Using the "Annotations Mode"

Program: Sheeting Check

File: Demo_manual_38.gp2

In this engineering manual, we will describe the work with "Annotations mode", which is a basic tool used in all GEO5 programs.

Annotation mode allows us to:

- Better show constructions when modeling
- Have a better graphical output

We will show the work in a Sheeting Check program, however, the process is similar in other GEO5 programs. To avoid unnecessary delays, we will use the data from engineering manual 7 (Verification of a multi-anchored wall) – this is a part of the sample examples that are preinstalled with the GEO5 program. These are stored in public documents in the FINE folder (for example C:\Users\Public\Documents\Fine\GEO5 2020 Examples).

When finished with this manual, you should have a lining structure, that looks like this.
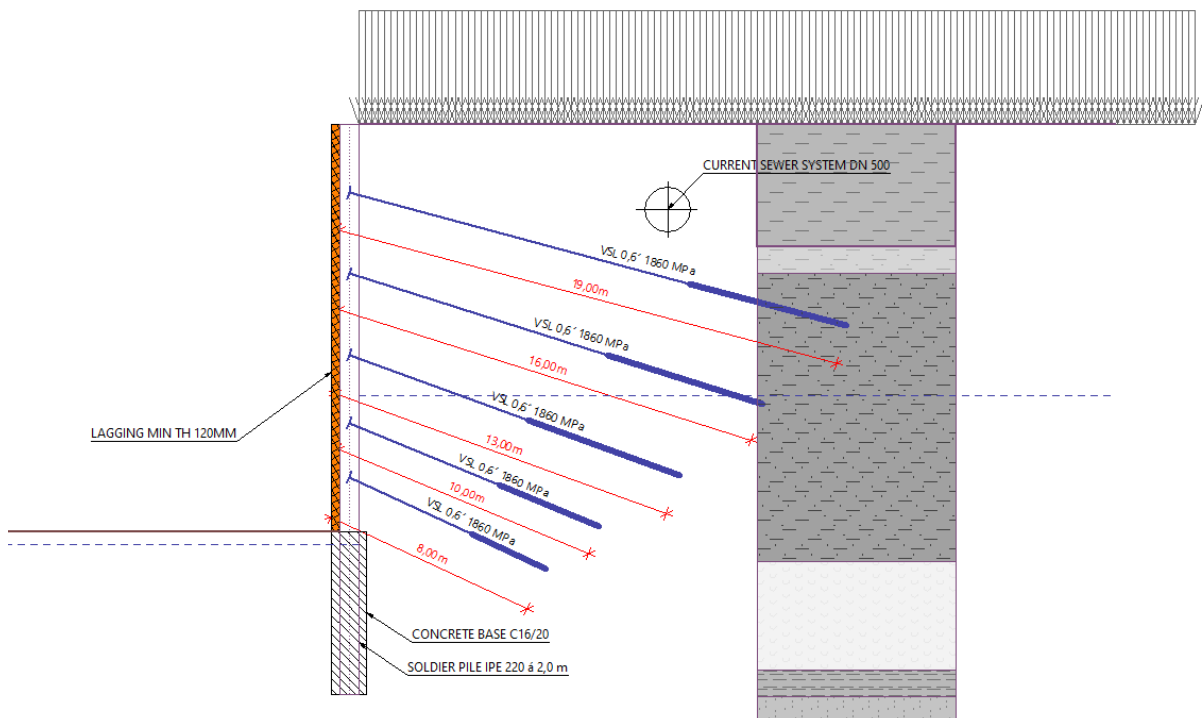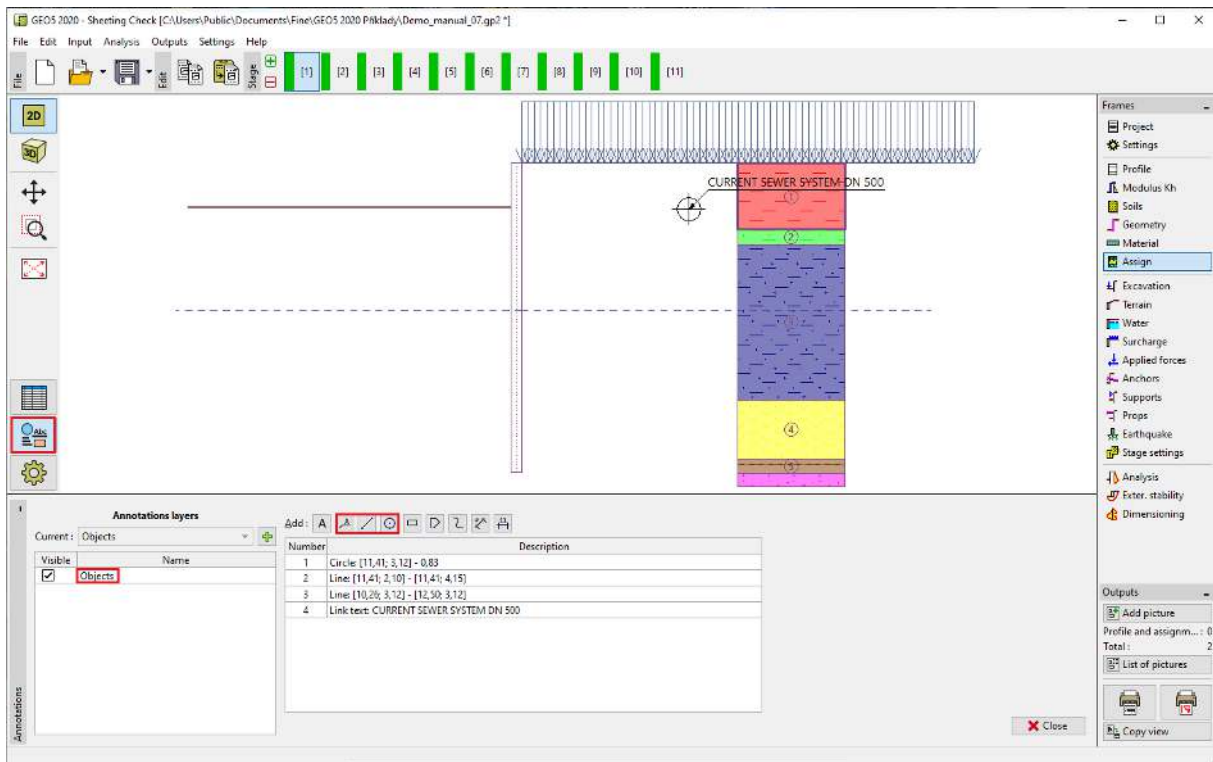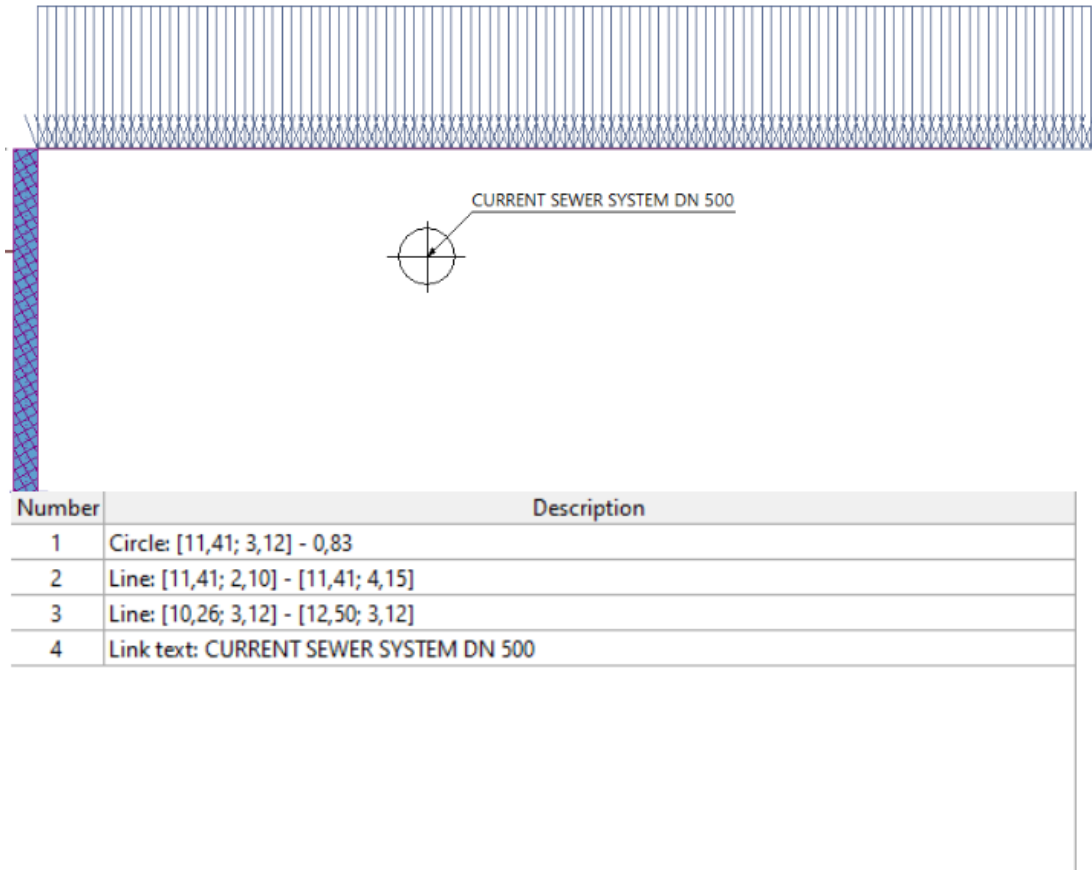
1) The input of the current state

We will draw a position of the current sewer system. This information is important for us because the anchoring we have designed must not interfere with the sewer. Therefore, we will draw this construction into the first stage.

After opening the "Demo_manual_07" file. Go to the first construction stage and in the "Geometry" frame, switch to the "Annotations mode" using the button on the left toolbar

We will name the default layer as "Objects" and draw the desired sewer into it. For this purpose, we will use the "Circle" and "Line" type objects. We will use the "Link text" for adding a description to the drawn sewer.


"Annotations" mode

Number	Description
1	Circle: [11,41; 3,12] - 0,83
2	Line: [11,41; 2,10] - [11,41; 4,15]
3	Line: [10,26; 3,12] - [12,50; 3,12]
4	Link text: CURRENT SEWER SYSTEM DN 500

Then we switch to the "Drawing Settings" mode – here we see that we have a column with our annotations displayed, where we can set the individual frames as visible or invisible, as we need. Use the "Apply everywhere" button to turn on this layer in all modes.
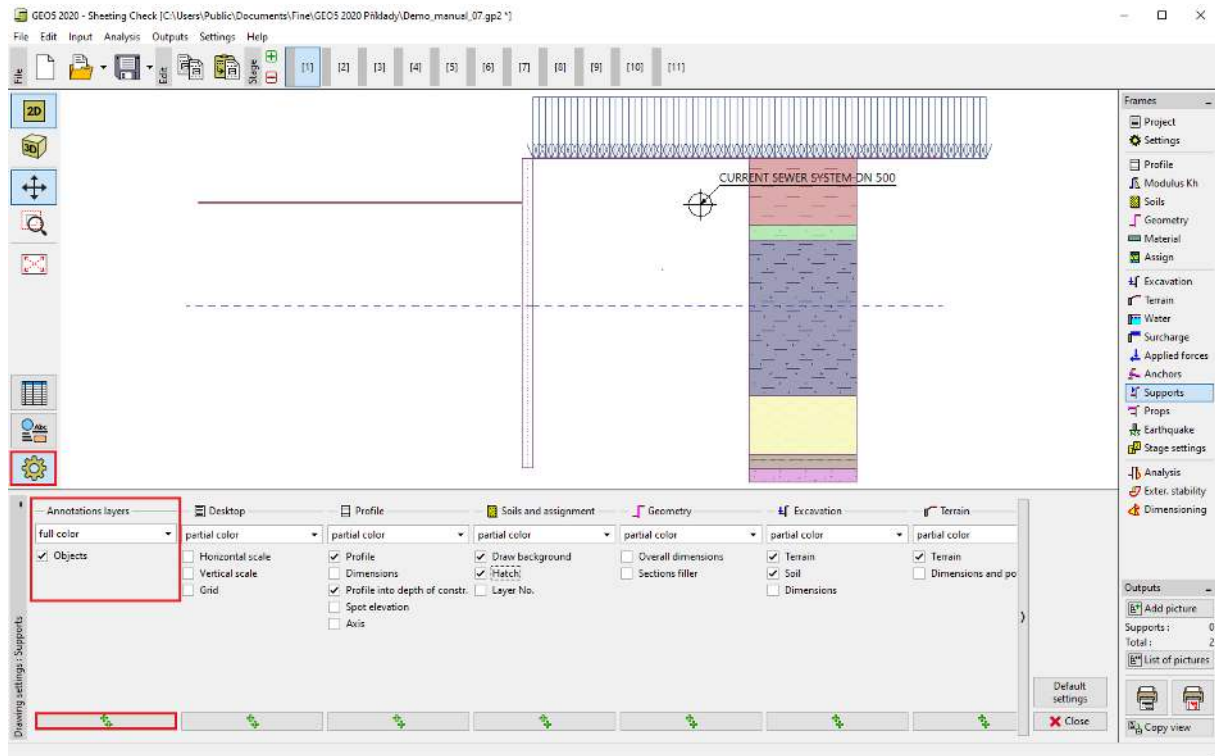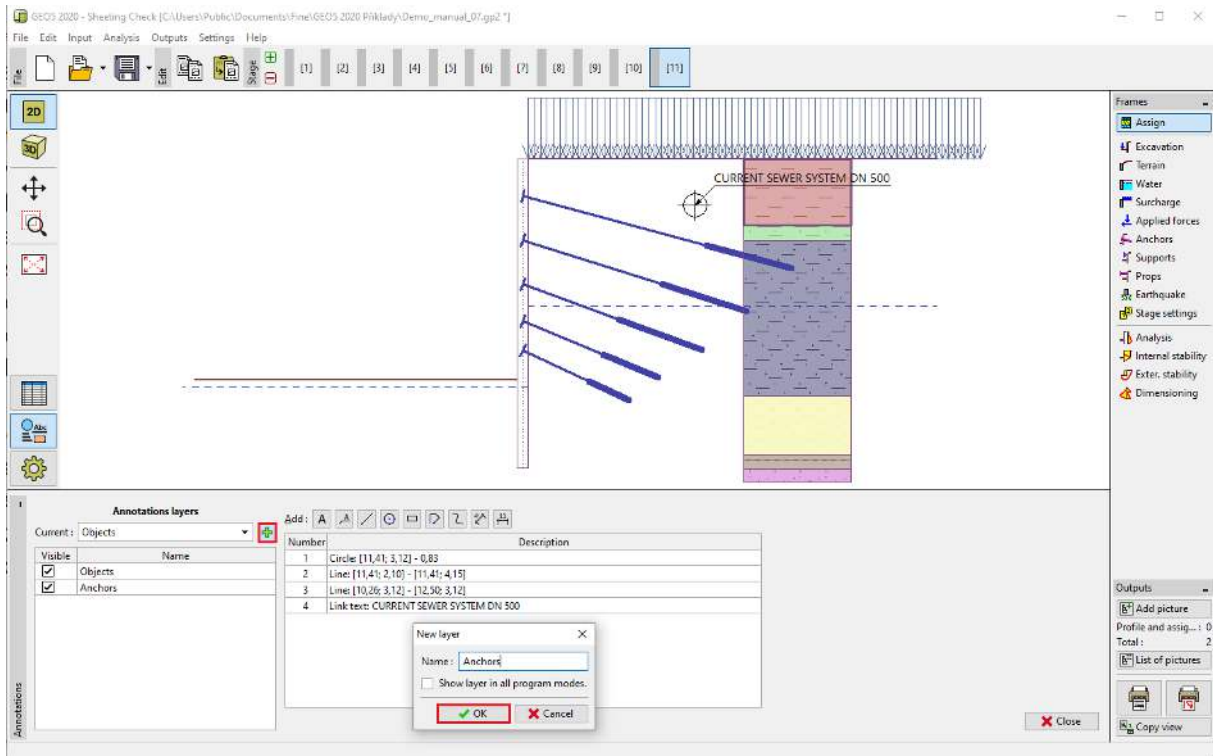
"Drawing settings" mode

The specified structure is then displayed in all modes and all stages of the construction.
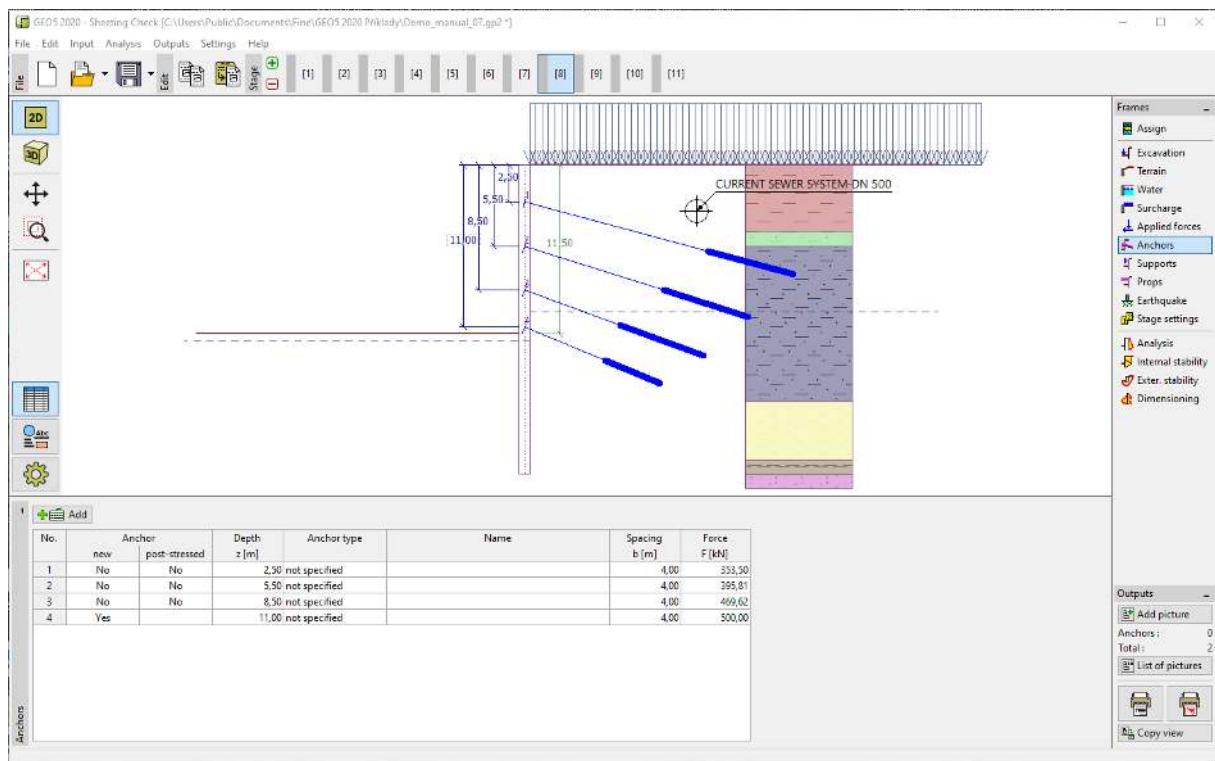
2) Output image enhancement

Here we want to create a description of the anchoring. We will turn to the last construction stage, where all the anchors are displayed.

We will add another layer named "Anchors" and fill in the required information

Adding another layer

We will describe the individual anchors. To describe the object, use the "Text" function, which can be rotated according to the anchor slope.
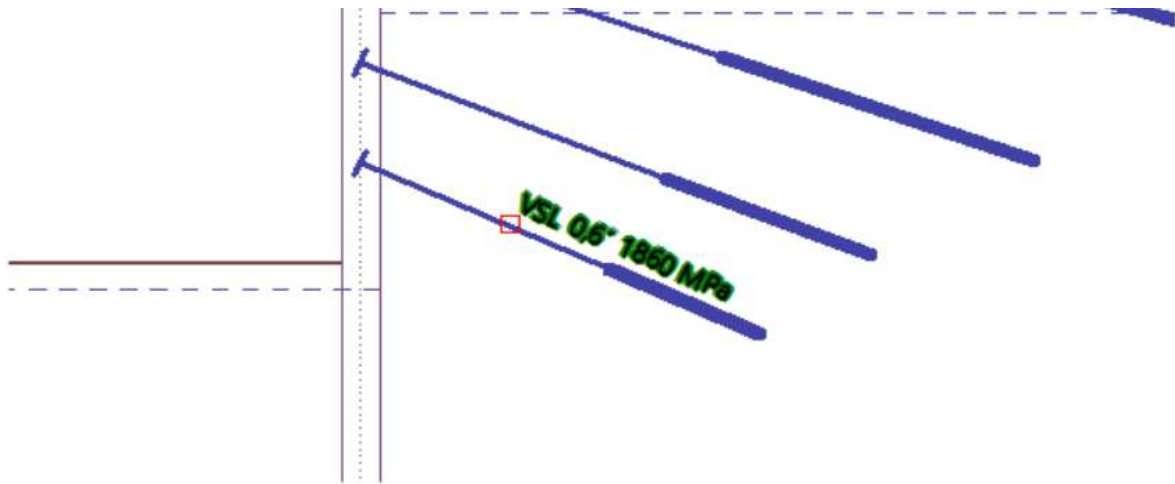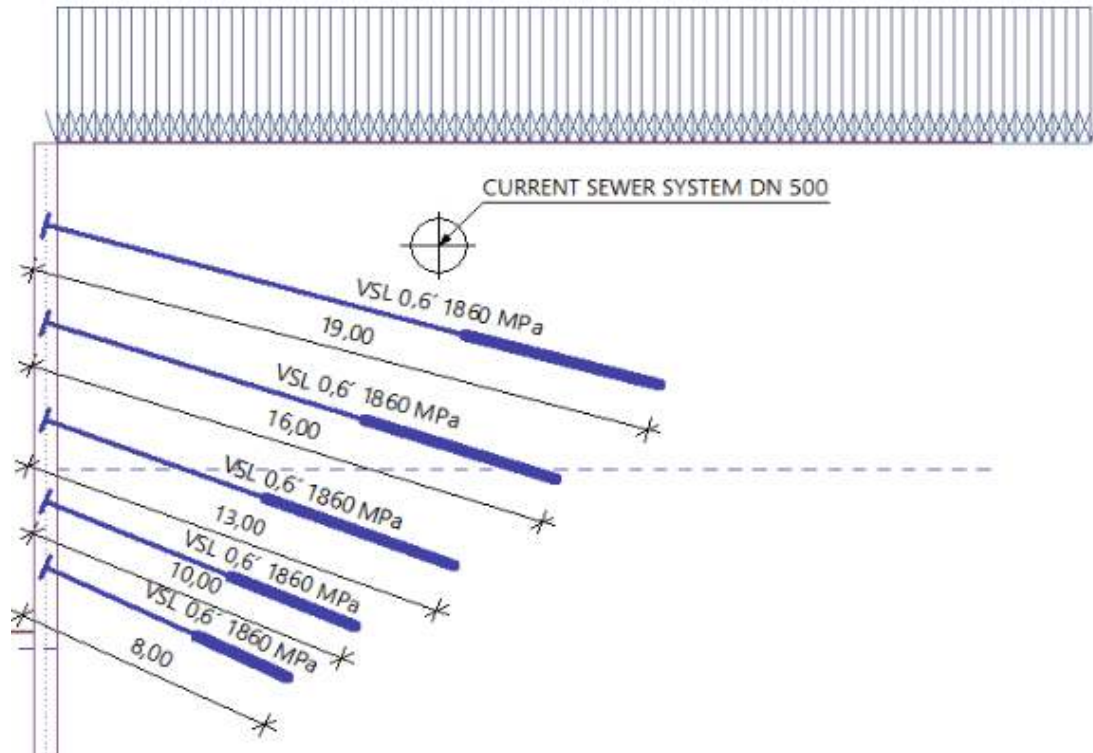
Number	Description			
1	Text: VSL 0,6´ 1860 MPa			

Text :	VSL 0,6´ 1860 MPa	
Text color :	▬ ▼	
Text height :	5,0mm ▼	
Rotation :	25,00 ▲▼	[°]
Horizontal alignment :	Left ▼	
Vertical alignment :	Bottom ▼	
Point :	X = 2,36	[m]

For dimensions, we use a function called: dimension aligned that measures the actual distance between two points.

Note: Another dimension type (linear) measures the distance in the vertical or horizontal direction

CURRENT SEWER SYSTEM DN 500

VSL 0,6′ 1860 MPa
19,00

VSL 0,6′ 1860 MPa
16,00

VSL 0,6′ 1860 MPa
13,00

VSL 0,6′ 1860 MPa
10,00

VSL 0,6′ 1860 MPa
8,00

Number	Description
1	Text: VSL 0,6′ 1860 MPa
2	Text: VSL 0,6′ 1860 MPa
3	Text: VSL 0,6′ 1860 MPa
4	Text: VSL 0,6′ 1860 MPa
5	Text: VSL 0,6′ 1860 MPa
6	Dimension: 19,00
7	Dimension: 16,00
8	Dimension: 13,00
9	Dimension: 10,00
10	Dimension: 8,00

The entered data can also be edited as a group. Select the dimensions and assign them to the color red in the common properties and add "m" after the "<>" symbols into the text input.
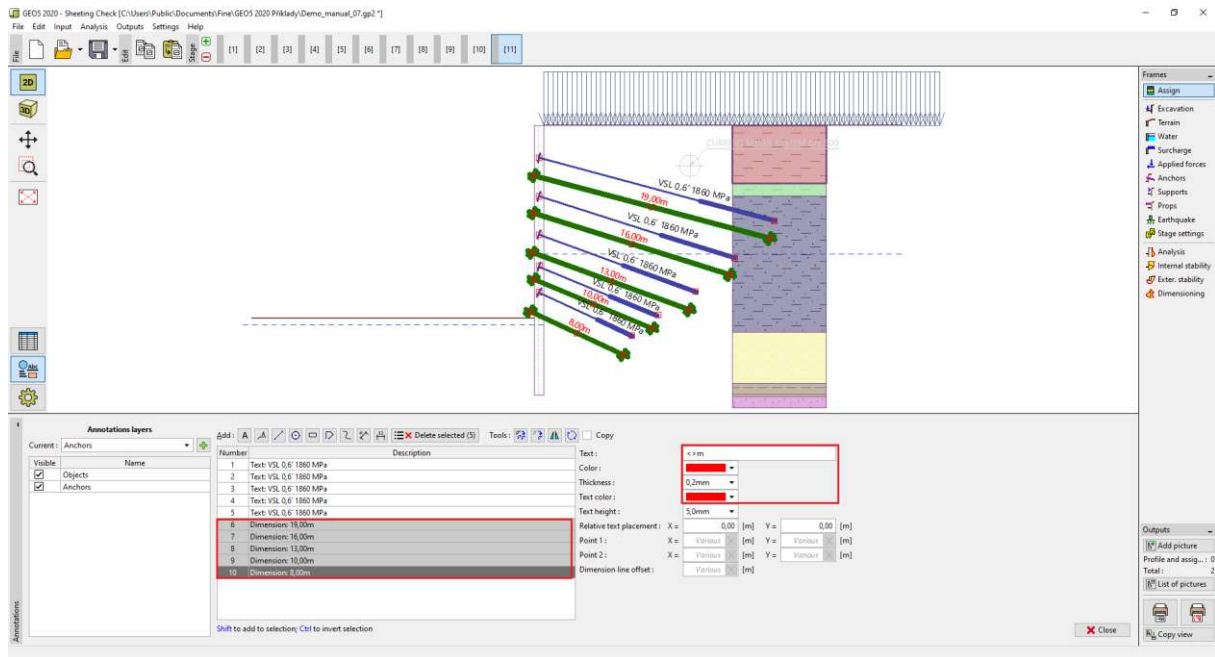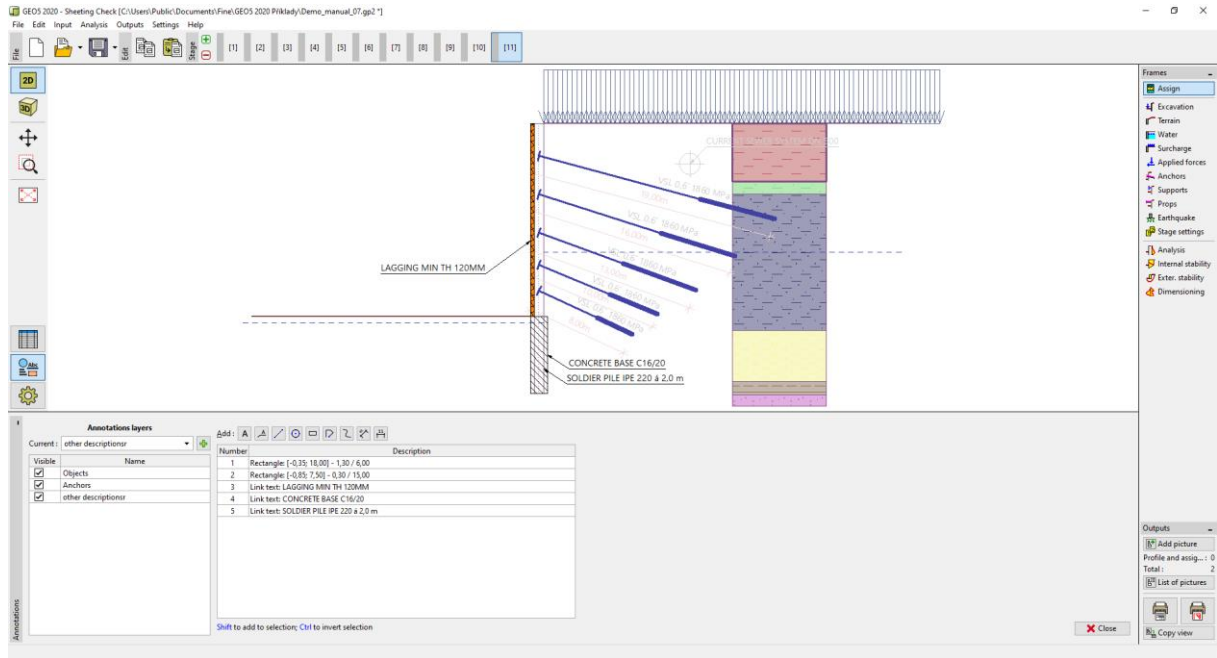
*Editing of all dimensions – color change and unit adding*
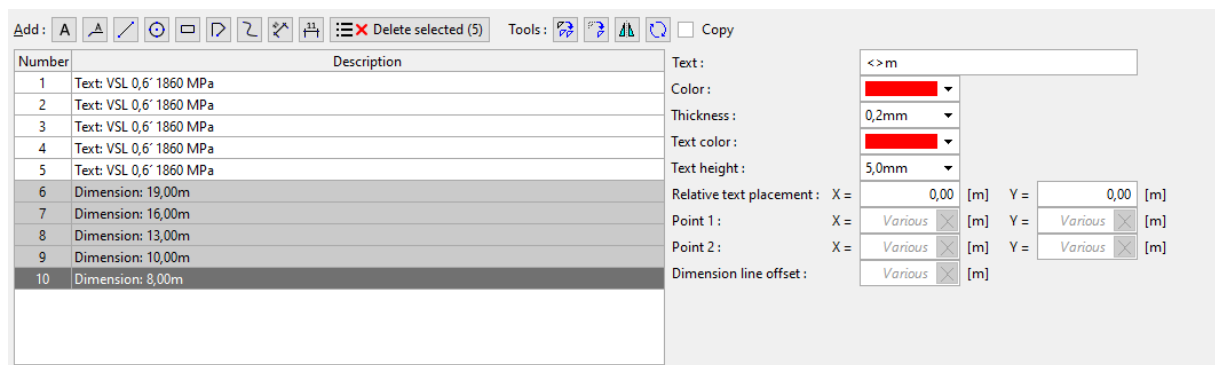
Note: the symbols <> in a text input indicate that the actual distance is displayed for the dimension. Any text can be added after it. If we delete the <> symbols, the text would not react on display size changes.

We will create another layer called "other descriptions", where we will add the rest of the information that we want to display

Description of the structure
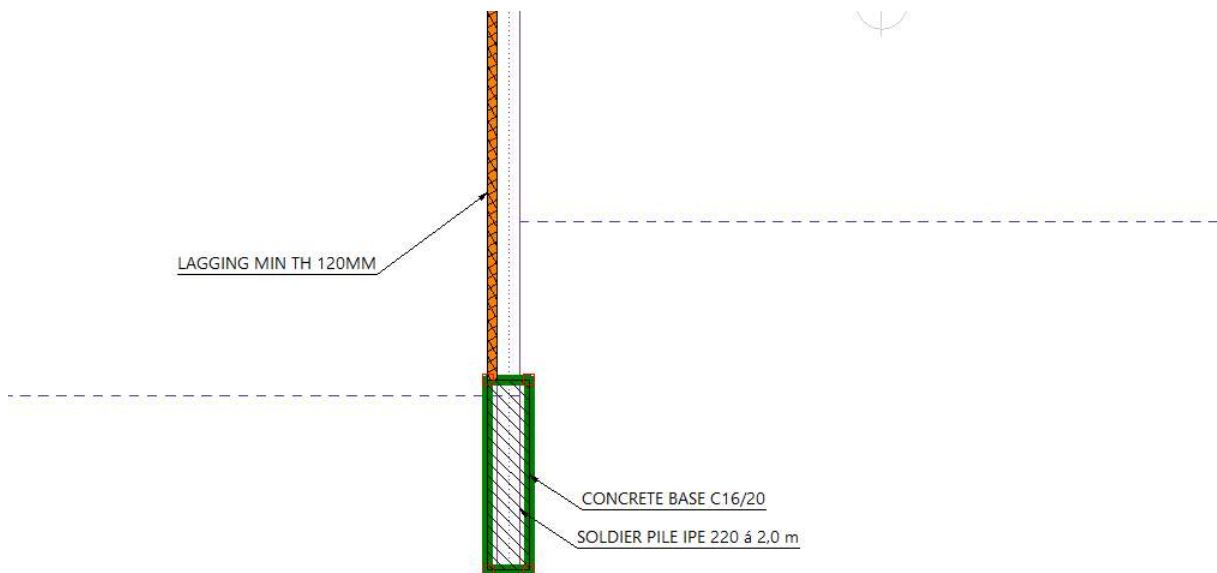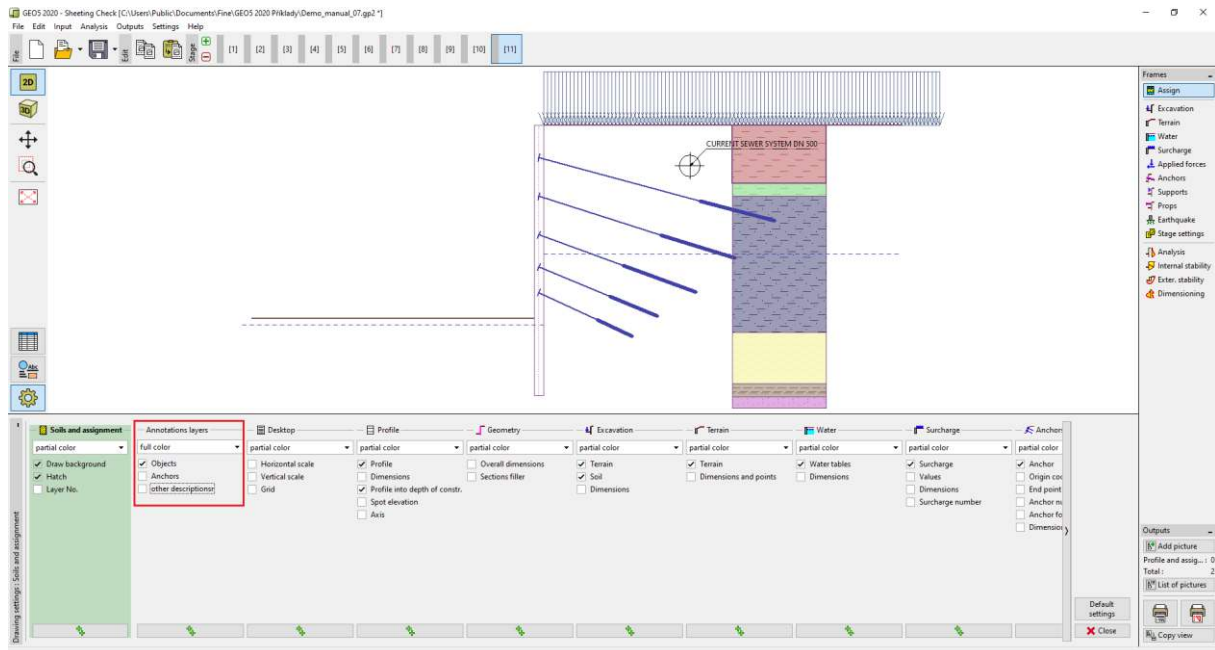
The overall size of the annotations, texts, and tags can be edited in "Drawing Settings" under "Global". In our case, we will reduce all descriptions to 80% of the original size (using a multiplier of 0.8).
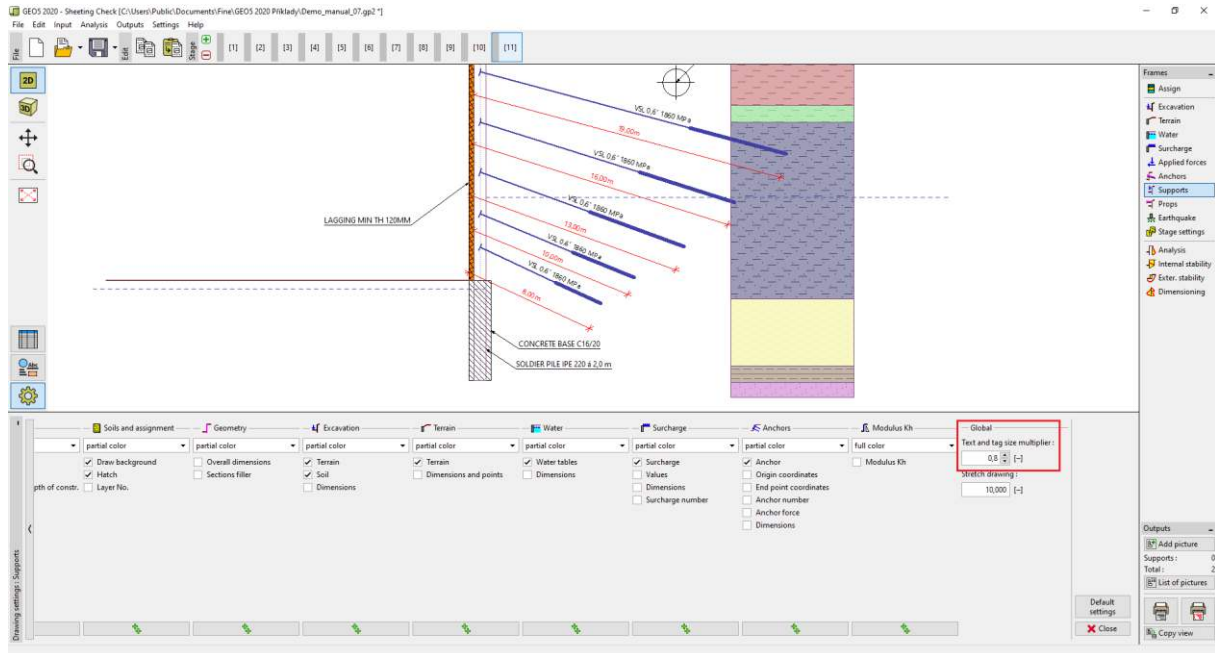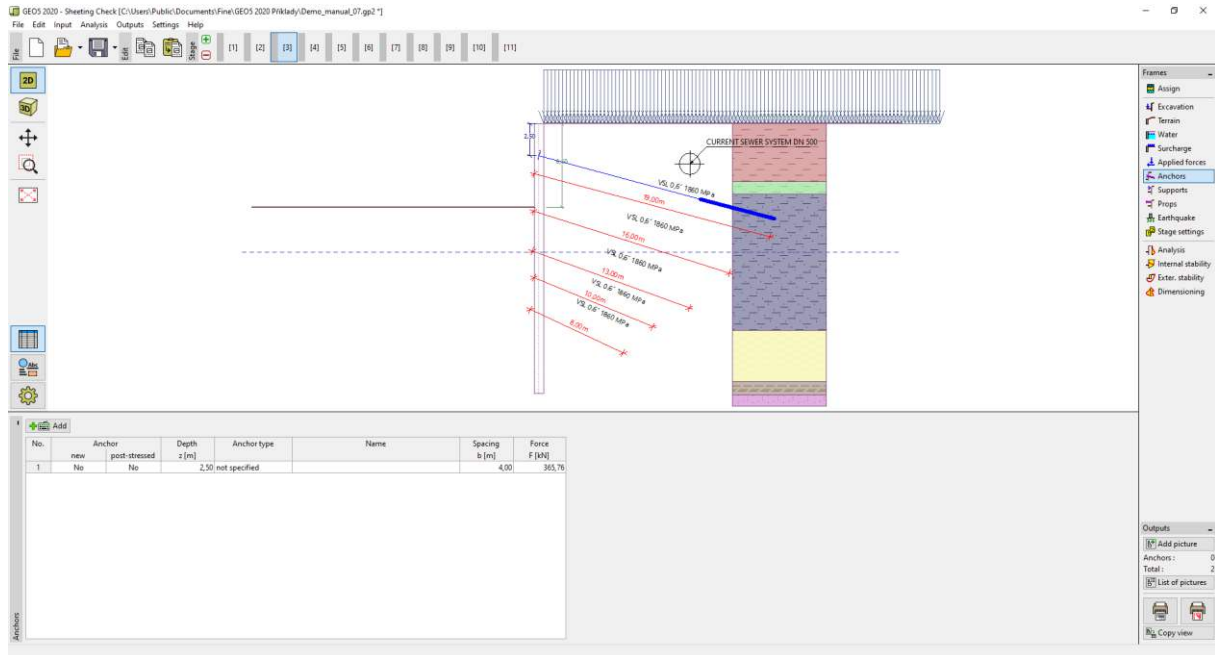

Reduction of text and tag size

Now in the "Drawing Settings" mode, we will turn off the visibility of the "Anchors" and "Other descriptions" layers.


Switching the visibility on and off in "Drawing Setting" mode

These layers are intended only for outputs – in individual stages of the construction, their rendering would be pointless.

Wrong description of the non-existent anchors in the third stage of construction

We should only activate the layers when the image is ready to be printed in the "Add picture" dialog window
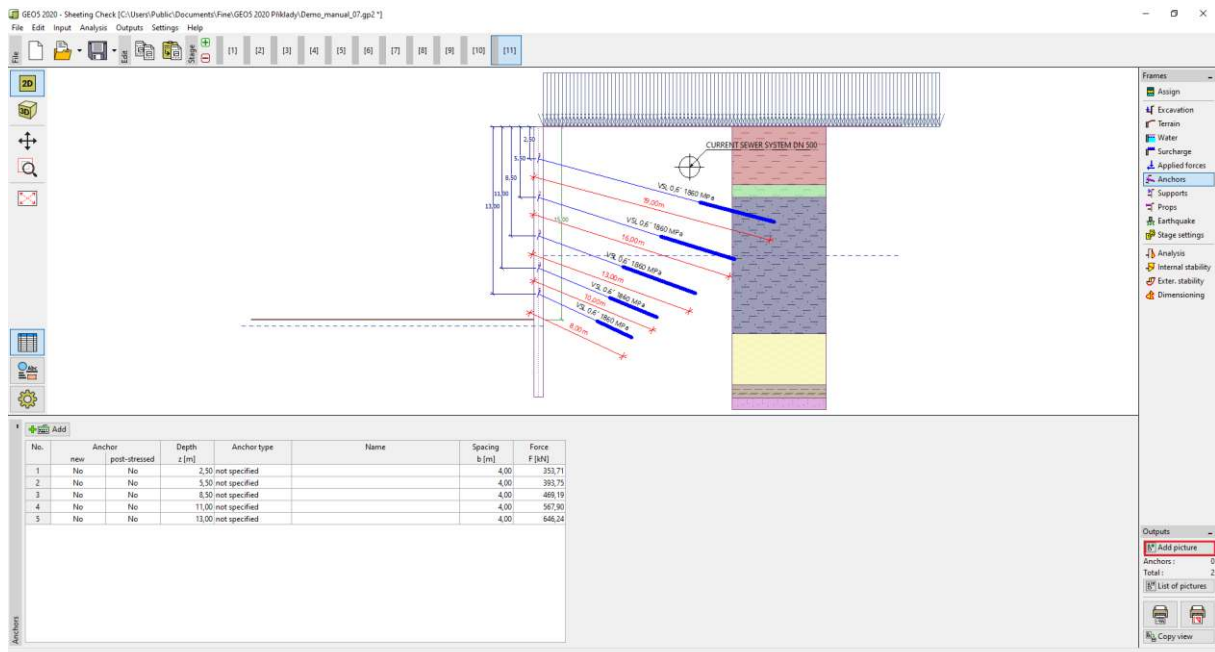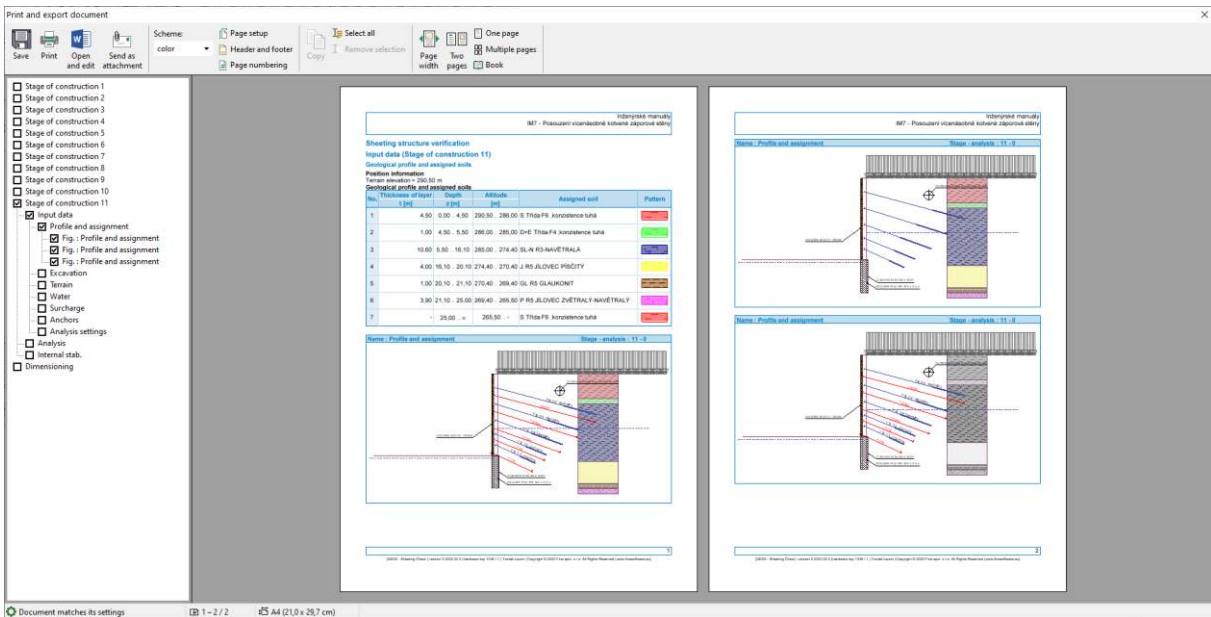

Add an image to print or output report

Here we can specify not only which drawing layers and labels are displayed, but also the building stages for a given print. The image can be printed directly from the window or saved for printing in the output document
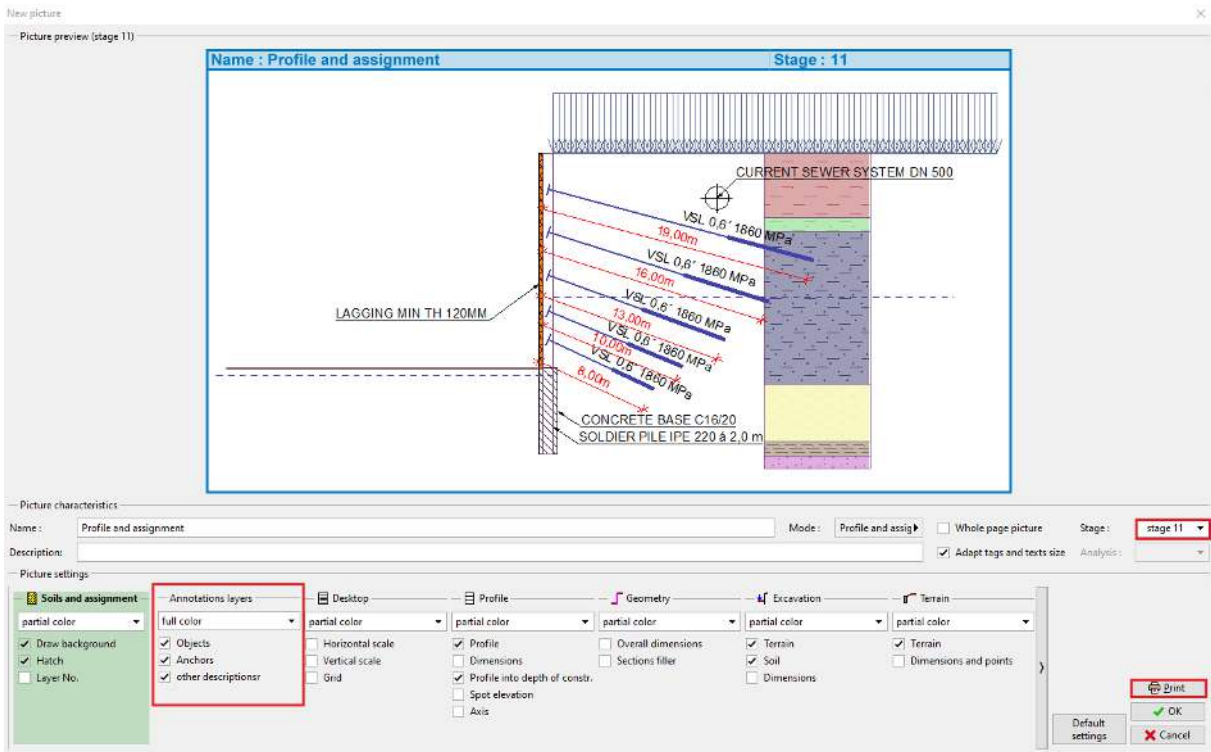
Creation of an image for printing

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