



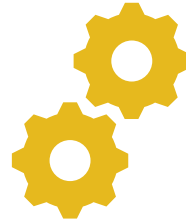
# Virtual Designing and Modeling of a Mountain Bike Trail

By Jiaqing Li

# The Objective



Possibility of  
RoadEng



Machine Simulation



Integrate Design  
criteria

# Data Collection



Collect data of a  
current existing trail

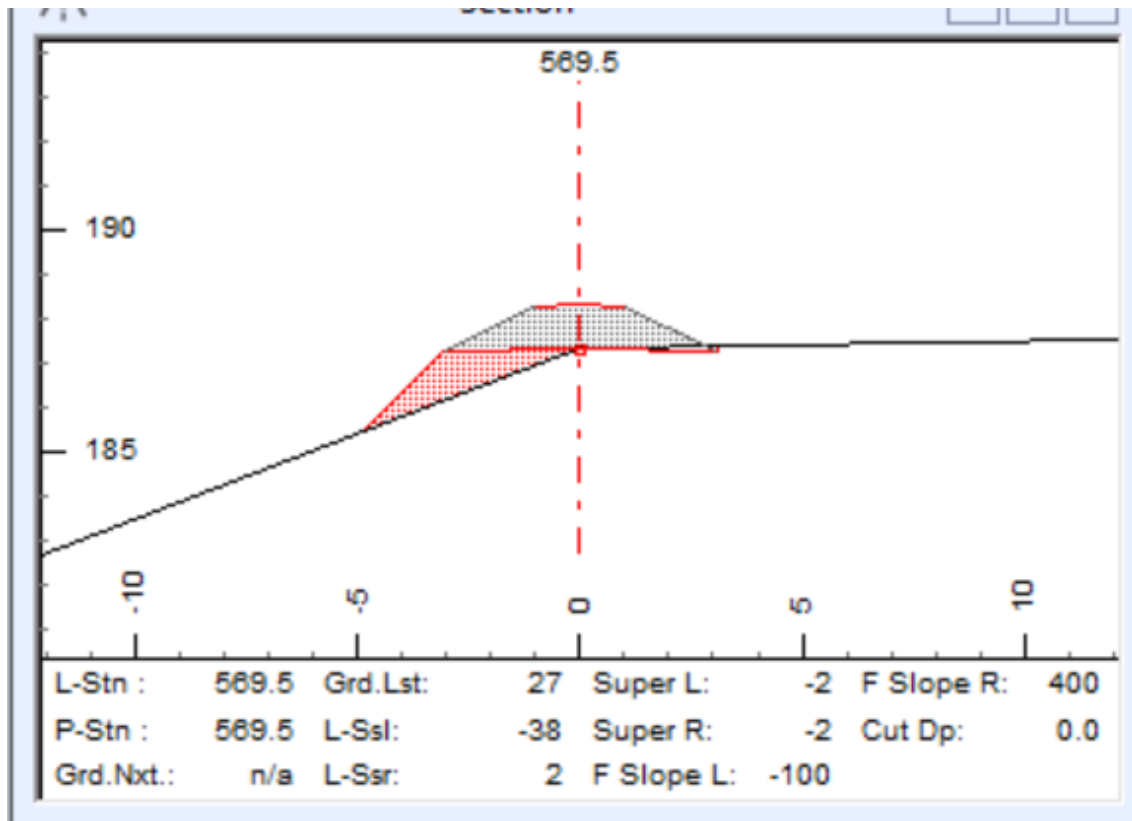


Cross-Sectional View

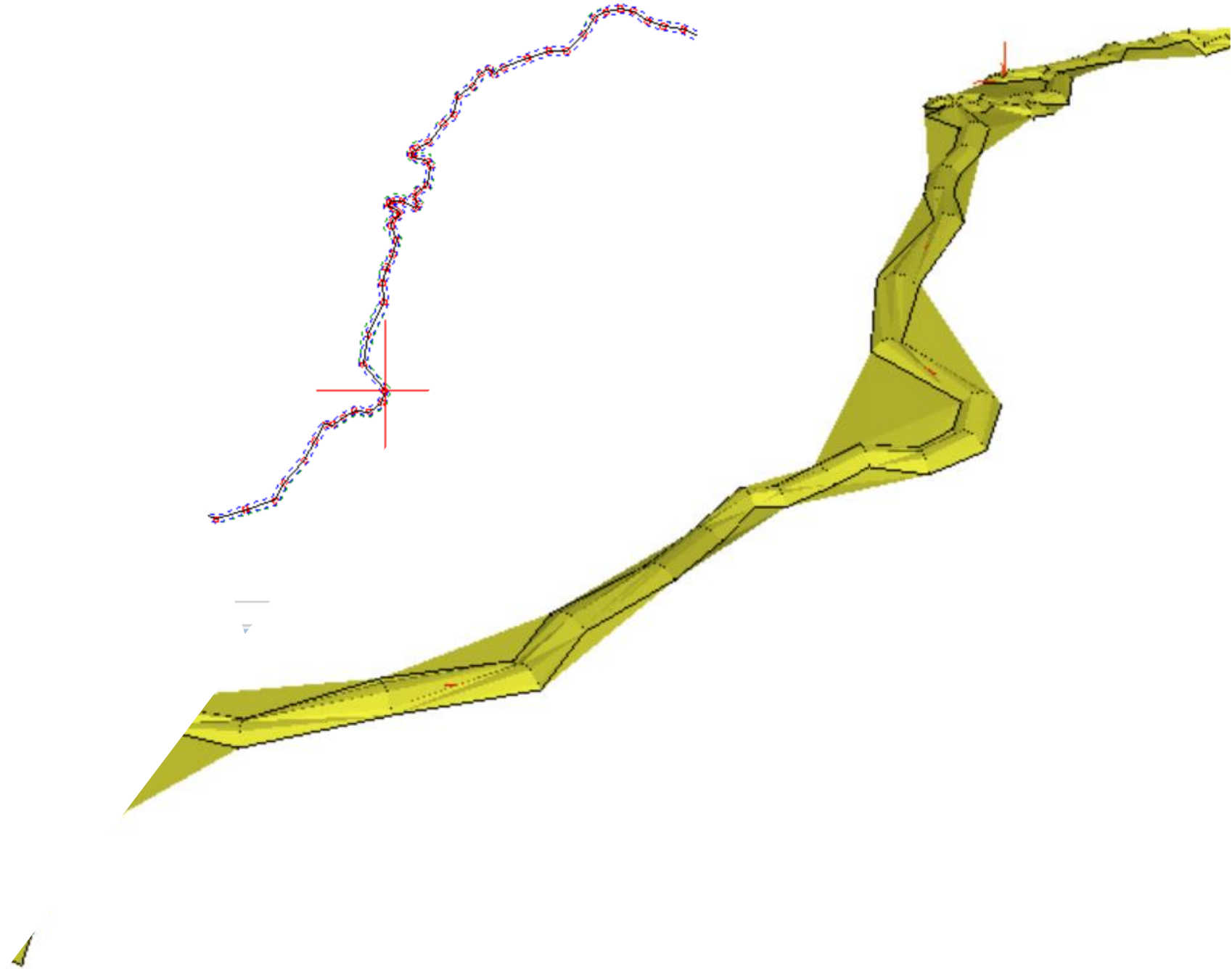


Full View

# Cross-Sectional View



## Model-Full View



# Modeling



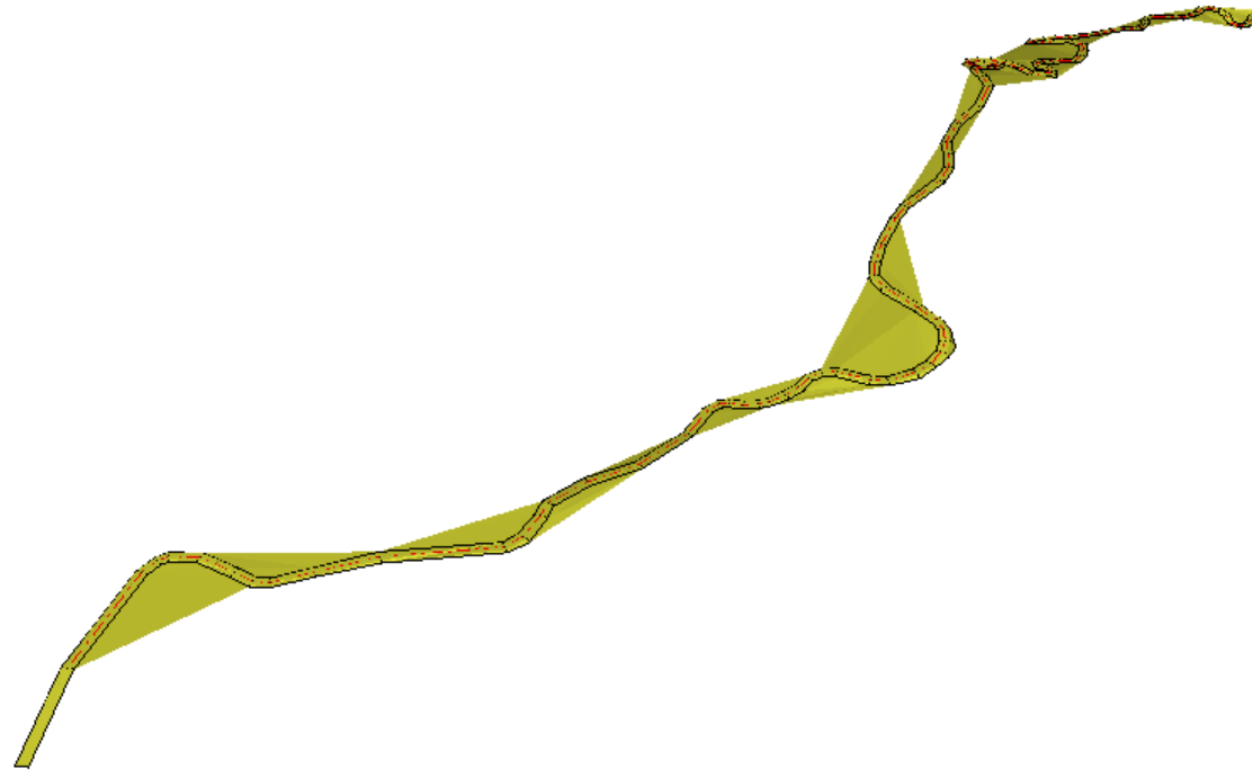
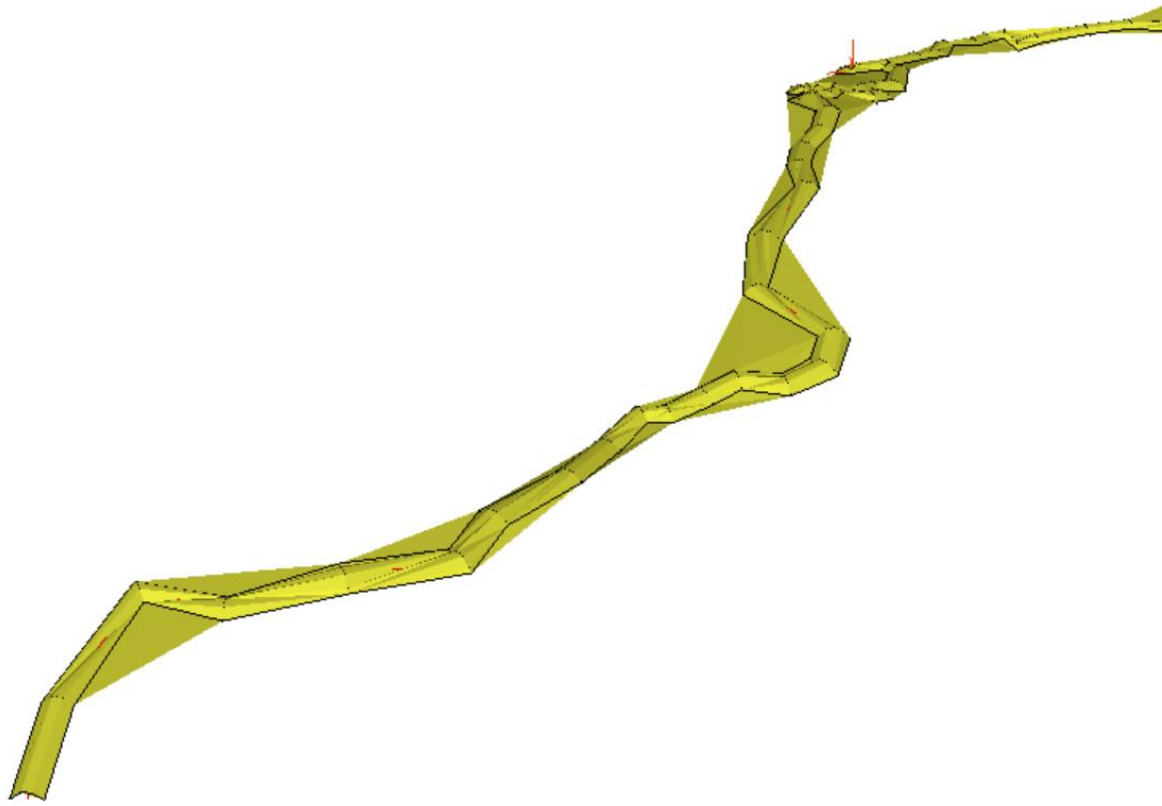
**SURVEY DATA**



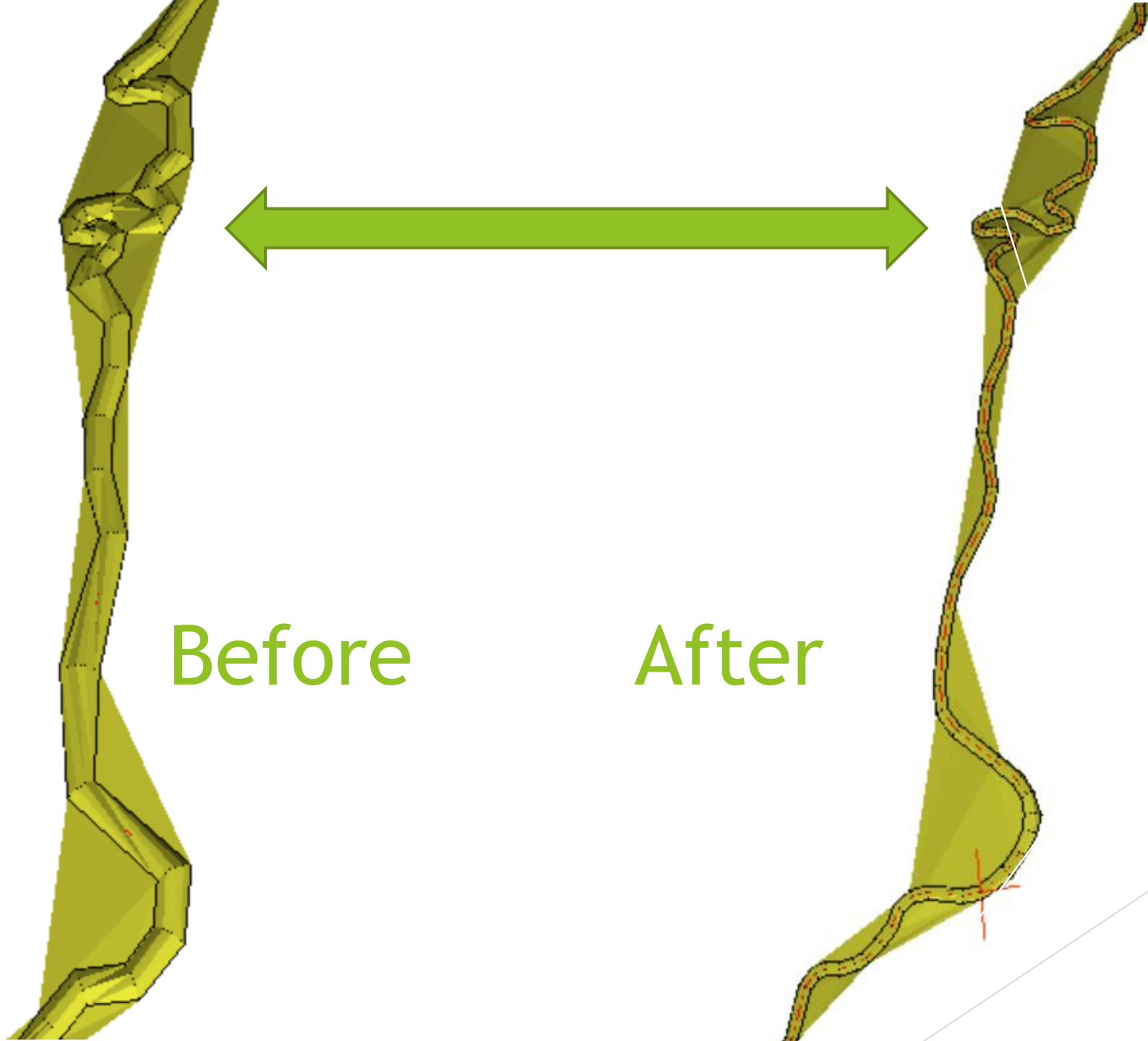
**REMODEL**



**REDESIGN**



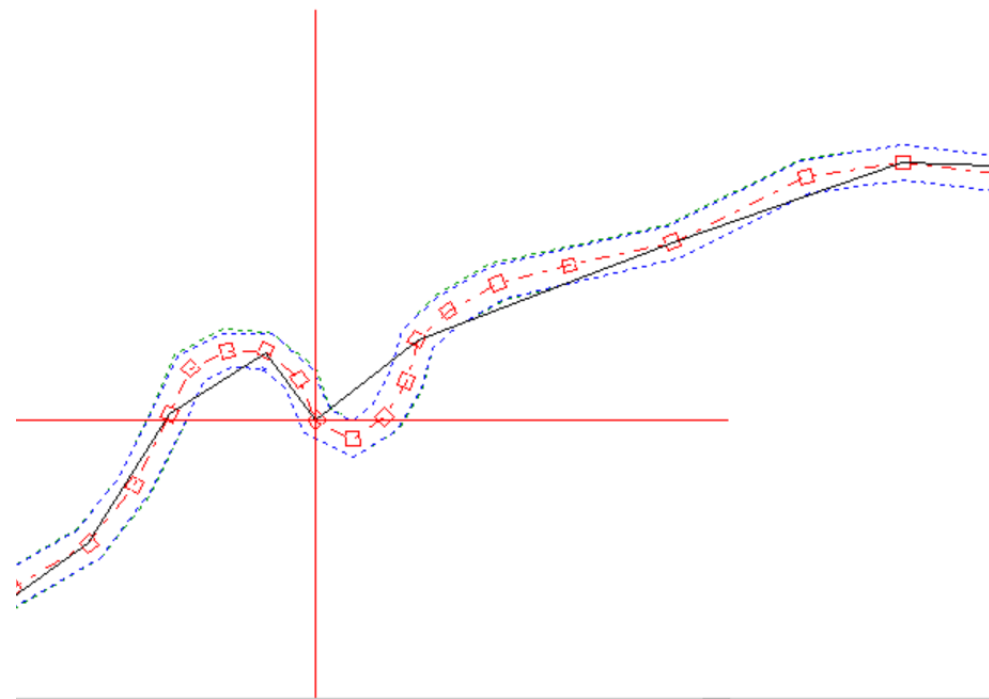
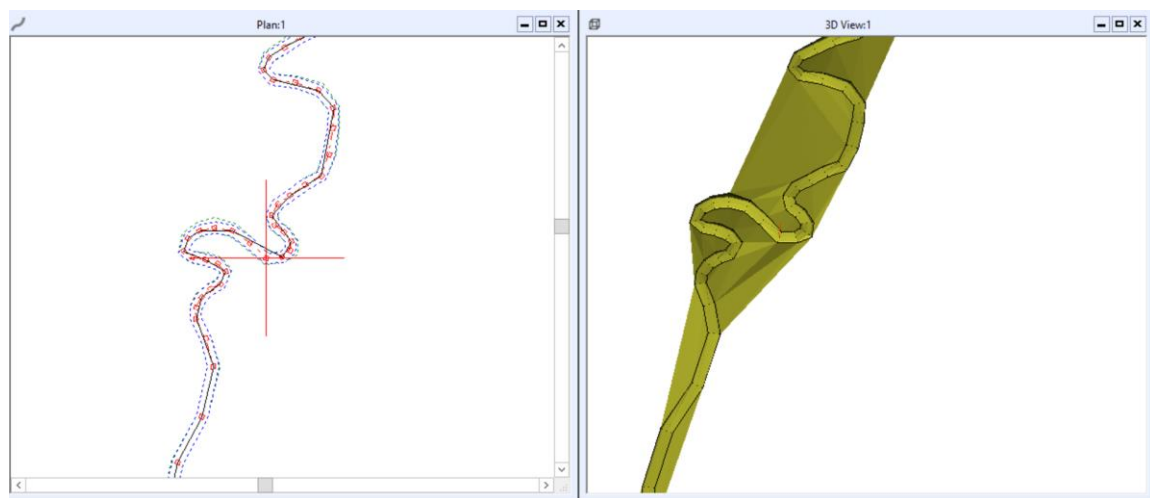
Remodeling-ReDesigning  
Before and After



Before

After

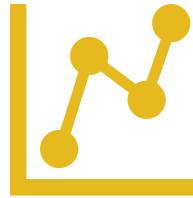




# Future Work: 3D Simulations World



Terrain Builder



Topographical  
data



Machine  
Simulator

