



Devotech Group of Companies

DEVOTECH iDAS v12.4

Document version: 02

DEVOTED TO ENGINEERING EXCELLENCE

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SUPPORTED CIVIL 3D VERSIONS

Civil 3D 2018-2024

OLD DRAWINGS COMPATIBILITY

Any old drawings are fully compatible with the new iDAS version however some adjustments might be needed, see further chapters.

Drawings with channels

If the old drawing contains V-shape or trapezoidal channels then double check the side slopes:

Pipes	Channel Name	Channel Description	Channel Size Name	Channel Inner Width (mm)	Channel Shape	Manning's Roughness Coefficient	Number of Channels	Trapezoidal Left Side Slope or Triangular Slope (wch or 1:x)	Trapezoidal Right Side Slope or leave Zero to Match Left Slope (wch or 1:x)	Average Loss	Initial Flow (m³/s)
Channels	C1	Rectangular	Rectangular Channel W 900 x H 750	900.000	Rectangular	0.0300	1	0	0	0	0
Direct	C3	V Shape Cha	V Shape Channel LEFT SLOPE 1 in 1.000 RIGHT SLOPE 1 in 1.000 H 750	1500.000	Triangular	0.0300	1	0.5	0	0	0
Unmatched	C5	V Shape Cha	V Shape Channel LEFT SLOPE 1 in 1.000 RIGHT SLOPE 1 in 1.000 H 700	1400.000	Triangular	0.0300	1	2	0	0	0

Drawings with valves

If the old drawing contains valves with the Fixed Status being set to Open, then this property **must** be changed to “None”. Fixed Status property was improved and offers all the options the EPANET engine supports:

- “None” - a valve operates as a valve
- “Open” - a valve operates as an open conduit
- “Closed” - a valve operates as a closed conduit

Plan	Water Sources	Pressure Reducing	Valve Name	Outgoing Pipe	Pipe Diameter (mm)	Valve Diameter (mm)	Fixed Status	Surface Elevation (m)	Invert Elevation (m)
Profiles	Tanks	Pressure Sustaining	1	PRV	P12 ou	140.450	Closed	1,468.479	1,467.361
House Conn	Pumps	Pressure Breaker					<None>		
Catchments	Valves	Flow Control					Open		
Structures	Junctions	Throttle Control					Closed		
Conduits	Fire Hydrants	General Purpose							
Alignments	SHC	Air Valves							

NEW FEATURES

Pipe Catalog Check

A pipe catalog can now be associated with a drawing. When a drawing is opened and the current Civil 3D pipe catalog is different from the catalog saved in the drawing a dialog will be displayed that can be used to resolve the difference.

Pipe Catalog Conflict

The pipe catalog that was last used in this drawing is different to the pipe catalog that is currently set in Civil 3D.

Civil 3D Current Catalog

Catalog Folder: C:\ProgramData\Autodesk\ApplicationPlugins\DEVOTECH.bundle\Contents\iDAS Pipe Catalog|

Pipe Catalog: iDAS Metric Pipes

Structure Catalog: iDAS Metric Structures

Catalog Last Used in this Drawing

Catalog Folder: **UNAVAILABLE**

Pipe Catalog: **UNAVAILABLE**

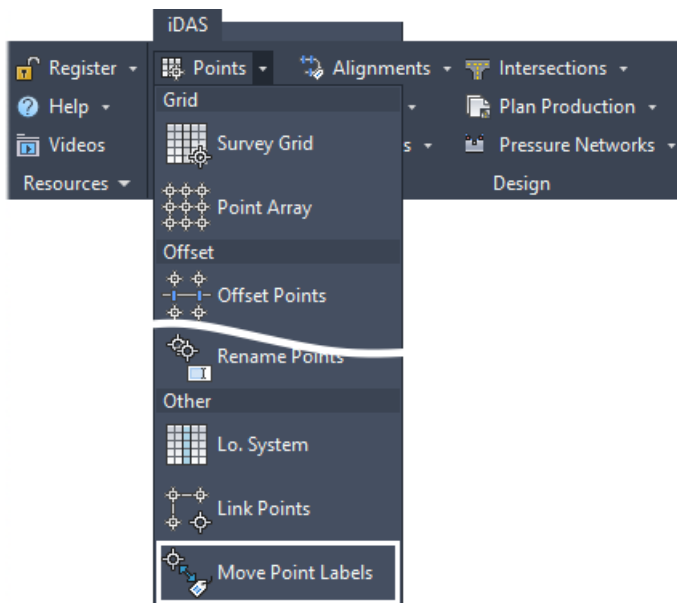
Structure Catalog: **UNAVAILABLE**

Do not show this dialog when a drawing opens

Use Catalog Last Used in this Drawing Use Civil 3D Current Catalog Use iDAS Catalog Browse for Catalog

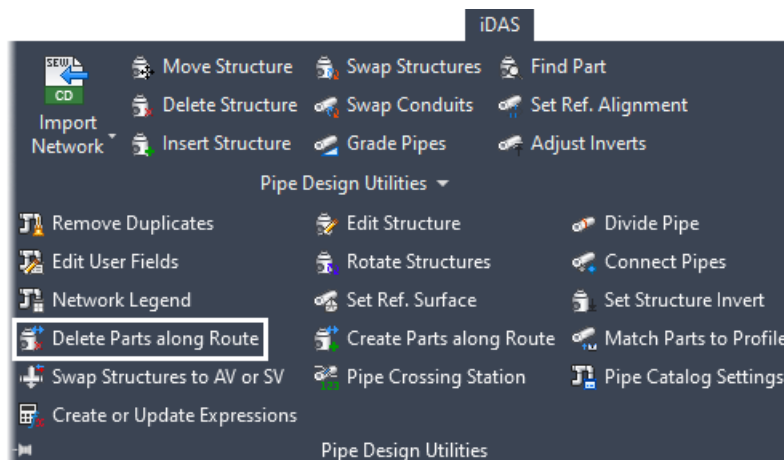
New Command: Move Point Labels

This command allows the user to move multiple point labels simultaneously in order to reduce the number of overlapping labels.



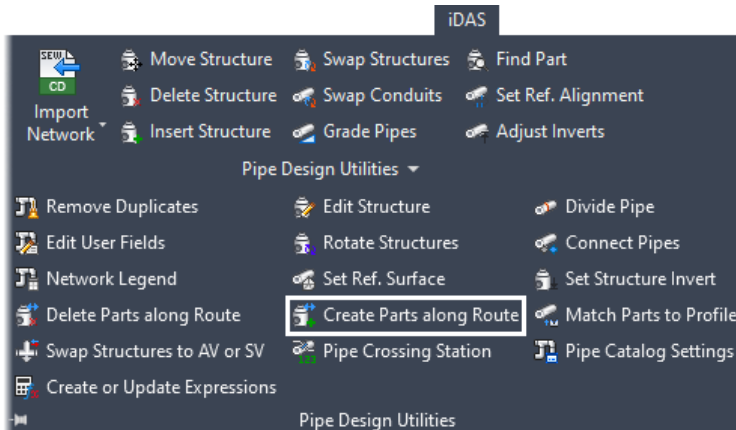
New Command: Delete Parts along Route

This command allows users to delete all pipes and structures between two structures.



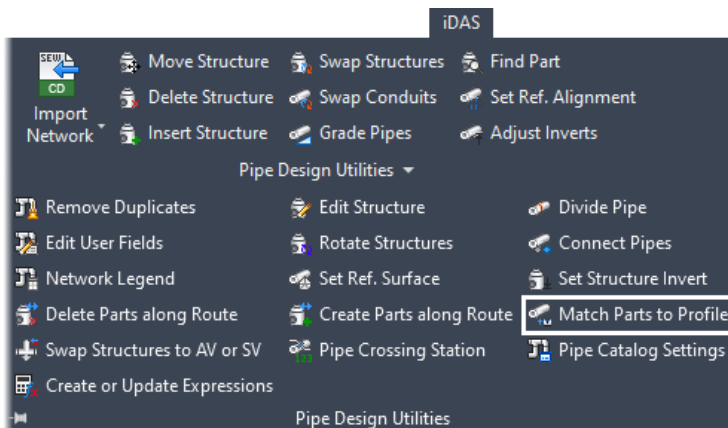
New Command: Create Parts along Route

This command allows users to create pipes and structures between two stations along an alignment.



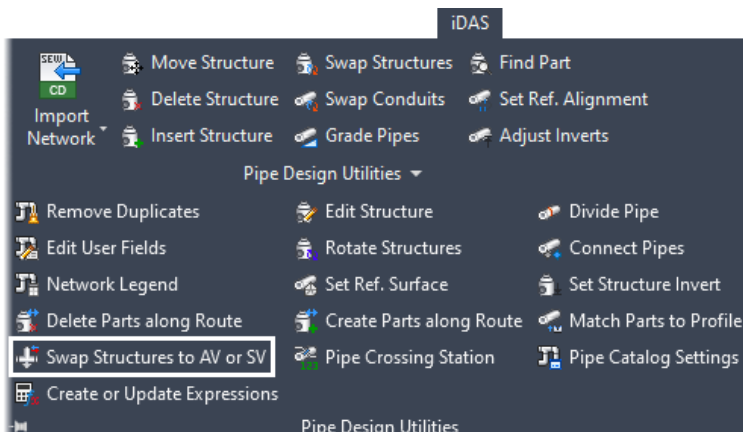
New Command: Match Parts to Profile

This command allows users to update pipes' and structures' elevations from a profile between two structures.



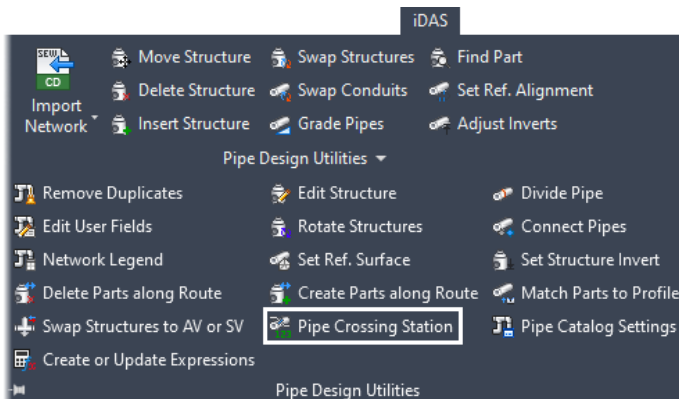
New Command: Swap Structures to AV or SV

This command allows users to swap structures that are at high and low points. This allows to user to quickly swap structures at high points to air valves and swap structures at low points to scour valves.



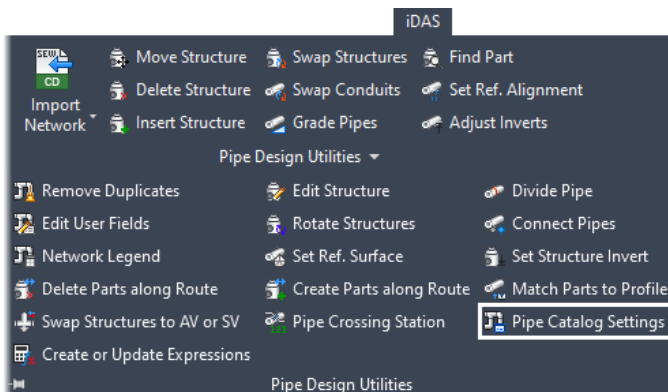
New Command: Pipe Crossing Station

This command allows users to update pipes' names or descriptions with the station of an alignment that crosses the pipe. This is useful for renaming culverts to the station of the corridor that they cross.



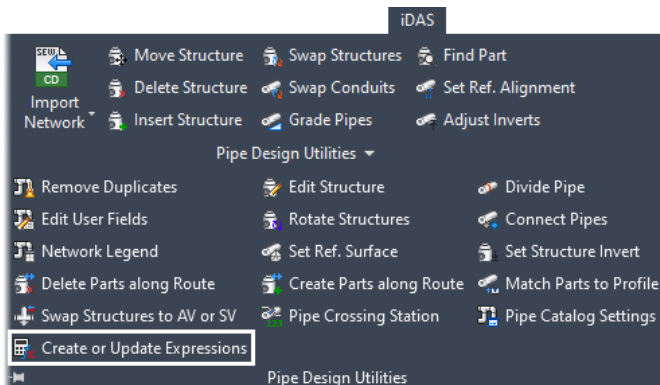
New Command: Pipe Catalog Settings

This command displays the pipe catalog settings dialog, allowing the user to enable/disable the pipe catalog settings dialog at startup and to set the current Civil 3D pipe catalog to the catalog that was last used in the drawing, the iDAS default catalog or to browse for another catalog.



New Command: Create or Update Expressions

This command creates or updates iDAS plan and profile label expressions for pipe networks.



IMPROVEMENTS AND BUG FIXES

Pipe Manager improvements

Opening Pipe Manager and its performance

Improved sewer network performance

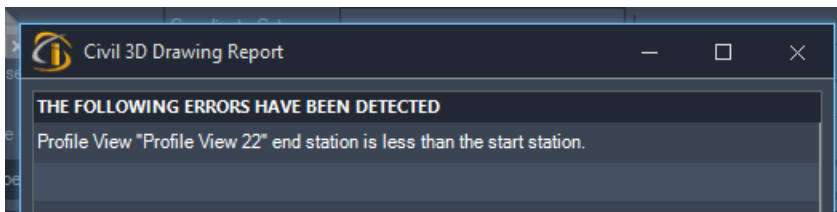
Large drawings open about five times faster.

Coordinate system conversion error no longer occurs

If the conversion between the assigned coordinate system and the coordinate system used by iDAS cannot be done, then generic transformations are used. Aerial images might not display correctly because of the discrepancies between the various transformation methods.

Pipe Manager does not stop working if the profile view start and end stations are not valid

The error message shows which profile views have incorrect stations:



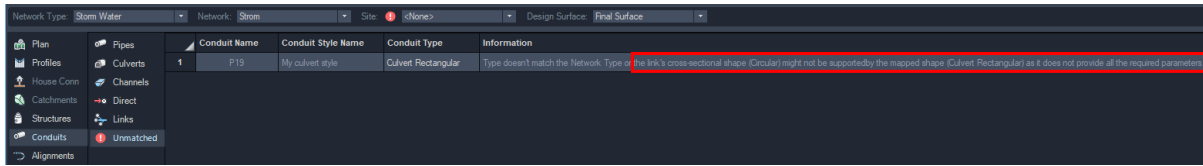
Although it is not possible to create a profile view that has end station less than start station, we received such a drawing from a client.

Mapping custom culvert styles to culverts works as expected

User can use any style for culverts and map it to desired culvert type:

	Conduit Style Name	Conduit Type	Conduits Used in this Design
Networks	_No Display	<None>	
Structures	Channel Irregular	<None>	
Conduits	Channel Rectangular	Channel Rectangular	
	Channel Trapezoidal	Channel Trapezoidal	
	Channel V Shape	Channel Triangular	
	Culvert	Culvert Rectangular	
	Culvert Existing	Culvert Rectangular	
	Culvert Existing Section style for Longsection	Culvert Rectangular	
	Culvert Section style for Longsection	Culvert Rectangular	
	Jacking	Pipe Circular	P1 , P2 , P3 , P4 , P23 , P24
	My culvert style	Culvert Circular	P19
	Orifice Model Link	<None>	
	Outlet Model Link	<None>	

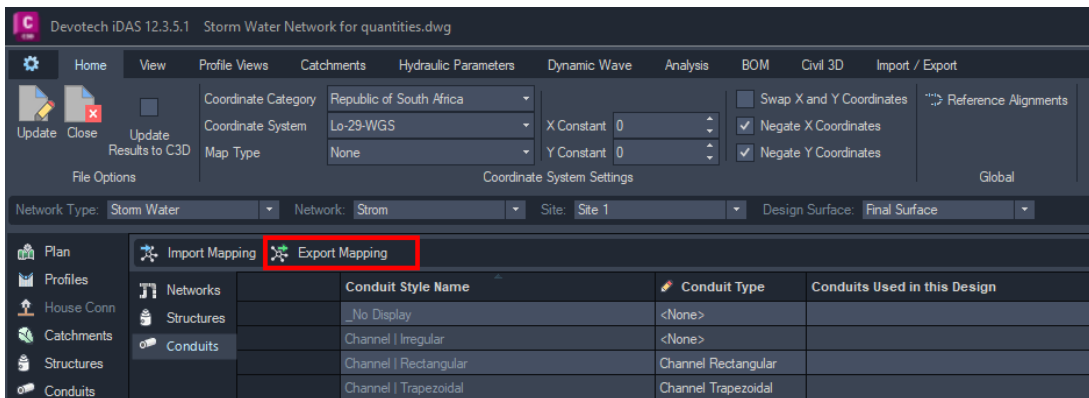
If a user assigns circular conduit to rectangular culvert or vice versa, Pipe Manager will inform the user in the **Information** column under **Unmatched** tab:



This approach provides more flexibility but on the other hand it has two disadvantages:

1. User must map correct shape to correct type (rectangular to rectangular, circular to circular)
2. The old drawings from iDAS 9, 10 or 11 might need mapping adjustment before they can be used again.

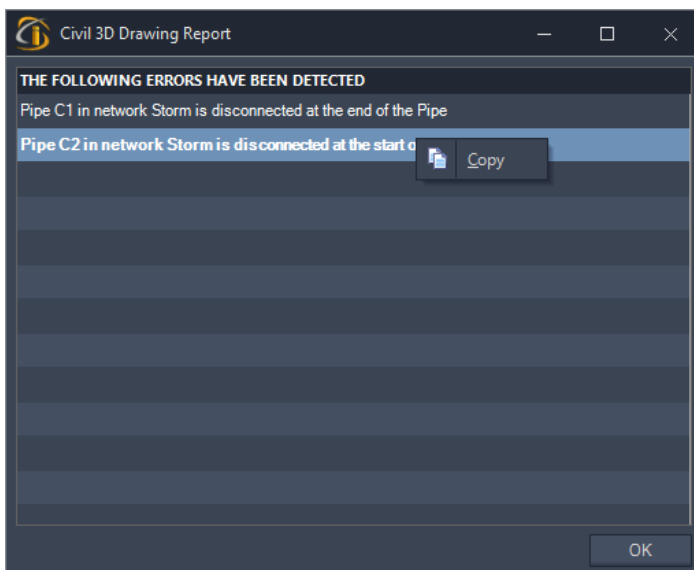
Exporting Mapping does not give an error regarding insufficient user's permissions



Civil 3D Drawing Report dialog has been revamped

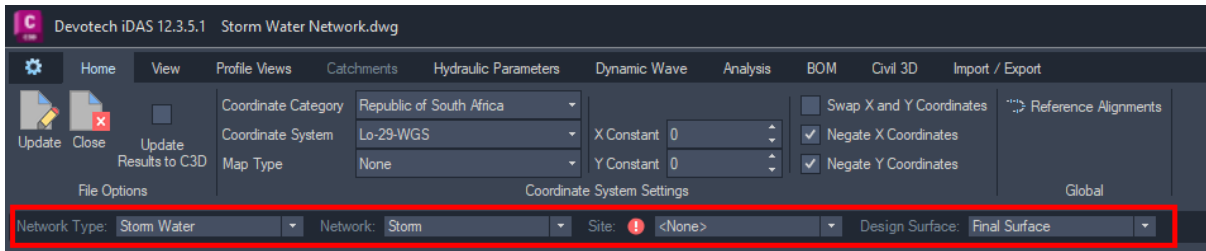
The report dialog is now a list of items. The items can be selected and copied to the clipboard.

The network that parts belong to have been added to the error messages.



User interface

Pipe Manager drop down colors match the other colors

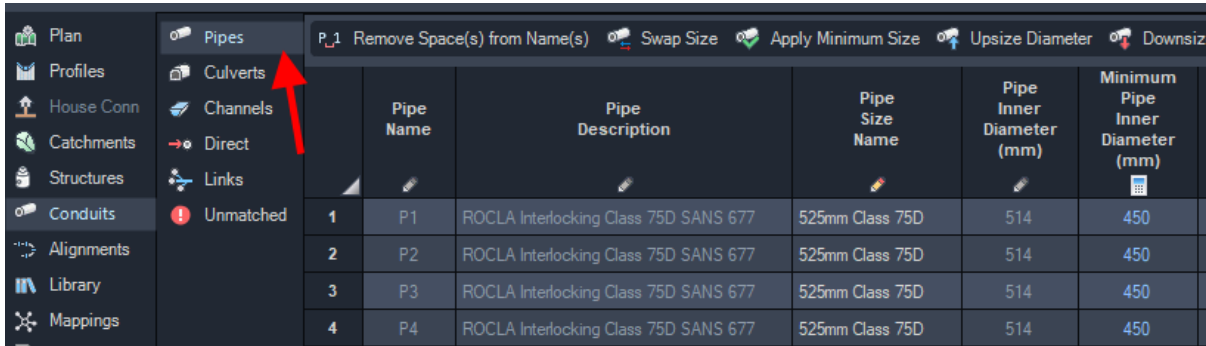


Grid lines are dark and not white

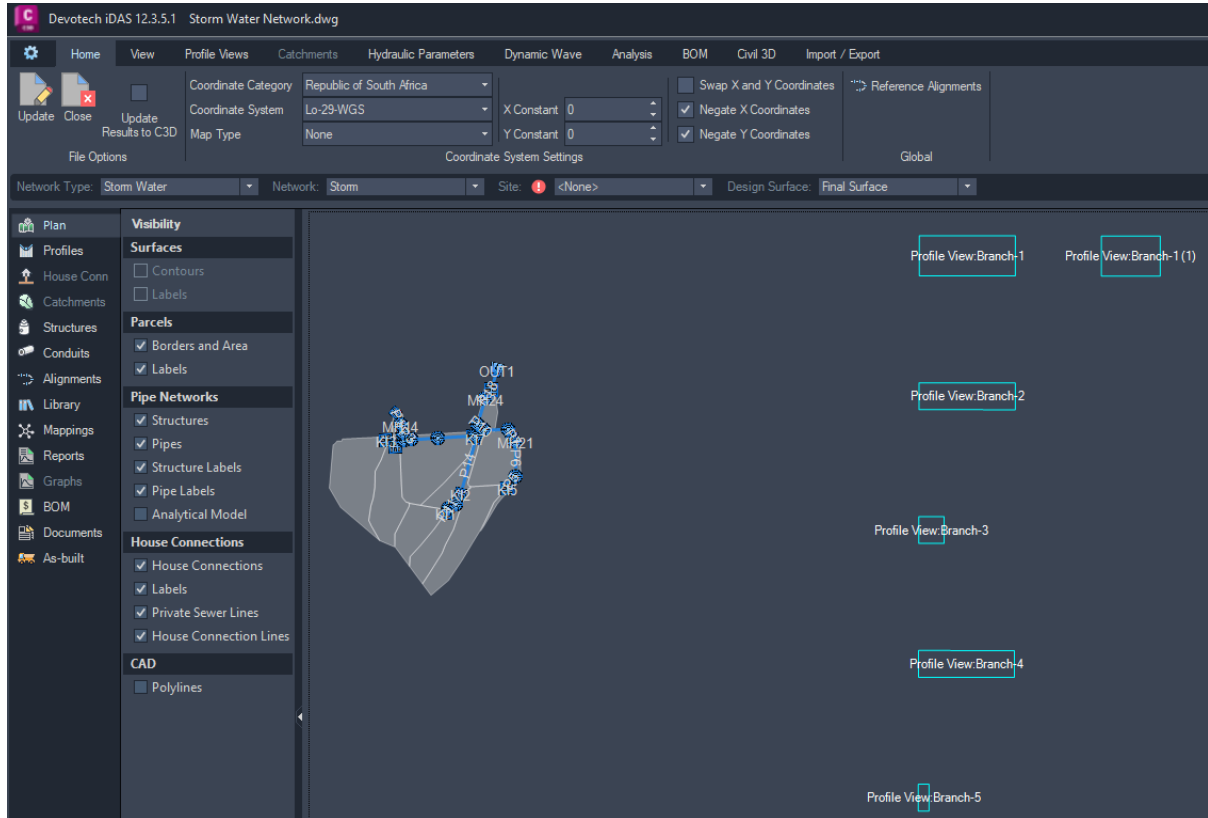
The screenshot shows a table with the following data:

	Pipe Name	Pipe Description	Pipe Size Name	Pipe Inner Diameter (mm)	Minimum Pipe Inner Diameter (mm)
1	P1	ROCLA Interlocking Class 75D SANS 677	525mm Class 75D	514	450
2	P2	ROCLA Interlocking Class 75D SANS 677	525mm Class 75D	514	450
3	P3	ROCLA Interlocking Class 75D SANS 677	525mm Class 75D	514	450
4	P4	ROCLA Interlocking Class 75D SANS 677	525mm Class 75D	514	450

Tabs do not display blue rectangle when they are active



Profile views rectangles displayed in plan show profile view name



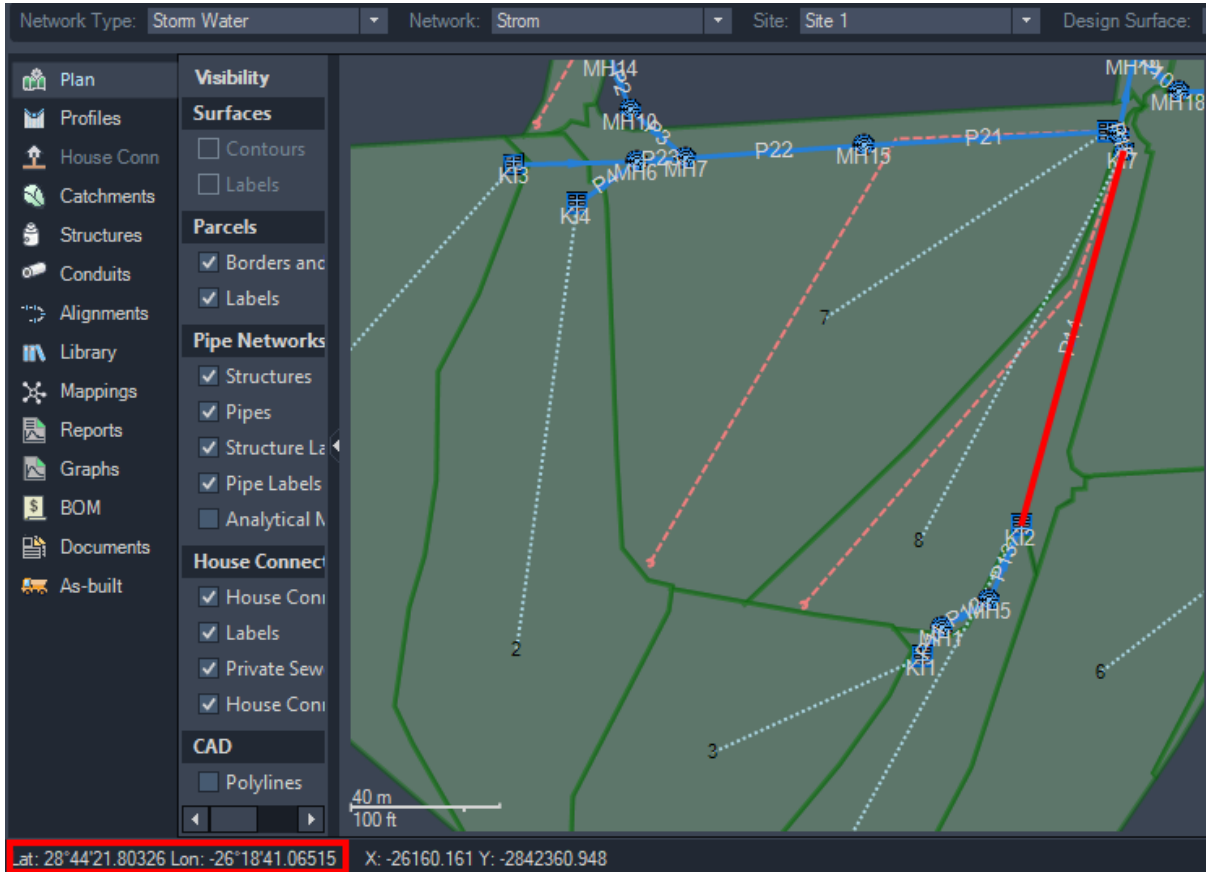
Spaces are allowed in the pipe and structure names

There is no longer a need to remove spaces from the pipe and structure names.

Remove spaces from names command checks for duplicates

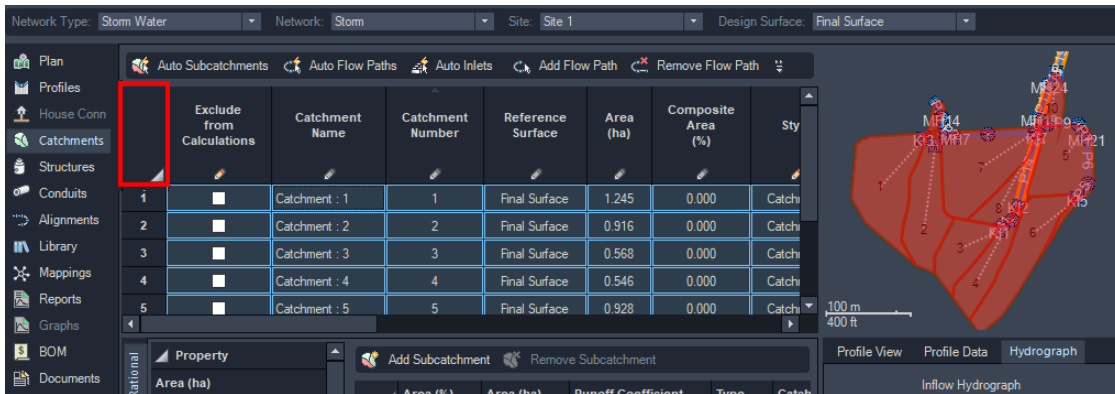
If duplicate name occurs, then number in the bracket is used, e.g.: P10 => P10(1).

Lat and Long values show decimal numbers and not zeros



Stormwater networks

All the catchments can be selected by right clicking on top left corner



Channel sides slopes can now have a different slope for the left and right side.

Pipes	Conduits	Channel Name	Channel Description	Channel Size Name	Channel Inner Width (mm)	Channel Shape	Manning's Roughness Coefficient	Number of Channels	Trapezoidal Left Side Slope or Triangular Slope (wch or 1x)	Trapezoidal Right Side Slope or leave Zero to Match Left Slope (wch or 1x)	Average Loss	Initial Flow (m ³ /s)
	C1	Rectangular	Rectangular Channel W 900 x H 750		900.000	Rectangular	0.0300	1	0	0	0	0
	C3	V Shape Cha	V Shape Channel LEFT SLOPE 1 in 1.000 RIGHT SLOPE 1 in 1.000 H 750		1500.000	Triangular	0.0300	1	0.5	0	0	0
	C5	V Shape Chal	V Shape Channel LEFT SLOPE 1 in 1.000 RIGHT SLOPE 1 in 1.000 H 700		1400.000	Triangular	0.0300	1	2	0	0	0

Culverts

Originally, circular and rectangular culverts could both use one style called “Culvert” and former Stormwater Manager knew if the culvert shape was circular or rectangular. When the new Pipe Manager was introduced in the version 12.1, the users had to use different style for circular culverts and different style for rectangular culverts.

If you have any old drawing that uses “Culvert” style for circular and rectangular culverts, then you must create new styles (create a copy of the existing “Culvert” style) and name them as following:

- Culvert | Rectangular
- Culvert | Circular

Open Pipe Manager, go to tab **Mappings** and map the styles name to the correct **Conduit Types** as per image below:

Conduit Style Name	Conduit Type	Conduits Used in this Design
_No Display	<None>	
Channel Irregular	<None>	
Channel Rectangular	Channel Rectangular	C1
Channel Trapezoidal	Channel Trapezoidal	
Channel V Shape	Channel Triangular	C3 , C5
Culvert	Culvert Rectangular	
Culvert Existing	Culvert Rectangular	
Culvert Existing Section style for Longsection	Culvert Rectangular	
Culvert Section style for Longsection	Culvert Rectangular	
Culvert Circular	Culvert Circular	C4
Culvert Rectangular	Culvert Rectangular	C2
Jacking	Pipe Circular	

Sewer networks

Deleting sewer HC updates table (grid) and section

Network Type: Sewer Network: Sewer Site: Site 1 Design Surface: Final Surface

Plan Add HC Add PS and HC **Remove HC** **Remove PS** Move HC Select Main Pipe Auto Select PS Polyline Calculate HC

No House Connection available for this Parcel.
 Select parcel and use command Add HC to create House Connection only or select parcel and use command Add PS and HC to create House Connection and Private Sewer line.
 Multiple parcels can be selected.

Parcel Number	Parcel Name	Area (m ²)	House Connection Structure	Connect To Pipe	Reference Network	Private Sewer Polyline	Private Sewer Length (m)	Inflow Group	Area Based Inflow (l/Day/m ²)	Direct Inflow (l/s)
1	Residential 1 : 1	954.223	<None>	P5.1	Sewer	<None>	0.000	<None>	0.000	0.000000
2	Residential 1 : 2	2536.776	<None>	P1.3	Sewer	<None>	0.000	<None>	0.000	0.000000
3	Residential 1 : 3	874.428	<None>	P1.3	Sewer	<None>	0.000	<None>	0.000	0.000000

All the house connections can be selected by clicking in the top left corner

Network Type: Sewer Network: Sewer Site: Site 1 Design Surface: Final Surface

Plan Add HC Add PS and HC Remove HC Remove PS Move HC Select Main Pipe Auto Select PS Polyline Calculate HC

Profile View
Private Sewer Line for Parcel No 1 (Residential 1 : 1)

Elevation (m) vs Station (m) graph showing:
 Start Invert Elevation = 1469.23m
 Structure Invert Elevation = 1467.838m
 Main Pipe Invert Elevation = 1467.273m
 Invert at Main Pipe Elevation = 61.687m
 Invert at Structure Elevation = 60.5m

LEGEND:
 House Connection
 Final Calculated Profile
 Min Calculated Profile
 Private Sewer
 Design Surface

Parcel Number	Parcel Name	Area (m ²)	House Connection Structure	Connect To Pipe	Reference Network	Private Sewer Polyline	Private Sewer Length (m)	Inflow Group	Area Based Inflow (l/Day/m ²)	Direct Inflow (l/s)
1	Residential 1 : 1	954.223	SC1	P5.1	Sewer	Polyline	60.044	High	0.000	0.000000
2	Residential 1 : 2	2536.776	SC2	P1.3	Sewer	Polyline	101.543	High	0.000	0.000000
3	Residential 1 : 3	874.428	SC3	P1.3	Sewer	Polyline	58.870	High	0.000	0.000000
4	Residential 1 : 4	695.564	SC4	P5.3	Sewer	Polyline	67.736	High	0.000	0.000000

Water networks

Error 305 should not occur if a user does not have write access to Program Data

If the user does not have sufficient writes in the current folder the INP file will be written to the windows temporary folder (%temp%).

Pump Initial Status and valve Fixed Status are exported to INP file

	Valve Name	Outgoing Pipe	Pipe Diameter (mm)	Valve Diameter (mm)	Fixed Status	Surface Elevation (m)	Invert Elevation (m)	Depth Below Surface (m)	Maximum Pressure (m)	Minor Loss
1	MH13	P13	276.600	100.000	Open	0.000	1.416.423	-1.416.423	10.000	0.000
2	MH22	P22	276.600	100.000	Closed	0.000	1.404.040	-1.404.040	5.000	0.000

Valve Fixed Status

If the old drawing contains valves with the Fixed Status being set to Open, then this property **must** be changed to “None”. Fixed Status property was improved and offers all the options the EPANET engine supports:

- “None” - a valve operates as a valve
- “Open” - a valve operates as an open conduit
- “Closed” - a valve operates as a closed conduit

	Valve Name	Outgoing Pipe	Pipe Diameter (mm)	Valve Diameter (mm)	Fixed Status	Surface Elevation (m)	Invert Elevation (m)
1	PRV	P12 ou	140.450	100.000	Closed	1.468.479	1.467.361

INP file generated from water analysis groups objects of the same type

```
[PUMPS]
;ID          Node1      Node2      Properties      Structure Type
MH98ps1     MH98       MH98out1   POWER 0        ; Borehole Pump
MH56ps1     MH56       MH56out1   HEAD           ; Pump
MH110ps1    MH110      MH110out1  POWER 0        ; water well

[RESERVOIRS]
;ID          Head        Pattern    Structure Type
MH98        208.000    Pattern Speed 3 ; Borehole
MH103      210.459    Pattern Time 2 ; Connect to Existing
MH102      211.824    Pattern Time 1 ; Connect to Existing
MH92       212.088    Pattern Time 2 ; Reservoir
MH59       198.971    Pattern Time 1 ; Reservoir

[JUNCTIONS]
;ID          ELev.      Demand    Pattern
MH104       215.417    0.000
MH105       215.103    0.000
MH99        214.536    0.000
MH109       214.143    0.000
MH106       214.134    0.000 ; Air Valve
MH101       213.898    0.000
MH98out1    208.000    0.000
MH107       213.635    0.000 ; Air Valve
MH100       213.593    0.000
MH108       212.674    0.000
```

Valve minor loss coefficient can be set and used in the analysis

Valve Name	Outgoing Pipe	Pipe Diameter (mm)	Valve Diameter (mm)	Fixed Status	Surface Elevation (m)	Invert Elevation (m)	Depth Below Surface (m)	Maximum Pressure (m)	Minor Loss
1 PRV1	P26 (1) (1)	158.000	0.000	Open	1,475.328	1,475.084	0.243	20.000	5.000
2 MH60	P12	140.450	0.000	Open	1,468.495	1,467.376	1.119	20.000	5.000

Emitter coefficient can be set and used in the analysis

Node Name	Emitter Coefficient	Type	Y Coordinate	X Coordinate	Surface Elevation (m)	Invert Elevation (m)	Depth Below Surface (m)
31 F1	14.000	Fire Hydrant	26,107.464	2,842,342.112	1,473.139	1,471.998	1.140
54 F2	14.000	Fire Hydrant	26,098.989	2,842,217.842	1,469.704	1,468.594	1.110
62 F3	14.000	Fire Hydrant	25,957.423	2,842,258.991	1,469.236	1,468.127	1.110
25 GV1	0.000	Valve	26,094.226	2,842,344.392	1,472.925	1,471.812	1.113
39 GV2	0.000	Valve	26,049.652	2,842,293.290	1,470.527	1,470.065	0.462
40 GV3	0.000	Valve	26,160.748	2,842,218.940	1,470.500	1,469.563	0.936
49 GV4	0.000	Valve	26,055.081	2,842,215.345	1,469.210	1,468.073	1.137

All the columns under Nodes except Emitter Coefficient are non- editable

Node ID	Node Name	Emitter Coefficient	Type	Y Coordinate	X Coordinate	Surface Elevation (m)	Invert Elevation (m)	Depth Below Surface (m)
31	F1	14.000	Fire Hydrant	26,107.464	2,842,342.112	1,473.139	1,471.998	1.140
54	F2	14.000	Fire Hydrant	26,098.989	2,842,217.842	1,469.704	1,468.594	1.110
62	F3	14.000	Fire Hydrant	25,957.423	2,842,258.991	1,469.236	1,468.127	1.110
25	GV1	0.000	Valve	26,094.226	2,842,344.392	1,472.925	1,471.812	1.113
39	GV2	0.000	Valve	26,049.652	2,842,293.290	1,470.527	1,470.065	0.462
40	GV3	0.000	Valve	26,160.748	2,842,218.940	1,470.500	1,469.563	0.936
49	GV4	0.000	Valve	26,055.081	2,842,215.345	1,469.210	1,468.073	1.137

Columns added to the links table for start and end structures

Link ID	Link Name	Link Description	Link Size Name	Start Structure	Length (m)	End Structure	Slope (%)	Slope (1:Ratio)
1	P1	Aquaflow HDPE PE 100 PN 10	90mm Class PN10	J11	11.510	J10	-3.046	-32.825
10	P10	Aquaflow HDPE PE 100 PN 10	160mm Class PN10	B3	8.885	J4	2.221	45.028
11	P11	Aquaflow HDPE PE 100 PN 10	160mm Class PN10	J13	10.803	B11	3.147	31.777

Valve Diameter

In the older iDAS versions, valve diameter was set the same as outgoing pipe diameter. In the iDAS 12.4, the valve diameter must be specified by a user. This offers to set any desired value:

Valve ID	Valve Name	Outgoing Pipe	Pipe Diameter (mm)	Valve Diameter (mm)	Fixed Status	Surface Elevation (m)	Invert Elevation (m)	Depth Below Surface (m)
1	PRV	P12 ou	140.450	100.000	<None>	1,468.479	1,467.361	1.118

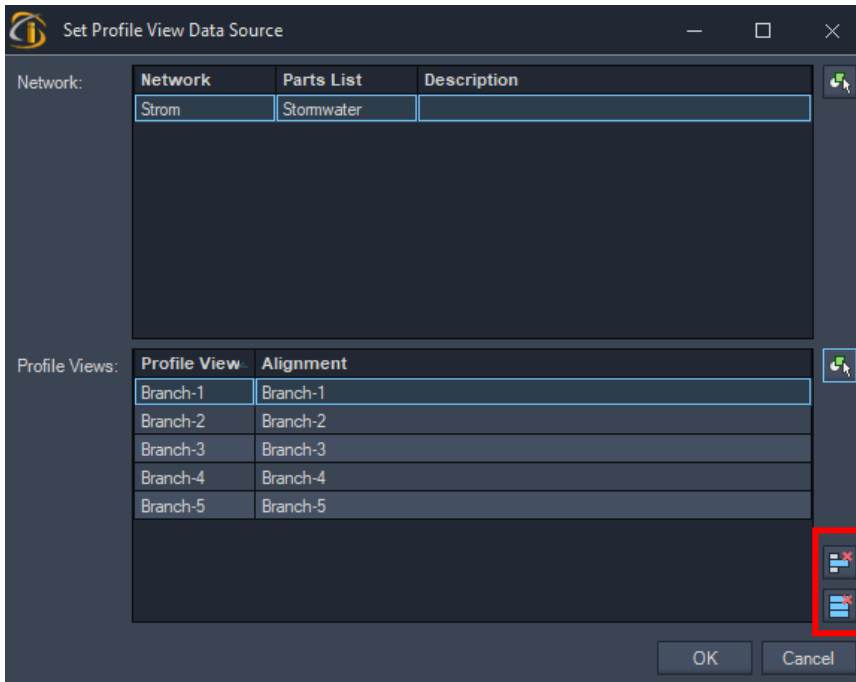
If you open an older drawing, the valve diameter that was originally used will also be used in the new iDAS 12.4.

Commands from iDAS ribbon improvements

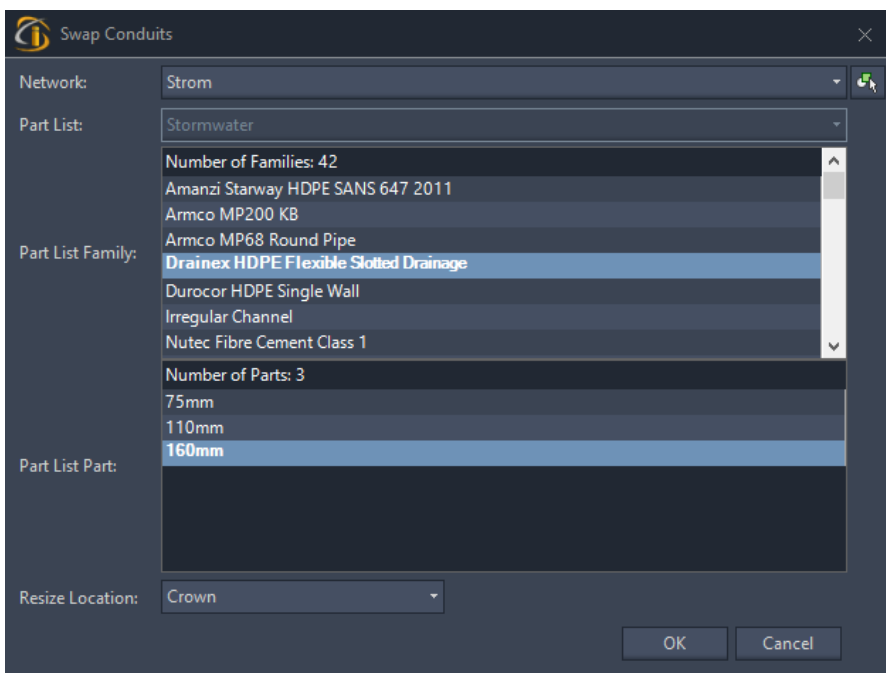
Set Data Source command has a new user interface

The new user interface has the following improvements:

1. It is easier to select a pipe network from the list and user can see which network was selected
2. User can remove the selected profile views from the selection
3. The colors are matching Civil 3D dark theme

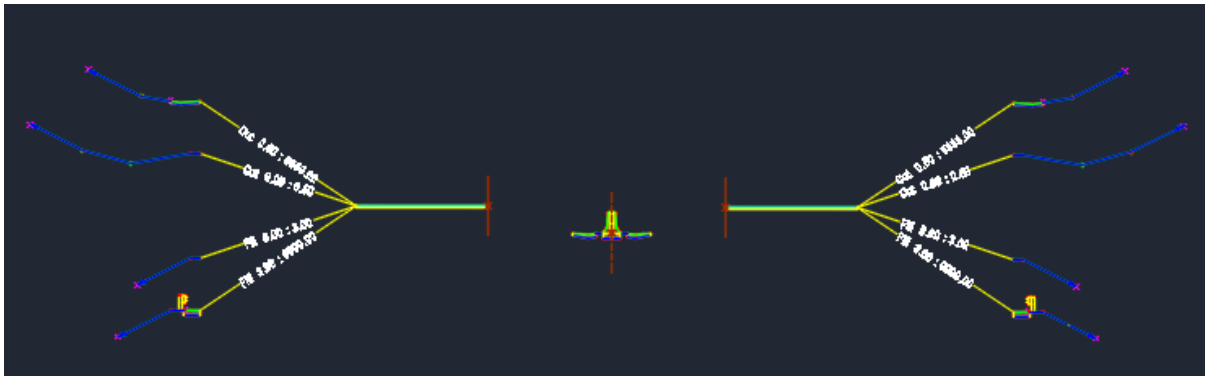


Swap Conduits and Swap Structures commands dialogs have colors matching with Civil 3D dark theme

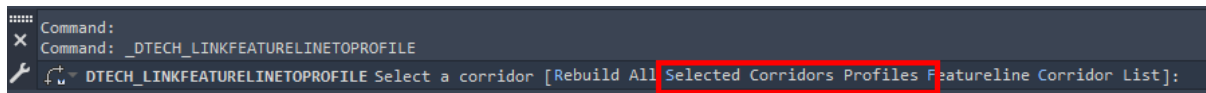


Profile Feature Line supports offset assemblies and provide an option to update only “Selected Corridors”

User can create dynamic profiles from offset assemblies:



Only selected corridors profiles can be updated:



There is significant **performance improvement in Civil 3D 2024**, see timing test results below when updating profiles from corridor on 10 km long corridor with two ETW profiles with the corridor frequency set to 10 m:

- Civil 3D 2023 - 71 seconds
- Civil 3D 2024 - 22 seconds

When the frequency was set to 5 m in the corridor from the testing above, then the performance improvement was even more significant:

- Civil 3D 2023 - 500 seconds (8:20)
- Civil 3D 2024 - 45 seconds

Adjust Inverts allows a negative adjustment amount

The screenshot shows the 'Adjust Pipe and Structure Parameters' dialog box. The 'Pipes' section is highlighted with a red box. The 'Amount' field is set to -0.5 (m), 'Depth to' is set to 'Cover', and 'Adjustment' is set to 'Raise/ Lower'. The 'Structures' section is also visible, with 'Amount' set to 5 (m), 'Adjustment' set to 'Below Surface', and 'Sump Depth' set to 0 (m).

Adjust Pipe and Structure Parameters

Selection Method

- Network: Storm
- Alignment: Branch-1
- Parts: Select Parts
No Parts selected

Surface

Name: <None>

Pipes

- Apply to locked pipes (and locked structures)
- Adjust Pipe elevations
- Amount: -0.5 (m)
- Depth to: Cover
- Adjustment: Raise/ Lower

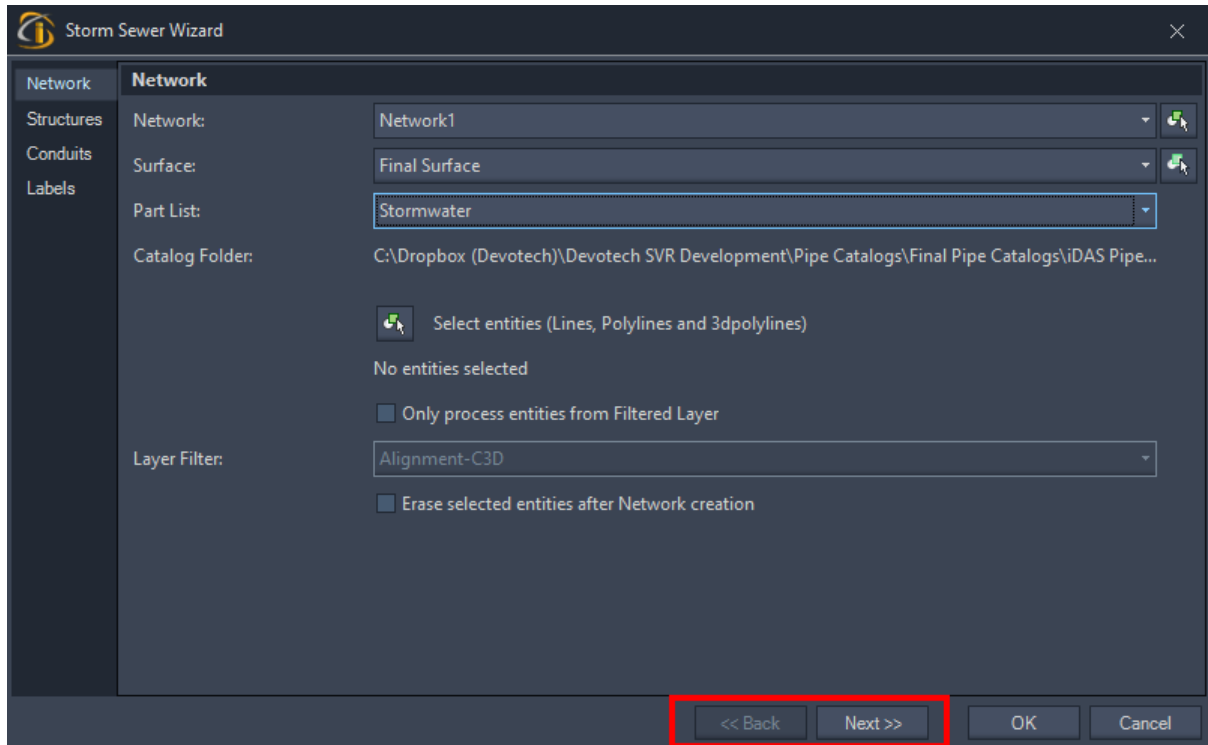
Structures

- Apply to locked Structures
- Adjust Structure Rim elevations
- Amount: 5 (m)
- Adjustment: Below Surface
- Adjust Structure Sump depth
- Sump Depth: 0 (m)
- Change Sump Depth control:
- Control by: Depth

OK Cancel

Pipe network wizards have Back and Next buttons

Stormwater, sewer, water reticulation and bulk water wizards have “Back” and “Next” buttons:

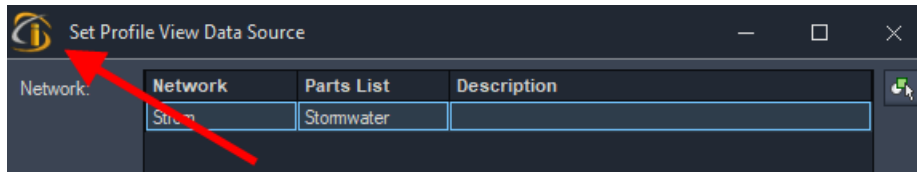


About dialog has been revamped



User Interface Improvements

All new dialogs for Devotech iDAS commands have Devotech iDAS icon in the top left corner:



The following dialogs have been improved to work better with high DPI settings:

- Storm Water Wizard
- Sewer Wizard
- Alignment Tags
- Find Part
- Insert Structure
- Regrade Network
- Set Inverts
- Set Pipe Direction
- Set Reference Surface
- Swap Pipes
- Swap Structures
- Register Dialog

Subassemblies Improvements

- New version of Devotech SANRAL Cut Fill Ver-2018-20.

The details can be found in the iDAS Help file.

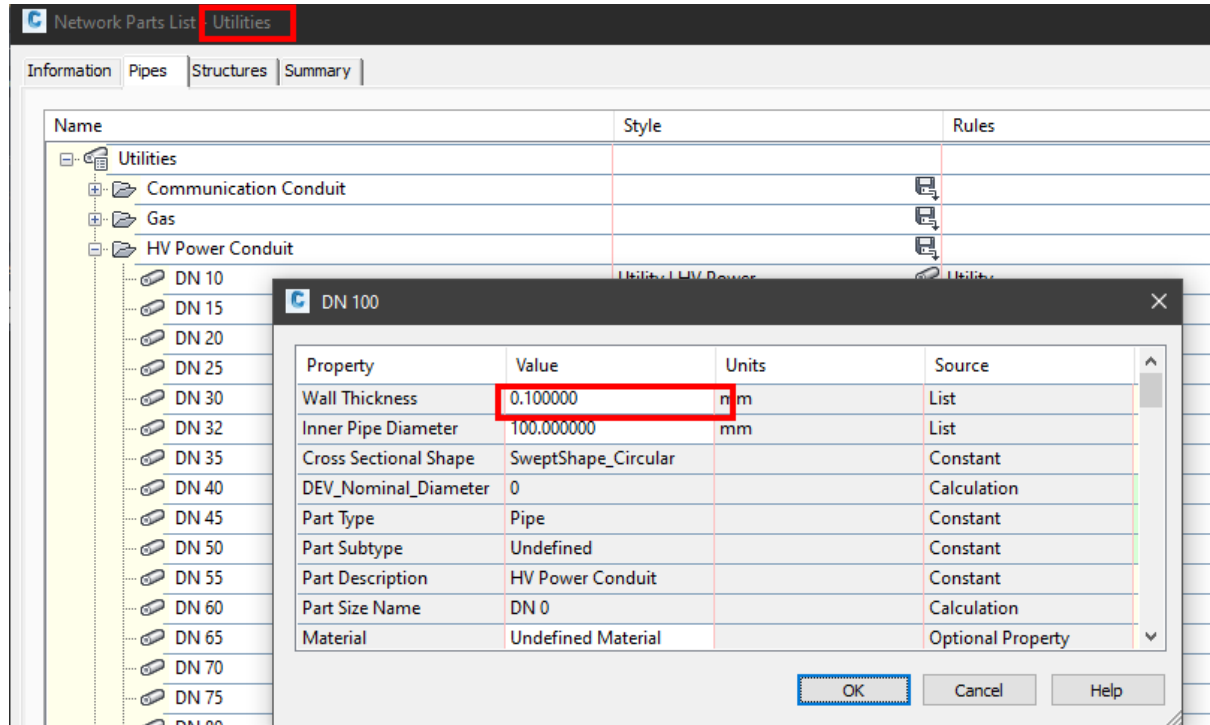
iDAS Civil 3D template improvements

Templates version number

Then new iDAS templates have version number 336.

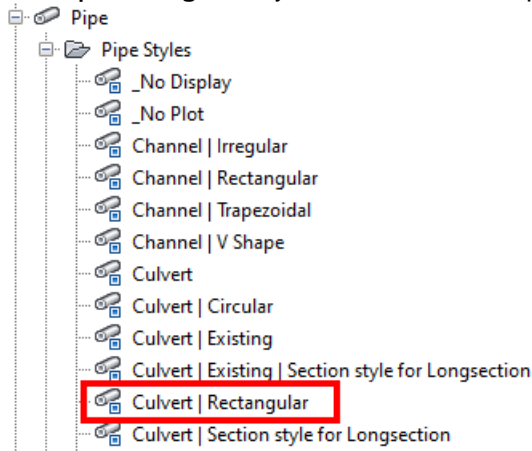
Conduits wall thickness in Utilities part list

Conduits wall thickness in the Utilities part list was set to 0.1 mm therefore nominal diameter is equal to the outer diameter to make it easier for the designers to use the correct outer conduit size (most of the time a utility outer diameter is known and not the inner diameter and wall thickness).



New culvert style

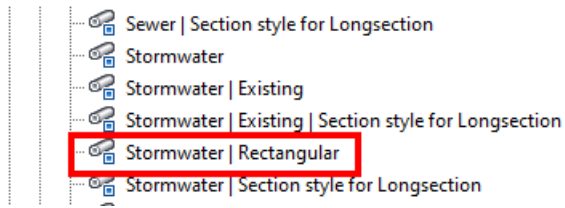
Culvert | Rectangular style was added to template:



The default Culvert style should be used for circular culverts.

New stormwater style

Stormwater | Rectangular style was added to template:



The default Stormwater style should be used for circular pipes.

RSA Stormwater part list update

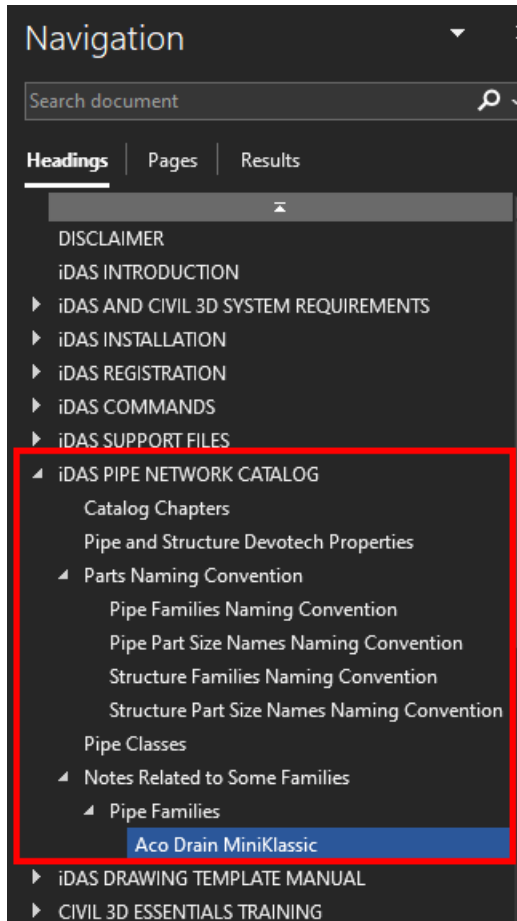
The latest channel families were added to RSA Stormwater part list (only one size per channel type was added but other sizes can be imported as per project's needs):

Channel Rectangular			
W 500 H 800 WALL 100	Channel Rectangular	Stormwater Same Rules for All Pipes	ByLayer
Channel Trapezoidal			
BOTTOM W 800 H 600 WALL 100 LS 1:2.000 RS 1:2.000	Channel Trapezoidal	Stormwater Same Rules for All Pipes	ByLayer
Channel V Shape			
H 600 WALL 100 LS 1:2.000 RS 1:2.000	Channel V Shape	Stormwater Same Rules for All Pipes	ByLayer

Help file improvements

New chapters

A new chapter **iDAS Pipe Network Catalog** was added to iDAS Help File to provide more details about iDAS catalog:



Chapters renaming

Chapters that provide training have suffix **training**, e.g.: Civil 3D Essentials Training, to easily identify the training chapters in the help file.

KNOWN ISSUES

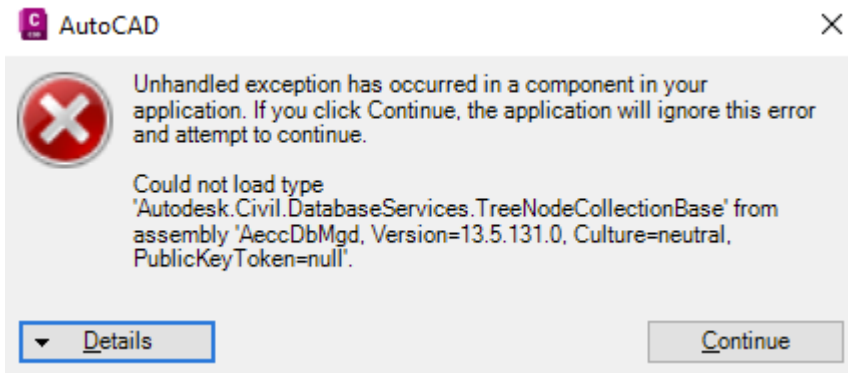
Pipe Manager Issues

No backwards compatibility between iDAS 12 and older versions (10 or 11)

Any pipe networks which are opened in **iDAS 12 Pipe Manager** cannot be opened in Devotech iDAS 10 or 11 (Storm, Sewer and Water managers), because there is no backwards compatibility. We had to improve the mapping functionality and we could not make it backwards compatible.

Error when starting Pipe Manager in Civil 3D 2023

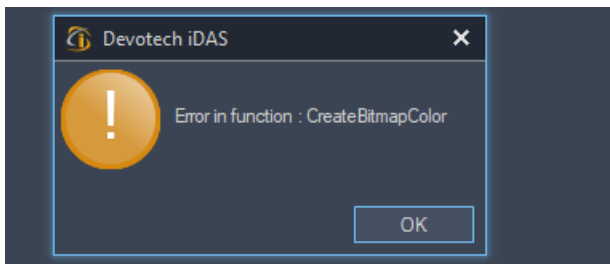
If you get the following error when opening Pipe Manager in Civil 3D 2023:



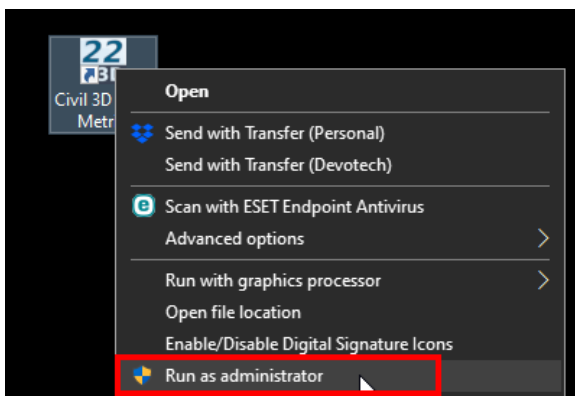
Then you **must install the latest updates** for Civil 3D 2023.

Error in function: CreateBitmapColor

If you get the following error when opening the Pipe Manager:



Close Civil 3D and start it up as **administrator** (right click on the Civil 3D icon and use the **Run as administrator** command)



Surfaces are not displayed in the Pipe Manager

The surfaces were removed improve Pipe Manager performance.

Orifice crest seems incorrect in the pond profile in iDAS Pipe Manager

This is just a graphical issue; the correct crest elevation is used for the analysis.

Weir crest elevation cannot be adjusted in the iDAS Pipe Manager

The user must go to Civil 3D model space to adjust the weir crest elevation which is the same as a structure sump elevation.

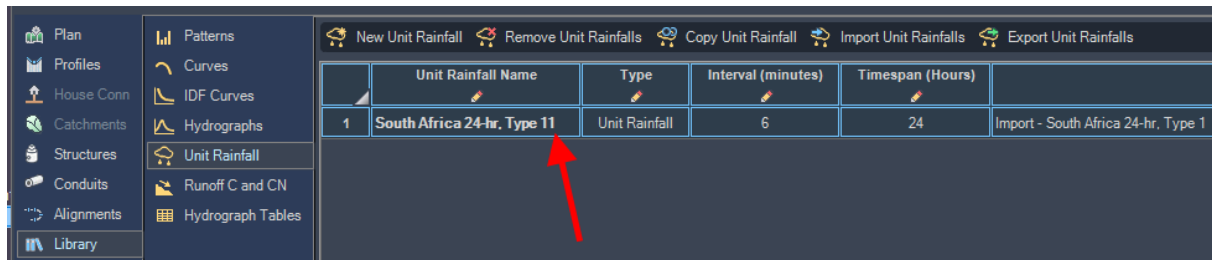
Grading does not work correctly if the profile view starts at Outfall

Import INP to SSA does not import Surcharge Depth

If you import a INP file to SSA, it might not import the **Surcharge Depth**. This is a SSA bug. To avoid this issue, open any existing SSA file (file with SPF extension) and then import the INP file again. It seems that when any SPF file is opened (it can even be an empty file) it forces SSA to load all the components correctly and importing the INP file works as it should.

Import library objects always adds number 1 at the end of the name

This behaviour changes the name of the imported object, e.g. Pattern, Curve, Hydrograph etc., therefore it does not match with the description. This behaviour is intentional to avoid issues with the duplicate names.



	Unit Rainfall Name	Type	Interval (minutes)	Timespan (Hours)	
1	South Africa 24-hr, Type 11	Unit Rainfall	6	24	Import - South Africa 24-hr, Type 1

Cannot set time series for direct inflow

Direct inflow is used for the inflow from catchments when the Rational Method is used. The EPASWMM engine does not allow to specify multiple direct inflows with various time series, therefore we could not implement the time series for the direct inflow.

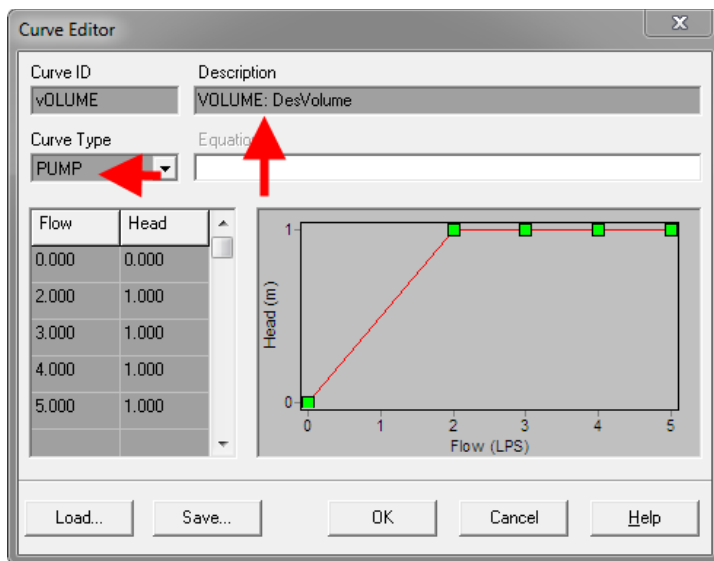
Kerb inlet overflow links are not implemented

Stormwater detention ponds have multiple bugs

It is possible to analyse a detention pond with Devotech iDAS Pipe Manager but there are some bugs that we want to fix in the future.

Curve type is not correctly imported to EPANET

When importing INP file to EPANET v 2.00.12 and newer, the curve type is not correct, all the curves have PUMP as type. This is an EPANET bug. EPANET v 2.00.10 works as expected.



iDAS Commands Issues

Help command limitations

- Help center takes a bit longer when opened for the first time (it must load all the resources)
- The videos do not play on a single click (only sound plays), a user must double click on the video
- On some computers scrolling does not work if the Help center window is moved to a non-primary screen.

The profiles from pipes do not update dynamically

Rename command had to be removed

We could not use the old rename command because of the name conflicts. We want to implement new rename functionality. In the meantime, you can use the workflows in these videos:

Stormwater, sewer and water reticulation networks:

<https://www.devotechgroup.com/storm-water-training?wix-vod-video-id=a8a76c0535a14ef39519d81c77e93b71&wix-vod-comp-id=comp-jck4lbf2>

Bulk water networks:

<https://www.devotechgroup.com/bulk-water-training?wix-vod-video-id=2a53063bebf14e5e8880d5708eaff58d&wix-vod-comp-id=comp-jck6l0rb>

iDAS Swap Pipes command and Swap Structures command delete user defined fields

If swap commands are used, then the **User Defined Fields** are deleted from the pipe or structure properties

User Interface Issues

Menu bar icons might show question marks in older Civil 3D versions

We could not find a solution for this problem.

Some icons are difficult to see on light themes

The icons were primarily developed for a dark theme therefore, the visibility might be sacrificed on light themes.

