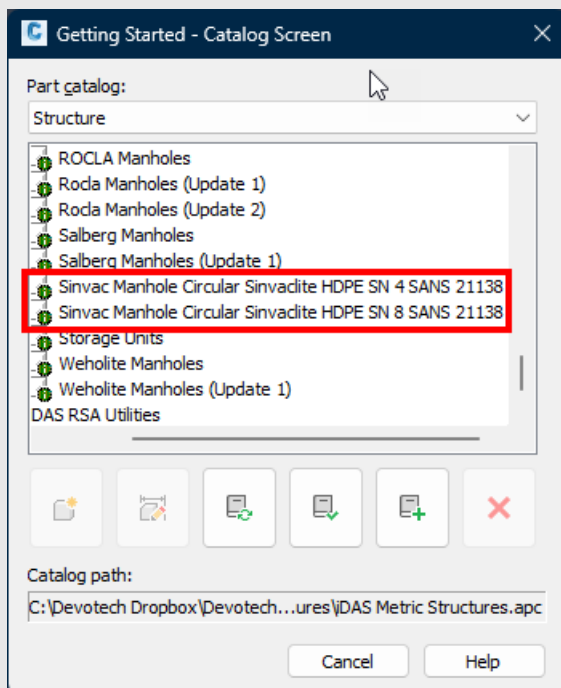
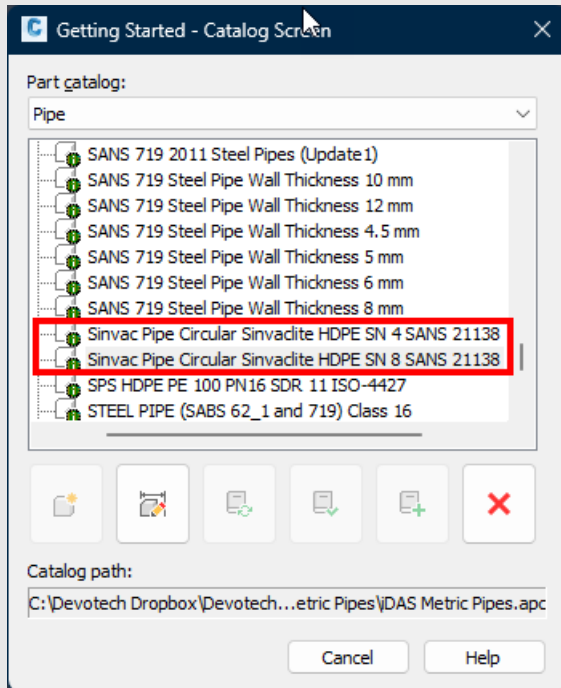
The image below provides an example of circular culvert sizes. While the minimum size of 16 mm may not appear suitable for culvert applications, some users may wish to use these parts for other purposes. To maximize flexibility and accommodate a wider range of use cases, we chose not to impose any minimum size restrictions.



PIPE CATALOG IMPROVEMENTS

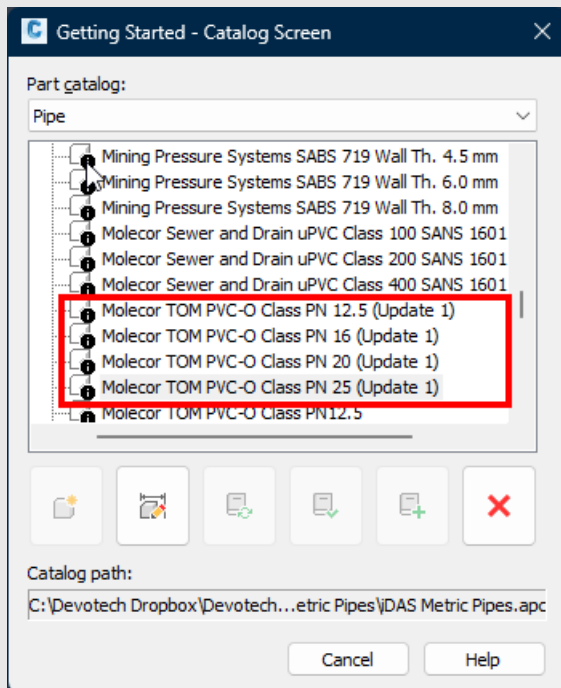
Sinvac Sinvac-lite Pipes and Structures

Sinvac Sinvac-lite HDPE pipes and structures have been added to iDAS pipe catalog:



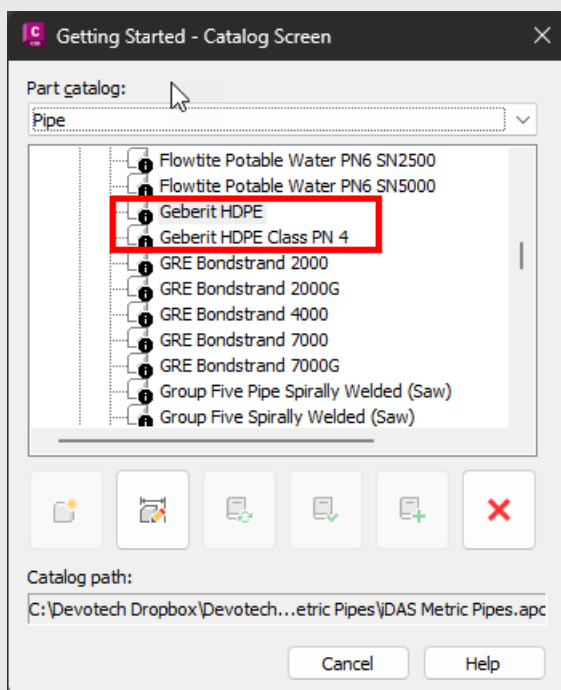
Molecor TOM PVC-O Pipes (Update 1)

Molecor TOM PVC-O pipes were updated with the new values:



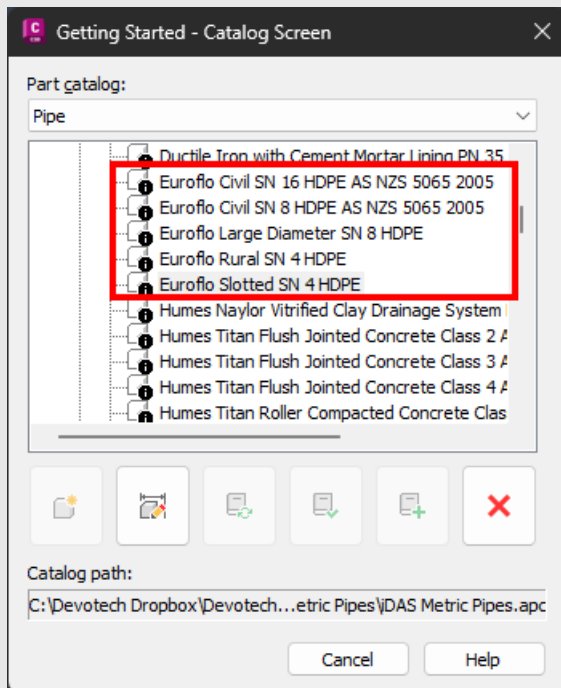
Geberit HDPE Pipes

Geberit HDPE pipes have been added to iDAS pipe catalog:



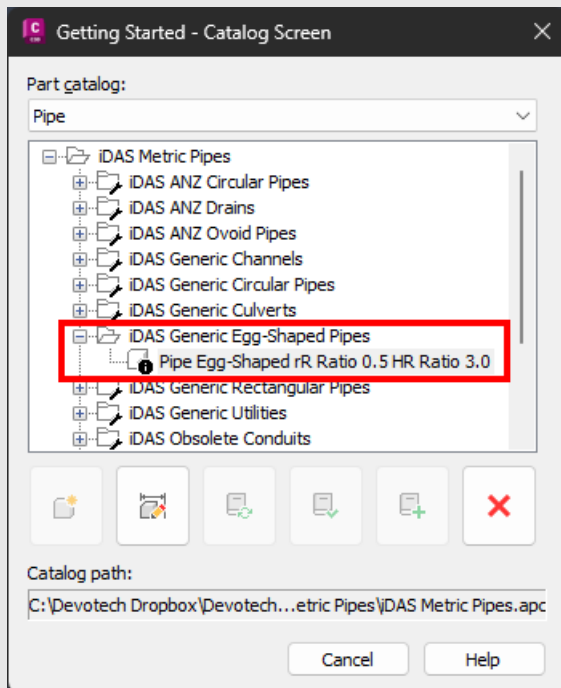
Euroflo HDPE Pipes

Euroflow HDPE pipes have been added to iDAS pipe catalog:

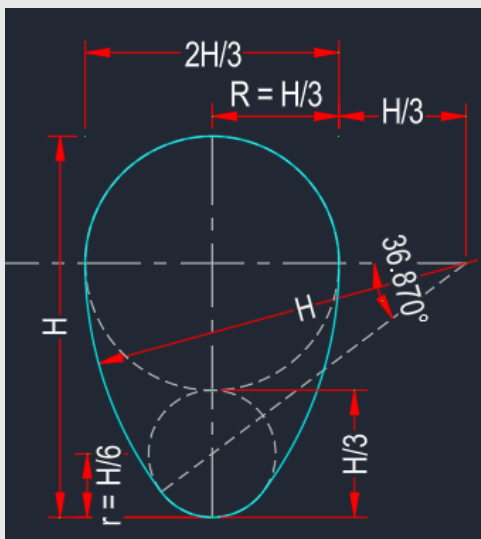


Pipe Egg-Shaped rR Ratio 0.5 HR Ratio 3.0

The egg-shaped pipes have been added to iDAS pipe catalog:



Egg-shaped pipes can have different profiles depending on the ratios between the height (H), the top radius (R), and the bottom radius (r). In the example shown below, the proportions are $H/R = 3$ and $r/R = 0.5$.



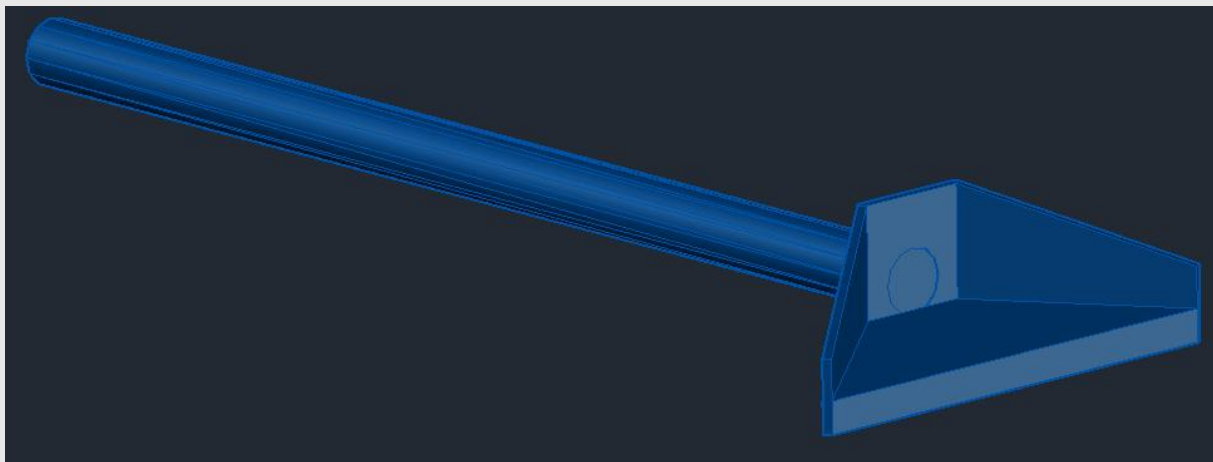
Generic Headwall with Wingwalls Structures

Generic headwall structures with wingwalls have been developed. These structures allow multiple sizes to be imported into the part list to meet project-specific requirements. The structure height is automatically controlled by the connected pipes; however, it can also be easily adjusted in the profile view.

The following parameters can be customized. Note that left and right flare angles can be set individually:

Property	Value	Units	Source	Add all sizes
Part Subtype	Undefined		Constant	
Cutoff Wall Height	0.100000	mm	List	☒
Cutoff Wall Thickness	0.100000	mm	List	☐
Floor Thickness	0.100000	mm	List	☐
Inner Structure Length	0.100000	mm	List	☐
Inner Structure Width	0.100000	mm	List	☐
Wall Thickness	0.100000	mm	List	☐
Wingwall Front Height	0.100000	mm	List	☐
Wingwall Thickness	0.100000	mm	List	☐
Wingwall Flare Angle Left	0.000000		List	☐
Wingwall Flare Angle Right	0.000000		List	☐
Floor Length	10.000000	inch	Optional Property	
Floor Width	10.000000	inch	Optional Property	
DEV_TotInflow	10.000000		Optional Property	
DEV_UCT	10.000000		Optional Property	
Material	Reinforced Concrete		Optional Property	
Cover	Standard		Optional Property	

3D view:



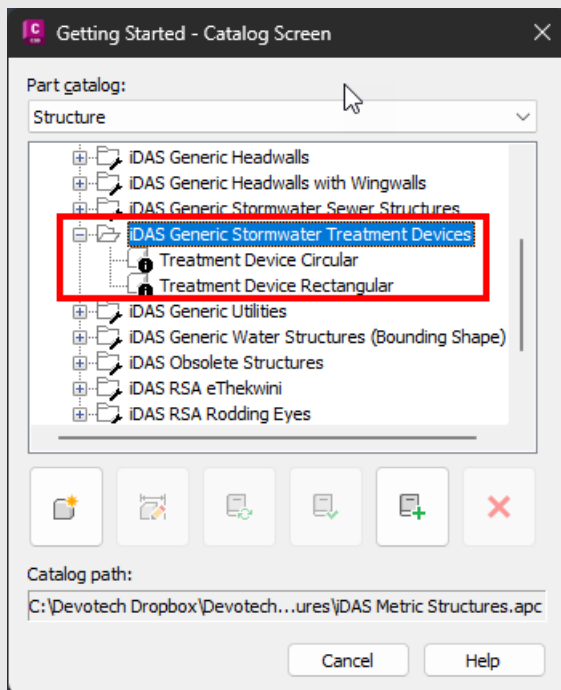
These structures have been added to RSA and ANZ Stormwater part lists.

Generic Treatment Device Structures

Generic circular and rectangular treatment device structures have been developed:



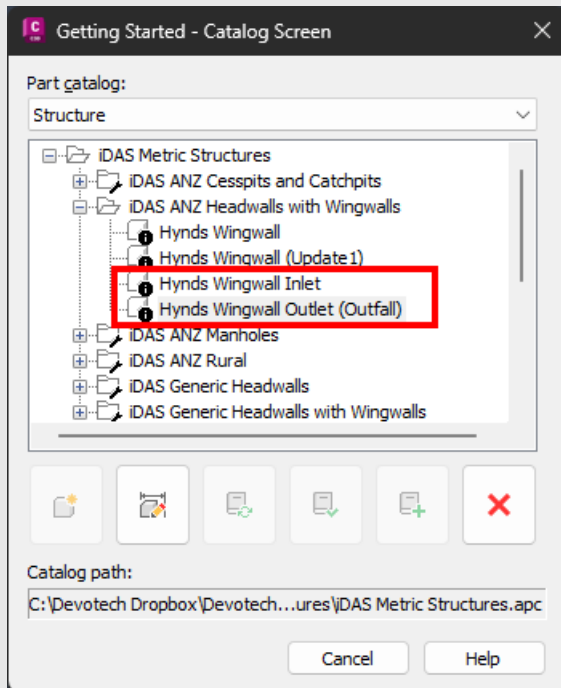
They can be found in the iDAS Generic Stormwater Treatment Devices chapter:



Hynds Wingwall Inlet and Outlet (Outfall) Structures

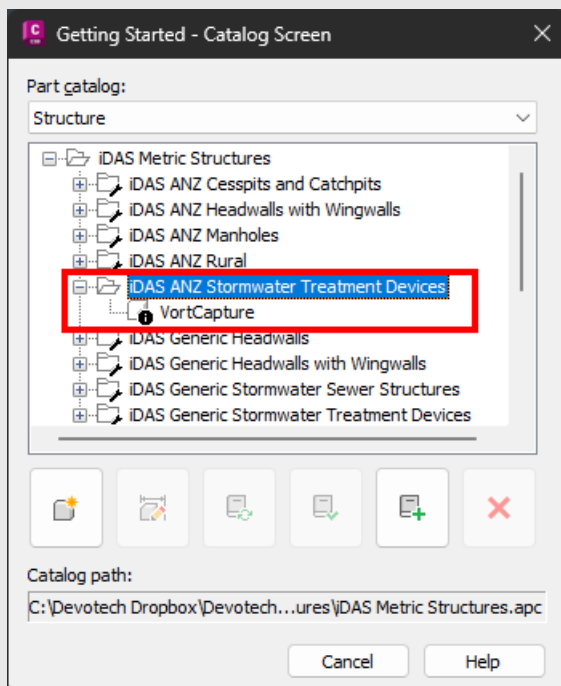
The Hynds Wingwall structures were redesigned to align with the generic wingwall structures in terms of terminology and modeling approach.

Previously, a single structure family was used for both inlet and outlet applications. This has now been separated into two dedicated structure families: one for inlet structures and one for outlet structures.



VortCapture Structures

The new VortCapture structures have been developed. They can be found in the chapter iDAS ANZ Stormwater Treatment Devices:



SUBASSEMBLIES

Devotech SANRAL Cut Fill Ver 23 Improvements

Cut range depth measurement offset bug

Fixed a bug where deep cut range depth was not measured at the depth measurement offset but at the shoulder break point:

Subassembly	
--- HIGH AND LOW FILL SHARED PARAMETERS ---	
High Fill and Low Fill Daylight Point Code	Daylight,Daylight_Fill
--- HIGH FILL ---	
High Fill Drain Creation	Always
High Fill Drain Flowline Point Code	Curb_Flowline
High Fill Drain Slab Thickness	0.190m
High Fill Drain Foreslope Width	0.500m
High Fill Drain Backslope Width	0.300m
High Fill Drain Backslope Height	0.110m
High Fill Guardrail Offset From Road Edge	0.700m
High Fill Drain Foreslope Height	-0.050m
High Fill Slope (Positive Up, Negative Down)	-1.50:1
High Fill Guardrail Point Code	Guardrail_R
High Fill Shoulder Rounding	Yes
--- LOW FILL ---	
Low Fill Max Width	5.500m
Low Fill Min Slope (Positive Up, Negative Down)	-6.00:1
Low Fill Max Slope (Positive Up, Negative Down)	-2.00:1
Low Fill Max Height	3.000m
--- SHALLOW AND DEEP CUT SHARED PARAMETERS ---	
Shallow and Deep Cut Depth Measurement Offset (0=Shoulder Break Point)	2.000m
Shallow and Deep Cut Daylight Point Code	Daylight,Daylight_Cut
Shallow and Deep Cut Concrete Drain Foreslope Width	1.000m
Shallow and Deep Cut Concrete Drain Foreslope Slope	4.00:1
Shallow and Deep Cut Concrete Drain Backslope Width	0.500m
Shallow and Deep Cut Concrete Drain Backslope Slope	3.00:1
Shallow and Deep Cut Concrete Drain Slab Thickness	0.120m
--- SHALLOW CUT ---	
Shallow Cut Slope (Positive Up, Negative Down)	2.00:1
Shallow Cut Max Depth	1.500m
Shallow Cut Drain Type	V Drain
Shallow Cut Drain Foreslope Width	3.000m
Shallow Cut Drain Foreslope Slope	6.00:1
Shallow Cut Drain Backslope Width	2.500m
Shallow Cut Drain Backslope Slope	4.00:1
Shallow Cut Drain Flowline Point Code	Channel_Flowline_Grass
Shallow Cut Bench Width	0.000m
Shallow Cut Bench Slope (Positive Up, Negative Down)	4.00:1
--- DEEP CUT ---	
Deep Cut Range 1 Max Depth	2.000m
Deep Cut Range 2 Max Depth	5.000m
Deep Cut Range 3 Max Depth	9999.000m
Deep Cut Range 1 Slope	2.00:1
Deep Cut Range 2 Slope	1.00:1
Deep Cut Range 3 Slope	0.50:1
Deep Cut Drain Flowline Point Code	Channel_Flowline_Concrete
Deep Cut Bench Width	1.500m

Copyright and usage restrictions

The **Copyright** and **Usage Restrictions** were added to subassembly:

ADVANCED	
Parameters	
Side	Right
Copyright	Devotech Group
Usage Restrictions	Only to be used in conjunction with a valid Devotech iDAS license.

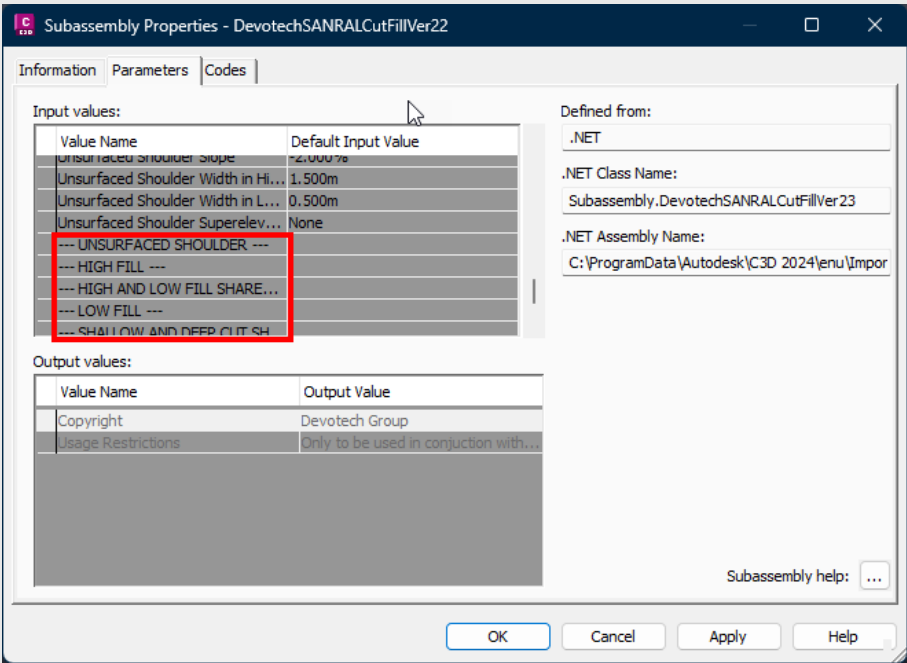
Parameter headers

The parameter headers were added to the **Properties** window for easier navigation:

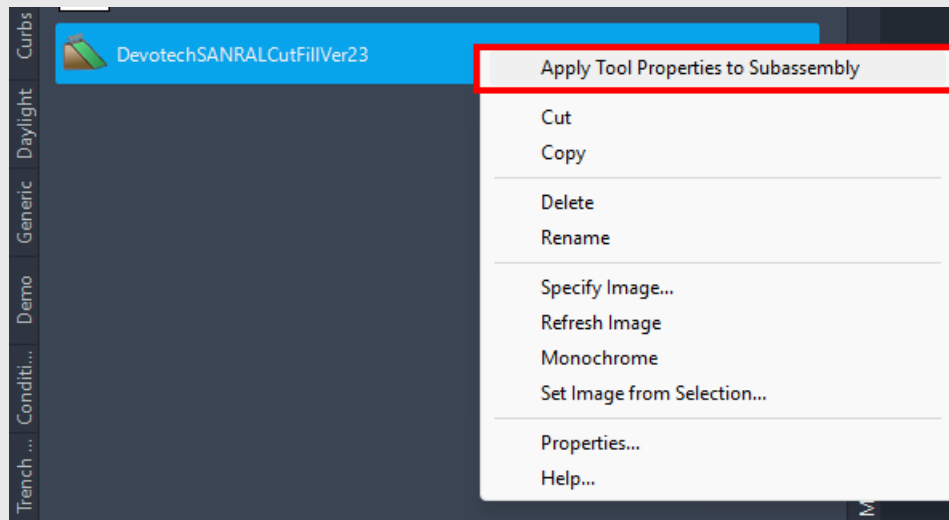
ADVANCED	
Parameters	
Side	Right
Copyright	Devotech Group
Usage Restrictions	Only to be used in conjunction with a valid Devotech iDAS license.
--- UNSURFACED SHOULDER ---	
Unsurfaced Shoulder Width in High Fill	1.500m
Unsurfaced Shoulder Width in Low Fill and Deep Cut	0.500m
Unsurfaced Shoulder Slope	-2.000%
Unsurfaced Shoulder Superelevation	None
--- HIGH AND LOW FILL SHARED PARAMETERS ---	
High and Low Fill Daylight Point Code	Daylight,Daylight_Fill
--- HIGH FILL ---	
High Fill Slope (Positive Up, Negative Down)	-1:1.500
High Fill Drain Creation	Always
High Fill Drain Foreslope Width	0.500m
High Fill Drain Foreslope Height	-0.050m

Known issues

The parameters and headers appear in the wrong order in the **Subassembly Properties** window:



The same issue appears in the **Properties** window if the **Apply Tool Properties to Subassembly** command from **Tool Palettes** is used:



The headers are then displayed at the bottom of the **Properties** window and the parameters are sorted alphabetically:

Shallow Cut Slope (Positive Up, Negative Down)	1:2.000
Shallow Cut and Deep Cut Daylight Point Code	Daylight,Daylight_Cut
Unsurfaced Shoulder Slope	-2.000%
Unsurfaced Shoulder Width in High Fill	1.500m
Unsurfaced Shoulder Width in Low Fill and Deep Cut	0.500m
Unsurfaced Shoulder Superelevation	None
--- UNSURFACED SHOULDER ---	
--- HIGH FILL ---	
--- HIGH AND LOW FILL SHARED PARAMETERS ---	
--- LOW FILL ---	
--- SHALLOW AND DEEP CUT SHARED PARAMETERS ---	
--- SHALLOW CUT ---	
--- DEEP CUT ---	
--- BERM ---	
--- OVERRIDES ---	

Parameters renaming

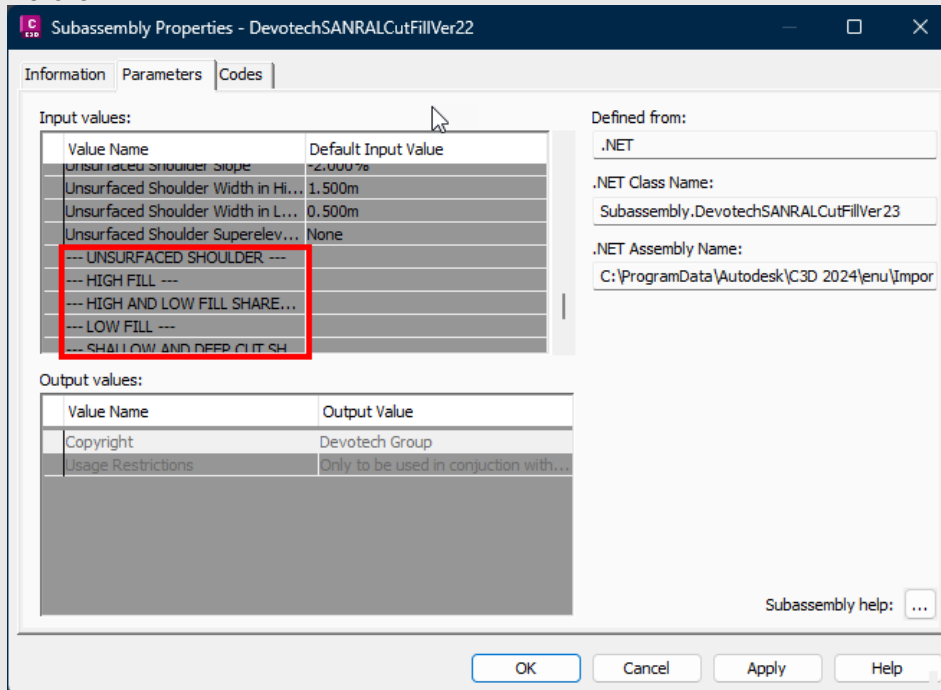
Some parameters were renamed to improve the navigation in the Properties window.

Old name		New name
Create Berm in Shallow Cut	X	Berm in Shallow Cut
Create Berm in Deep Cut	X	Berm in Deep Cut
Guardrail Point Code	X	High Fill Guardrail Point Code
Guardrail Offset from Road Edge	X	High Fill Guardrail Offset from Road Edge

Devotech SANRAL Cut Fill Ver 24 Improvements

Fixed a bug that caused the parameters and headers to appear in the wrong order in the **Subassembly Properties** window.

Before:



After:

