

Fundamentals of Road Construction

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Project 1

The subject of the project lecture:
General information about project



Poznan University of Technology
Institute of Civil Engineering
Division of Road Engineering

Name and surname:
Index number:
Sustainable Building Engineering first cycle
semester 6 , academic year 2025/26

Thematic card of the course
Fundamentals of Road Construction
Design of section of the public road

The data for the design:

The map with contour line in the scale of 1: 5000 or digital elevation model
Road class: "L" (local)
Design speed: 50 km/h
Number of roadway: 1
Number of traffic lanes: 2
Traffic category: KR2
The load-bearing capacity group of the subgrade: G1

The project should include:

PDF file containing:

- technical description,
- example road surface construction.
- drawing of the horizontal alignment,
- drawing of the vertical alignment,
- drawing of the cross sections.

Send the finished project to e-mail: marcin.bilski@put.poznan.pl

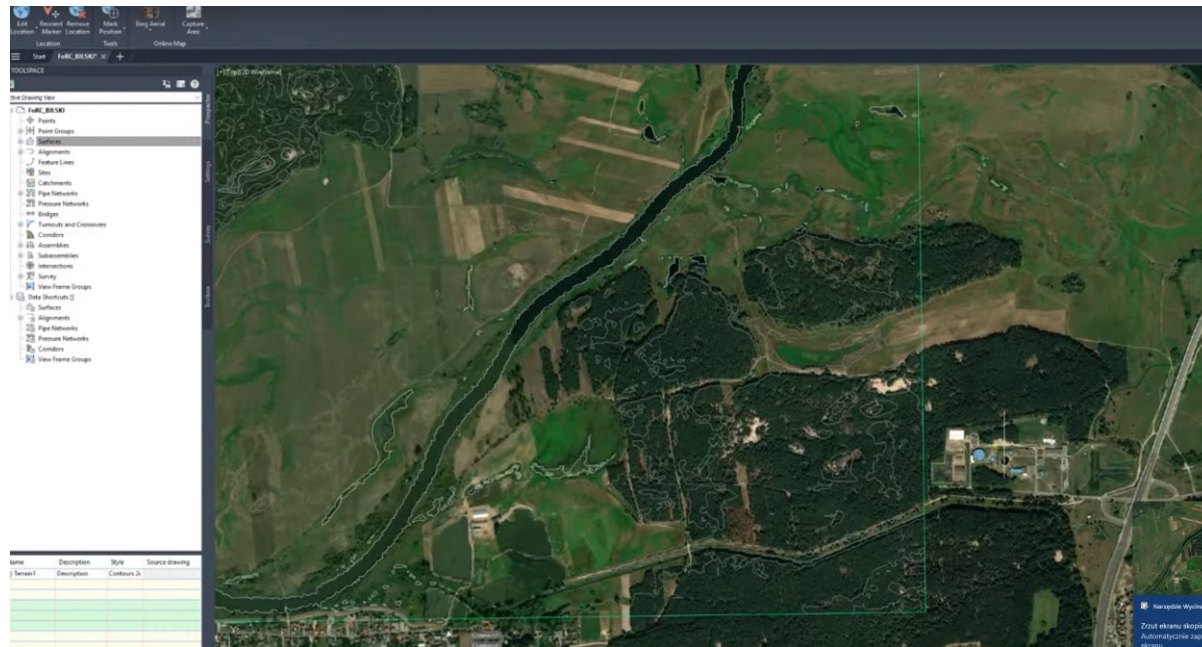
Issued date: 2026/03/10 The project completion date: 2026/06/16

The project was issued by: Marcin Bilski, BEng, PhD

What to do:

- 1. Choose a solution for the project: DEM or MAP**
- 2. Select DEM or MAP variant**
- 3. Create surfaces with digital elevation model in AutoCAD Civil 3D**
- 4. Select the starting and ending points of projected road (the maximum distance between points should be no more than 1750 m)**

How to do:



<https://www.youtube.com/watch?v=nq1T3wF3oiQ&list=PLf4dUPhGnWHyJW3EKW1pkerUzyPpyRtsa>

THANK YOU FOR YOUR ATTENTION