

## Modelling Roads and Kerbs

**Using Revit and Dynamo** 







## The Challenge...

Revit is not great at site modelling But it is capable...

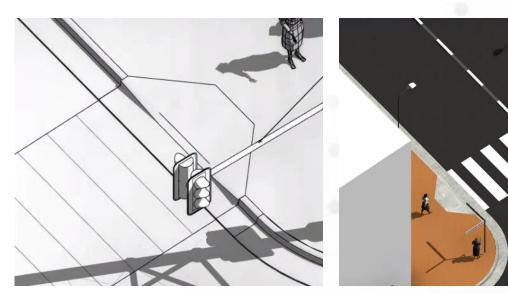
Typically involves complex methods and cross platform operation/massing

Roads/kerbs in particular



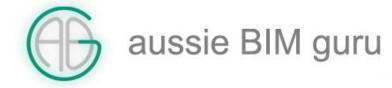
#### The Goal...

Match roads to topography, then model line markings, kerbs and kerb ramps in Revit



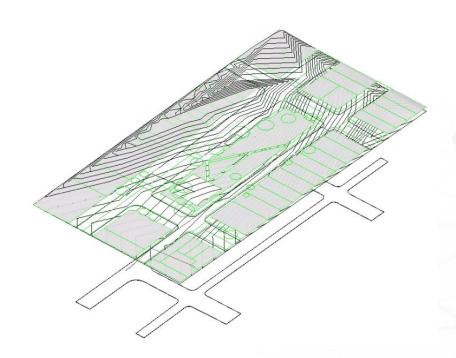


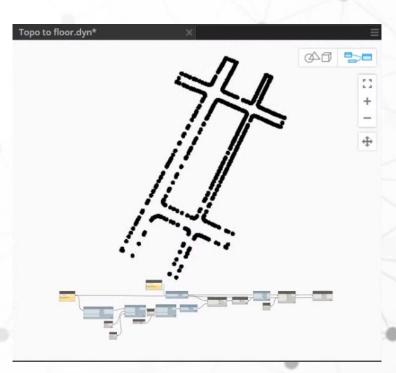
# Without further ado...

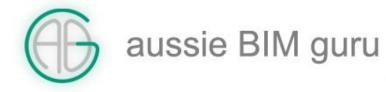


## Step One

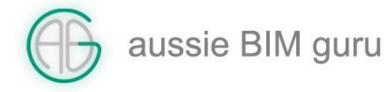
Creating roads from topography







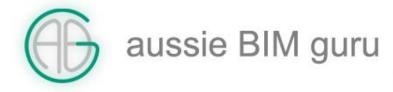
- 1. Create topography
- 2. Split the topography by road division
- 3. Model the road as floor(s)
- 4. Use Dynamo to drape the floor
- 5. Downset road and/or topography



## Step Two

**Modelling Kerbs** 





- 1. Simplify sub-points
- 2. Divide road into pieces
- 3. Make a profile family for the kerb

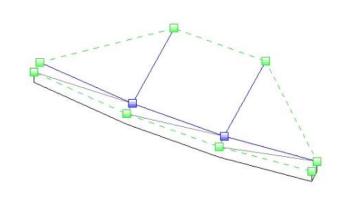
Optional: Inset the road edges

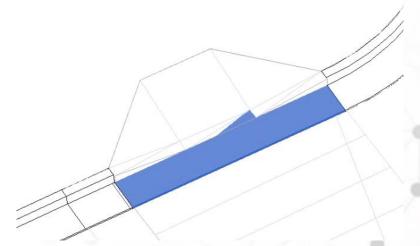
4. Model in place sweeps, picking road edges

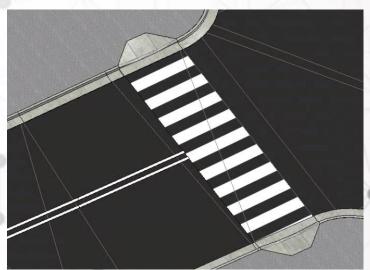


## Step Three

Kerb Ramps

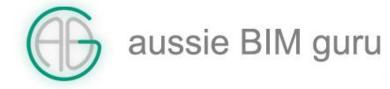






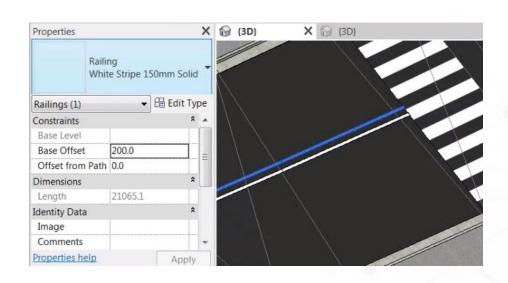


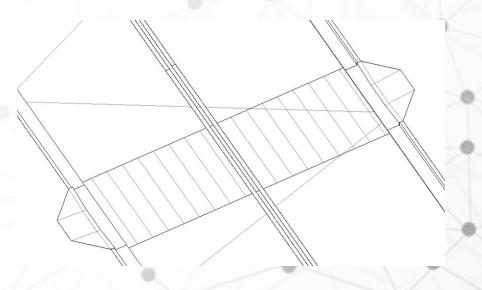
- 1. Model kerb ramp profile
- 2. Split topography, delete or lower the piece
- 3. Elevate sub-points of kerb ramp
- 4. Modify kerbs to replace ramp segment of kerb with an infill piece of picked path



## Step Four

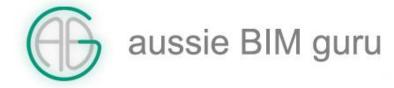
Linemarking/crossings







- 1. Split face and paint crossings
- 2. Railings for linemarking



## Some additional steps...

