

# Expression games brief – Dev Log

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# Planning and research



roof tile lengths to cover where roof joins



window trim and wall bricks together



Roof tiles, Tiling texture

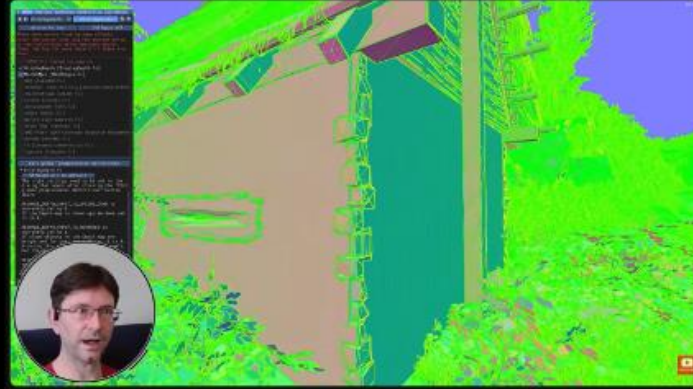
miro



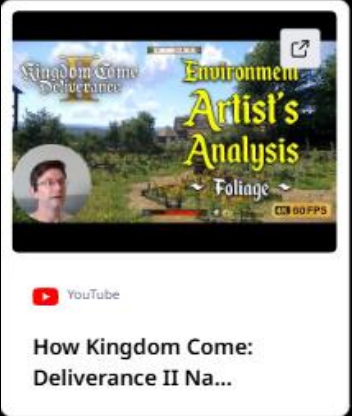
### Research - from others



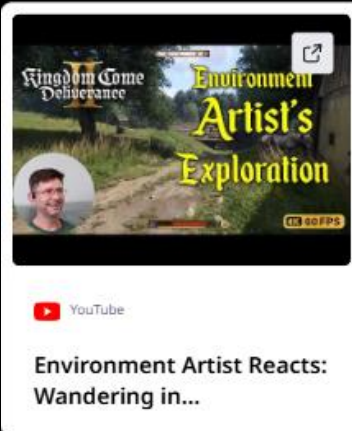
The Geometry of KCD2 - A Look Beneath The Surface



The Geometry of KCD2 - A Look Beneath The Surface



How Kingdom Come: Deliverance II Na...



Environment Artist Reacts: Wandering in...



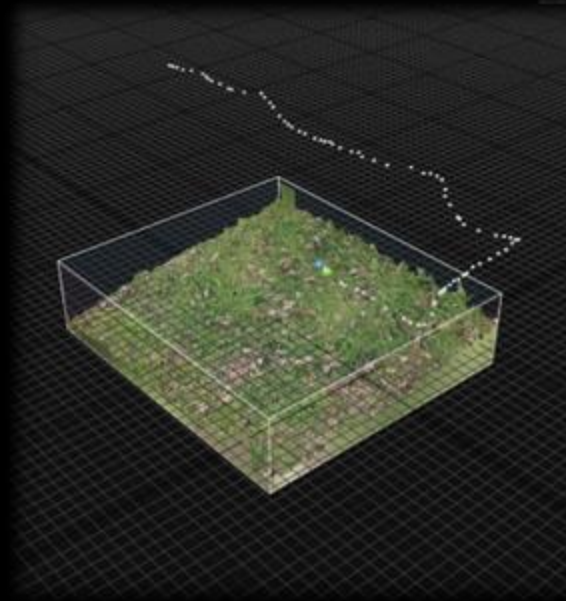
Environment Artist Reacts: Wandering in the storm in Kingdom Come: Deliverance II (4K)

### Research - in game personal exploration (foliage focused)

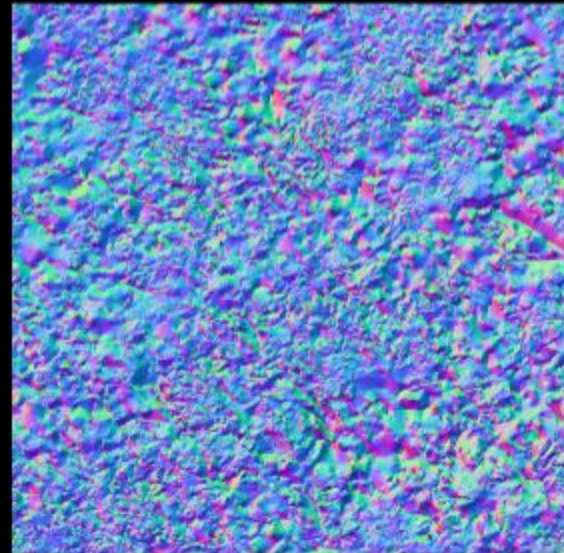


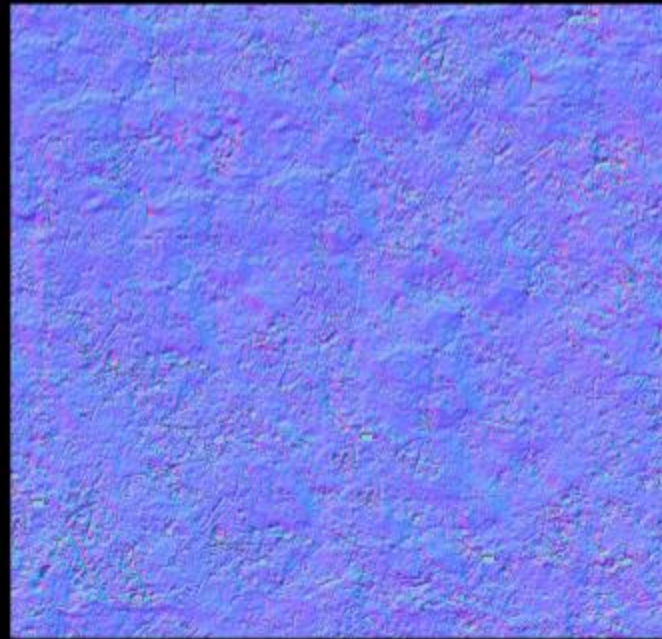
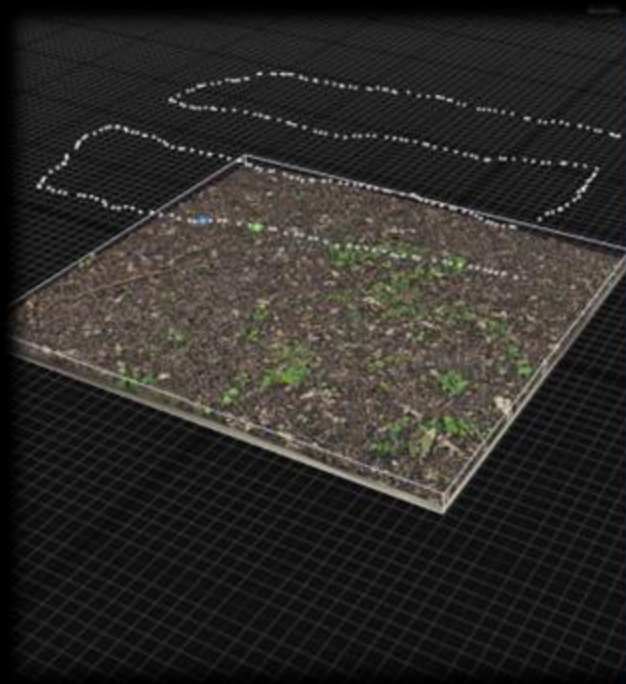
# Photogrammetry

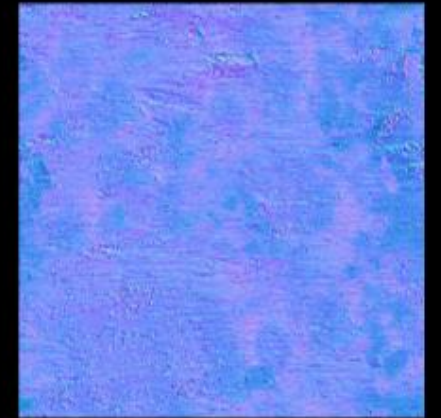
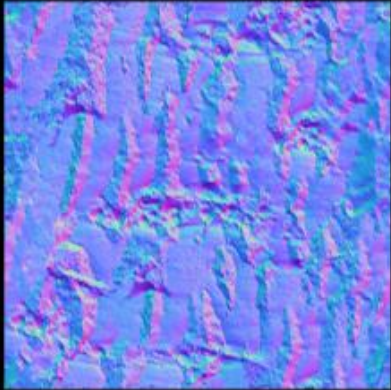
Photos were taken in the forest behind my house. I wanted a grass texture that will cover most of the forest floor, but also a dirt texture to landscape paint across different areas to help breakup tiling. The Dirt texture will also form the path that leads to the church



\*Textures are exported in Targa and packed for unreal.  
Unpacked PNG's were exported to show each channel separately in this log.

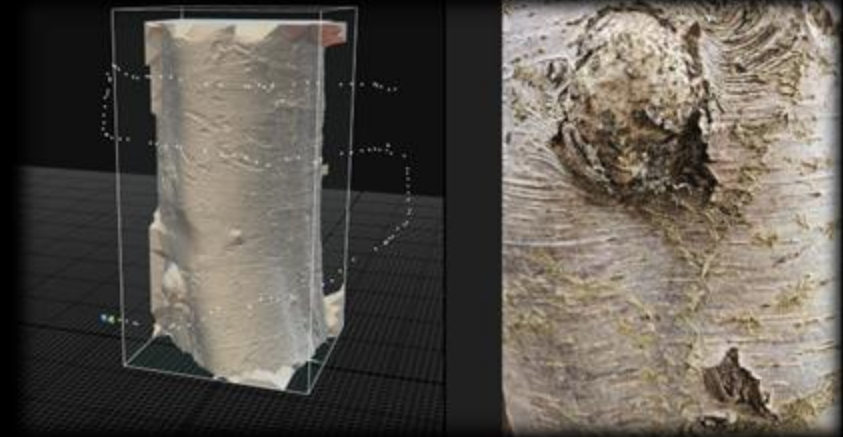


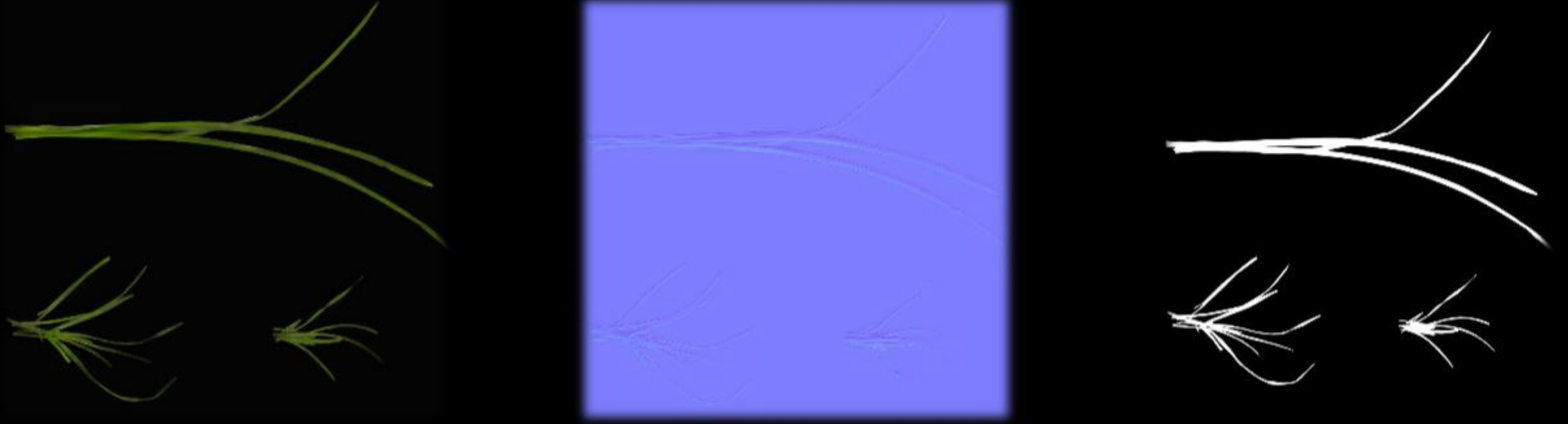




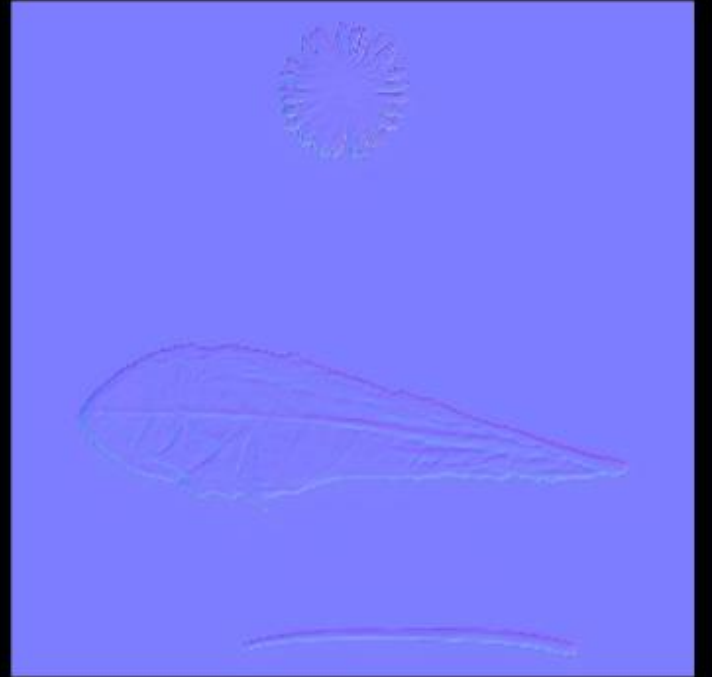
Three trees with two bark textures overall, one dark and one lighter birch style bark.

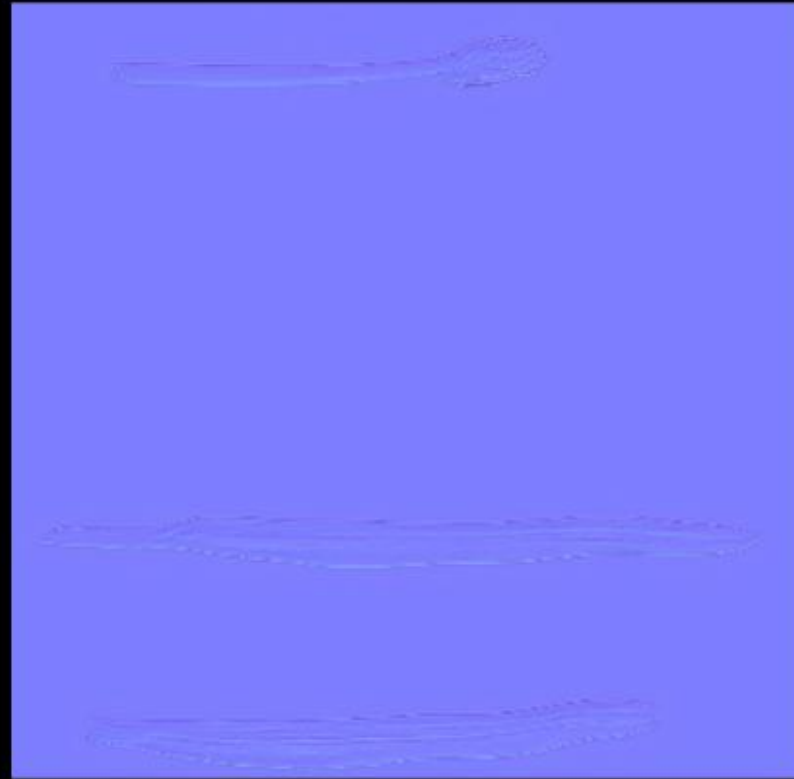
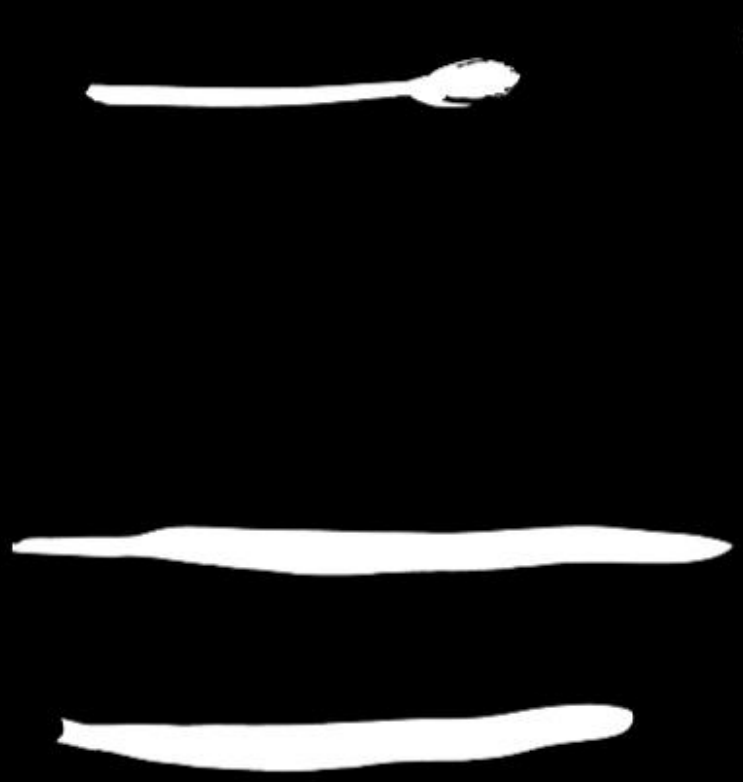
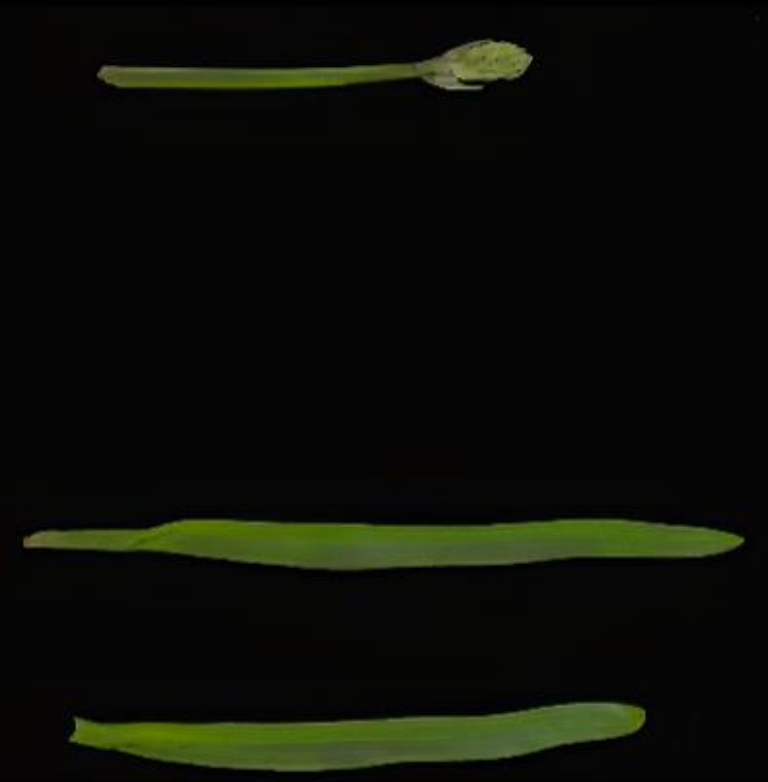
Both taken from photogrammetry scans and processed in painter to eliminate texture seam and any obvious repeating features.





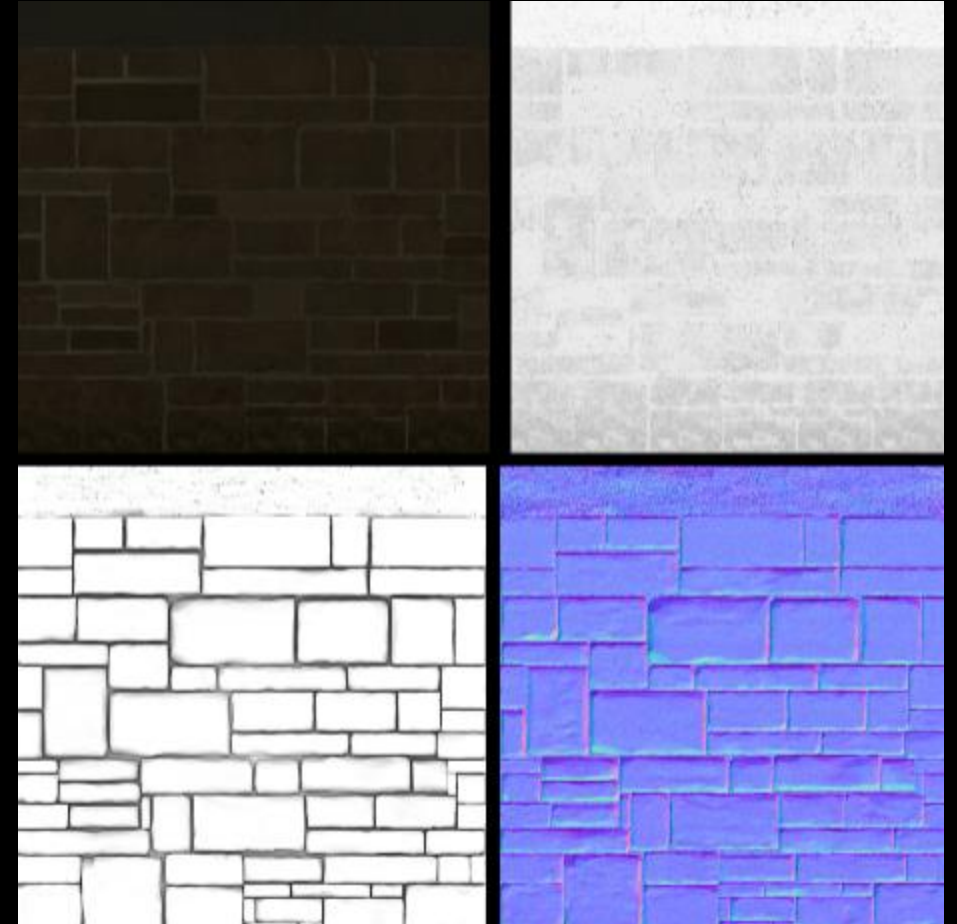
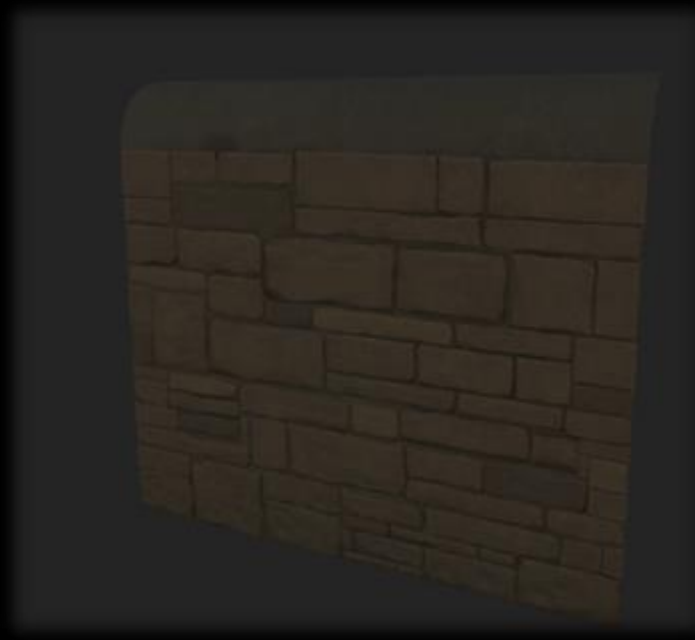
Three types of grass for variation in height and appearance





# Sculpting textures

Due to a lack of confidence with making realistic textures in designer, I decided to use a workflow I had previously used for FYP. This process involves sculpting out the texture and then baking/texturing in painter. A process which seemed to take longer, but yeilded better results than I would have personally cheived with designer. Used for both the Wall and church bricks, these example screenshots of the exterior wall show the process



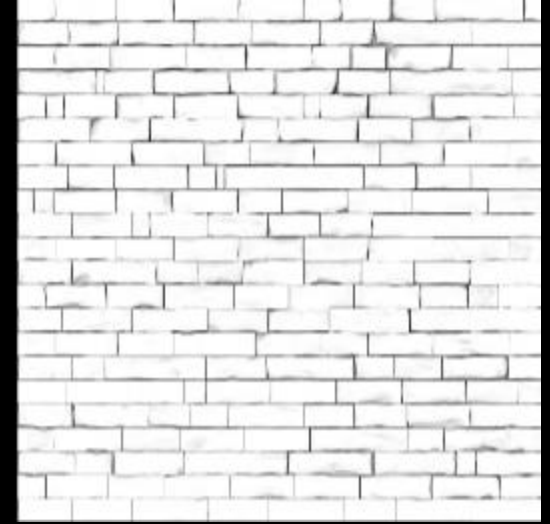
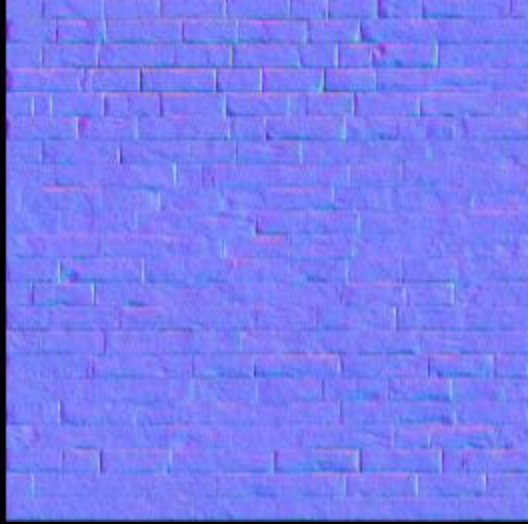
Wall trim sheet

Basic bricks are made in blender and cover either a 2x2m plane or the asset, they are exported into zbrush and sculpted to achieve larger details. (image shows the sculpted High poly)

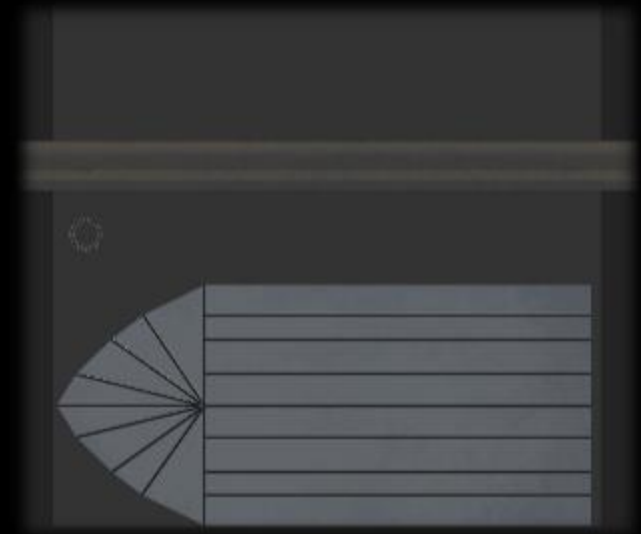
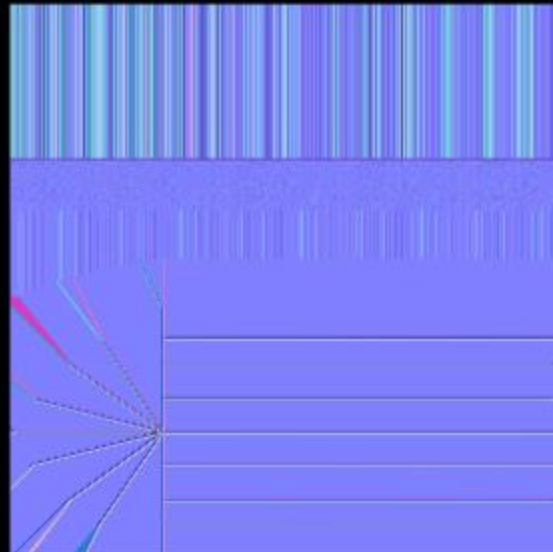
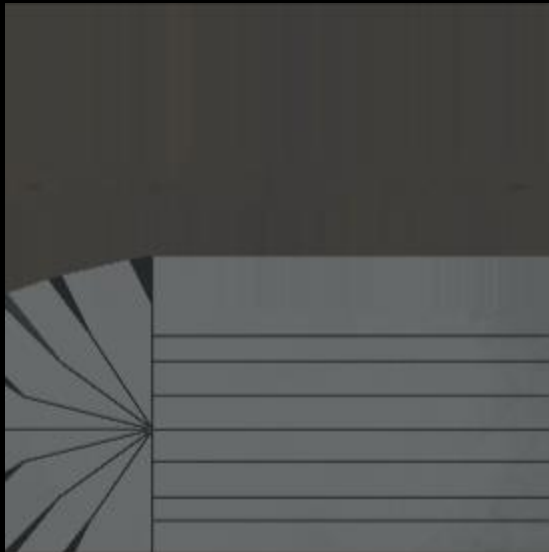
The wall is symmetrical, meaning one half could be deleted for the baking process and the latter half unwrapped in a manner that turned the baked texture into a trim sheet.

# Church bricks

colour – normal – rough – AO



# Window trim sheet



# Usage of LODS

While the trees automatically have LODS from speedtree, certain high detailed assets needed manual LOD creation, notably the assets for the church modular kit. Assets with LODS include: Trees (automatic from speedtree), Church wall with window, the church doorway arch and door itself and the individual stones that form columns on the corners of the church. Below is the door archway as an example of the LODs created, each of the mentioned assets having two LODs each.

LOD0



LOD1



LOD2

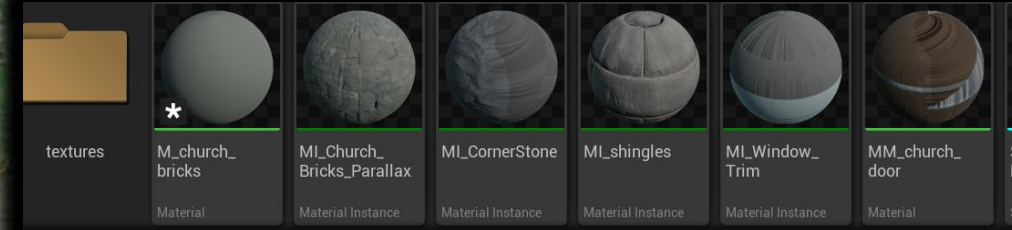




The parallax Occlusion setup was created in a material and was applied to the church brick texture via a material instance



Before parallax Occlusion



After parallax Occlusion

# Scene development timeline









