

# ZW Traffic



## ZWTraffic 2025

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Usługi Informatyczne "SZANSA" Sp. z o.o.

ul. Świerkowa 25

43-305 Bielsko-Biała

NIP 937-267-27-69

[www.zwcad.pl](http://www.zwcad.pl)

tel. +48 33 307 01 95

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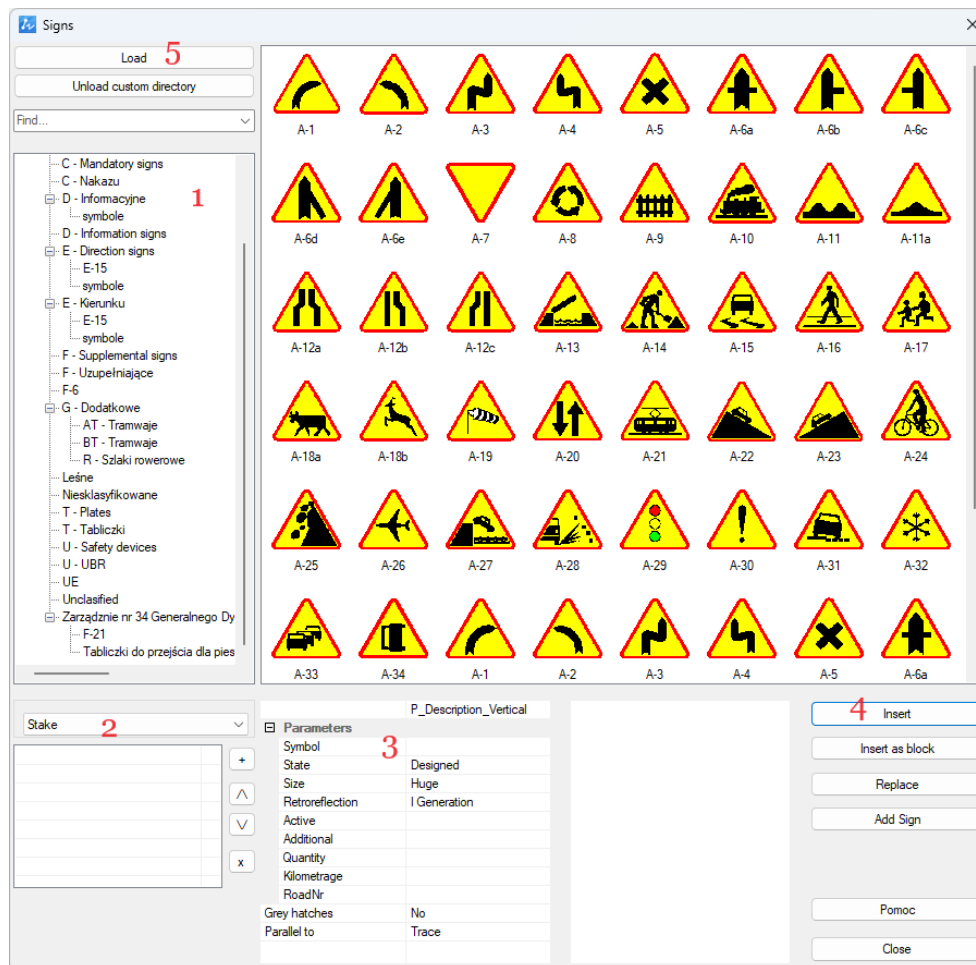
## Load

In order to load ZWCAD faster, ZWTraffic isn't active at all time. If you want to use the application during your project, please use this command to load its content into the ZWCAD. You can also run ZWCAD with ZWTraffic by opening it from the desktop's icon.

## Vertical signs

### Signs library

You can turn the Signs library function by clicking on the icon.



When you do so, a menu will appear. There are signs listed, according to category (1), which are:

- Warning signs,
- Prohibition signs,
- Mandatory signs,
- Information signs,
- Direction signs,

- Supplemental signs,
- The rest.

Every sign you want to put on a drawing, needs a support. You can see them at 2.

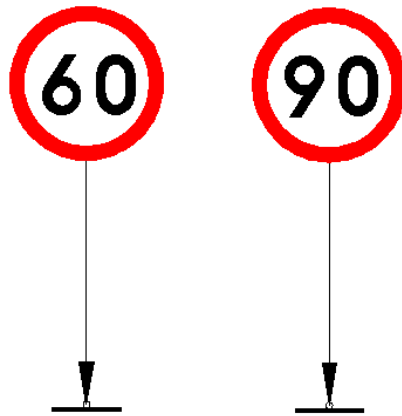
After choosing a sign and its support, most often its a Stake, you can look at 3, if you need to modify some parameters.

If you want to make a new one, click insert, 4. If the sign is already made, you can replace it, or click Add sign to add one more face to a stake.

If you have your own base of signs, you can go to 5, and load them.

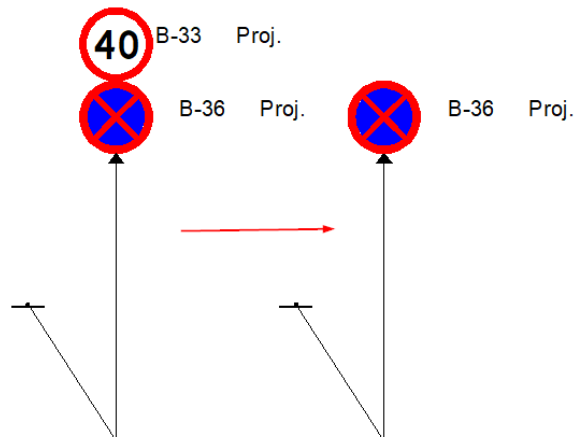
### Edit values

This function lets the user to change value of a already made sign. After running the function, you need to choose a sign with values. In the Edit values box, you can type any number, and confirm with OK button.



### Remove sign

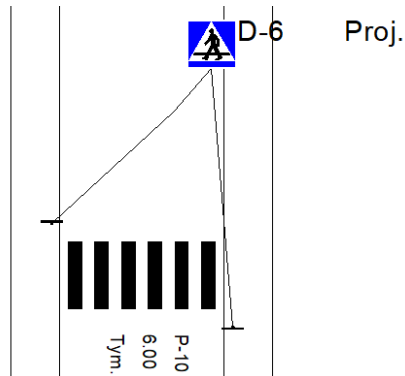
This function is used to remove a sign from a stake. After running the command, you must choose which sign is to be removed from a construction.





### Add a post to existing sing

You can use this function to add a new stake to already existing sign. After running the command, choose a sign then draw a reference line, confirm with Enter and decide the angle of a stake.



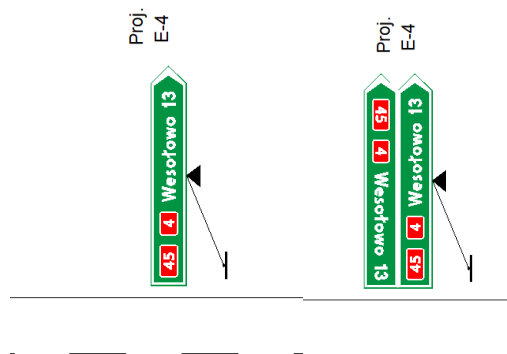
### Vertical signs report

This function lets the user to make a report of vertical signs. After running the command, choose signs which shall be put into the table and confirm. Now just choose a place to put it in.

	Quantity	Symbol	State	Size	Retroreflection	RoadNr
	1	A-12b	Designed	Huge	I Generation	
	1	A-12c	Designed	Huge	I Generation	
	1	B-2	Designed	Huge	I Generation	
	1	C-2	Designed	Huge	I Generation	
	1	B-20	Designed	Huge	I Generation	

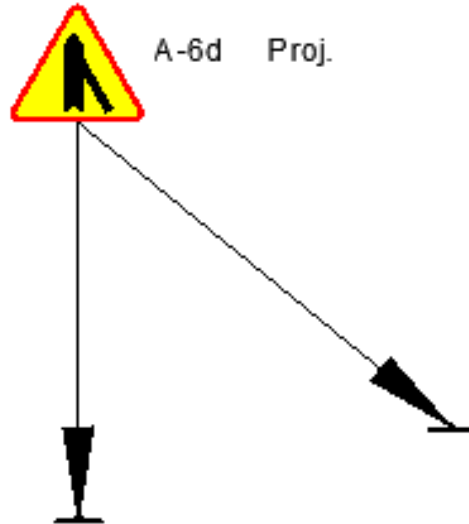
### Mirror sign

This function can be used when typing ZWTRAFFIC\_MIRROR, or clicking on the icon. The function mirrors sign on chosen stake.



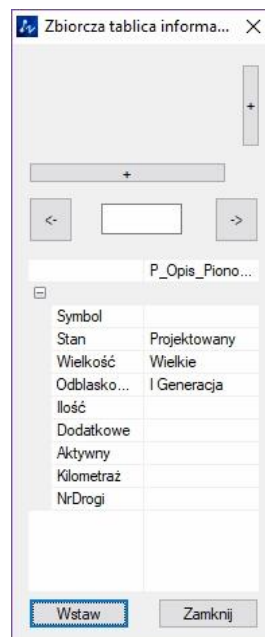
## Vertical description

This function adds a new stake and description to already made sign. After running the command, choose already made sign on a stake and confirm with enter. You can type its description. When you do so, you can put a new stake and connect it to the sign.

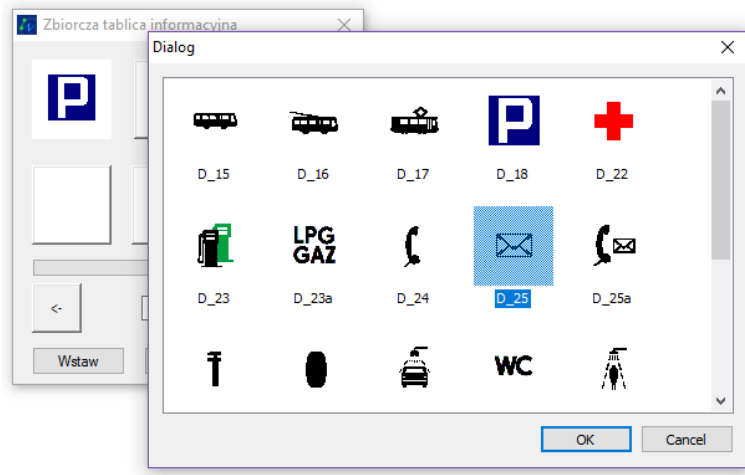


## Collective information boards

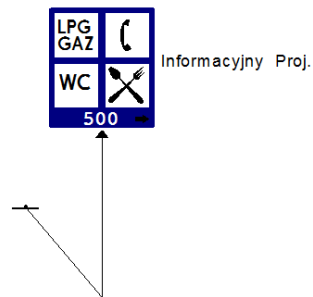
The Collective information boards is a command used for making such boards with a few symbols and a distance. After activating the command, you can see a window with a signs to choose. You can click on + to add more signs to collective board.



After clicking on a white block, you can see a library of signs.

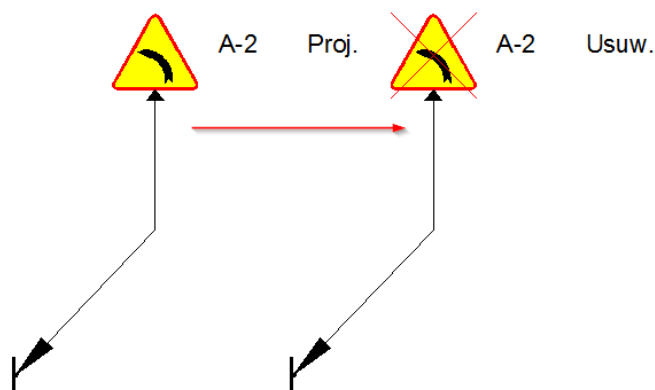


Next, you need to click Insert and put it in the drawing. In the command tab you can name a sign, its state, and decide if it's parallel to the road or reference by clicking O or T.



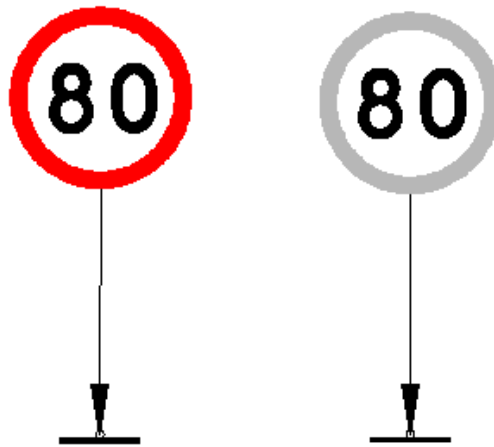
### Modify state of sign

With this function you can quickly change state of sign. Click on the function, then on the signs, and confirm with enter. Then choose which state should be now active.



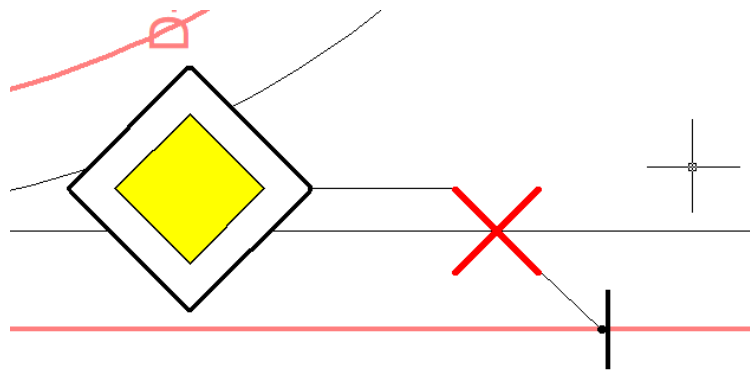
### Change to grey

This function is used to change the colour of a sign. After running the command, choose if you need to change to grey or to colour, then select the signs and press Enter.



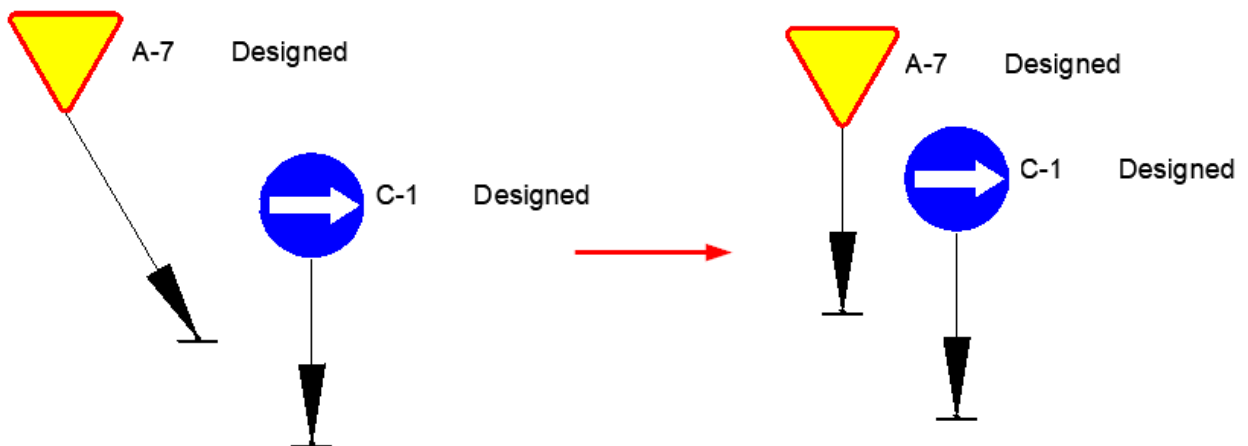
**Add crossing symbol**

This function adds a symbol of a cross to already existing reference line. Just run the function, then choose a place and a size.



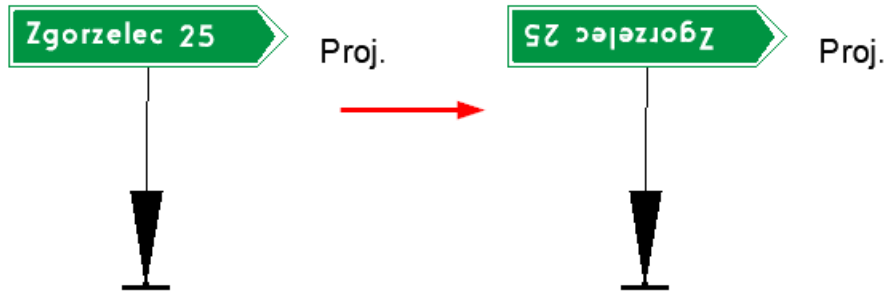
**FormatPrinter**

With this function, you can align signs to each other. Run the command, then choose a sign that will be an example. After that, each face of a sign clicked will be aligned to the example.



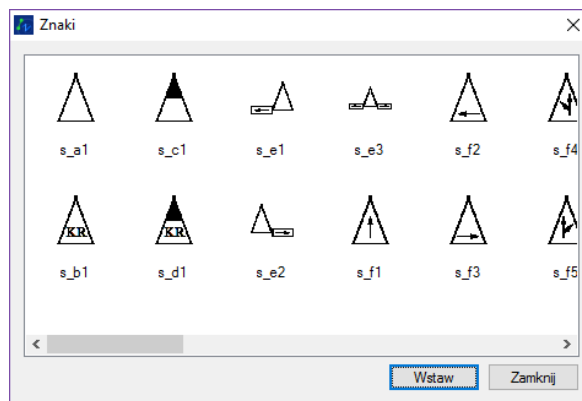
### Reverse face of a sign

With this function you can reverse face of a sign, so it would be visible from the other side. Run the command and choose a sign.



### Road signs

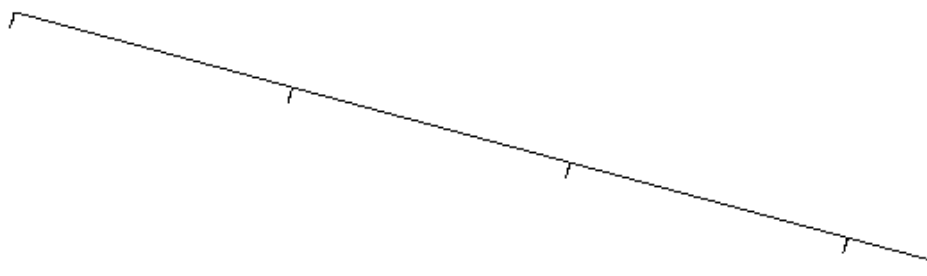
This command can be used to insert a traffic lights symbol to the drawing.



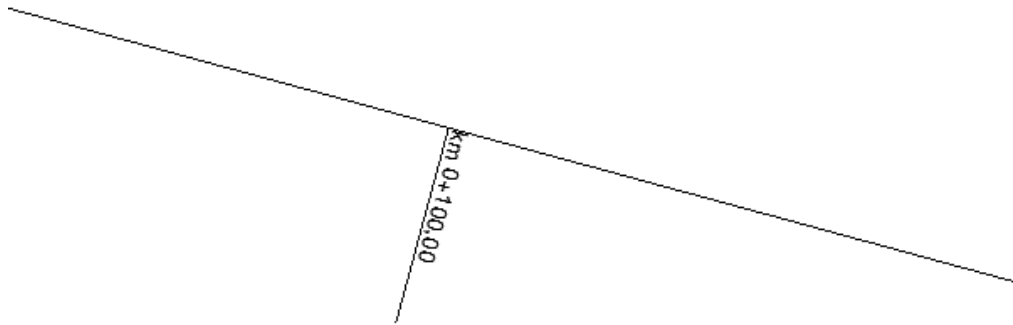
After running the command, choose a symbol. After that, click Enter and put it in a drawing.

### Trace kilometrage

In order to make a Trace kilometrage, activate the command. Then click on a polyline and type a starting value, then confirm the direction and set a distance between signs, default is 100 units. After that, all is left to do is to pick a starting point and an end.

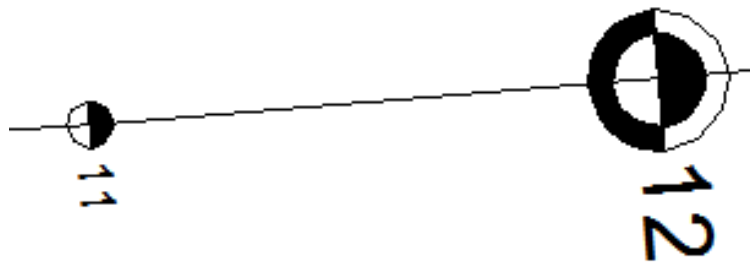


And that's how it looks after zooming:



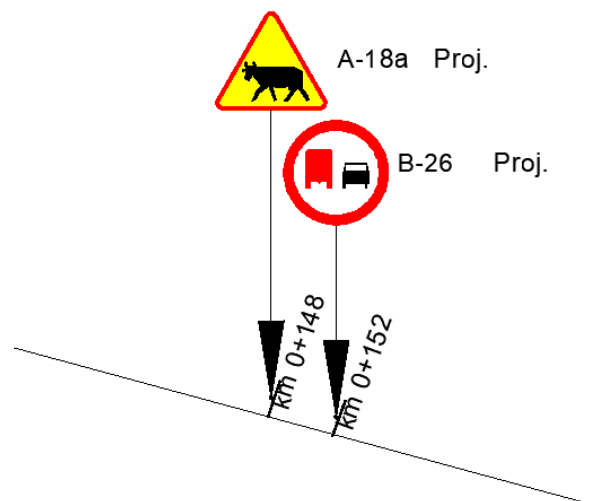
### Distance markings

This function allows a user to set distance markings every 100m. After running the command, choose a road. Then select starting kilometrage, start and end of the function.



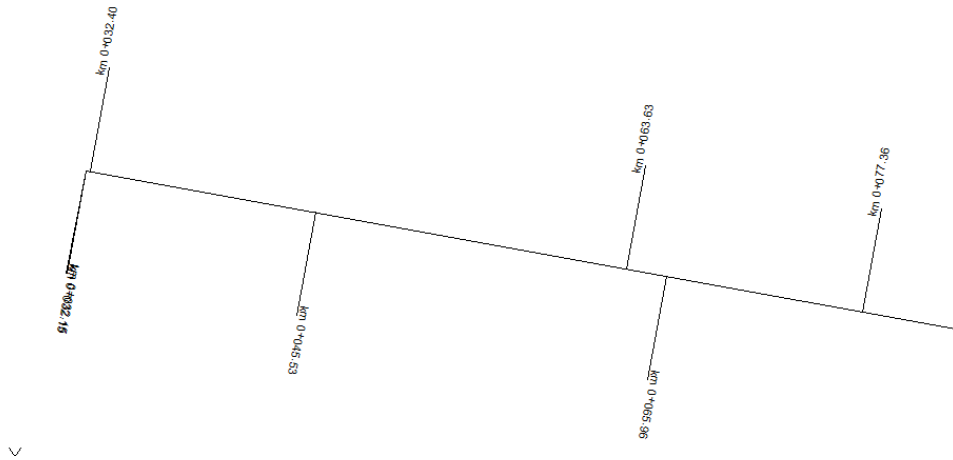
### Distance markings by signs

This function can be used to mark distance of signs by the road. You need to run the command, choose a road then point at signs you wanted to be marked.



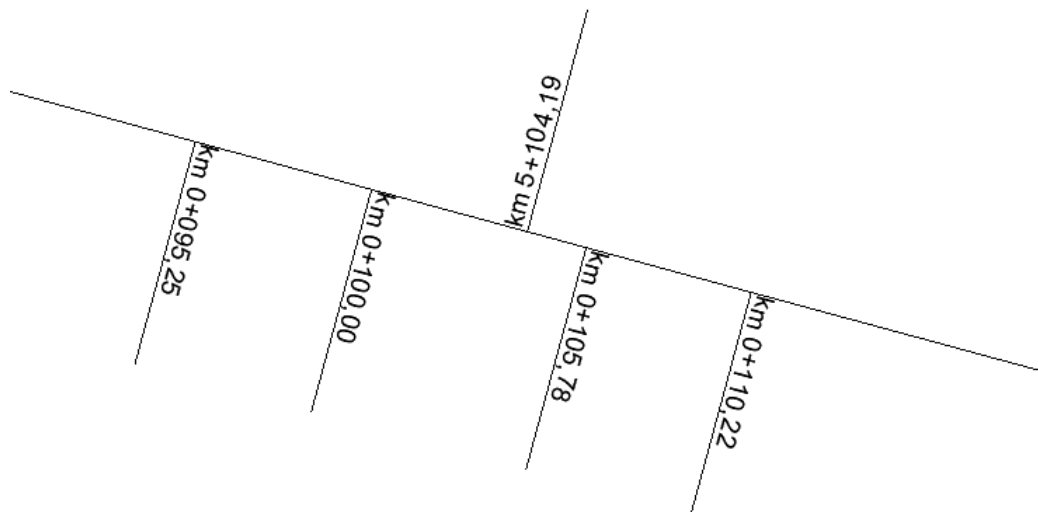
### Distance markings by points

This function marks distance by inserting a reference point with precise measurement. Run the command, then choose a line. Now in each place you click, a distance mark will appear.



### Trace

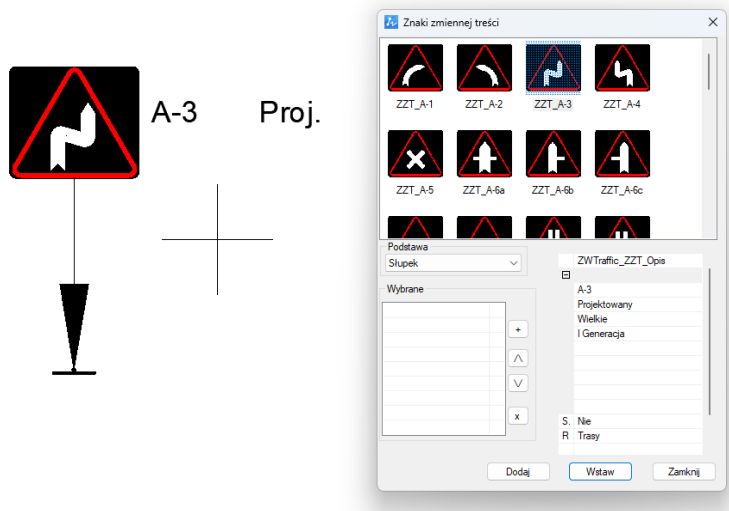
This function can be used to change properties of a route, with a new kilometrage. Run the command, choose a line and type starting kilometrage (in meters). Here is an example with starting kilometrage changed to 5000. Note that previous markings of kilometrage won't disappear.



### VMS

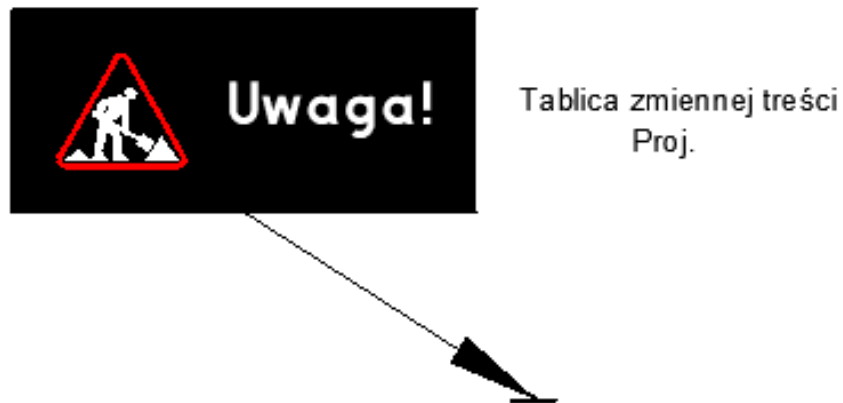
#### Insert variable message sign

This function can be used to insert any variable message sign. After running the command, choose a sign, its base and a place on a drawing.



### Variable message sign

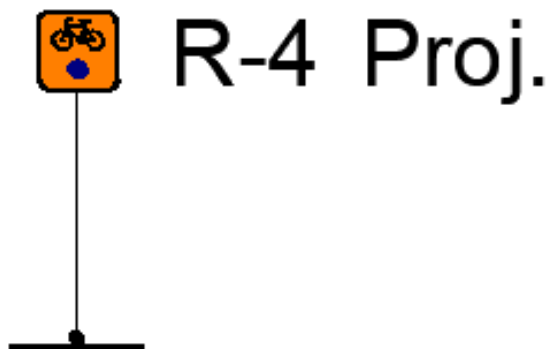
After running the command, you can choose a sign and its text, and then insert it into a drawing.



### Bike trails

#### Bike trail

This function is used to make a bike trail sign. After running the function, you can insert a sign into a drawing.





### Bike trail direction

This function is for making directional sign for a bike trail. After running the command, fill the blanks with road number, city, direction etc. and click insert.



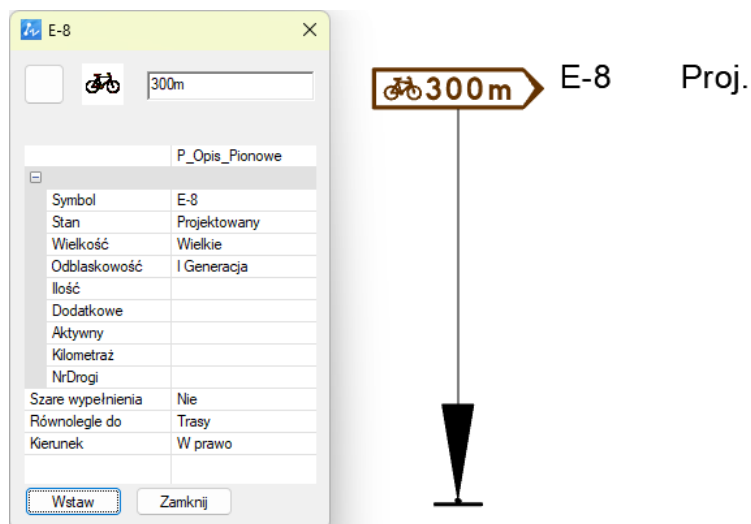
### Bike trail library

This function is used to insert a roundabout symbol into a drawing, which will be used during creation of a board.



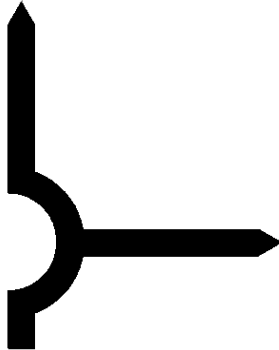
### E-8

With this function you can create a signpost to a bicycle path. Just run the function, choose your elements and text and click on insert.



### Bike trail road format

With this function you can add a direction symbol, which will be used during creation of a board.



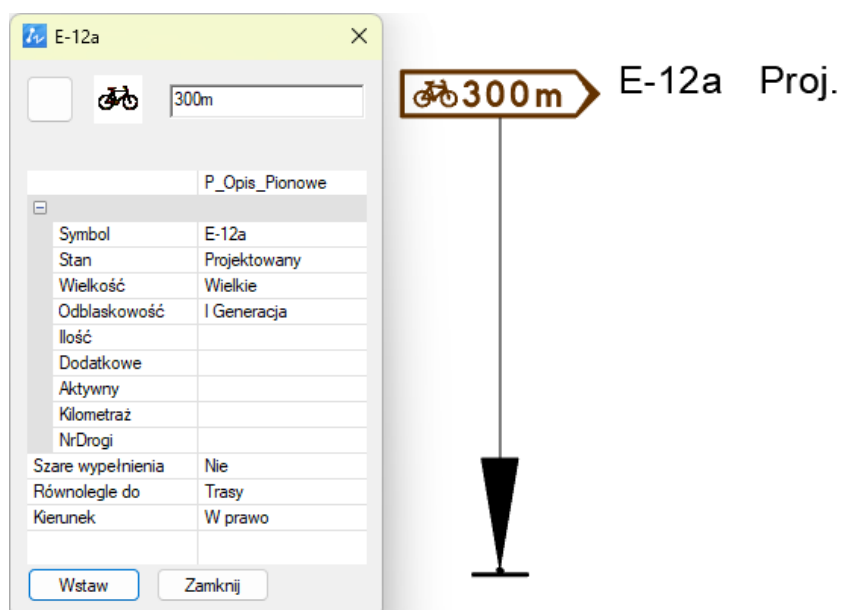
### Bike trail direction text

With this function you can add a text which will be used during creation of a board.

# Bronów

### E-12a

With this function you can create a signpost to a bicycle path. Just run the function, choose your elements and text and click on insert.



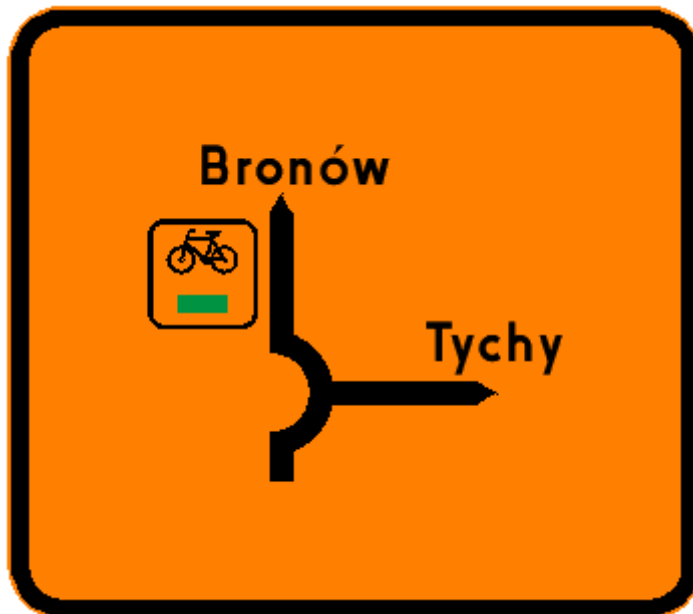
### Bike trail direction symbol

With this function you can add a bike trail symbol which will be used during creation of a board.



### Bike trail table

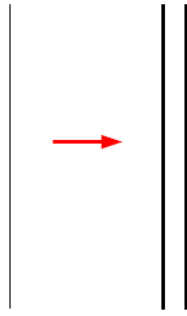
With this function you can combine other elements to make a new table. Choose which signs will be placed on a table and select its angle.



### Traveling boards

#### Closed road

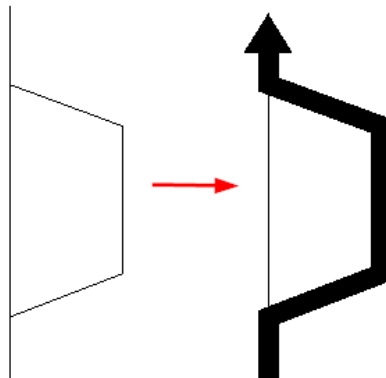
Closed road function can be used to make a road out of order, which will be used during creation of a board. You can make it either by clicking on the polyline you want to change, or by clicking D and drawing it manually.



We suggest turning background colour grey, for example with SZARE command.

### Detour

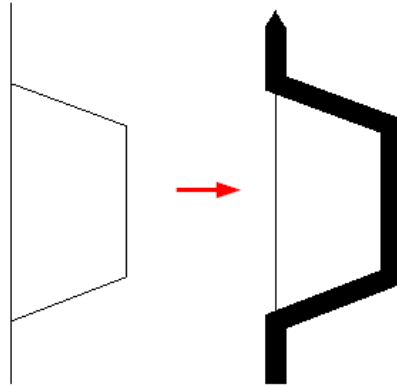
With this function you can change a line into a detour road with an arrow at the end. After running the command, click on a polyline you want to change. You can also run the function and click on D to draw a new detour line that will be used later in making a table.



We suggest turning background colour grey, for example with SZARE command.

### Road of detour

With this function you can change a line into a detour road. After running the command, click on a polyline you want to change. You can also run the function and click on D to draw a new detour line that will be used later in making a table.



We suggest turning background colour grey, for example with SZARE command.

### Arrow

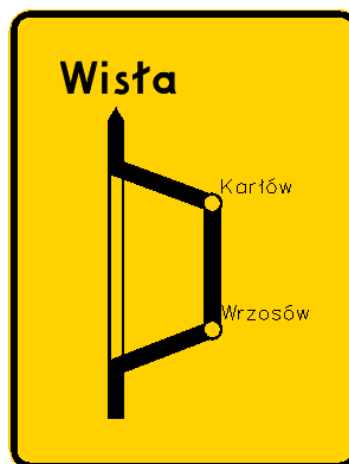
With this function you can make an arrow which will be used during creation of a board.



We suggest turning background colour grey, for example with SZARE command.

### Table - sign background

This function can be used to combine other elements to make a new board. First, select the elements and then choose a direction for the new table.



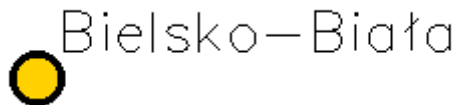
### City description

With this function you can make a marker of a city, that will be used when making a board. Just run the function and click on a place you want to represent a city.



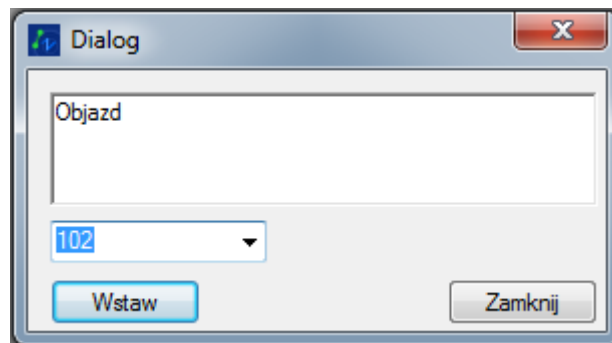
### City description

With this function you can make a marker of a city that will be used when making a board. Click on a place you want to represent a city. Then you can name it and set an angle for the text.



### Description of the road

With this function you can make a description of a road or a detour. After running the command choose a size and type a text that should be placed in the drawing.

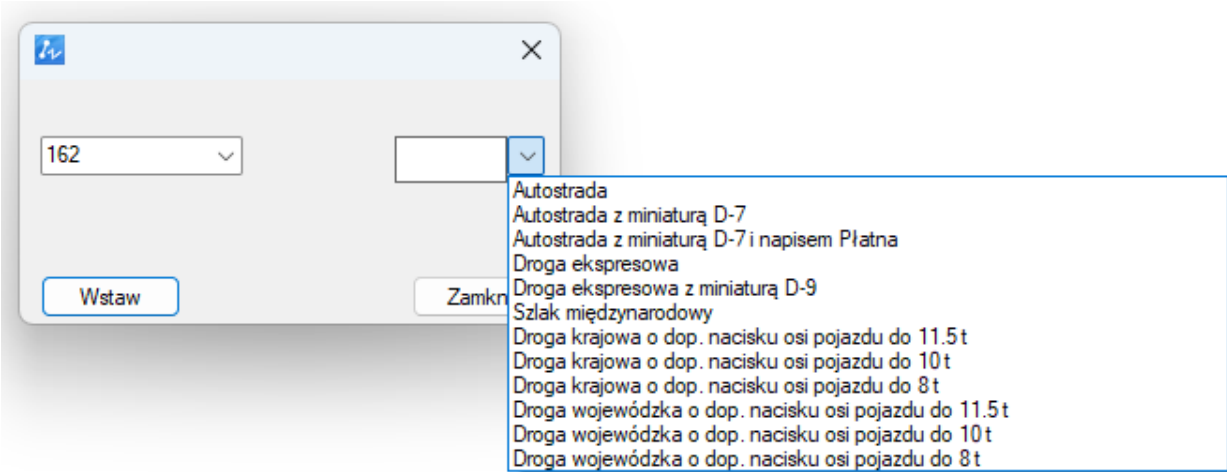


Final effect:



### Road number

With this command you can make a table with a road number on it. Run the function then choose a size, a colour and a text. In this example it's a highway.



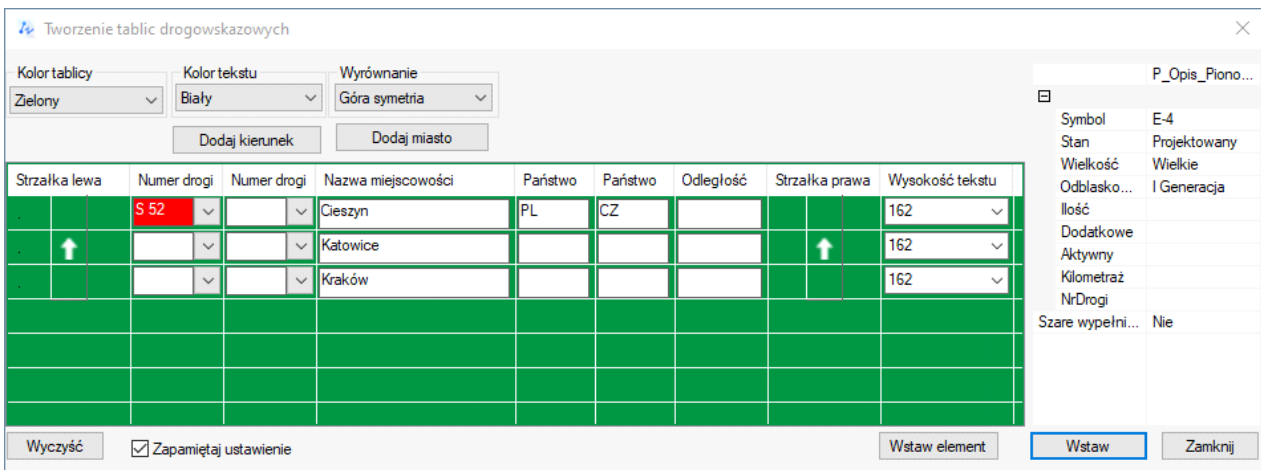
Final result:



## E tables

### Direction marking

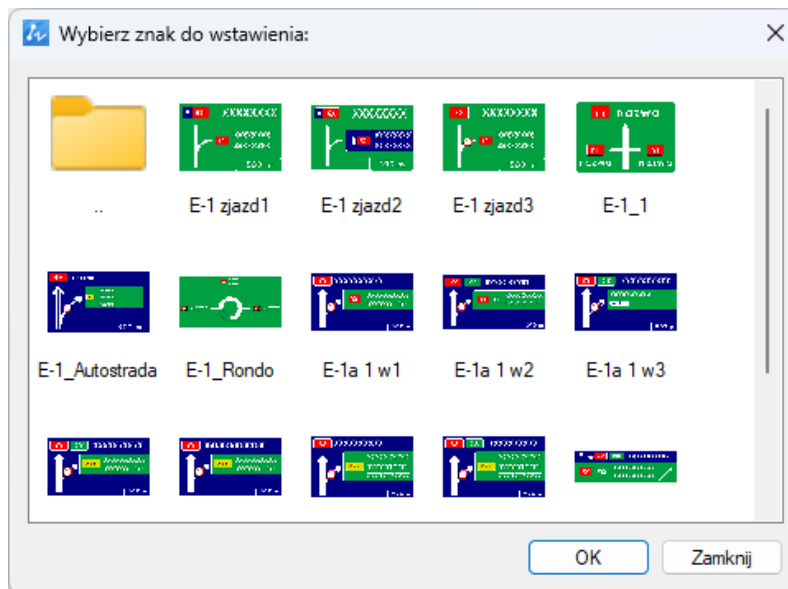
This function is for creating a signboard. After running the command fill all the fields you want to have on your signboard and click insert. This way a sign will be inserted with a reference line and the table. You can change a colour of your table from green to blue or white, colour of the text from white to blue or black. You can also save settings, adjust text size and change it to grey. If you want to insert it as a block, without a stake and a reference line, click Insert element.





## E1\_library

With this function you can add a template to a drawing, and then edit it as a block.



## Table - sign background

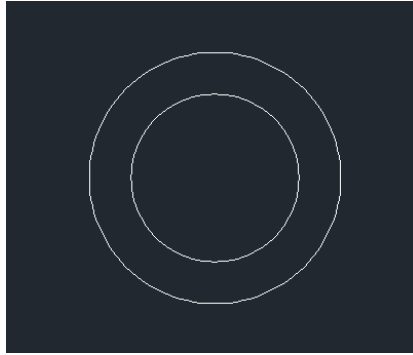
With this function you can make a new signboard. Run the command, choose elements you want to be placed on the board, confirm with enter and set the angle for it.



## Roundabout

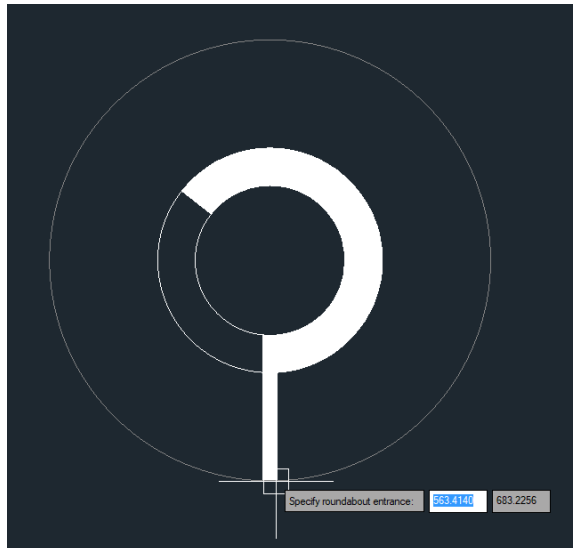
With this function you can make a roundabout for later use when making a board. There are 5 sizes to choose from.





### ERW

With this function you can make a road to a roundabout which will be used during creation of a board. After running the command select inner circle, then length and place for a road.



### Main road

With this function you can make a simple main road element that will be used when making a signboard.



**EDNr**

This command allows to make a name of a city with a road, that will be used when making a signboard. Choose values and colours that should be put on a signboard.

**EDDisabled**

With this function you can make a closed road symbol that will be used when making a signboard. After running the command, you can cross any element you want to be closed.

**Table - sign background**

With this function you can make a signboard with a blue background. Run the command and choose which elements should be placed in it. Then just make an angle and your signboard will be placed.



## Highway

With this function you can make an arrow that represents a highway, that will be used when making a signboard.



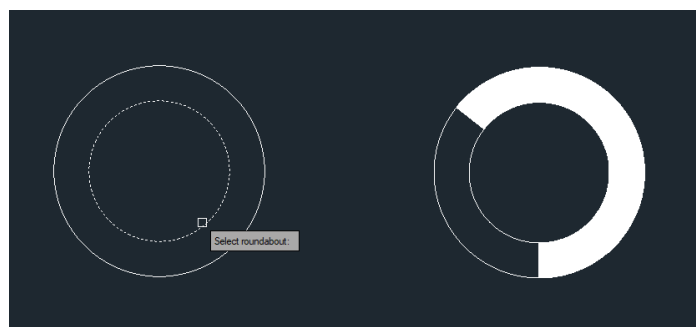
## Highway lane

That function is useful for making a small arrow when making a signboard. It's a directional arrow, for example to cities or districts.



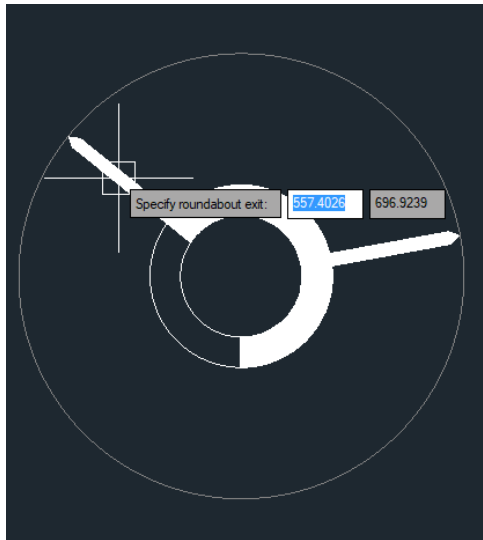
## Roundabout filling

With this command you can fill any roundabout that is already made in the project. First, select the inner circle, then click on start and end of fragments you want filled.



## ERz

This command creates an exit road out of a roundabout. Select the inner circle, set a length and location. The length of an exit will be saved for future usage, but you can change it anytime.



### Main road

With this function you can easily make a subordinated road, that will be used later when making a signboard.



### EDm

With this command you can make a white table with a city name, that will be used for creating a signboard. Run the command, type a name, and place it in your drawing.



### EDlimitSign

With this function you can add a symbol of a sign into the project and use it for making a signboard.



### Highway exit

This function can be used to make an arrow, which stands for leaving a highway and use it later when making a signboard.



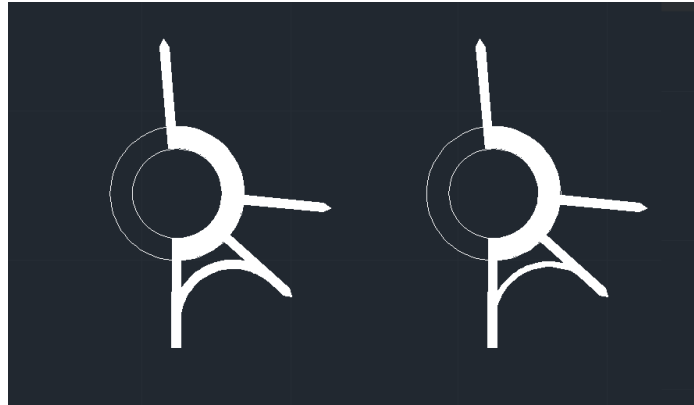
### Arc connector

This function is useful for creating an arch that is connecting two roads at the roundabout. Run the command, then select the roads and adjust the arc.



### Arc

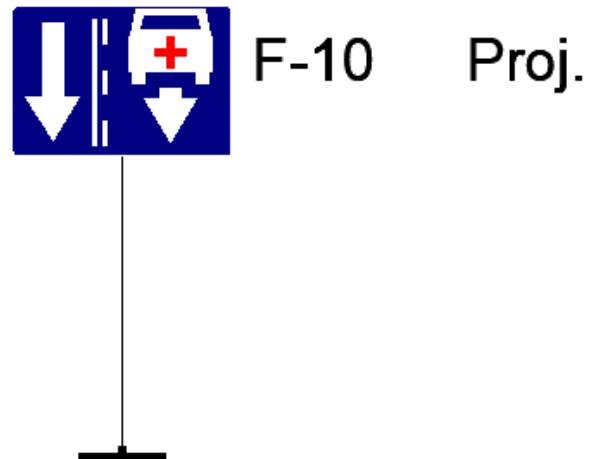
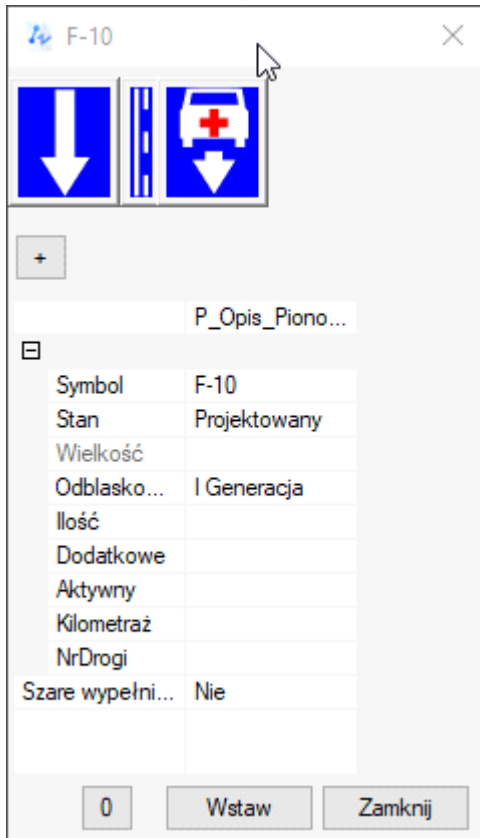
With this function you can easily modify an already made arc. After starting the command, click on an arc that is to be modified, select its size and decide if it should be a main road or a subordinated road.



### Supplementary

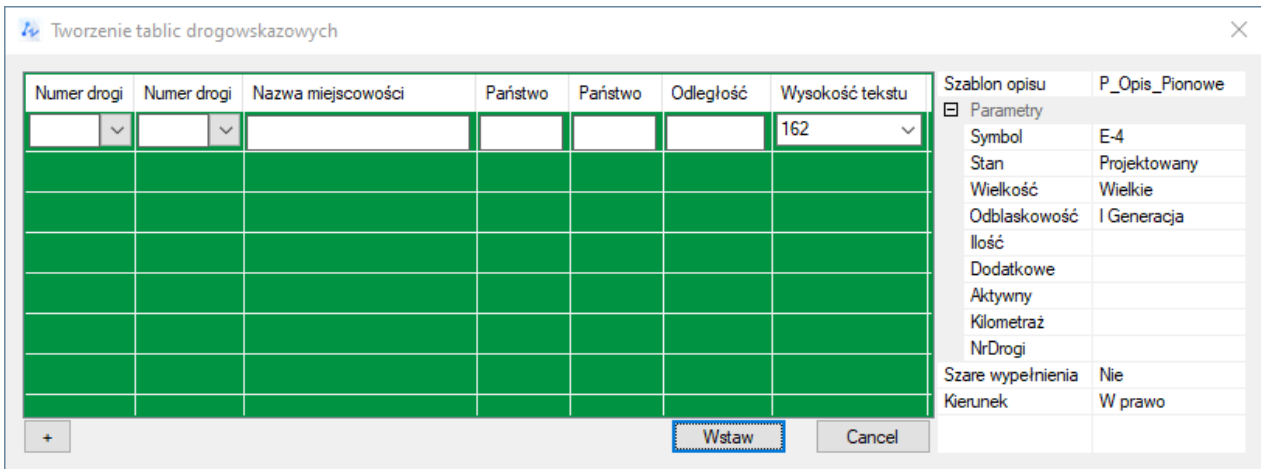
#### Lanes signement

With this function you can easily make a sign with assigned lanes. Run the function, then choose what you want to be on your sign and click insert.



E-4

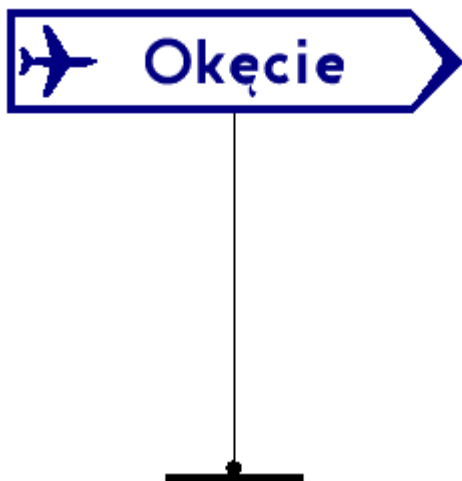
With this command you can make a signpost with a direction to a city. You can fill any blanks you prefer, or just type a city name and click Insert.



Proj.

E-5

This **signboard** is for directional tables. After starting the command, choose a symbol and type name of a city or a district.

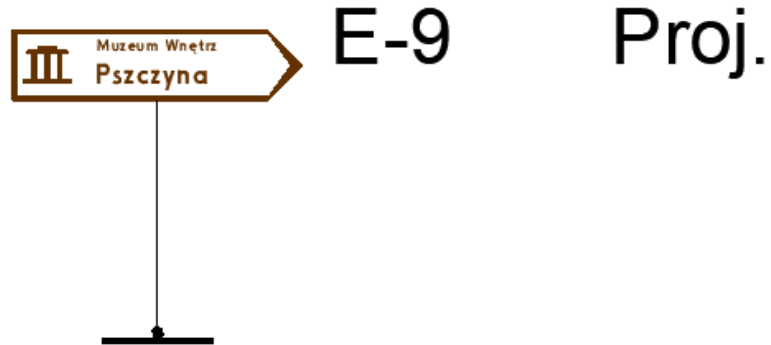


E-6

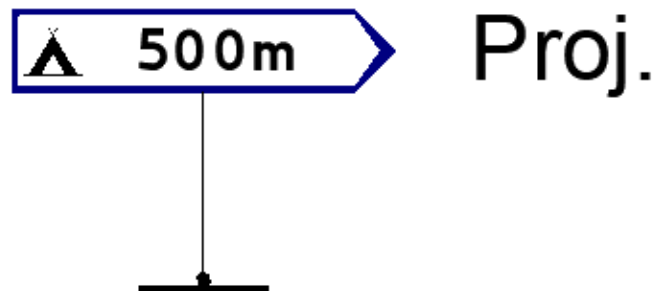
Proj.

**E-7 E-12**

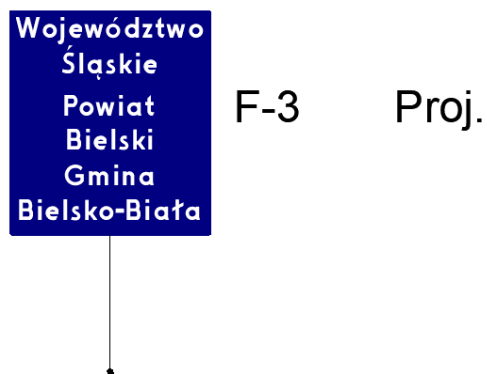
With this command you can make a signboard for a cultural or tourist object. Here is an example:

**InfoSignPost**

This command is used for making a signboard for services, like mechanic, WC, restaurant etc. Run the command, choose a symbol and type a name.

**Administration area border F-3**

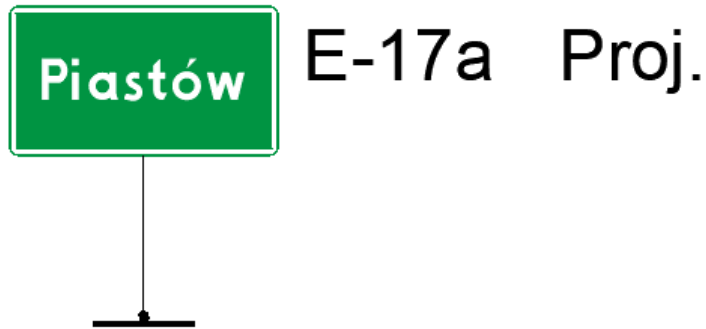
You can make an administration area border sign with this function. After you activate the command, fill Province, District and Town fields you want and click insert.





E-17a

This command makes a town sign.



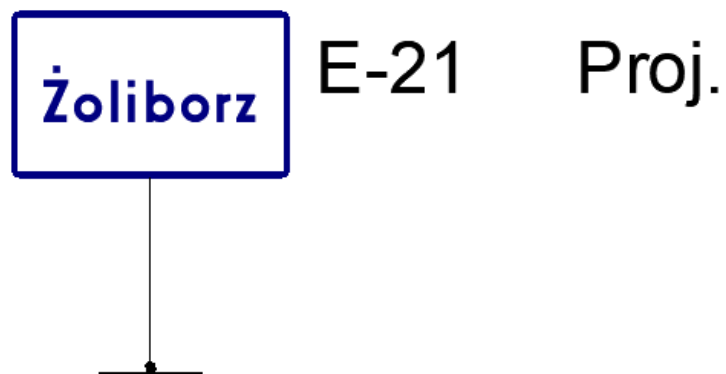
E-18a

This command makes an end of a town sign.



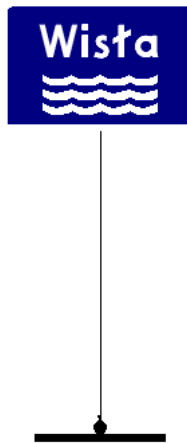
E-21

This command makes a district sign.



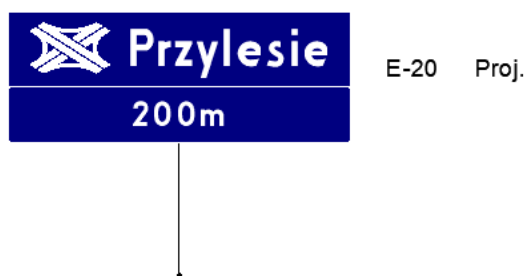
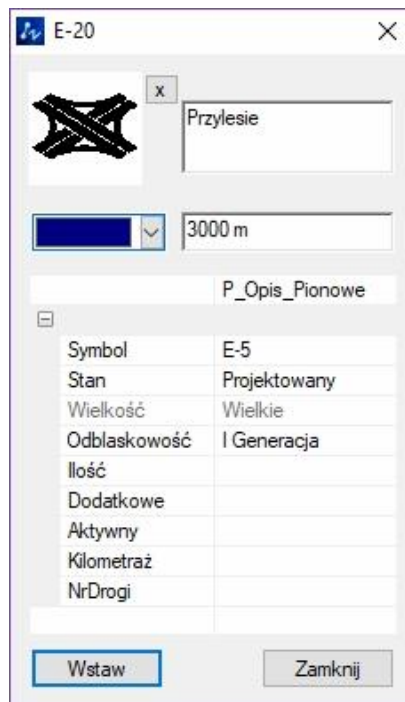
River (F4)

This command makes a river sign. You can modify size of a board, by clicking District or town road.



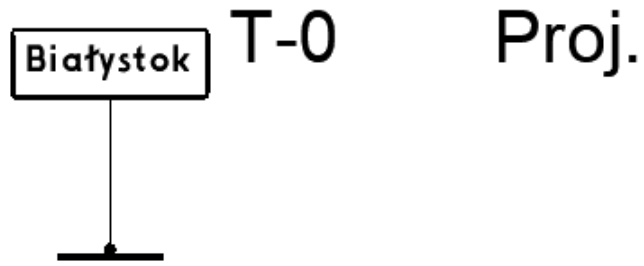
## E20

After running the command you can type a name of a road junction, a distance and a colour then click Insert.



### Additional information table

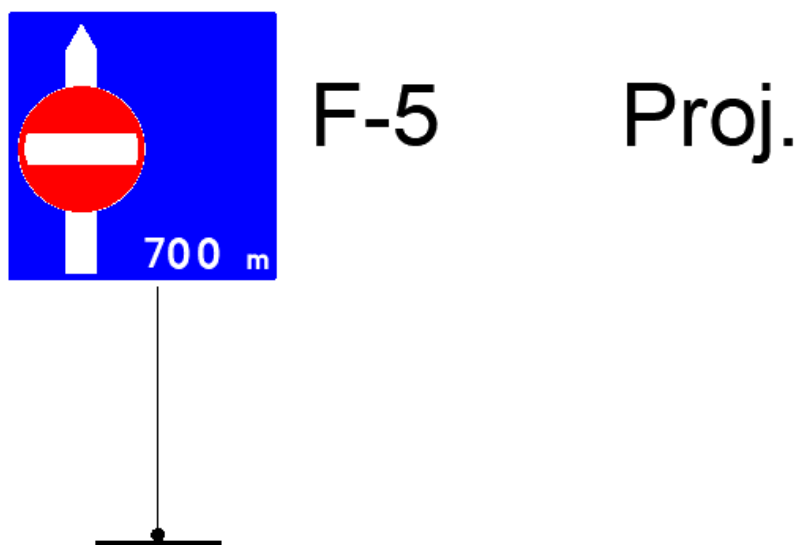
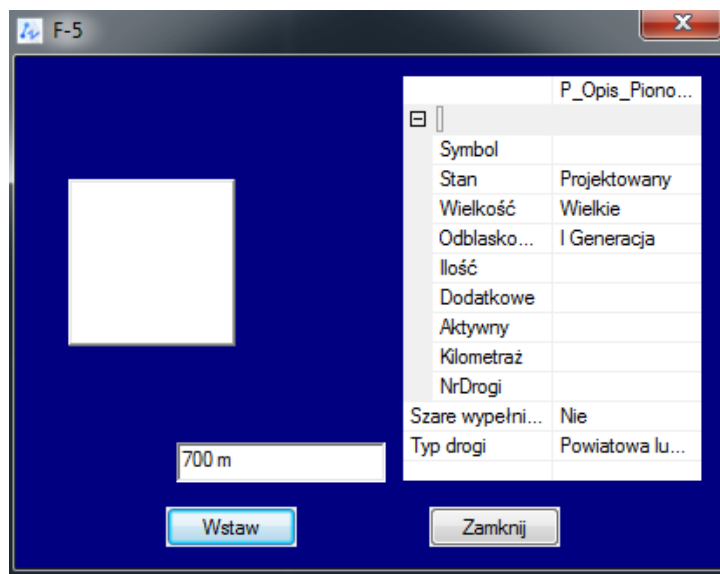
This function creates a white table with any text, for example town's name.



F-6

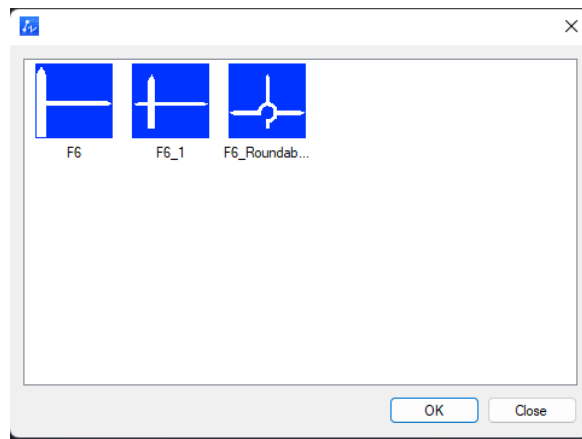
F-5

F-5 is a function that creates a board with a prohibition sign. You can choose a sign, set the distance and click Insert to make it work.



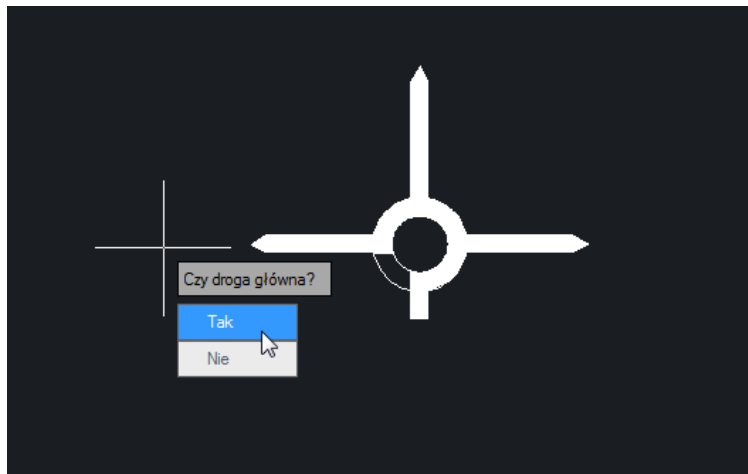
F-6 New

With this function you can easily insert one of three template bases for making F6 sign.



### F-6 Road

With this function you can add a road to your drawing, that can be used to make F6 board. After activating the command set size of the road and insert it to the project.

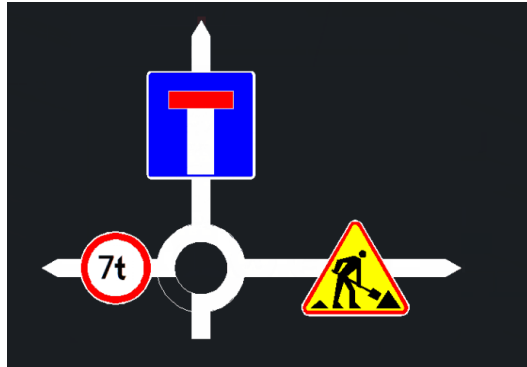


### F-6 Sign

With this command you can add a sign to the signboard. Choose one, and place it in the project. The sign can be used later to make for example F6 signboard.



Here's an example:



#### F-6 Comment

When using this command, you can set a comment to the drawing. Click on this function, then place a 5t to the drawing. You can edit it in any way you need.

# Road closed

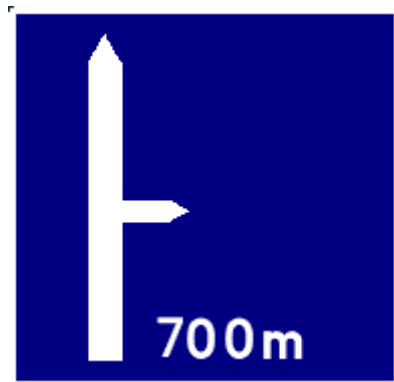
#### F-6 Comment frame

This function creates a frame with white background around chosen elements.

**Road closed**

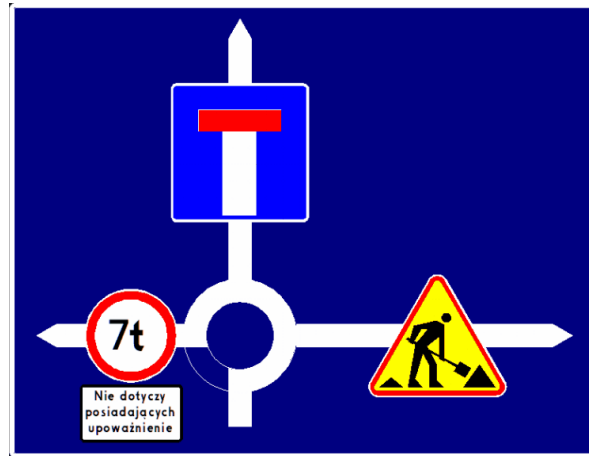
#### F-6 Dist

This command creates a distance to the drawing. Click on the function and place it in your drawing. You can edit it by double clicking.



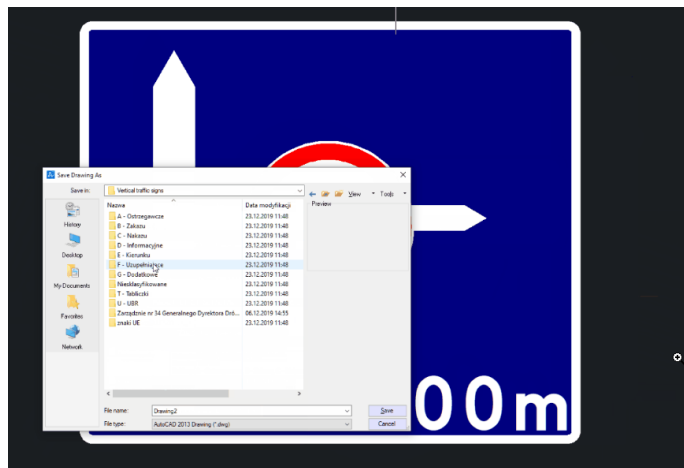
## F-6 Table

This function can create a F6 signboard by combining other elements to make one board. Choose elements you want to be placed, confirm with Enter and choose an angle.



## F-6 Export

This function allows user to save already made F6 board for further use. You should save the sign in the instal folder, for example C:\Szansa\ZWTraffic\2025\EN\Templates\Vertical traffic signs, and there, in of the folders you can save you own. When you do that you can access them in library of signs.

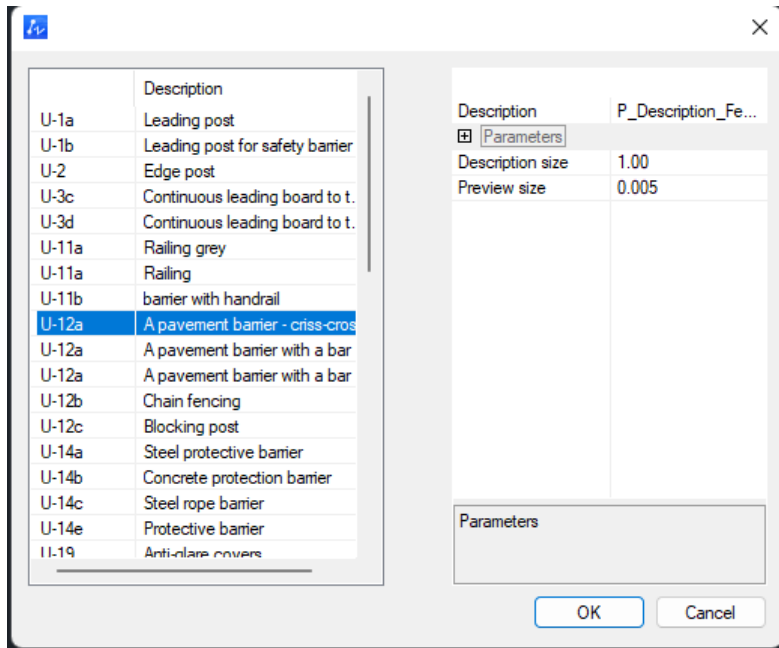


## UBR

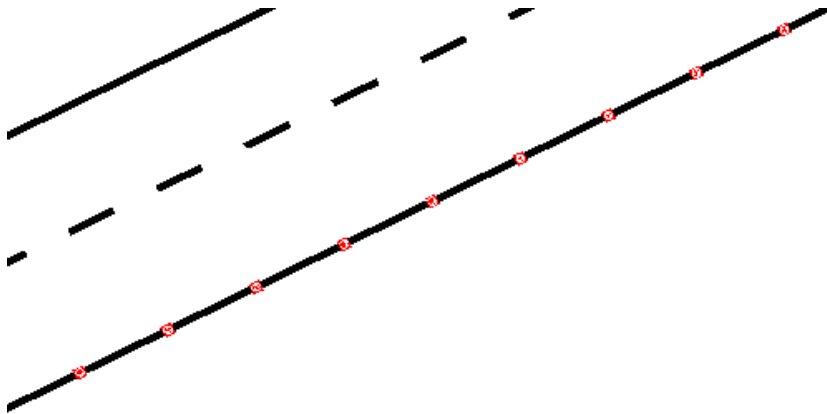
### Marks barriers

This function is for creating barriers and fences in the project. After running the command, pick a barrier you want to be placed on a line. On the left side you can choose what kind of barrier you need and then you can click OK or you can change parameters on the right.

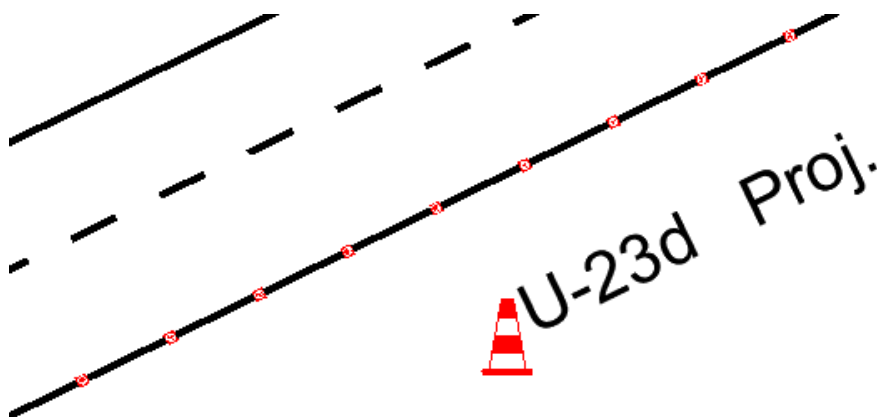
Most of available elements require you to choose length of segments.



After that click on a line you want new barrier to be placed on and set its start and end.

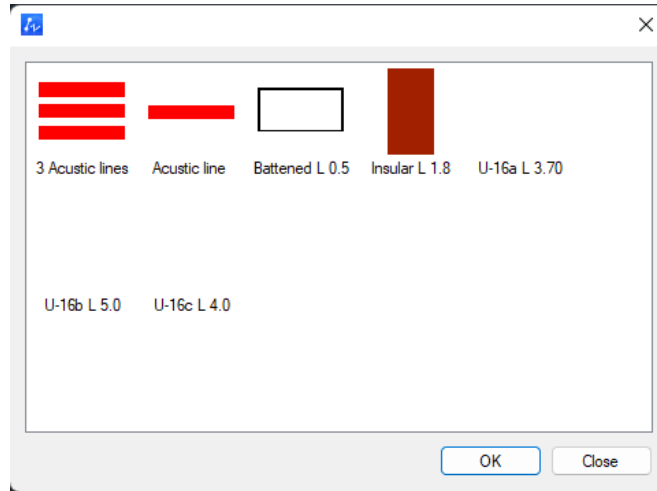


When the line changes into your barrier all there is left to do is choose a place to insert a symbol of the barrier.

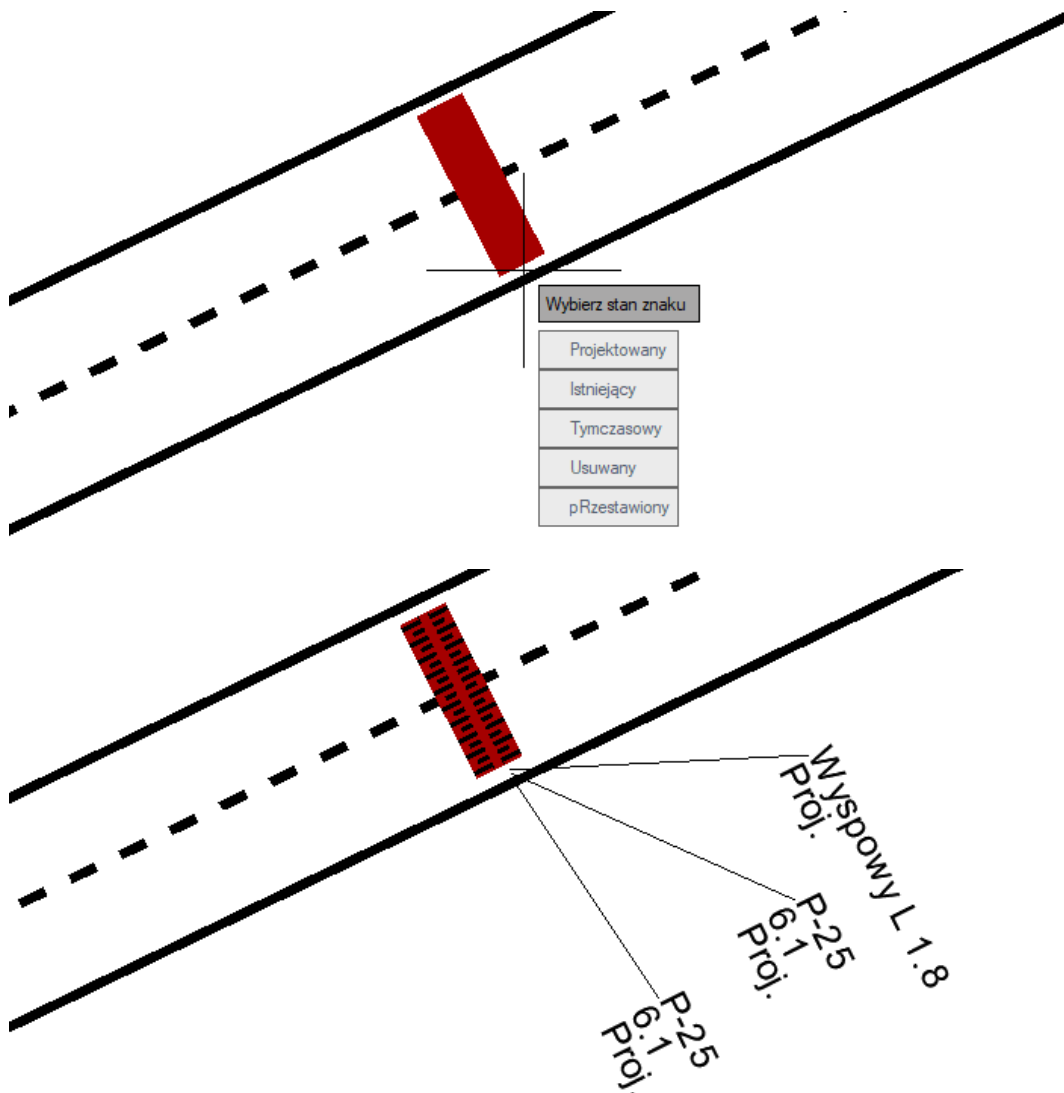


### Threshold

With this function you can add a threshold to the drawing. Run the command then choose an element and click OK.



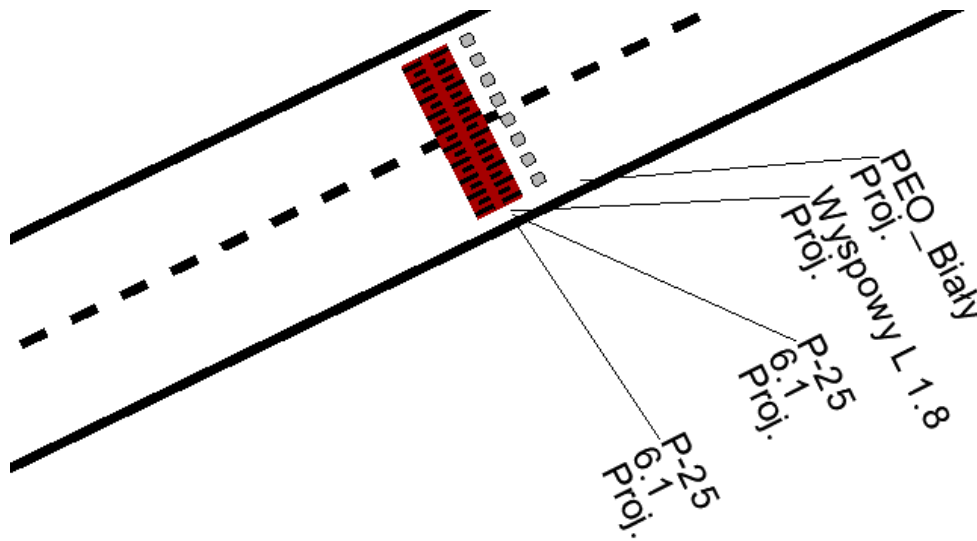
Then put it on the drawing. The application will ask you to set description after each of inserted segments.





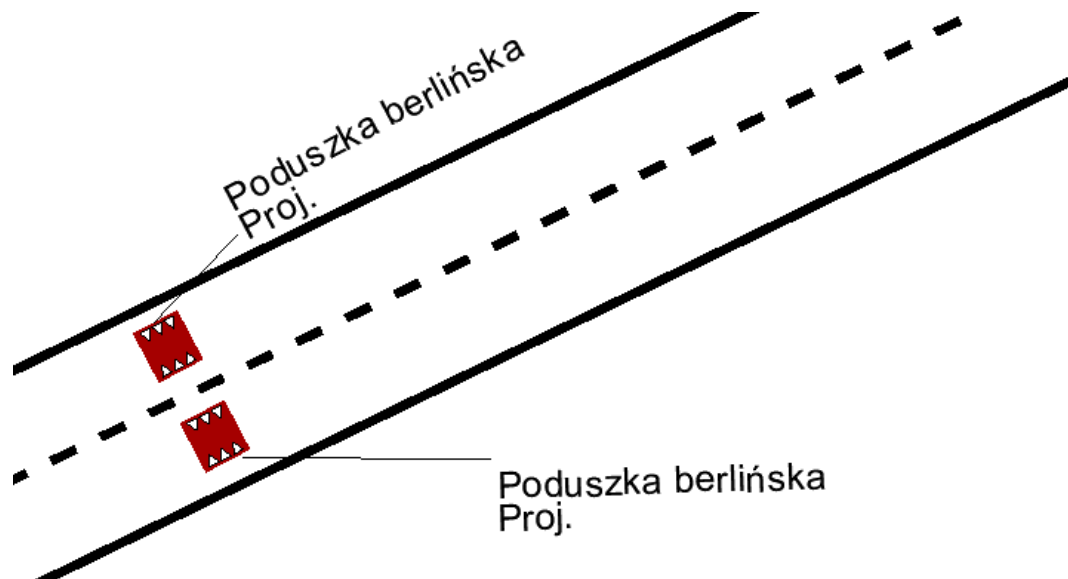
### Retroreflectors

With retroreflectors function, you can place such elements on the drawing.



### Berlin pillow

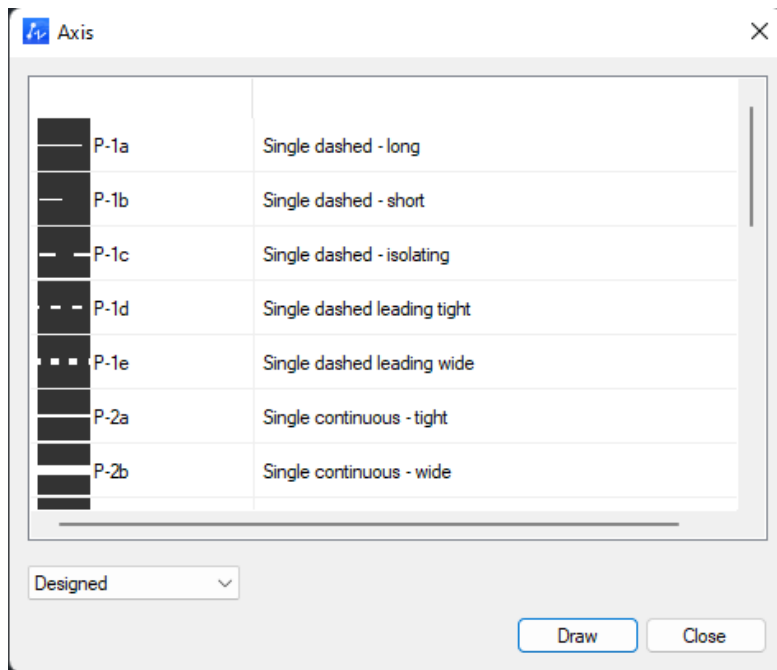
With this function you can make a Berlin cushion on the drawing.



### Horizontal marks

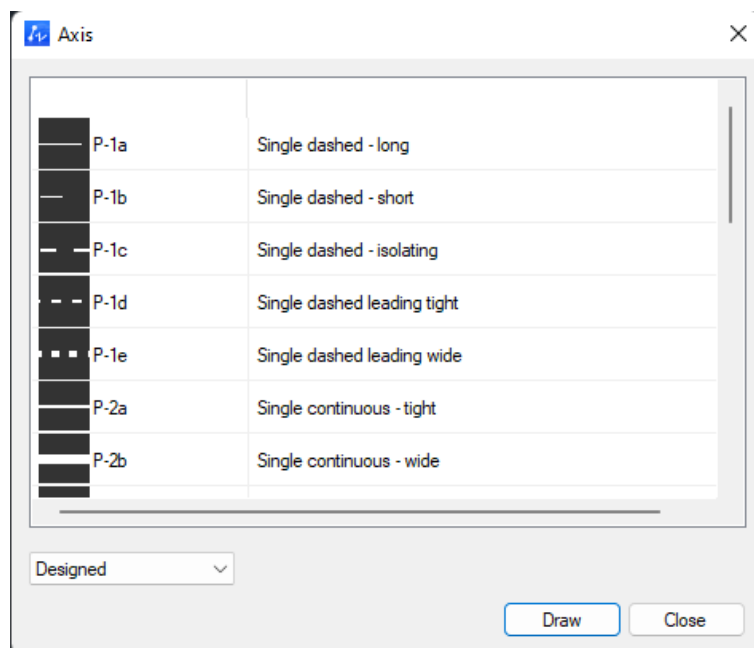
#### Axis

With this function you can convert a line to one of the lines on the example. After running the command, you can choose a new style and click on the line you want to change.



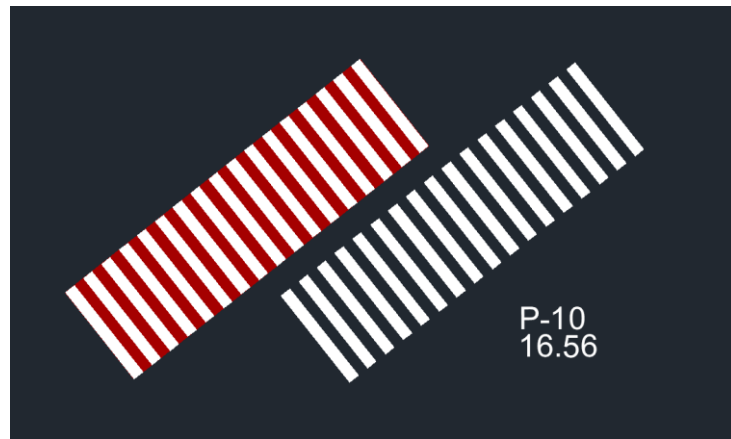
## Line

With this function you can draw a traffic lane, or other elements of the road lines. After running the command, you can choose a traffic lane, click on Draw, and start drawing.



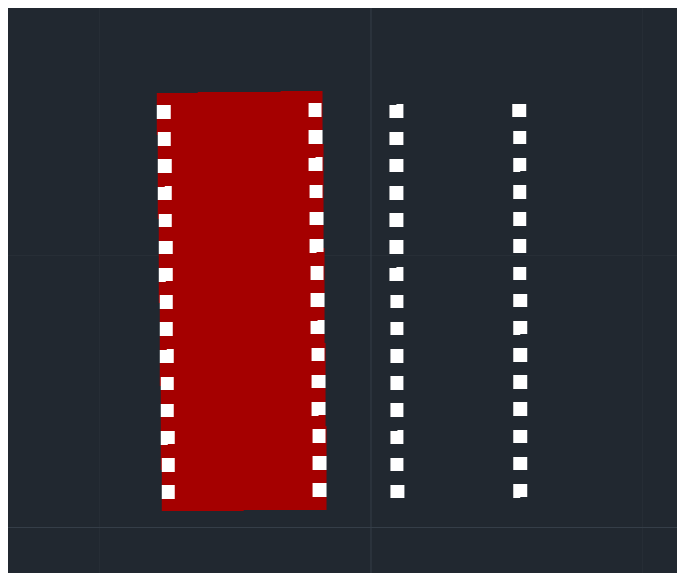
## Pedestrian's crossing

With this function you can make a pedestrian's crossing. Run the command, and start drawing. Default crossing is made on a red background, but you can click and remove it after drawing.



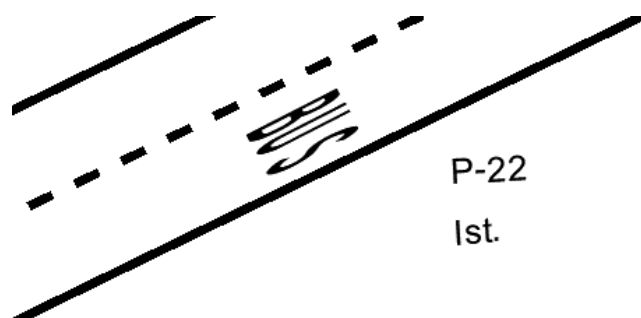
**Passage for cyclists P-11**

With this function you can make a passage for cyclists. Run the command, and start drawing. Default passage is made on a red background, but you can click and remove it after drawing.



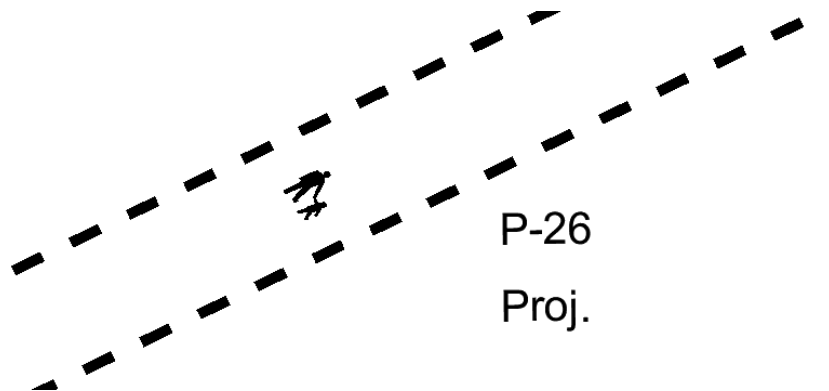
**BUS**

With this function you can make a bus text on the road. Run the command, choose a size in command line and start put it in the drawing.



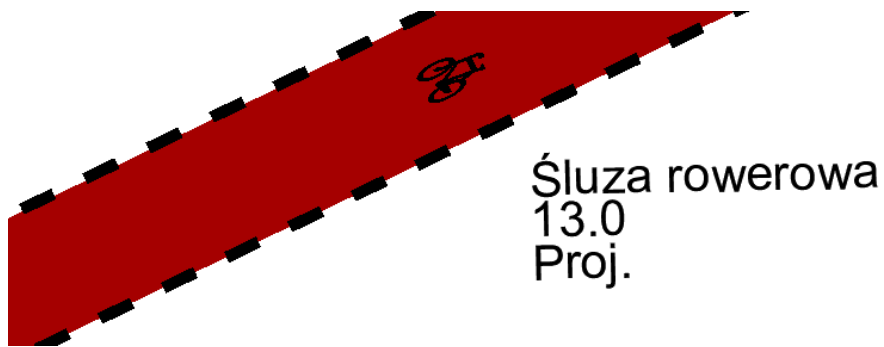
### Pedestrian symbol P-26

This command creates pedestrian symbol in the drawing.



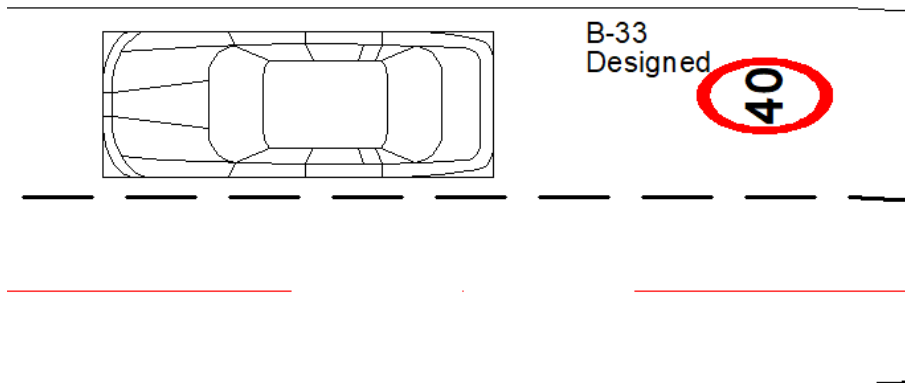
### Bike lock

You can make a bike lock with this command. Click on the function then choose a starting point, direction and angle.



### Vertical signs as horizontal marking

With this function you can set vertical signs horizontally. Click on this command, choose a sign and place it in the drawing. You can edit its values by double clicking.

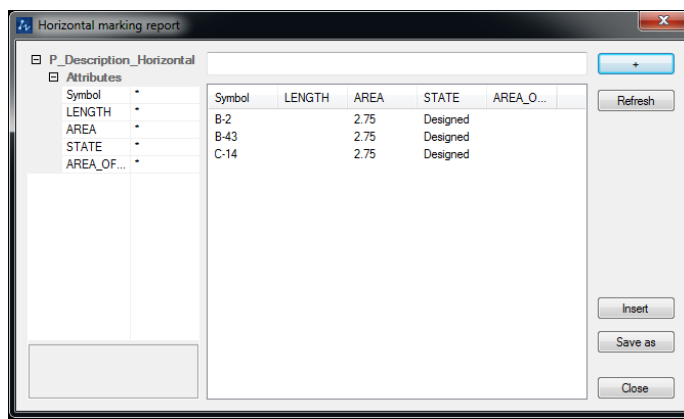


## Sum of length

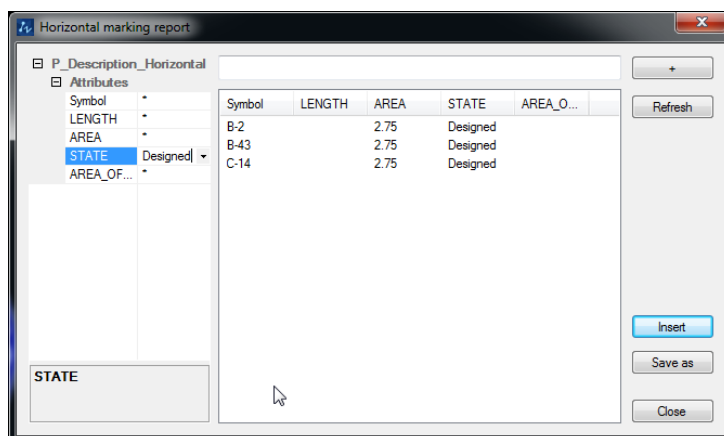
You can use this function to sum length of horizontal marks. Run the command, choose a sign and you will see its surface area in the command bar. You can also insert it to your drawing.

## Horizontal markings report

The command allows to create a collection of horizontal signs in a form of a table. Once activated, a window will appear where on the right side a + will be available and it will let you add elements to the collection of elements. It is possible to either choose All or Select depending on the user's needs.



The parameters of signs are present on the left hand side of the dialog box, thanks to them it is possible to choose a certain group of signs e.g. according to their states. The list can be extended. If you only want to see the signs with certain parameters, it is necessary to select the desired parameters and click on Refresh. The program will display the vertical signs that present set criteria.

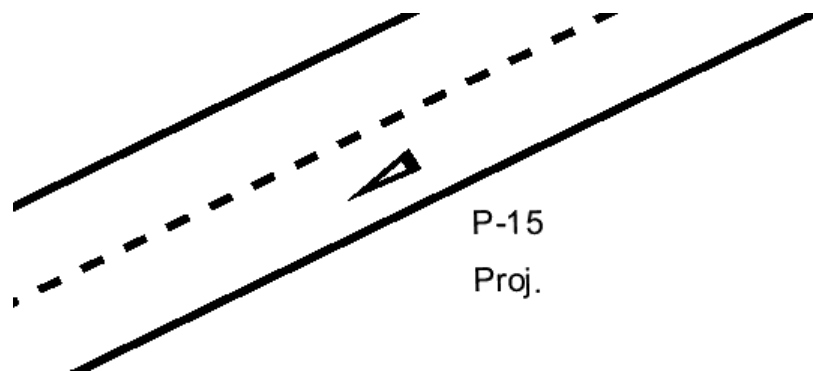


Selected vertical signs can be added with detail to the drawing in form of a table by using the button Insert or to an external CSV file by means of Save as.

Symbol	Długość	Powierzchnia	Stan	Powierzchnia_na_mb
P-17	55.00	6.27	Usuw.	1.71 m <sup>2</sup> /15mb
P-10	32.00	40.00	Proj.	0.5m <sup>2</sup> /mb s
P-1a	12.00	0.49	Proj.	0.04m <sup>2</sup> /mb
P-1a	6.00	0.26	Proj.	0.04m <sup>2</sup> /mb
P-1a	49.00	1.97	Proj.	0.04m <sup>2</sup> /mb
P-4	20.58	4.94	Proj.	0.24m <sup>2</sup> /mb
P-2a	29.00	3.52	Proj.	0.12m <sup>2</sup> /mb
P-1d	24.00	14.12	Proj.	0.60m <sup>2</sup> /mb
P-1a	22.00	0.87	Proj.	0.04m <sup>2</sup> /mb

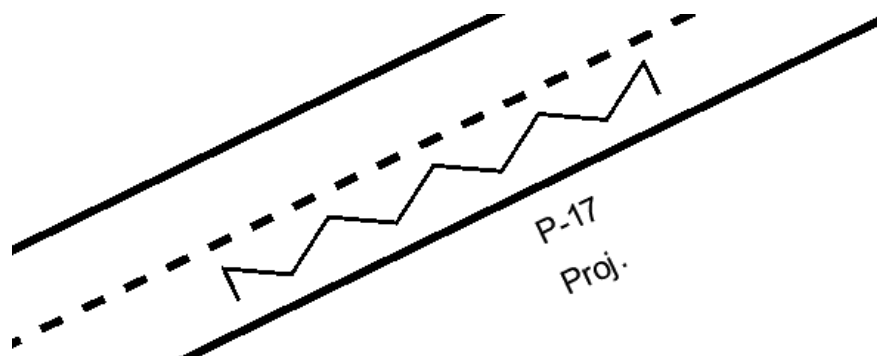
### Triangle subordination P-15

With this function you can make a triangle of yield symbol on the ground.



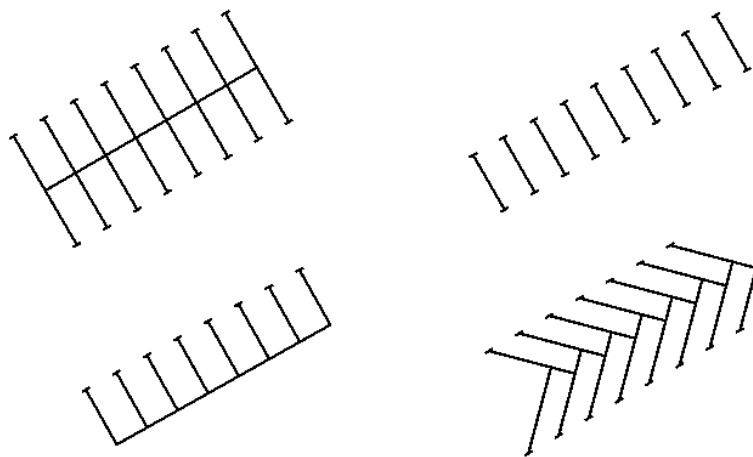
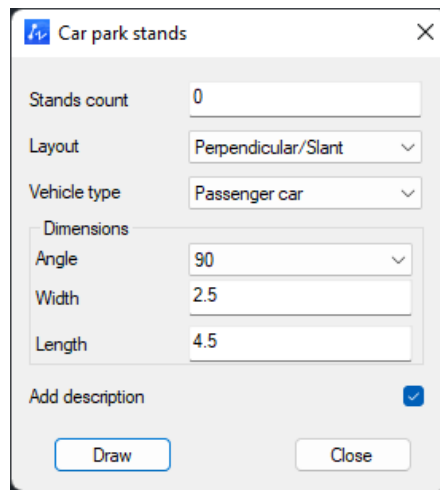
### Bus stop line P-17

Using this function you can make a bus stop line. Run the command, draw a line in place you want a bus stop line to be placed and confirm.

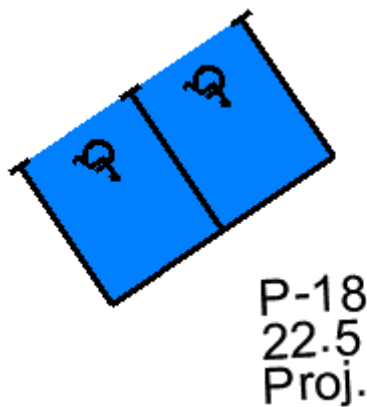


### Parking spots P-18

Parking spots P-18 is a function to create advanced spaces. Choose number of stands, layout and vehicle type. After that, start drawing, then choose side and confirm.



You can also choose different type of vehicle, for example:

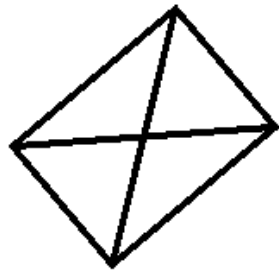


You can change dimensions easily by editing default parameters.

### Envelope P-20

With this function you can easily make a private parking space. Click on the command, then choose a starting point, direction and angle. You can type T during drawing to insert text in

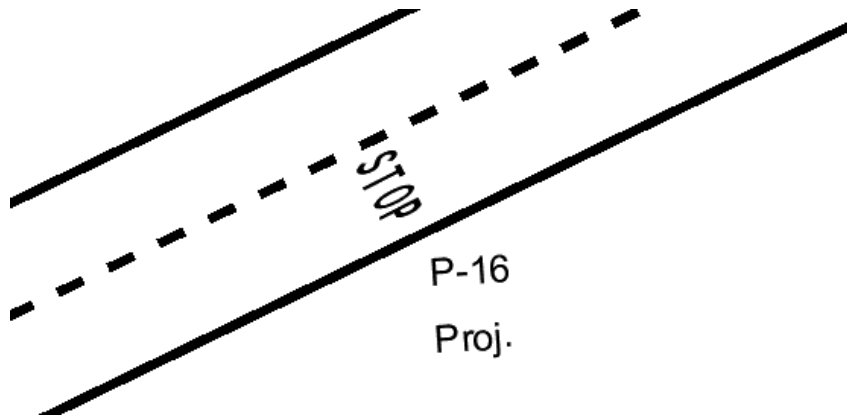
that parking space, or you can type C to choose a car type.



P-20  
5.0m x 3.7m  
Proj.

### Stop

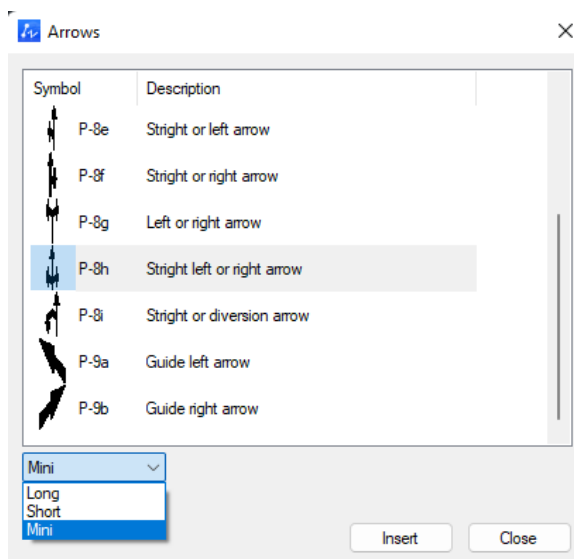
This function inserts stop text to the drawing. There are 3 sizes to choose from.



P-16  
Proj.

### Arrows

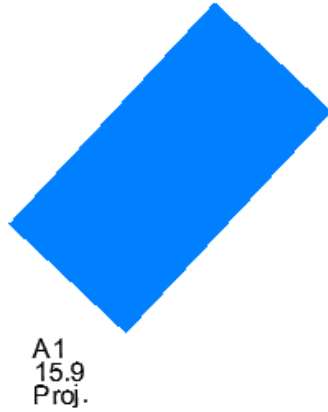
With this function you can put an arrow to your project. There are plenty of them to choose from, and you can adjust its size as well.





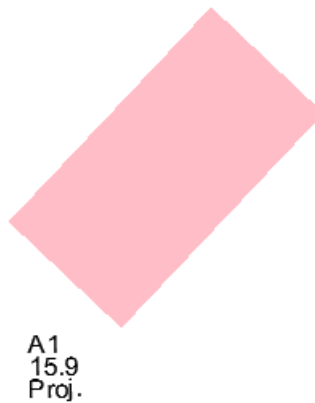
### Blue horizontal area

With this function you can draw a square area on the ground with blue colour and any description.



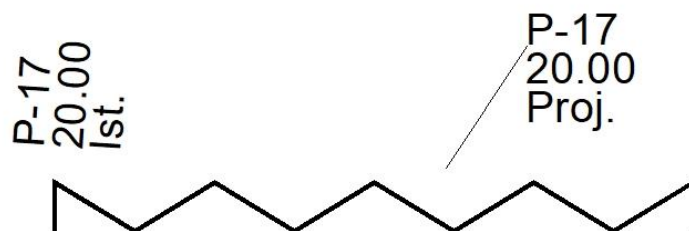
### Pink horizontal area

With this function you can draw a square area on the ground with pink colour and any description.



### Add horizontal marking description

With this function you can add a description to a horizontal sign or marking. Choose a function, select a sign and a size and confirm with Enter.



### Bike symbol P-23

With this function you can add a bike symbol to a project. Click on icon, choose a size and click where you want the symbol to be.



P-23

Proj.

### Lane and direction for cyclists P-27

You can use this function to add a bicycle road direction to your project.



P-27

Proj.

### Disabled person symbol P-24

This function adds a disabled person symbol to the drawing.



P-24

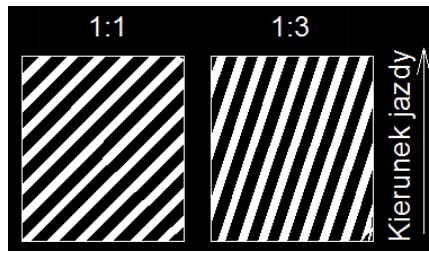
Proj.

### Excluded surface P-21

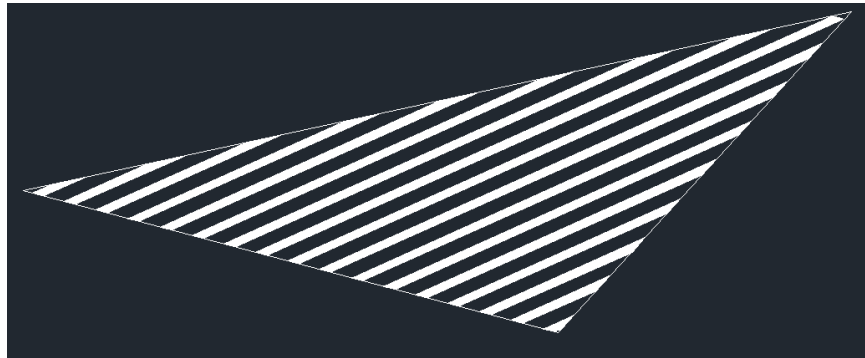
Excluded surface is a function that fills a space with parallel lines. There are 2 types of P-21 sign:

- P-21a (narrow)
- P-21b (wide)

After running the command, you can choose angle of the lines and type of excluded surface.

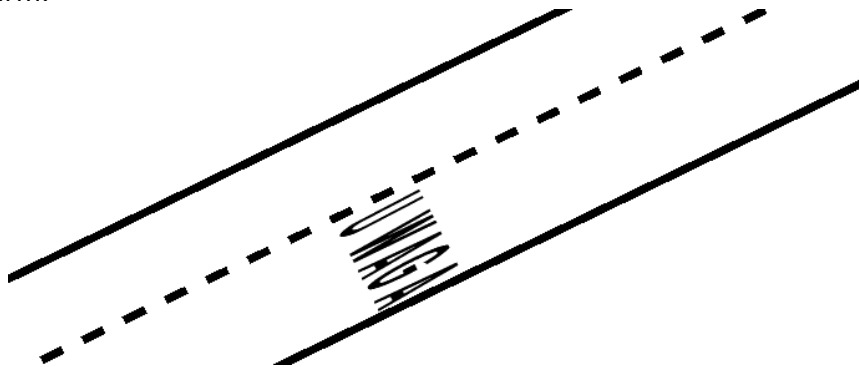


Then you should select an area you want to be lined, press D and select direction of the road and continue.



### Horizontal text

This command creates a text in horizontal form. Run the function, type text, then signs name and confirm.



### Green horizontal area

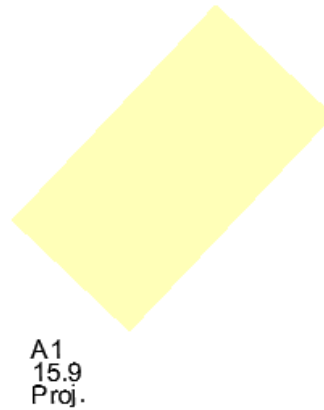
With this function you can draw a square area on the ground with green colour and any description.



A1  
15.9  
Proj.

### Yellow horizontal area

With this function you can draw a square area on the ground with yellow colour and any description.



### Update horizontal description

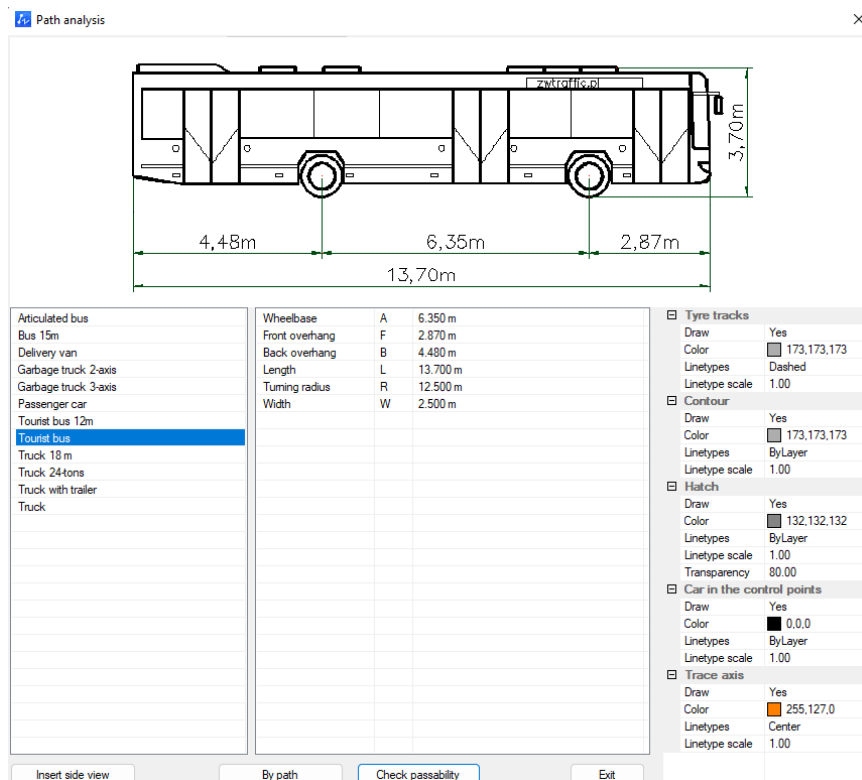
If you'll have a need to change a description of a sign after it was changed, you can use this function.

### Trajectory

### Trajectory

This function is a simulation of a car's trajectory, made for optimisation of certain vehicles.

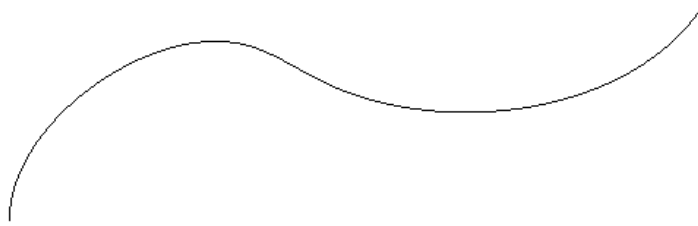
After running the command, a window will appear:



You can insert a side view of your car into the project. You can also choose a vehicle to test it, and there are two ways to do so.

### ***By path***

This way, you can check trajectory of a car by choosing a polyline, line or arc. To do so, run the command, choose a car and click By path. Now click on a line you want to check.

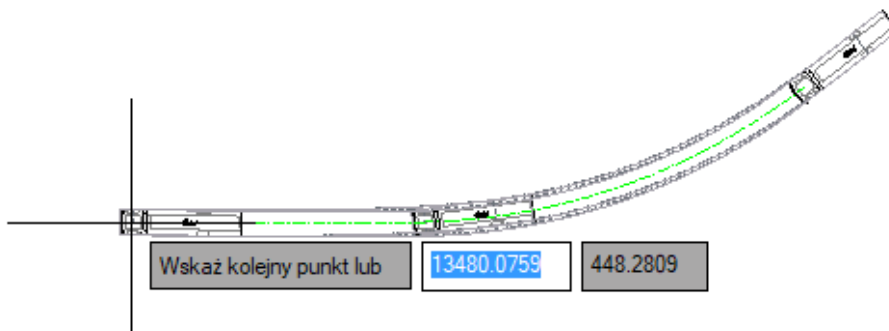


Trajectory of the car will be drawn.

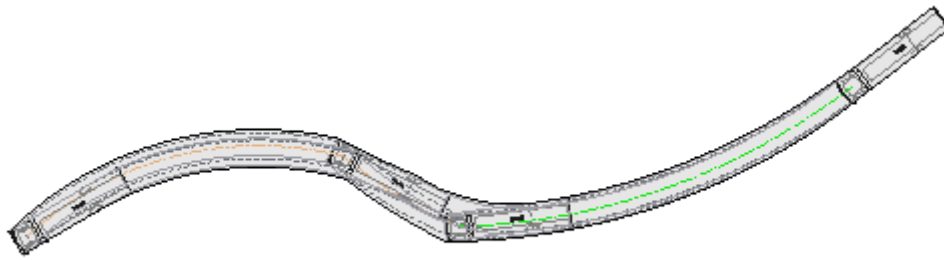


### ***Check passability***

After choosing a vehicle and clicking Check passability you can place your car in the drawing, and start moving it, while creating its path.



Enter finishes the job.



## Visibility

### Visibility

This command allows you to insert a drive-through, in accordance with the Decree of the Minister of Infrastructure of Poland dated 24.06.2022 on technical and construction regulations for public roads.

After starting the function, a visibility window will appear, where you can select the relevant regulation:

ZWTraffic - Widoczność
✕

?

OZPORZĄDZENIE ...

Ulubione

Ostatnio używane

ROZPORZĄDZENIE MINISTRA INFRASTRUKTURY z dnia 24 czerwca 2022 r. w sprawie przepisów techniczno - budowlanych dotyczących drogowych znaków drogowych

1. Kierującemu pojazdem innym niż rower, hulajnogą elektryczną i urządzeniem transportu osobistego zapewnia się

- 1) odległość widoczności, która umożliwia bezpieczne zatrzymanie się pojazdu przed przeszkodą na jezdni lub torze
- 2) na skrzyżowaniu – wolne od przeszkód pole widoczności przy:
  - a) zbliżaniu się do skrzyżowania z obowiązkiem ustąpienia pierwszeństwa dzięki zapewnieniu co najmniej tak
  - b) ruszaniu z miejsca zatrzymania na wlocie drogi z obowiązkiem ustąpienia pierwszeństwa
- 3) w węźle na wjeździe z pasem włączania na jezdnię główną, na jezdnię zbierająco-rozprowadzającą oraz na jezdnię
  - a) przy zbliżaniu się do pasa włączania,
  - b) na całej długości pasa włączania;
- 4) w węźle na wyjeździe z jezdni głównej, jezdni zbierająco-rozprowadzającej i jezdni łączniczej – zapewnione w całości
- 5) na wjeździe z pasem włączania oraz na dodatkowym pasie na skrzyżowaniu – wolne od przeszkód pole widoczności

Cecha	Wartość
<input type="checkbox"/> Parametry	
Czas decyzji [s]	5.00
Opóźnienie przy hamowaniu [s]	3.70
Pochylenie	0.00
Prędkość na drodze z pierwszeństwem [km/h]	70.00
<input type="checkbox"/> Parametry	
L1	5.00
L2	153.00

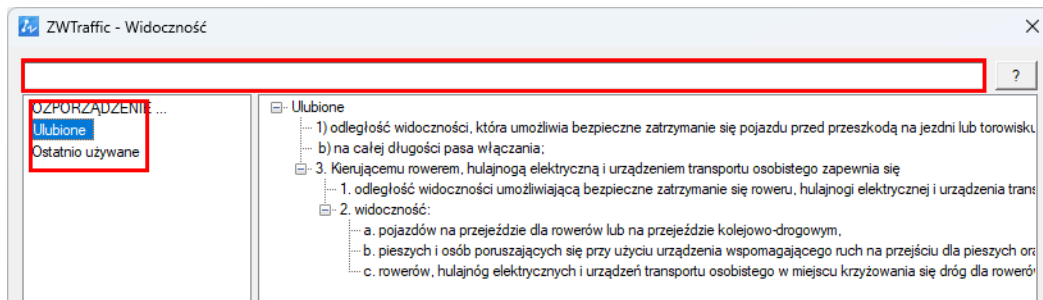
**Czas decyzji [s]**

Wstaw
Zamknij

The window on the right is fully editable, the object inserted into the drawing with the Wstaw button will depend on the values entered there.

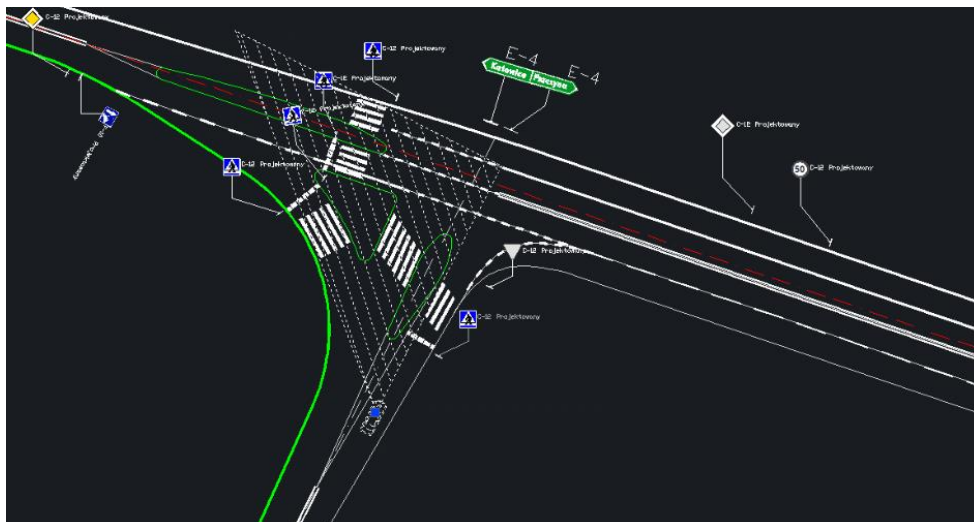
Cecha	Wartość
[-] Parametry	
Czas decyzji [s]	5.00
Opóźnienie przy hamow...	3.70
Pochylenie	0.00
Prędkość na drodze z pi...	30.00
[-] Parametry	
L1	5.00
L2	153.00
Prędkość na drodze z pierwszeństwem przejazdu [k]	

In the bar at the top, you can enter content for searching. There are also two additional categories, one for favorites and second for recently used. If you right-click on any paragraph, you can add it to the favorites folder, while the recently used folder gives you quick access to previously selected lines.



### Visibility field before crossroads

After running the command, you can choose a starting point and then the direction by left clicking.



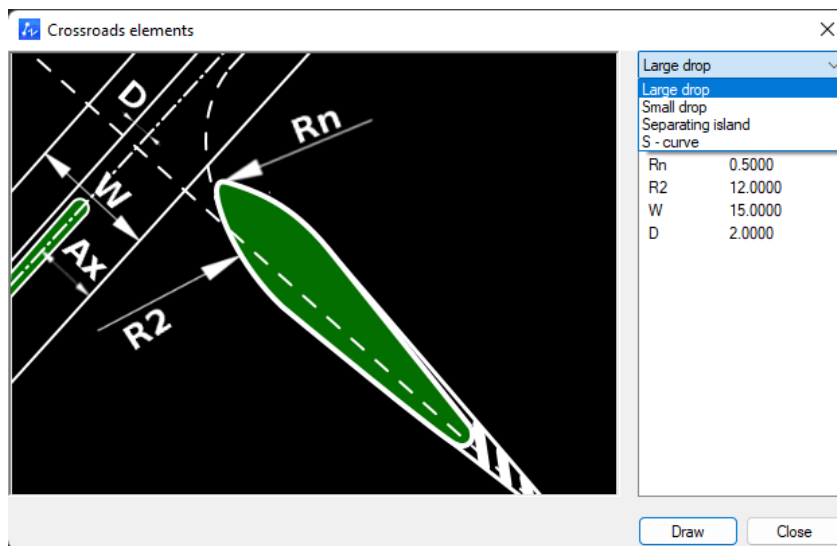
You can edit values of the vehicle in Properties panel.

ZWTraffic, visibility field	
Speed on a dual carriageway	50
Speed on a priority road	90
Elevation/Decline (negative value)	8%
Car length	4.75
S Stopping distance	37
L Visibility along the priority road	39.9

## Islands

### Crossroads elements

With this function you can draw some islands before an intersection. You can change its parameters in the right menu.

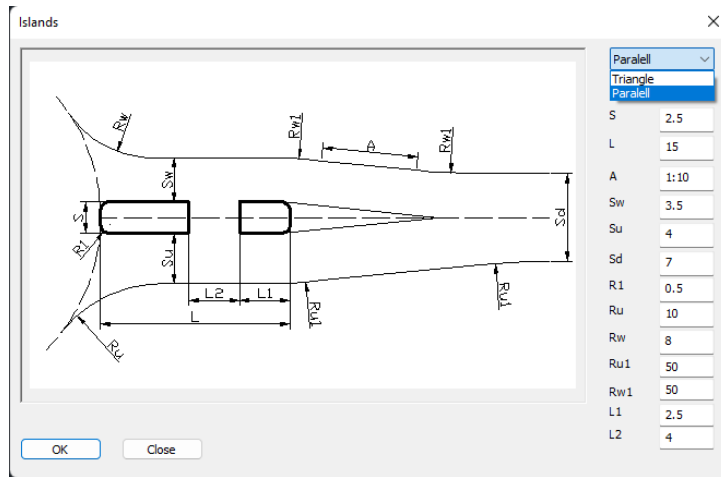


With Large and Small drop, you have to draw a line for its axis, then for the main road and the drop will be made. With Separating island and S-curve, pick a roundabout's outer line and click it. The entire structure will be made.

### Roundabout elements

This function can create complicated access to a roundabout. After running the command, you can modify parameters of parallel or triangle island and draw it. Click on the outer edge of a roundabout and choose a direction. The structure will be drawn then.

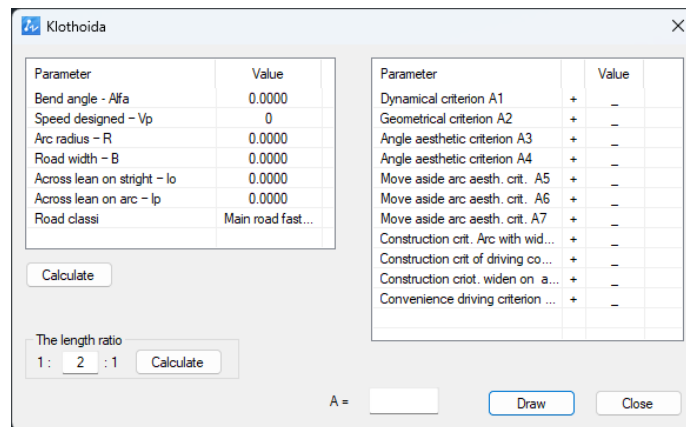




## Additional tools

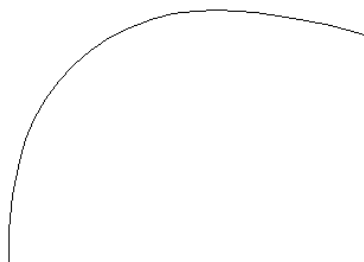
### Klothoid

With this function, you can draw a Euler spiral. After running this function, a window will appear, in which you can modify values. The most important is to set A value, if you can't fill all the data. After clicking Calculate, the program will calculate a range in which A value should be set. If you want to calculate the length ratio, a precise value of A will be measured. When you click on Draw, you should then pick 2 lines so the klothoid will be drawn.



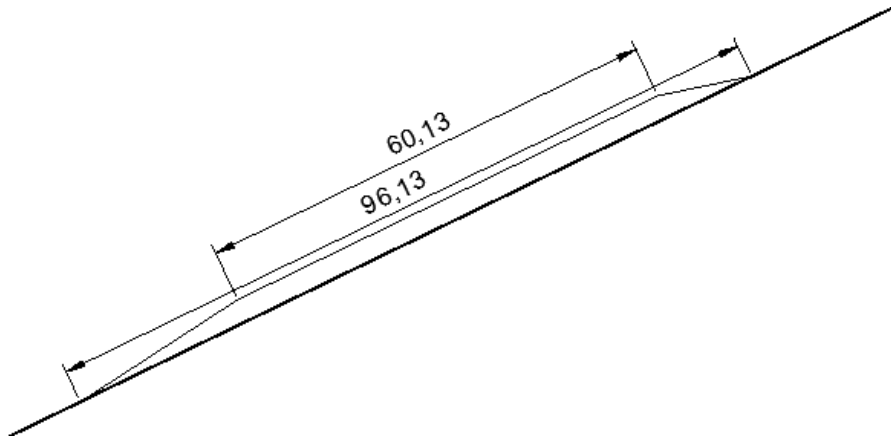
### Basket curve

With this function you can make an arch. After running the command, type a middle radius in command box, set the ratio, and pick 3 points on which the curve will be drawn.



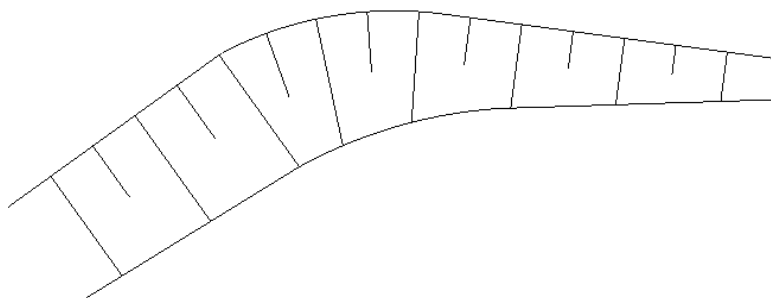
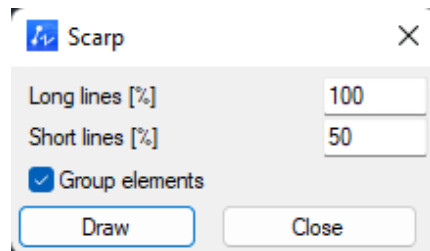
## Bays

You can draw a bay with this function. First, choose a polyline, then pick beginning and ending of a bay. Measurement will be shown in real time.



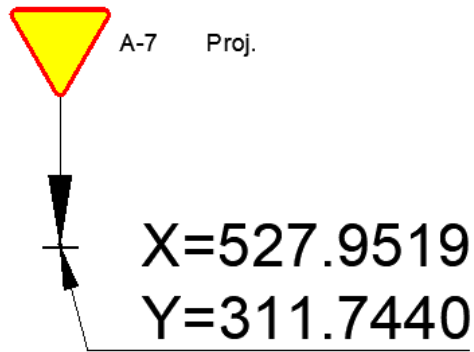
## Draws lines of slope

If you want to draw lines of a slope, pick top and bottom edges and the lines will be drawn. You can also modify them.



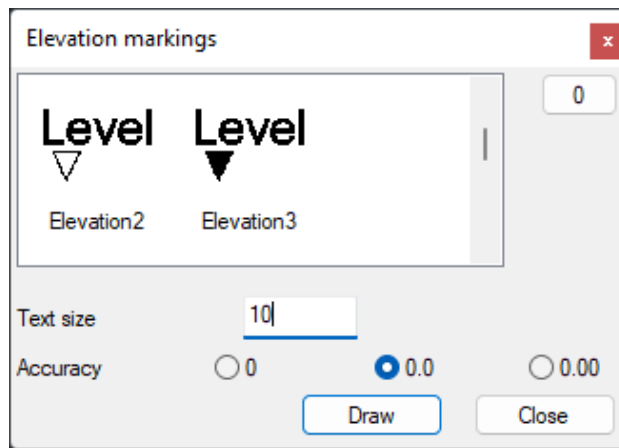
## Marks coordinates of project

You can use this function to set coordinates for any point. Just run the command, click on the point and a place where coordinates should be put.

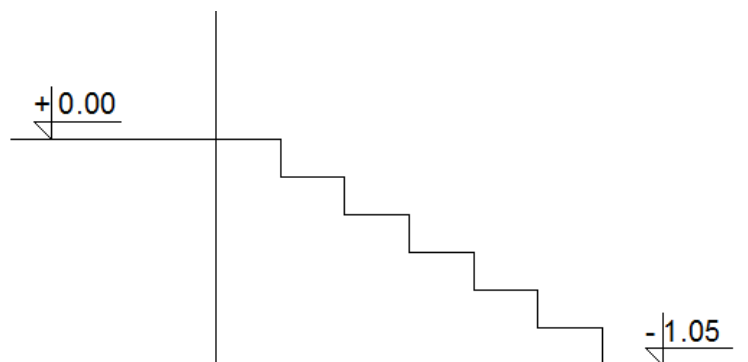


### Elevation marks

You can draw elevation marks with this command. There are few templates to choose from. You can modify size and precision of the data.



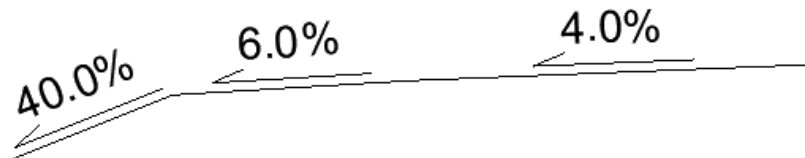
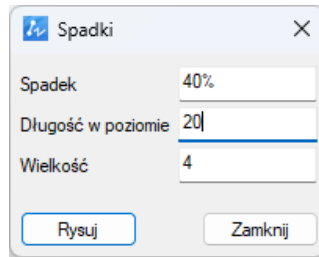
Elevation mark measures distance via Y axis from the beginning of the coordination system. You can click on 0 to set such a beginning.



If you change the 0 point, you'll be asked if you want to change you already done elevation marks.

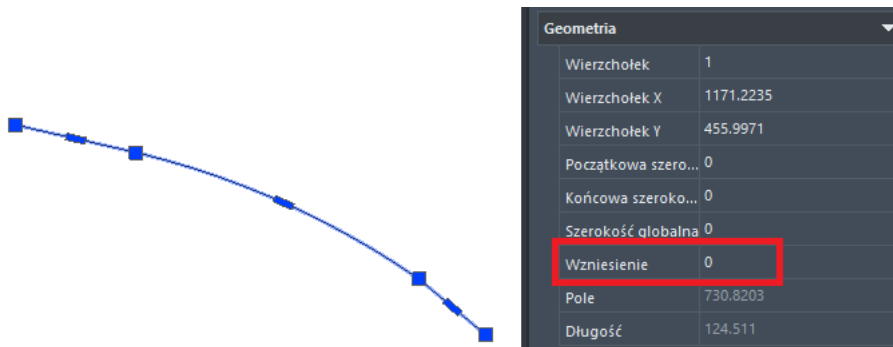
### Draw lines of slope in percentage

With this function you can draw lines of a slope. Run the command, draw a line where you want your slope to be placed. After that, click Draw or modify values of the slope.

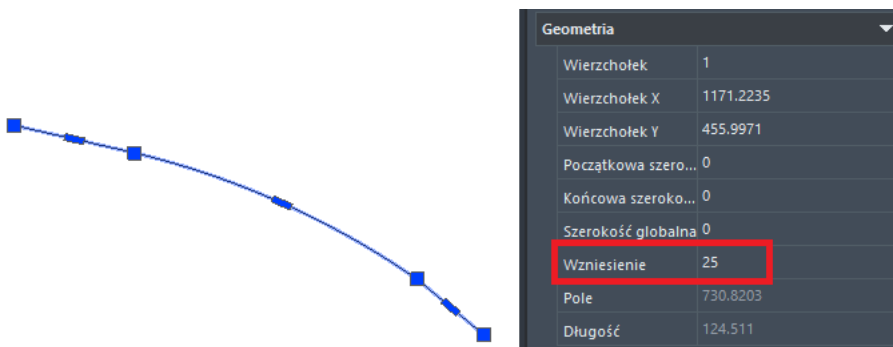


### Mark contour line

With this function, you can easily change a height of a contour line. To do so, run the command and click on a line, then type its value. The Z parameter will be changed.



The picture before and after said function is used.

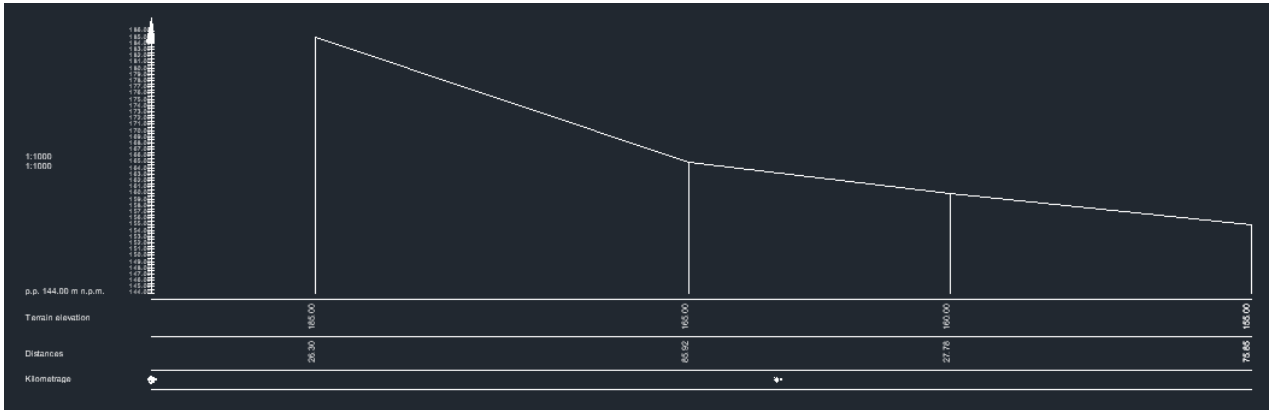


In case of problems, convert your contours to Light Polylines with a CONVERTPOLY command.

### Draw Longitudinal Profile

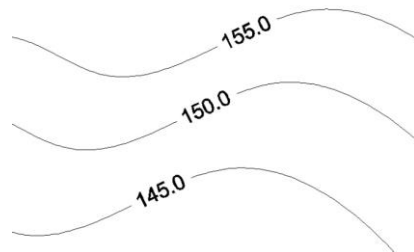
To draw a longitudinal profile, run the command and select contour lines. Then, draw a line you want to be a profile, and insert it to the drawing.

In case of problems, convert your contours to Light Polylines with a CONVERTPOLY command.



### Describe contour line

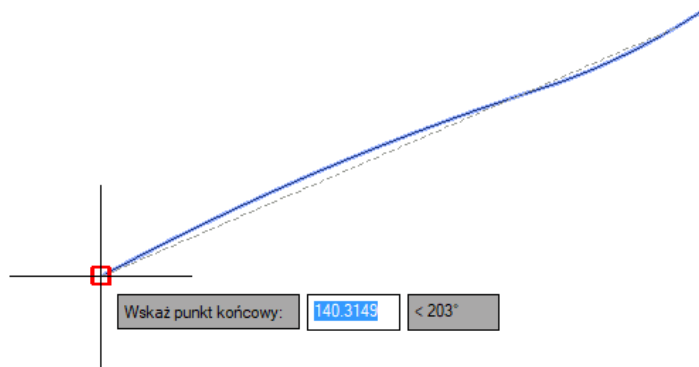
The function labels contour lines. After running the command, make a line that will go through your chosen lines. In each place that contour crosses with this function's line, a description of its height will be placed.



In case of problems, convert your contours to Light Polylines with a CONVERTPOLY command.

### Summ length

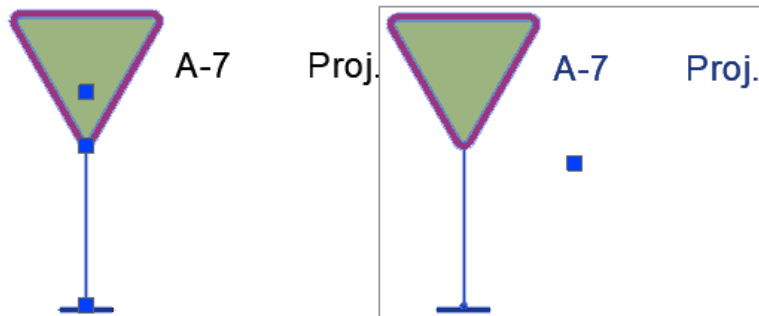
You can use this command to sum length of objects. After choosing the function, click on an element you want to measure, then draw a line. The part within the line will be measured and displayed in command tab.



**Extras**

**Select singly**

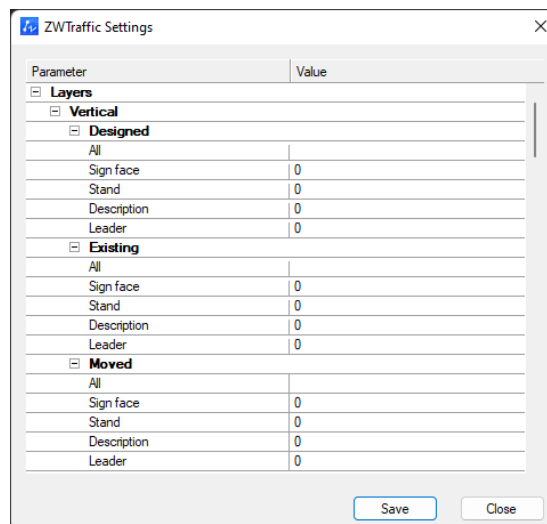
This function is responsible for displaying grouped objects. Signs and other objects in ZWTraffic are inserted as a group. You can either display objects grouped, with only one grip or as separate elements. Separate elements are easier to move or modify, but it's easier to miss something. This can be switched with this function.



GROUPDISPLAYMODE command is responsible for displaying groups.

**Settings**

You can define your own settings in the application, just click on Settings.



You can choose on which layers symbols will be placed. You can create new layers this way for any groups of signs. Base value is set to 0.

Parameter	Value
Leader	0
<b>Temporary</b>	
All	
Stand	0
Description	0
Leader	0
<b>Remove</b>	
All	
Stand	0
Description	0
Leader	0
Path analysis	0
<b>Sizes</b>	
Sign face size	1.000000
Sign shield size	1.000000
Description size	1.000000
Drawig scale	1:1000
Make group from created elements	Yes

The default scale is set to 1:1000, but that can be changed, as well as for example state of signs. Every setting is saved to the file in directory: C:\Szansa\ZWTraffic\2025\EN\Configuration. There is a States.ini file, in which you can edit.

### Activation

A trial period that lasts for 30 days with full functionality is available after installation of the application.

Activation must be completed on an account with administrative privileges.

Once the trial period of 30 days runs out, a licence will be needed in order to use the program. After receiving the payment, an e-mail with an activation code will be sent. Activation is available directly in ZWCAD or by using the function Activation from menu of the application. It is also possible to activate the program from its installation folder. By default located in: C:\Szansa\Aktywator\2025\EN and run Aktywator\_2025.exe.

**In operating systems such as Windows Vista, Windows 7, Windows 8 and Windows 10 it**

is necessary to right click on ZWCAD icon and select Run as Administrator.

Full licence code is only visible on the licence certificate that is sent out during completion of the order due to security reasons. Once Activator has been launched, the following window will be displayed:

Application	Module	Version	Licence type	Licence state	Expiring	The code
ZWTraffic	All	2019	Full license	Active	12-31-2024	XXXXXXXXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX
ZWTraffic	Lite	2019	Full license	Active	12-31-2024	XXXXXXXXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX
ZWTraffic	All	2019	Full license	Expired	12-31-2024	XXXXXXXXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX
ZWTraffic	All	2019	Full license	Expired	12-31-2024	XXXXXXXXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX
ZWTraffic	All	2019	Full license	Expired	12-31-2024	XXXXXXXXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX
ZWTraffic	All	2019	Full license	Expired	12-31-2024	XXXXXXXXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX
ZWTraffic	All	2019	Full license	Expired	12-31-2024	XXXXXXXXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX
ZWTraffic	All	2019	Full license	Expired	12-31-2024	XXXXXXXXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX
ZWTraffic	All	2019	Full license	Expired	12-31-2024	XXXXXXXXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX
ZWTraffic	All	2019	Full license	Expired	12-31-2024	XXXXXXXXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX
ZWTraffic	All	2019	Full license	Expired	12-31-2024	XXXXXXXXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX

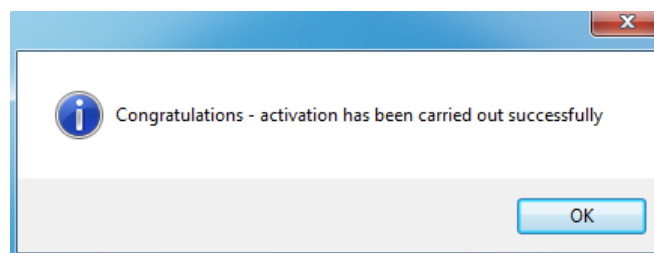
Please click on **Activate**.

A choice between activating the application online or offline will be present.

#### Online activation

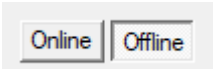
In the field **Activation code** please type in the information sent during realization of the order, afterwards click on **Activate**.

An information window will pop up confirming the activation.

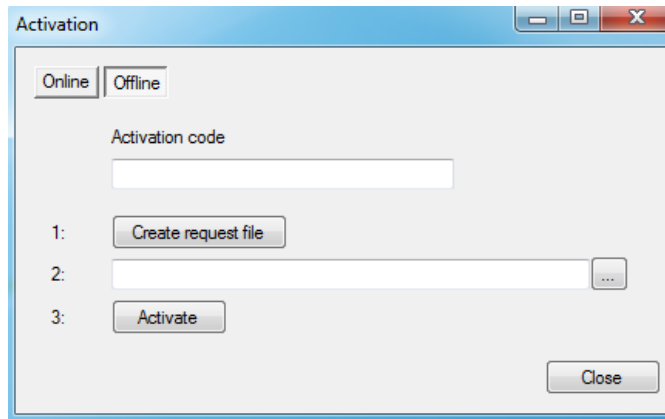


Once ZWCAD is launched, all functions of the program should be loaded and available.

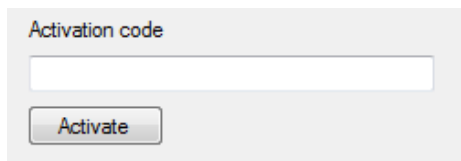
#### Offline activation

In the **Offline** tab  additional steps are required to complete the activation.

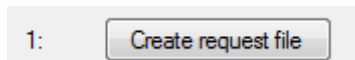




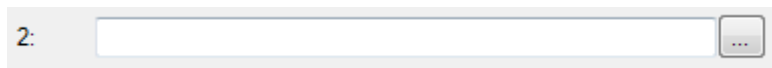
In the field **Activation code** please type in the information sent during realization of the order.




Afterwards it is necessary to click on Create a request file, it will create an additional file which needs to be saved on the desktop or in any other directory of the computer.

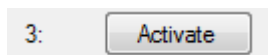


The file needs to be sent in a form of an attachment to, [pomoc@zwcad.pl](mailto:pomoc@zwcad.pl) and a reply will consist of response file which then needs to be loaded in the activator:

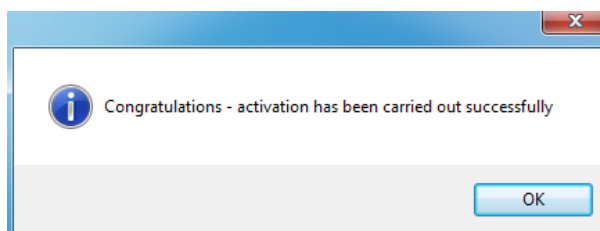


Response file needs to be saved on the computer and its localization needs to be determined by clicking on the following icon .

Once the response file is loaded, click on **Activate**.



An information window will pop up confirming the activation.



Once ZWCAD is launched, all functions of the program should be loaded and available.

#### Manual menu load

After installing the overlay, it should load automatically after running ZWCAD 2025. The functions should be available and the toolbar with the icons should be displayed. If after running

ZWCAD the overlay does not appear, please follow these steps:

- Run the command `_menuload`.
- Press the button and select the file `ZWTraffic.cuix` located in `C:\Szansa\ZWTraffic\2025\EN`. Confirm the file by clicking Add.

