



CIVIL SOLUTIONS 2024.1

design
simulate
optimize

What is new in CGS Labs Civil Solutions 2024.1

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1. Supported CAD platforms

CGS Labs Civil Solutions 2024.1 is now compatible with the latest BricsCAD V24 version as well as the Autodesk AutoCAD & Civil 3D 2024 version.



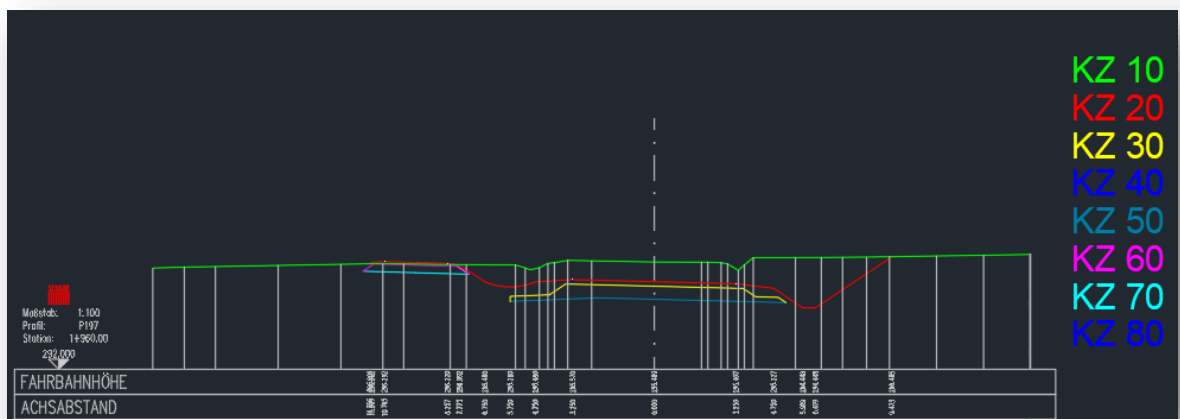
With CGS Labs Civil Solutions 2024 the support now covers the following CAD platforms:

Autodesk AutoCAD/Civil 3D	BricsCAD
2024	V24
2023	V23
2022	V22
2021	
2020	
2019	
2018	

2. PLATEIA / FERROVIA / AQUATERRA

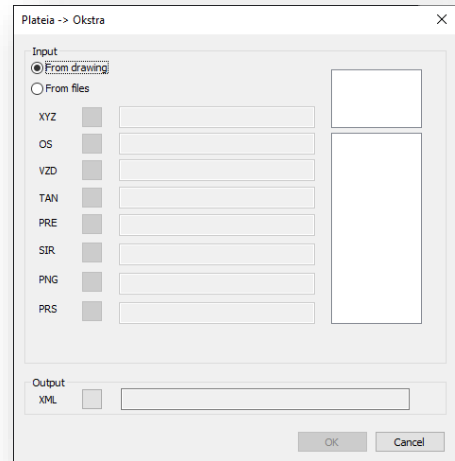
2.1. REB

REB 66 functionality has been revised and updated according to REB documentation (REB-VB 20.073). New function »Horizons« has been added to PLATEIA which allows users to connect multiple TCS elements into a new single element. Export and import functionality for DA66 files has been updated and fixed.



2.2. OKSTRA

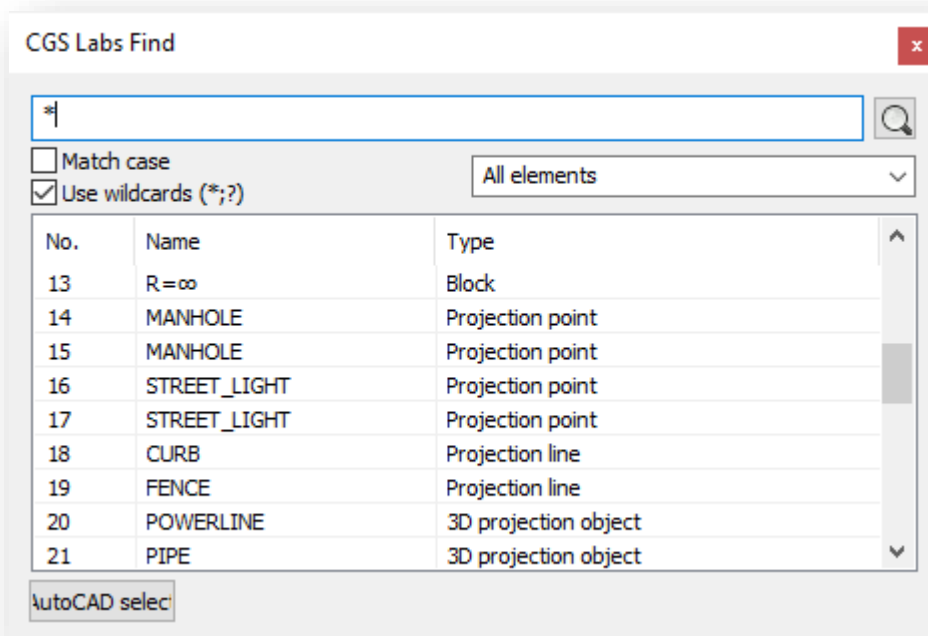
CGS Labs software has implemented OKLABI converter which supports latest OKSTRA versions (2.020). User can now export multiple road design information in XML file such as: CGS points, axes, lanes, sample lines, longitudinal profiles, tangents, super elevations, jumps, cross sections. Exported information can be used with other software such as Civil3D, AKG Vestra, ProVI, ...



2.3. Search CGS elements

Search CGS elements tool allows users to quickly view, search and select CGS elements in layout:

- CGS points,
- intersection points,
- intersection lines, and
- intersection 3D objects.
- as well as other CAD elements: blocks, texts, and COGO points.



2.4. BIM TOOLS

Property Set Manager & Property Set Editor

Property Set Manager and Property Set Editor now offer:

- significant improvements in performance,
- alphabetically ordered property sets,
- differ between *Real*, *Text* and *Integer* attribute type when exporting them to IFC files, and
- support resizable UI to accommodate longer property sets or attribute names.

3D model creation

3D infrastructure modelling tool now supports automatic assignment of up to three (3) property set definitions per object.

Additional UI improvements include:

- quantity names arranged in alphabetical order,
- multiple rows selection option, and
- a resizable UI features.

3. AUTOPATH

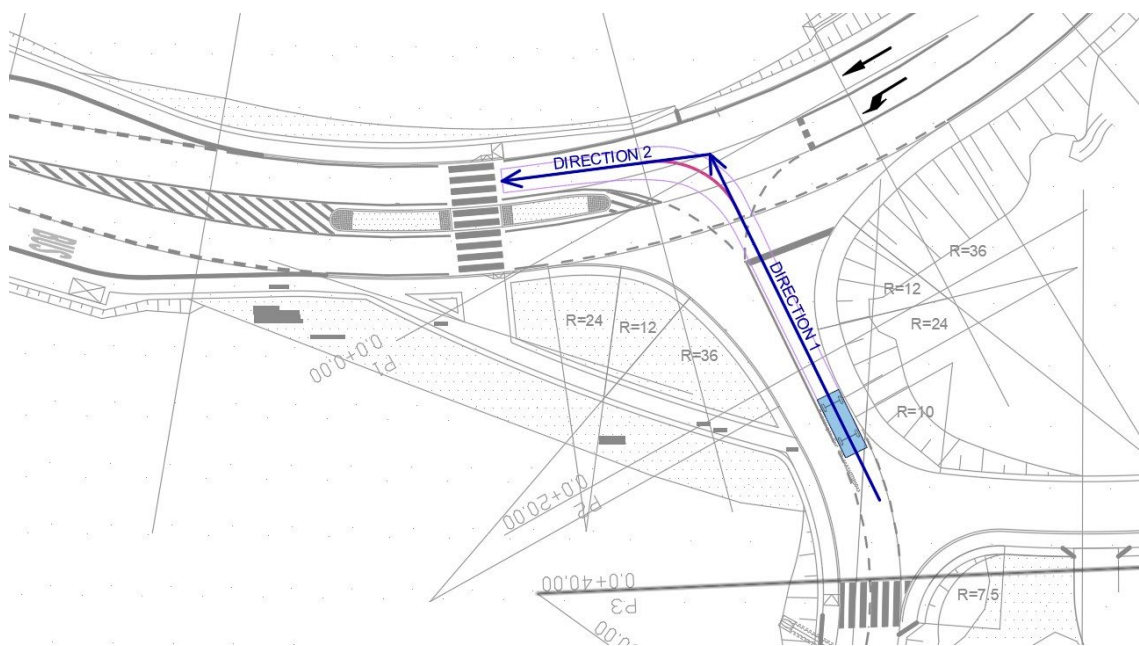
AUTOPATH 2024.1 bring new important features:

3.1. Easy Drive Aligned

The Easy Drive method now offers two options for defining the starting point of analysis. In addition to the existing Easy Drive method, we have introduced the new Easy Drive Aligned approach. With this new method, users can interactively specify the vehicle's direction and insertion point before proceeding to define the analysis path, following the same steps as the conventional Easy Drive method.

3.2. Corner Align analysis

Corner Align is a new interactive feature for the quick and easy creation of swept path analysis. The user first selects a vehicle and then specifies the initial and final direction of the vehicle directly on the drawing. The tool generates an analysis based on these two inputs. The angle that is drawn represents the smallest angle between the provided directions for the selected vehicle.



3.3. Horizontal and Vertical Analysis with Offset option

When you run the 'horizontal' or 'vertical' analysis commands, you now have the option in the dialogue box to define an offset value. The offset can be applied to the right (positive offset value) or the left side (negative value) of the path in the case of horizontal analysis. In vertical analysis, a positive value means an upward offset, while a negative value means a downward offset.

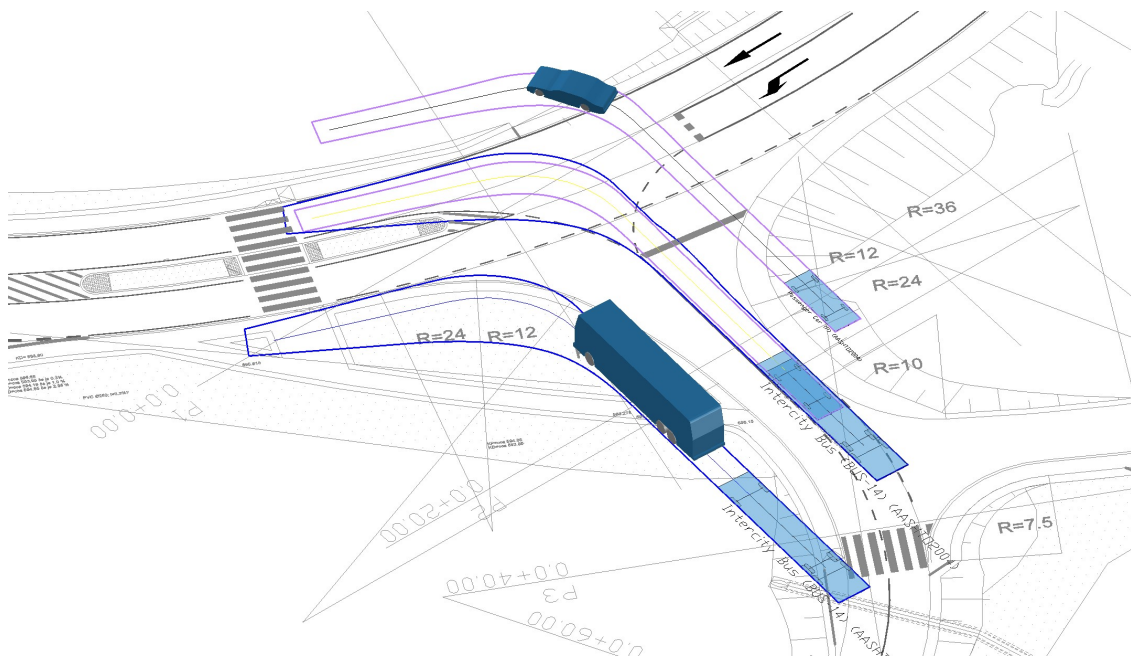
The primary advantage of this additional feature is evident in cases where you want to track a polyline representing the center or edge of a road, as shown in the video below. Previously, it was necessary to manually adjust this polyline, which added an extra step to the process. Furthermore, the user still has the option of making subsequent offset changes.

3.4. Export Analysis to Block

New swept path report feature enables users to export analysis to a block and place the analysis block anywhere in the drawing. The analysis block can also be exported to external DWG file, PDF or other formats.

Exported analysis to a block includes all the entities created while making the analysis and/or creating a 2D & 3D animation, and it includes all settings changes for analysis viewing options (changed colours, linotypes, layers, entities shown). It is important to be aware that this block is a copy of the existing analysis. The existing analysis still remains in the drawing and can be modified as desired.

Multiple blocks can be created from altered analysis made to explore best possible options and have their footprints always available.



3.5. New vehicle libraries added












New national library was added for the AUTOPATH 2024.1 version:












- Polska 2022 national vehicle library






4. AUTOSIGN

4.1. Traffic signs & Road Markings Report

The AUTOSIGN Report has a new feature that allows you to group AUTOSIGN entities (such as traffic signs and road markings) into layouts that fit on A4 paper size. This makes it easier to print the report or create PDF files of the report.

TRAFFIC SIGNS REPORT 1/3										
POSITION	CODE	STATUS	ANNOUNCE	REFLECTIVE MATERIAL	SHOULDER	HEIGH	HE OF PRES	POST HEIGH	HE OF SIGNS	COMMENT
	1102	0.000	0.178	PA2		2.00	1	2.00	1	
	1103	0.000	0.178	PA2		2.00	1	2.00	1	
	1104	0.000	0.178	PA2		2.00	1	2.00	1	
	1108	0.000	0.178	PA2		2.00	1	2.00	1	
	2182	0.000	0.080	PA2		2.00	1	2.00	1	
	2004	0.000	0.402	PA2		2.00	1	2.00	1	
	2186	0.000	0.080	PA2		2.00	1	2.00	1	
	2281	0.000	0.080	PA2		2.00	1	2.00	1	
	2382	0.000	0.080	PA2		2.00	1	2.00	1	
	2383	0.000	0.080	PA2		2.00	1	2.00	1	
	3005-1	0.000	0.080	PA2		2.00	1	2.00	1	

TRAFFIC SIGNS REPORT 2/3										
POSITION	CODE	STATUS	ANNOUNCE	REFLECTIVE MATERIAL	SHOULDER	HEIGH	HE OF PRES	POST HEIGH	HE OF SIGNS	COMMENT
	4200-2	0.000	0.000	PA2		2.00	1	2.00	1	
	4201	0.000	0.000	PA2		2.00	1	2.00	1	
	19403	0.000	0.000	PA2		2.00	1	2.00	1	
	1482_349	0.000	0.25	PA2		2.00	1	2.00	1	
	2125	0.000	0.000	PA2		2.00	1	2.00	1	
	2126	0.000	0.000	PA2		2.00	1	2.00	1	
	2420	0.000	0.000	PA2		2.00	1	2.00	1	
	2400	0.000	0.000	PA2		2.00	1	2.00	1	
	2406	0.000	0.000	PA2		2.00	1	2.00	1	
	2020-0	0.000	0.000	PA2		2.00	1	2.00	1	
	2020-0	0.000	0.000	PA2		2.00	1	2.00	1	

TRAFFIC SIGNS REPORT 3/3										
POSITION	CODE	STATUS	ANNOUNCE	REFLECTIVE MATERIAL	SHOULDER	HEIGH	HE OF PRES	POST HEIGH	HE OF SIGNS	COMMENT
	2200	0.000	0.000	PA2		2.00	1	2.00	1	
	2202	0.000	0.000	PA2		2.00	1	2.00	1	
	2204	0.000	0.000	PA2		2.00	1	2.00	1	
	2206	0.000	0.000	PA2		2.00	1	2.00	1	
	2208	0.000	0.000	PA2		2.00	1	2.00	1	

4.2. Traffic signs & road markings library

New libraries are now available or have been updated:

- Croatian traffic signs & road markings library
- Czech traffic signs & road markings library
- Czech Rail signals library

