



What's new in Civil 3D 2024

Key messages and features

GRAITEC



Key themes

Civil 3D 2024



Civil Design Efficiencies



Digitization of existing
transportation systems



Designing with sustainability
in context

New features and enhancements

Civil 3D 2024

Civil design efficiencies

- Subassembly deployment and management
- Project Explorer enhancements
- Pressure networks
- General performance enhancements

Designing with sustainability in context

- Connector for ArcGIS enhancements

Digitization of existing transportation systems

- Corridor transitions
- Rail turnout API



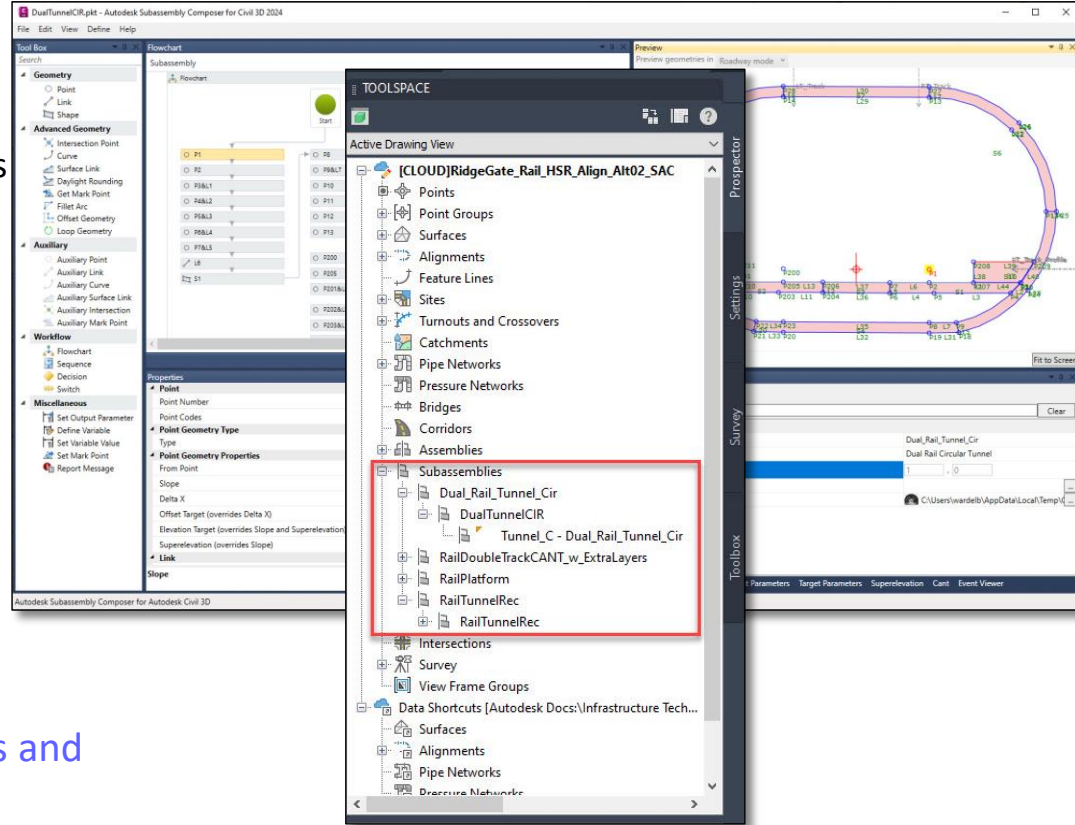
Civil design efficiencies

Civil 3D 2024

Subassembly deployment and management

Civil 3D 2024

- Easier, more efficient method for:
 - A content creator to deploy subassemblies to a project team
 - A corridor designer to consume new and updated subassemblies



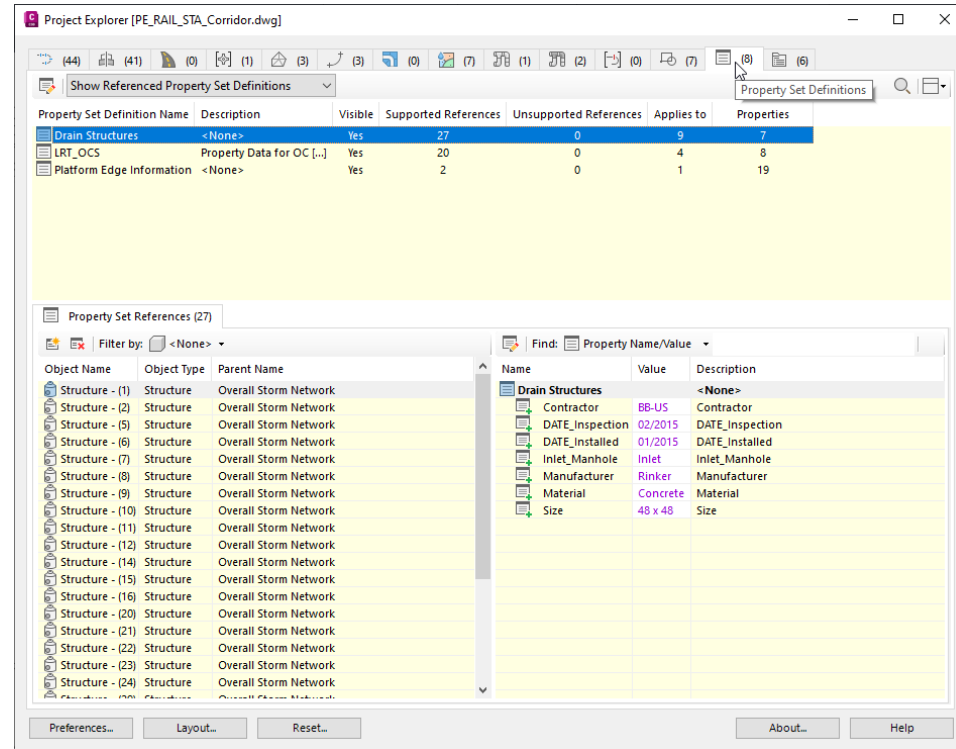
Manage changes to assembly deployments and configurations more efficiently!

Project Explorer enhancements

Civil 3D 2024

- New Property Set Tab
- Project Explorer is incorporated into Civil 3D!

Quickly review and make changes to property set data!



Pressure networks: Continued fit & finish

Civil 3D 2024

- Set a separate user-defined block for displaying vertical bends in plan view.
- Display a hatch pattern for pressure network fittings and appurtenances in plan view.
- Automatic vertical rotation of branch fittings to align with branch pipe run slopes.
- Connect a pipe run to another pipe run at a tee, wye, or cross.
- Much, much more!

Manage design and project complexity!

A 3D architectural rendering of a glass structure, possibly a modern building facade or a large window, shown in a perspective view. The glass is transparent and reflects light, creating a sense of depth and modernity. The structure is composed of several rectangular panels held together by dark frames.

Design with sustainability in context

Civil 3D 2024

Connector for ArcGIS enhancements

Civil 3D 2024

- Import objects from ArcGIS as AutoCAD point/polyline/polygon
- Configure settings when importing from ArcGIS
- Support to import arc objects into Civil 3D as arcs (Portal only)

The screenshot displays the Autodesk Connector for ArcGIS interface. On the left, a search bar contains the text 'City of Littleton GIS-2-28-23'. Below the search bar, a grid of search results is visible, including items like 'Arapahoe County Tra...', 'City of Littleton GIS...', 'City of Littleton Ex_S...', 'Conceptual_Sentary', 'Denver crime', 'Denver Demo Flood M...', 'Denver Emergency Se...', 'Denver golf_courses', and 'Denver ngs_harn_pot...'. A '9 selected' button and an 'Add to my design project' button are at the bottom of the search results.

On the right, a 'Layers' panel lists the following layers with their corresponding feature types:

Layer Name	Feature Type
FireHydrants	COGO Points
FireHydrantLat	Feature Lines
SMWS_Water_Main	Feature Lines
Arapahoe_County_Parcels	Parcels
SMWS_Water_Valves	COGO Points
Littleton_Centerlines	Alignments
Redtail_Soil_Survey	AutoCAD Polygons
Littleton_RailRoads	Alignments
Flood Hazard Boundaries	AutoCAD Polylines

Below the layers list, an 'Import Layers' dialog box is open, showing the 'Specify Settings Template' section with a dropdown menu set to 'City of Littleton' and buttons for 'Edit' and 'Add New'. The 'Selected Layers' section contains a table with the following data:

Layer Name	Feature Type
City of Littleton GIS-2-28...	
Flood Hazard Bounda...	AutoCAD Polyline
Littleton_Centerlines	Alignment
Redtail_Soil_Survey	AutoCAD Polygon
FireHydrantLat	COGO Point
Arapahoe_County_Pa...	Parcel
FireHydrants	COGO Point
SMWS_Water_Valves	COGO Point
Littleton_RailRoads	Alignment

At the bottom of the dialog box, there are 'Import' and 'Help' buttons.

Streamline data flow between Civil 3D and ArcGIS!



Digitization of existing transportation systems

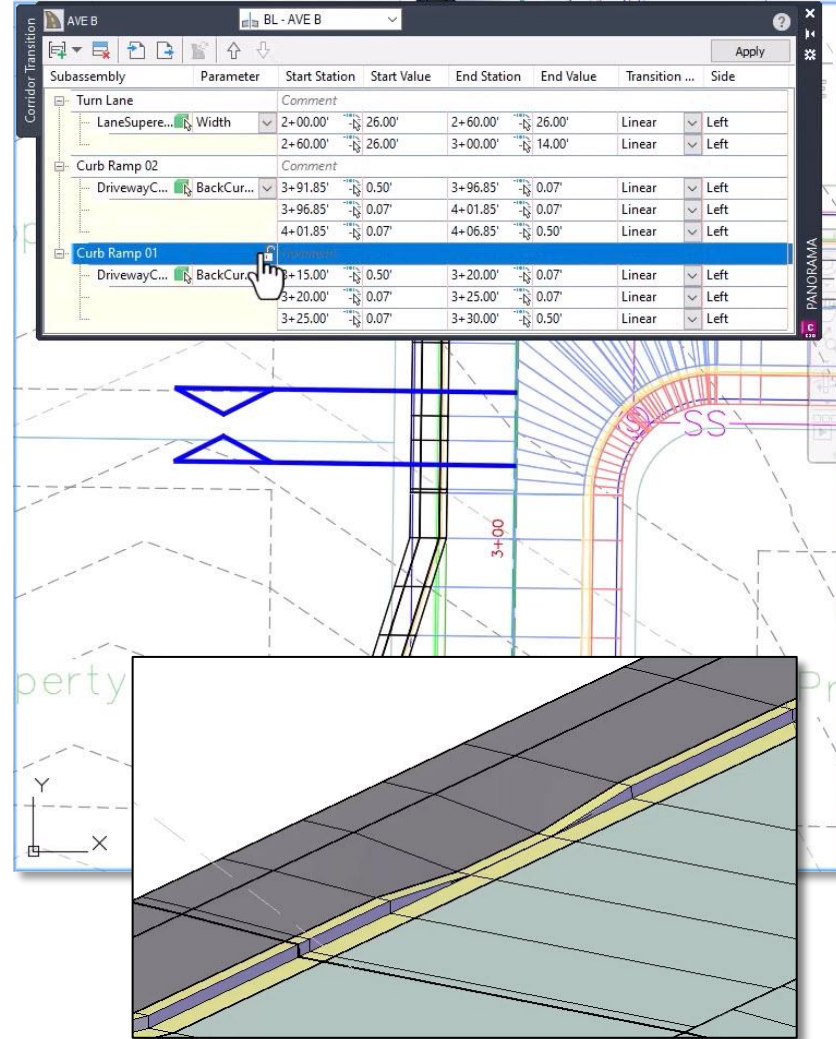
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Corridor transitions

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- Support for locking the length of a transition to allow easy movement of the transition along the baseline
- Support for rearranging transitions in the list to specify the order in which transitions are processed
- Support for panning/zooming to transitions from within the dialog box
- Added support for creating transitions by selecting the .NET class name
- API for creating transitions

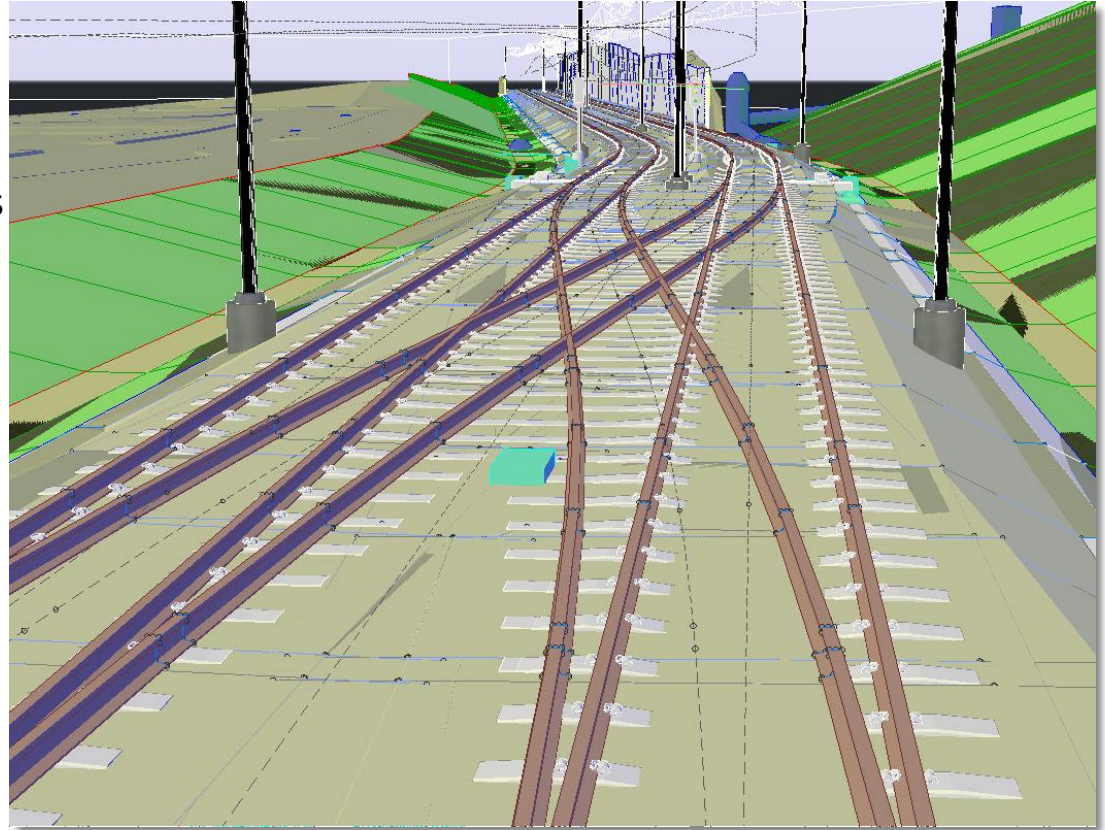
Reduce overall design time and improve data exchange!



Rail Turnout API

Civil 3D 2024

- Turnout APIs are added to allow users to create/edit a simple turnout.
- Import design data from other software to use with Civil 3D
- Utilize owner or company specific drafting standards within Civil 3D



Improve design quality and standards!

