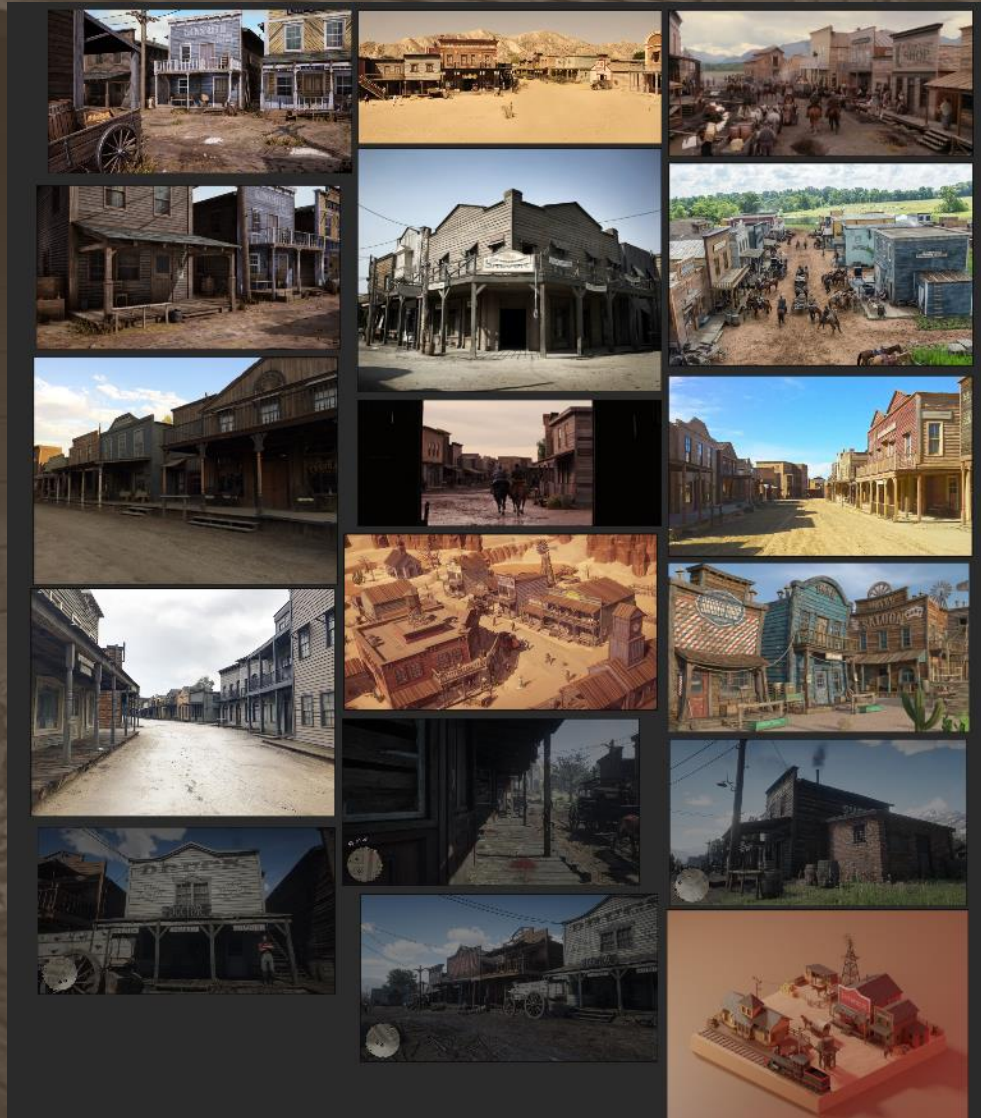




Final Viva Presentation Wild West 3D Environment

Rizwan Miah

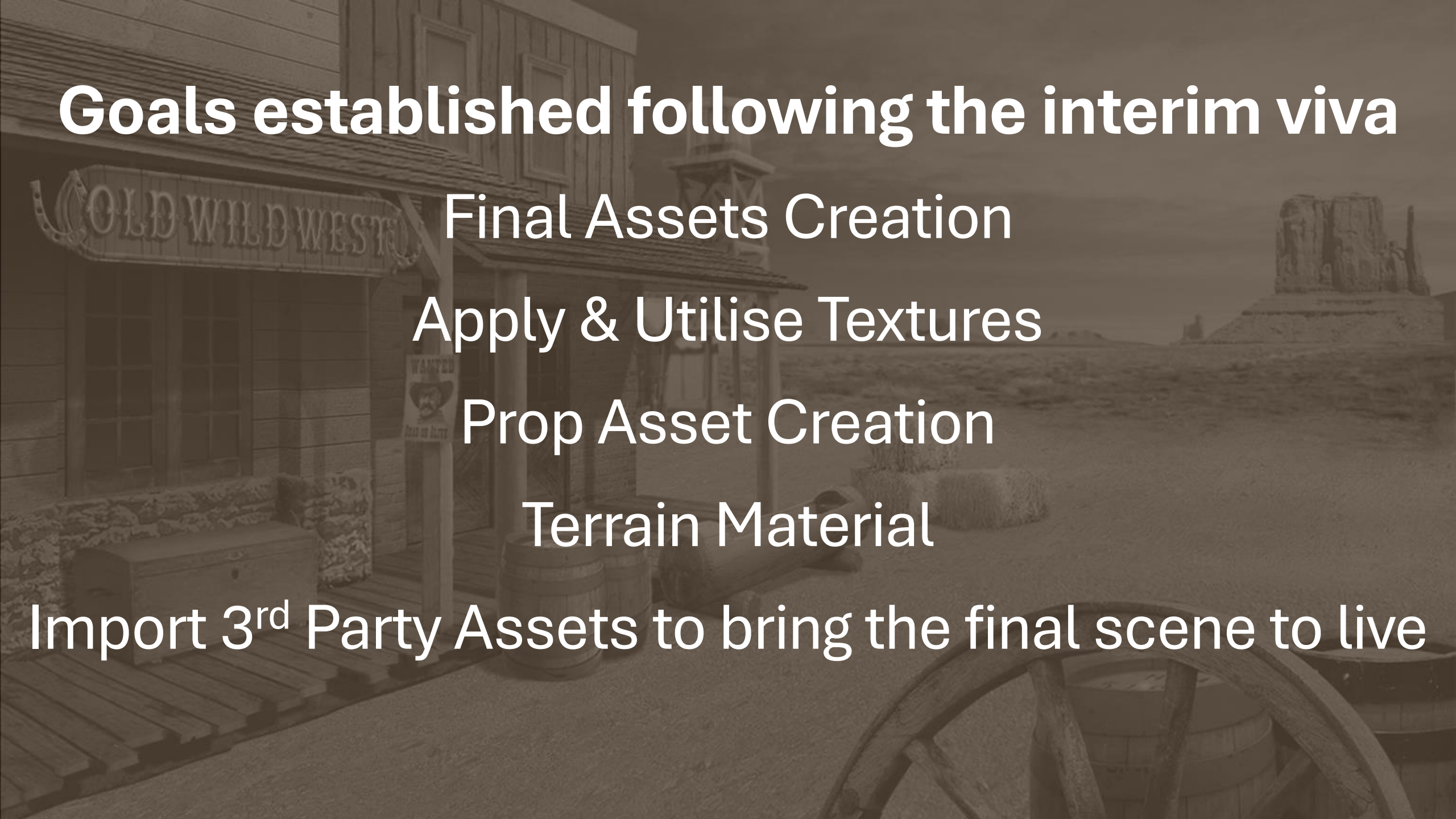
Recap of Interim Viva



Recap of Interim Viva



[4] Unreal Engine 5
[5] Substance Designer



Goals established following the interim viva

Final Assets Creation

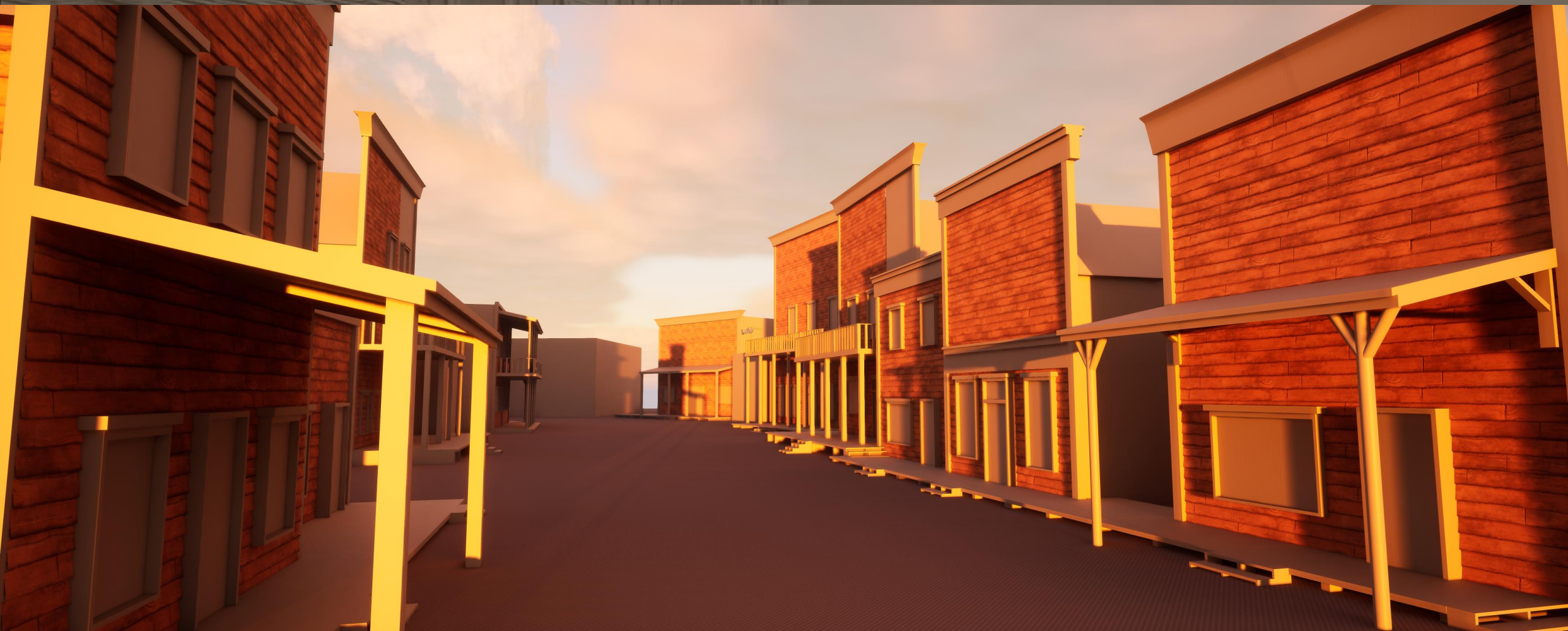
Apply & Utilise Textures

Prop Asset Creation

Terrain Material

Import 3rd Party Assets to bring the final scene to live

Environment showcase - Interim Viva



Environment Showcase





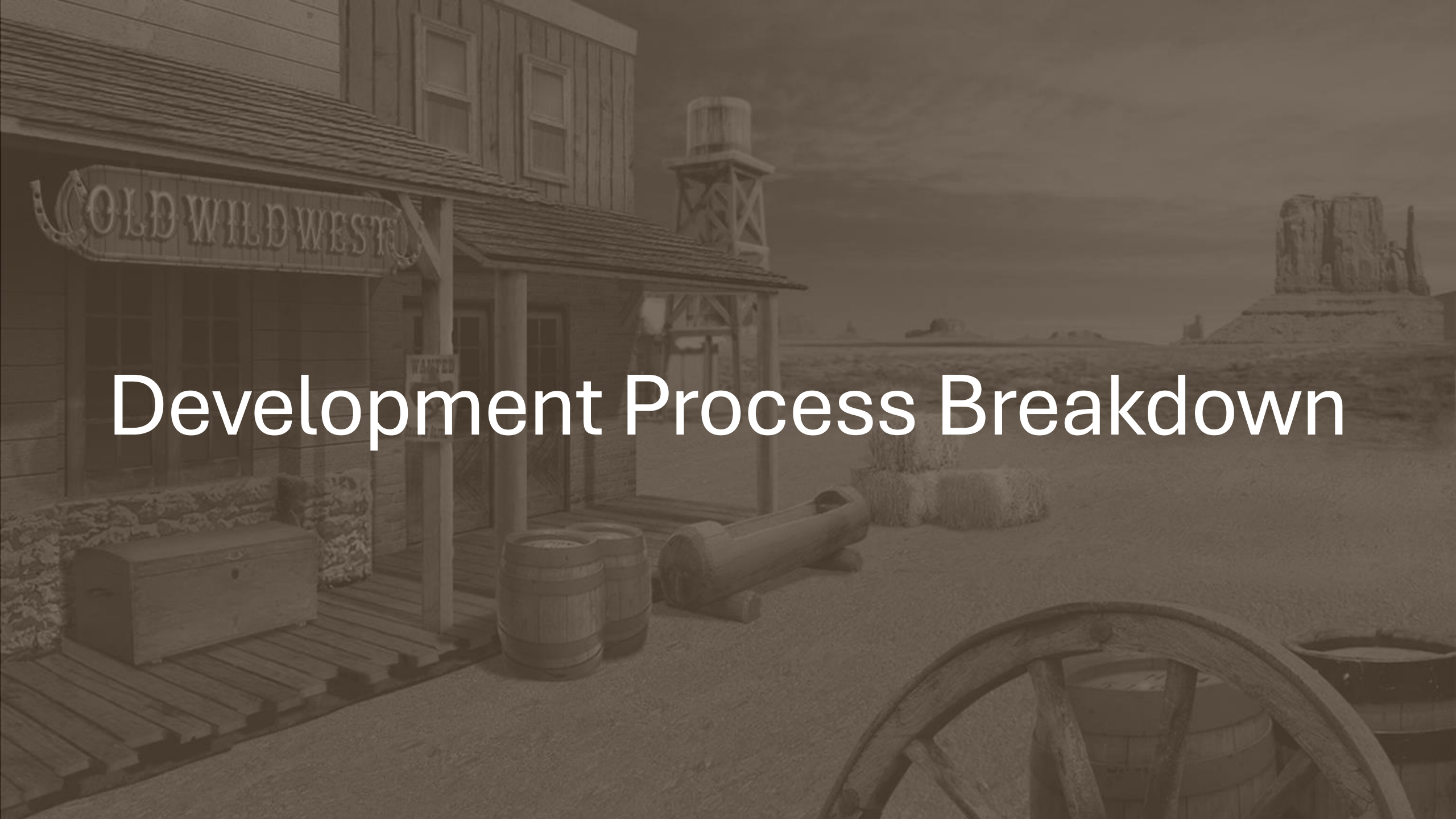




HARDWARE
PROVISIONS & SUPPLIES





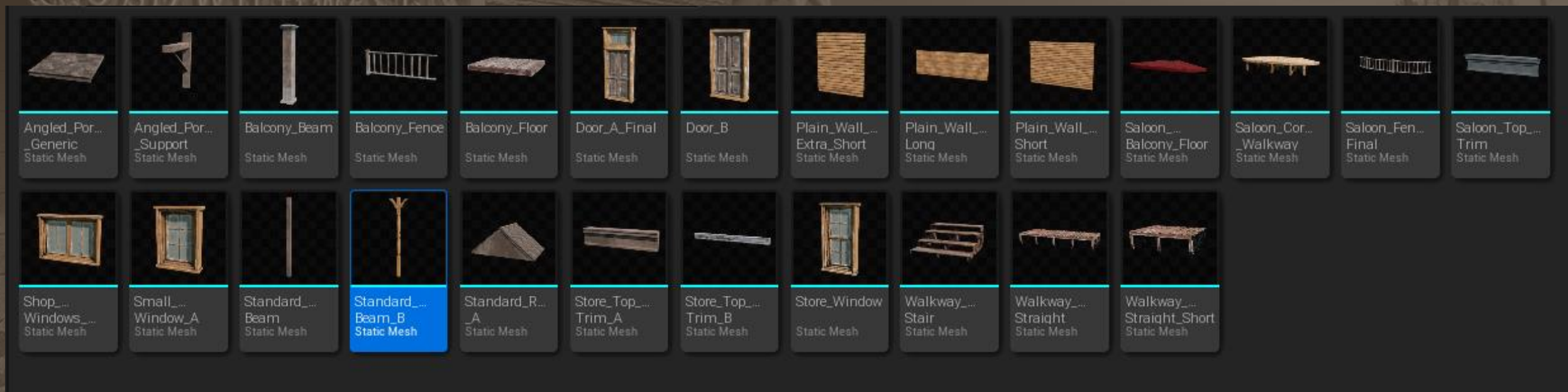


Development Process Breakdown

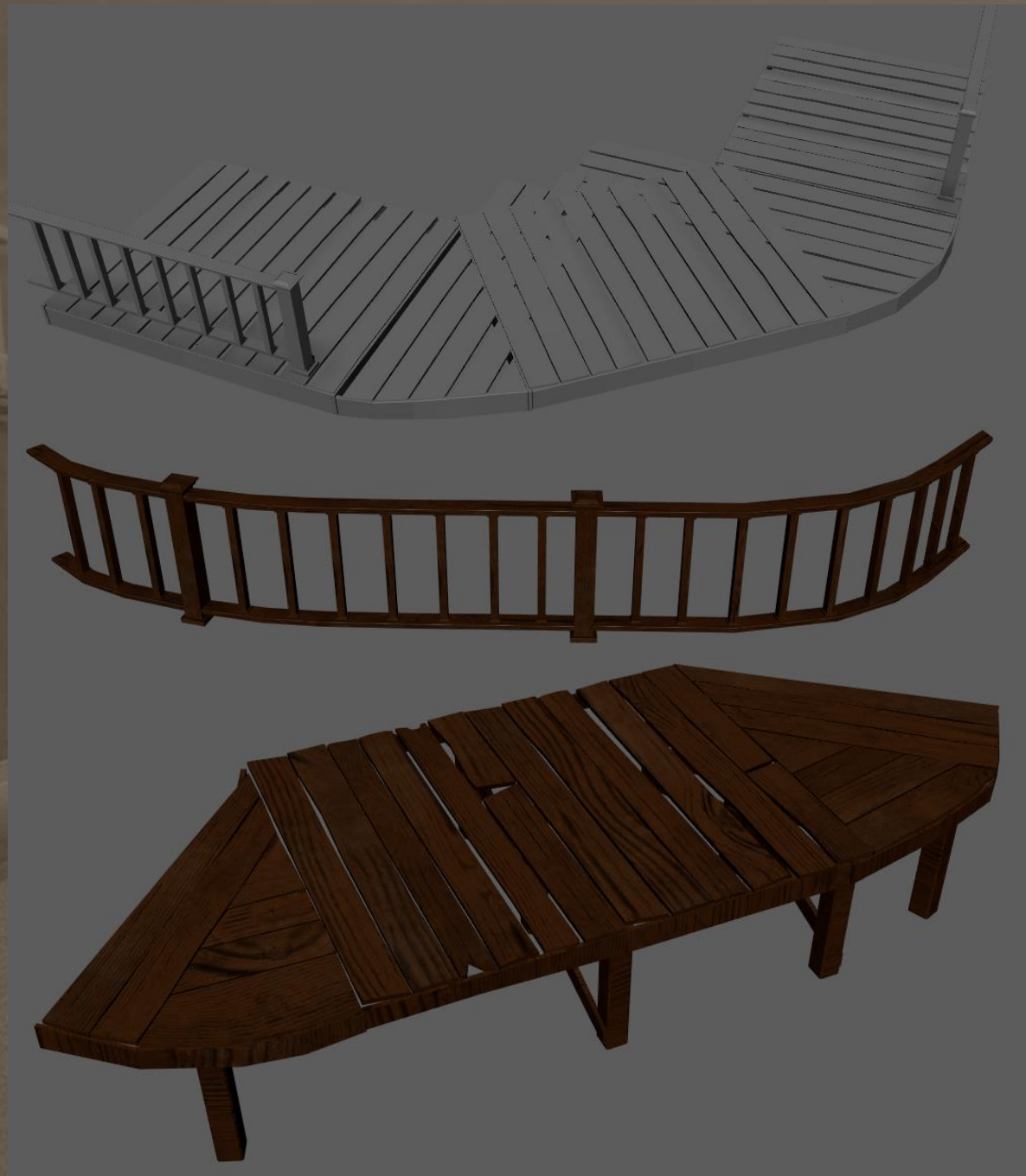
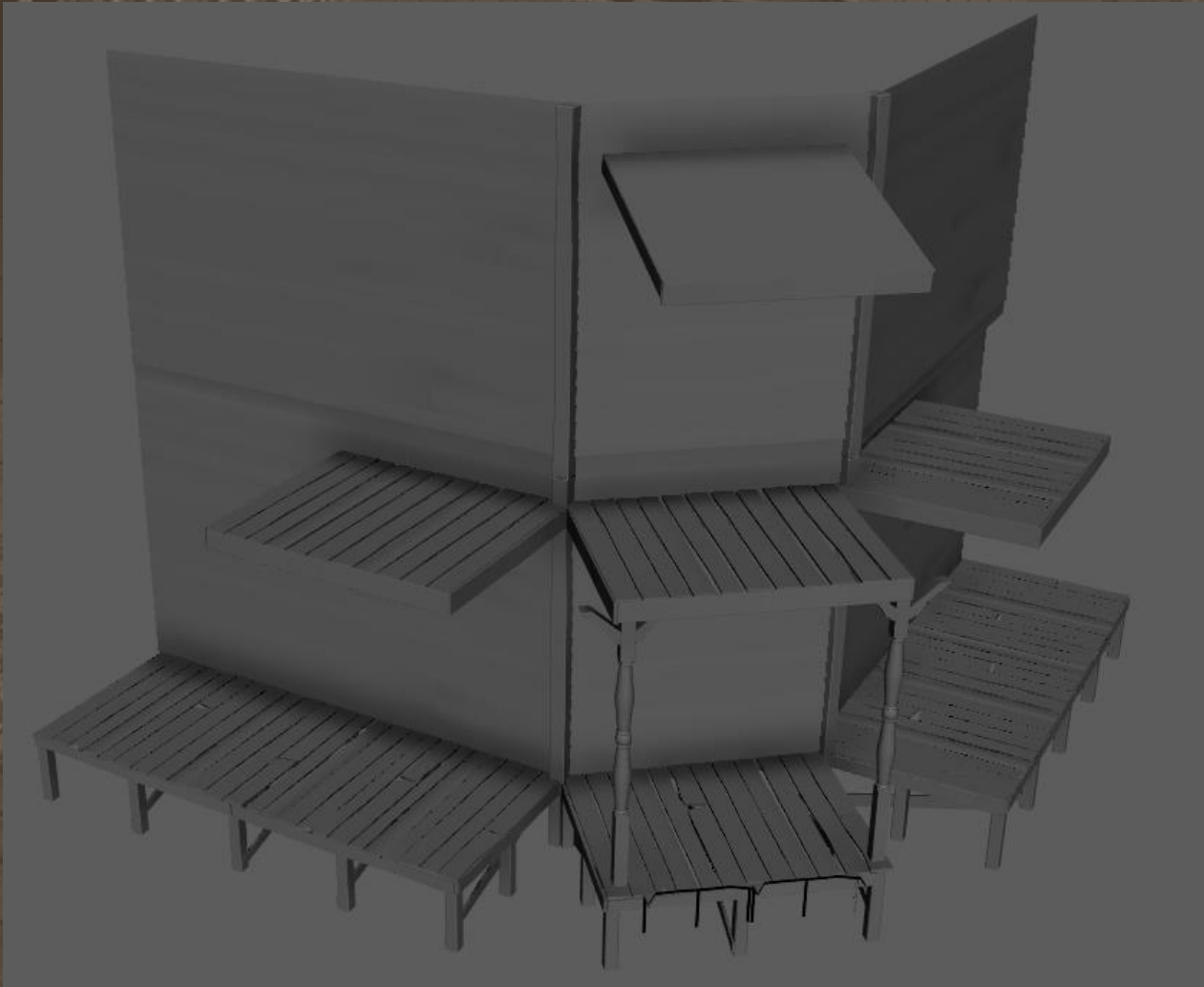
Modelling Final Assets



Modelling Final Assets



Creating Saloon Bespoke Corner Pieces



Creating Saloon Bespoke Corner Pieces



Image 1

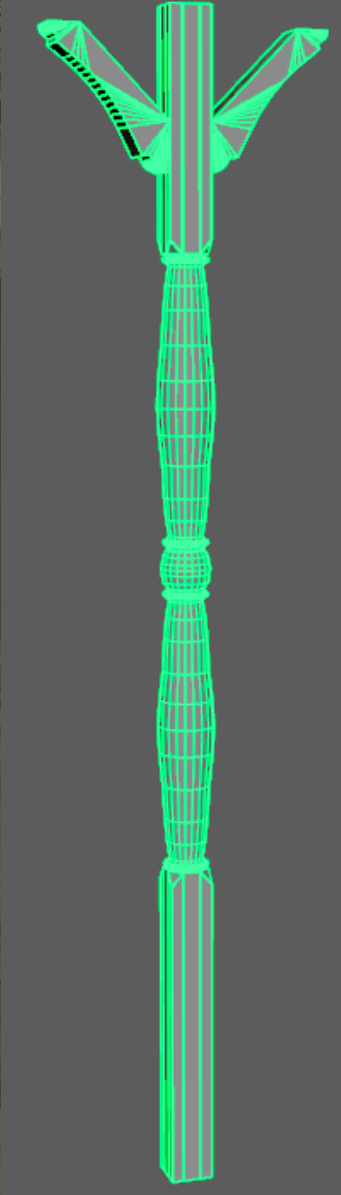


Image 2





Modelling Final Assets



Modelling planning issue

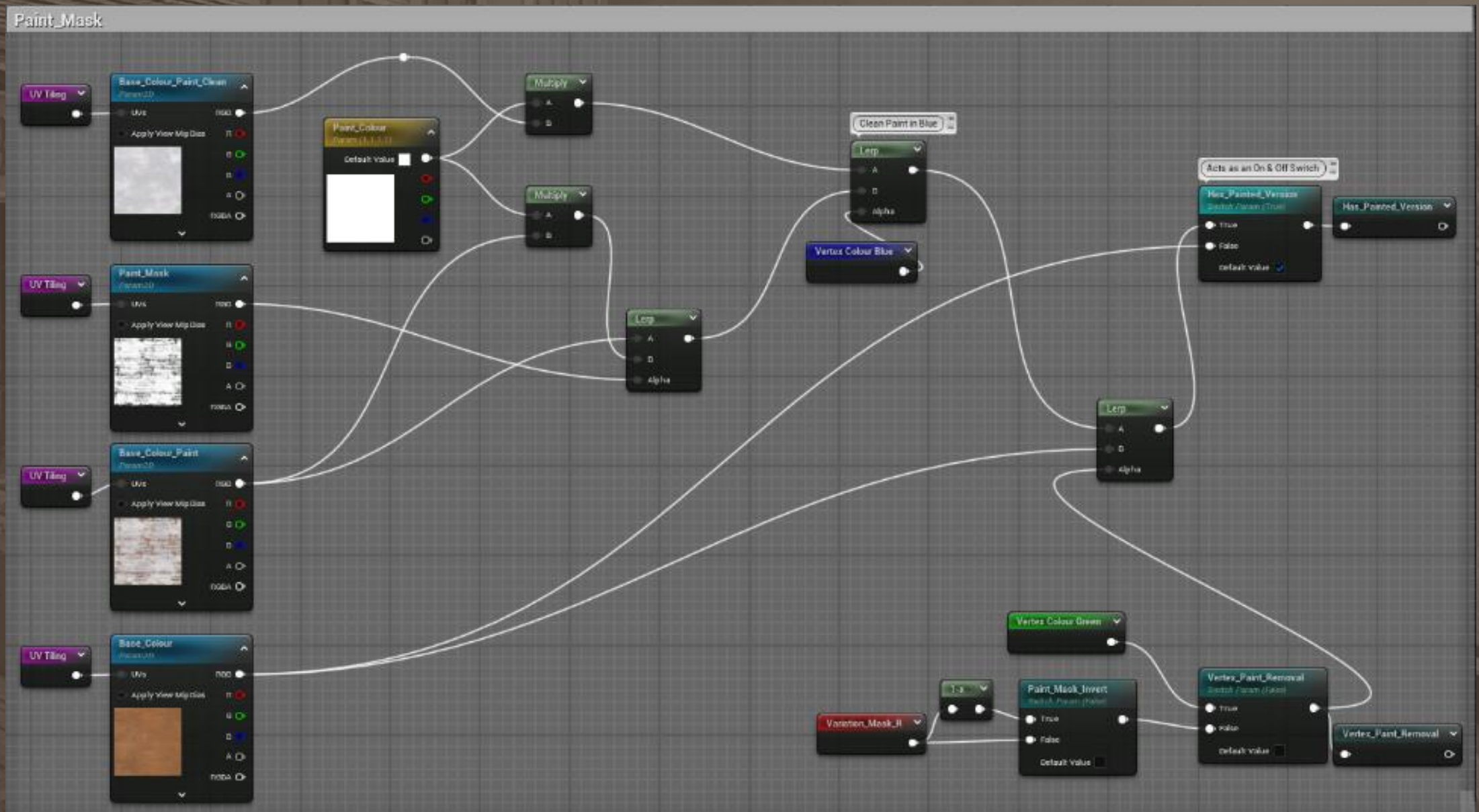
Image 1



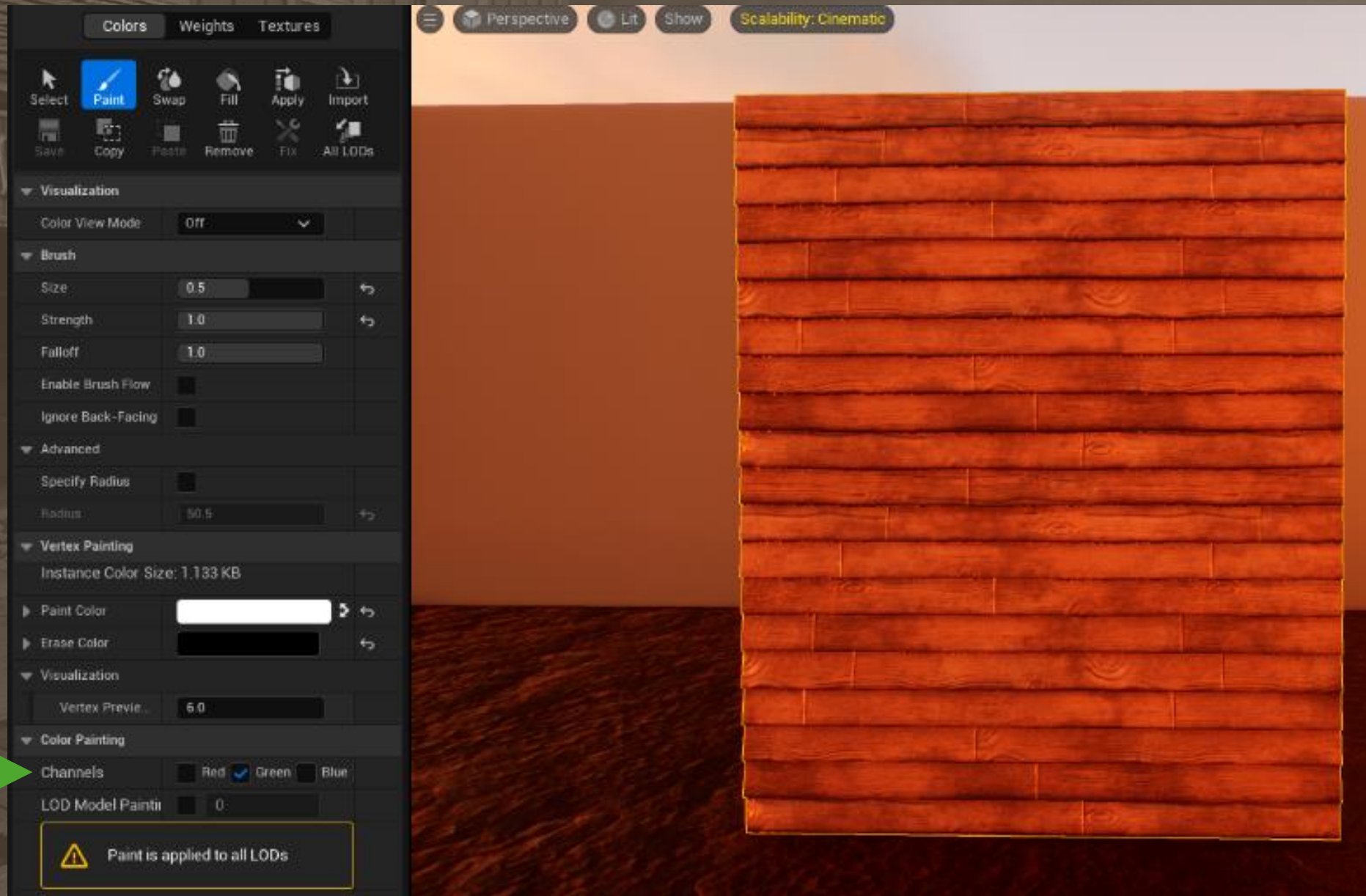
Image 2



Master Material – Paint Mask



Master Material – Vertex Painting



Master Material – Vertex Painting

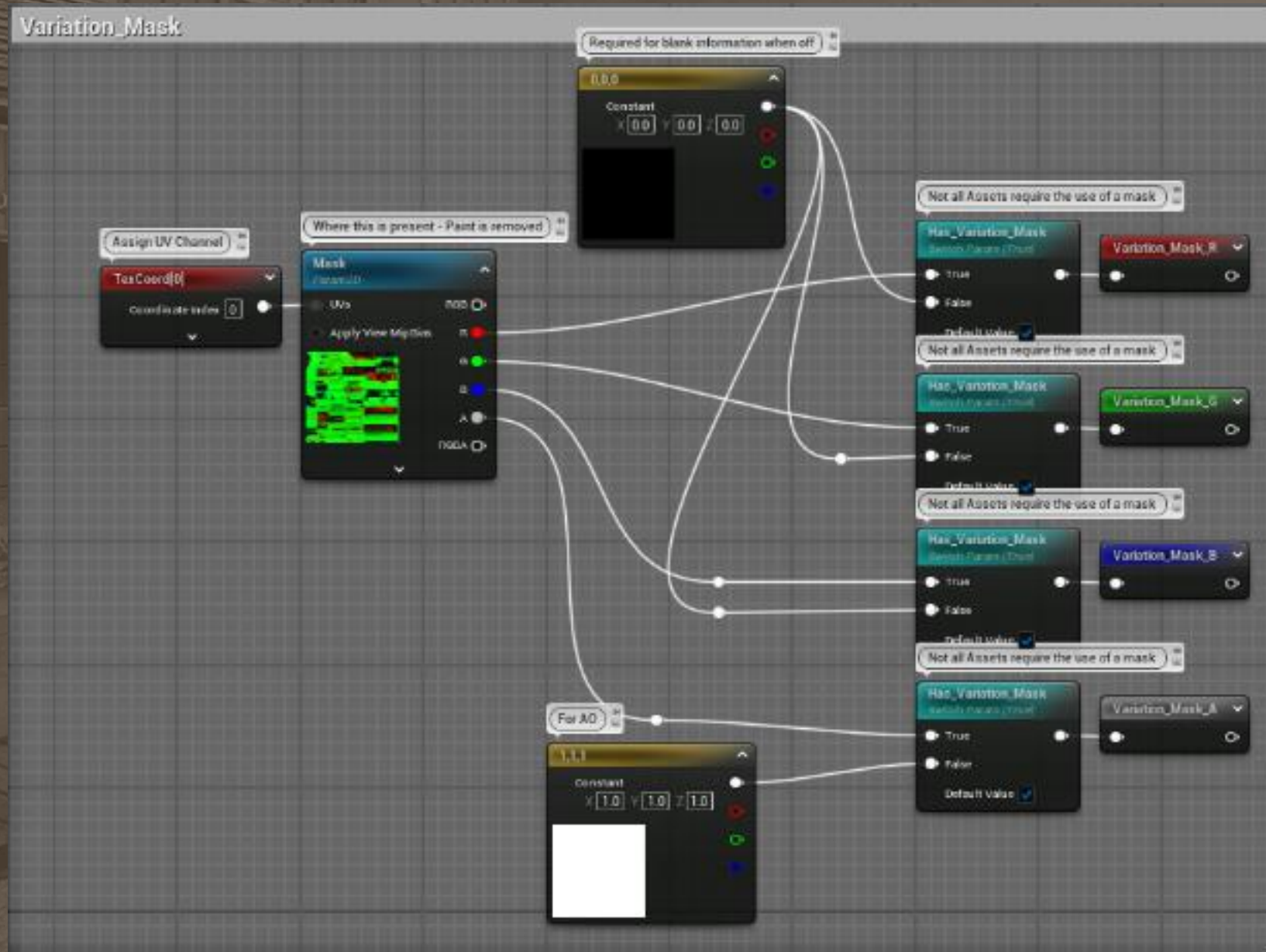
Green Channel Painted – Full Colour



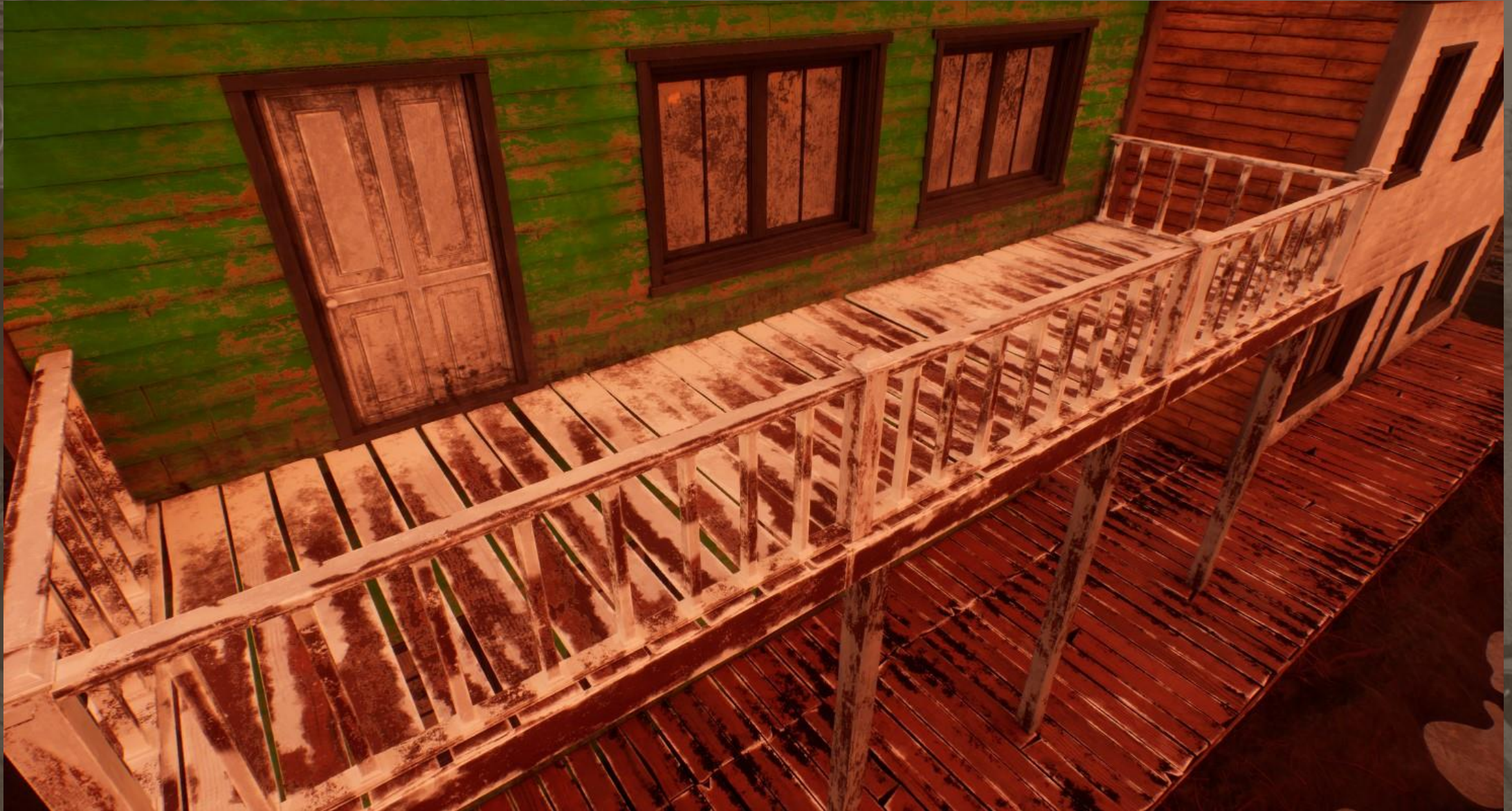
Blue Channel Painted – Paint Peeled



Master Material – Variation Mask



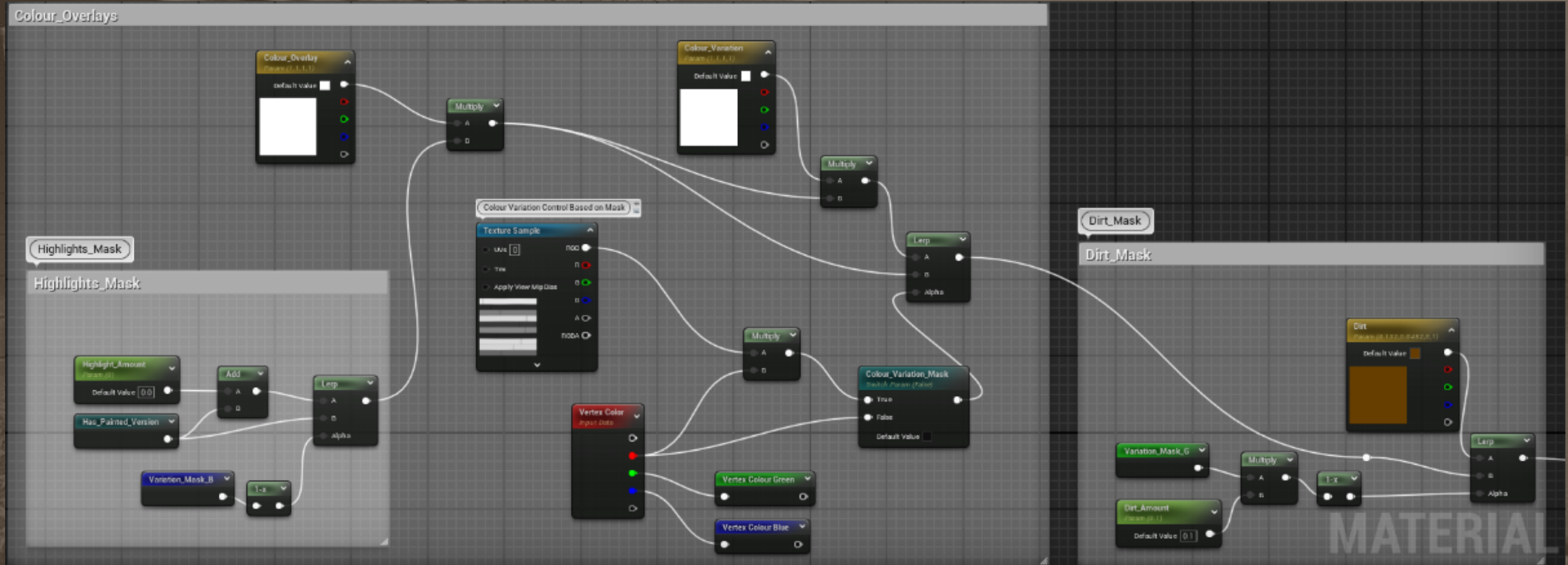
Master Material – Variation Mask in Play



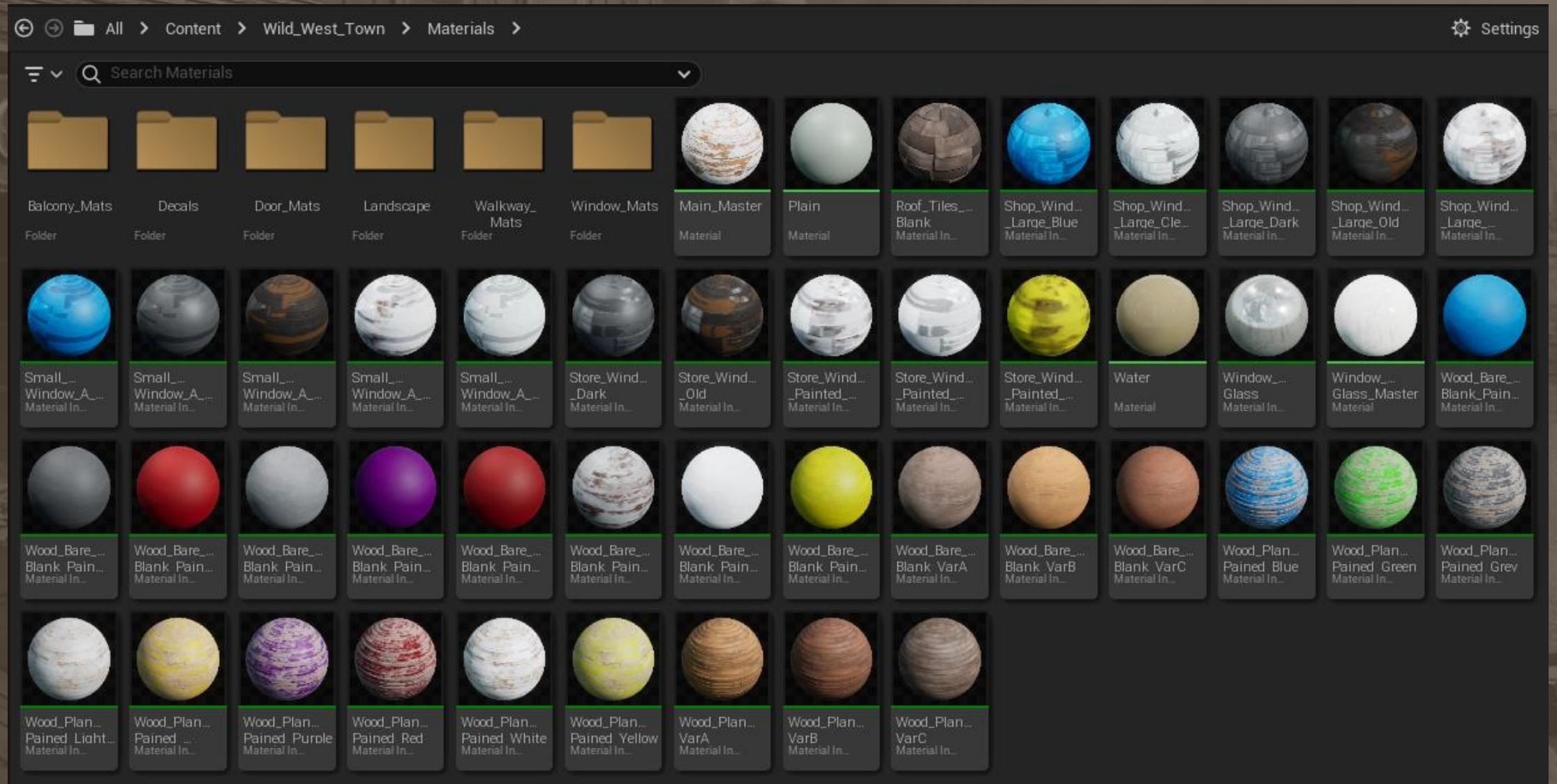
Vertex Paint Impact on Environment



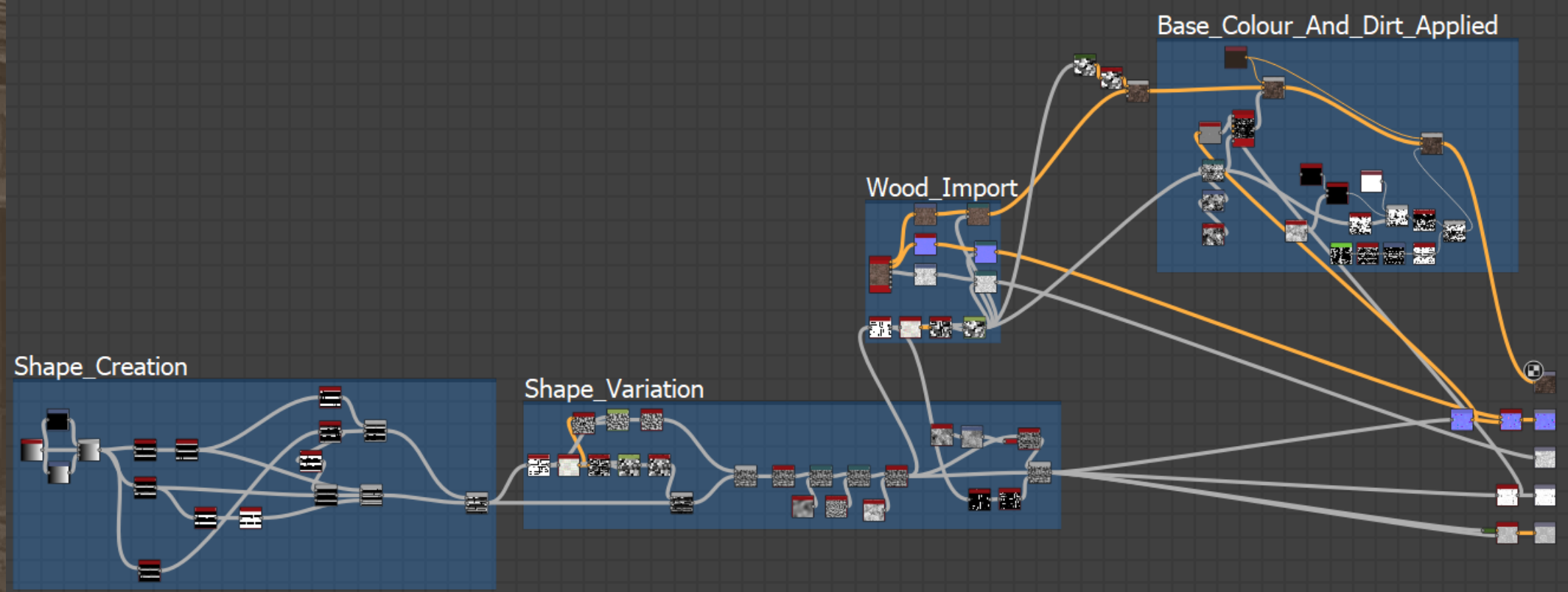
Master Material – Colour Overlays



Master Material – Colour Overlay Results



Roof Material Creation



Roof Material Creation



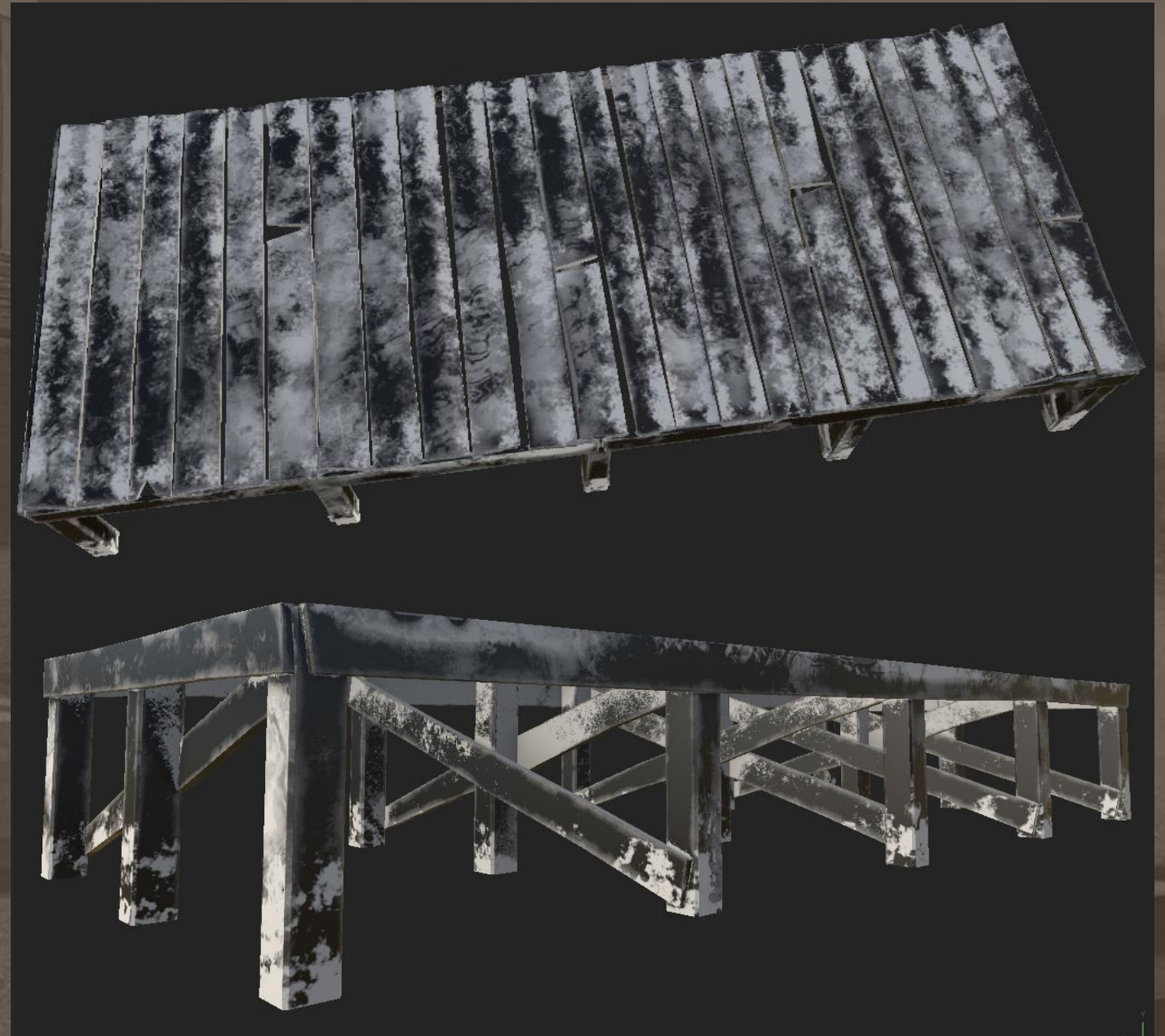
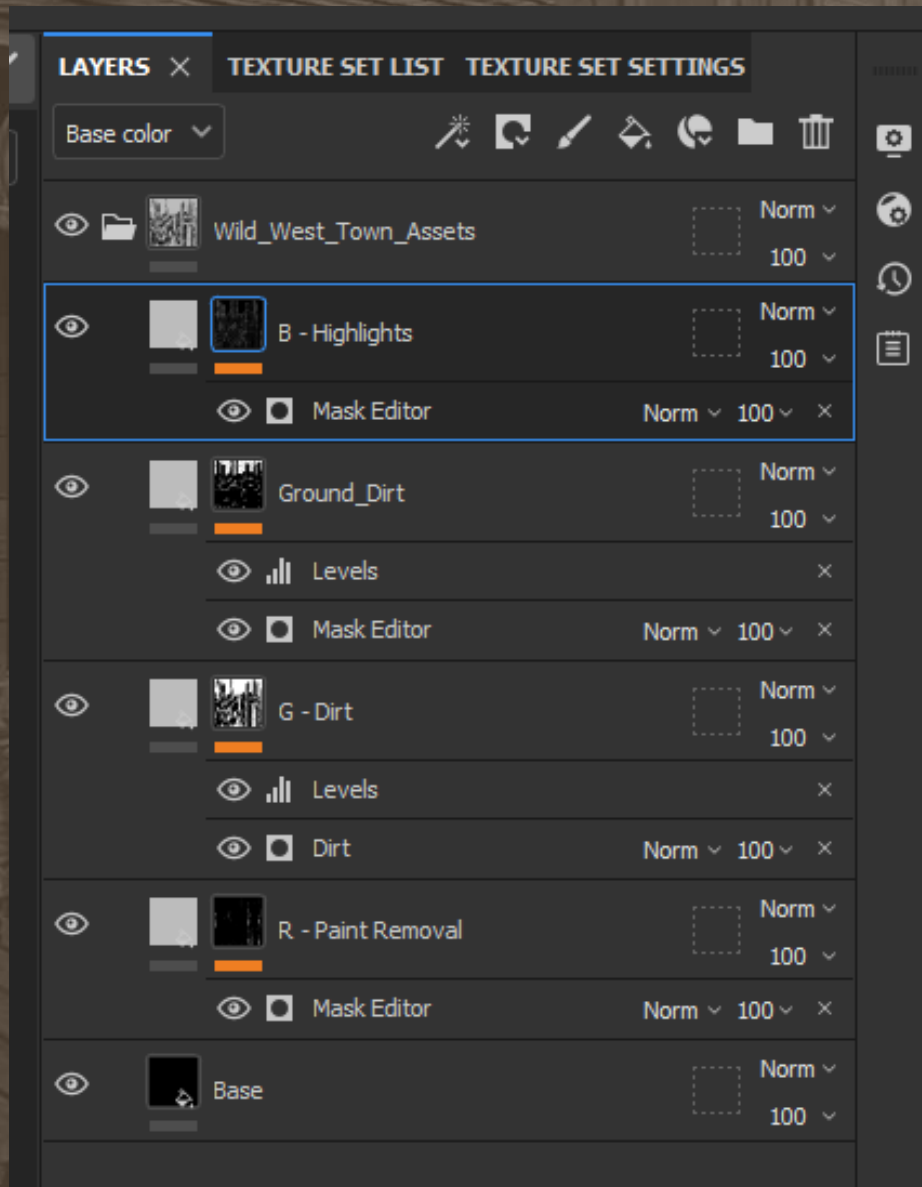
Unreal Engine Parallax Occlusion Mapping - Issue



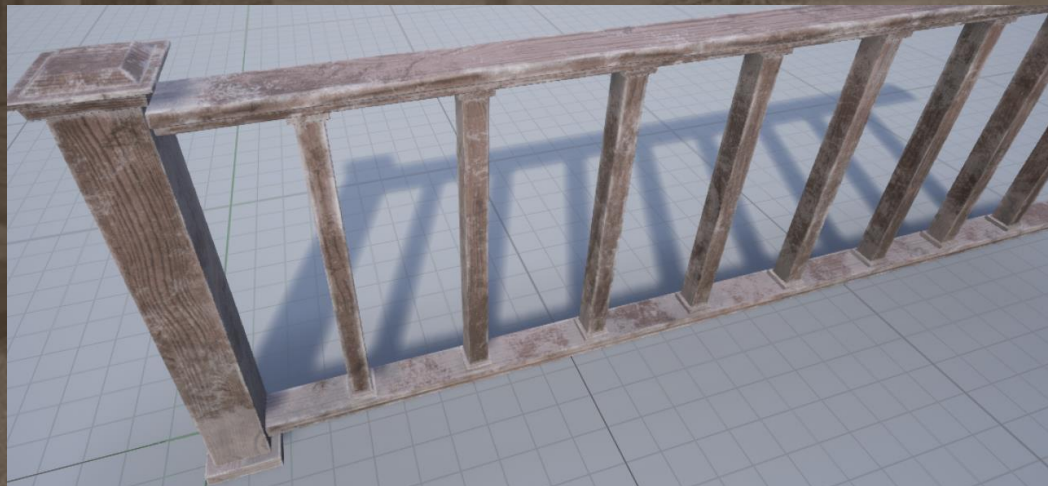
Parallax Technique Showcase



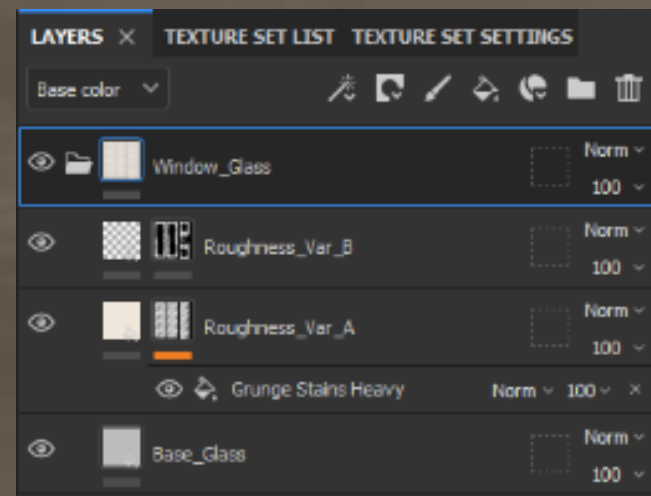
Substance Painter







Glass Texture



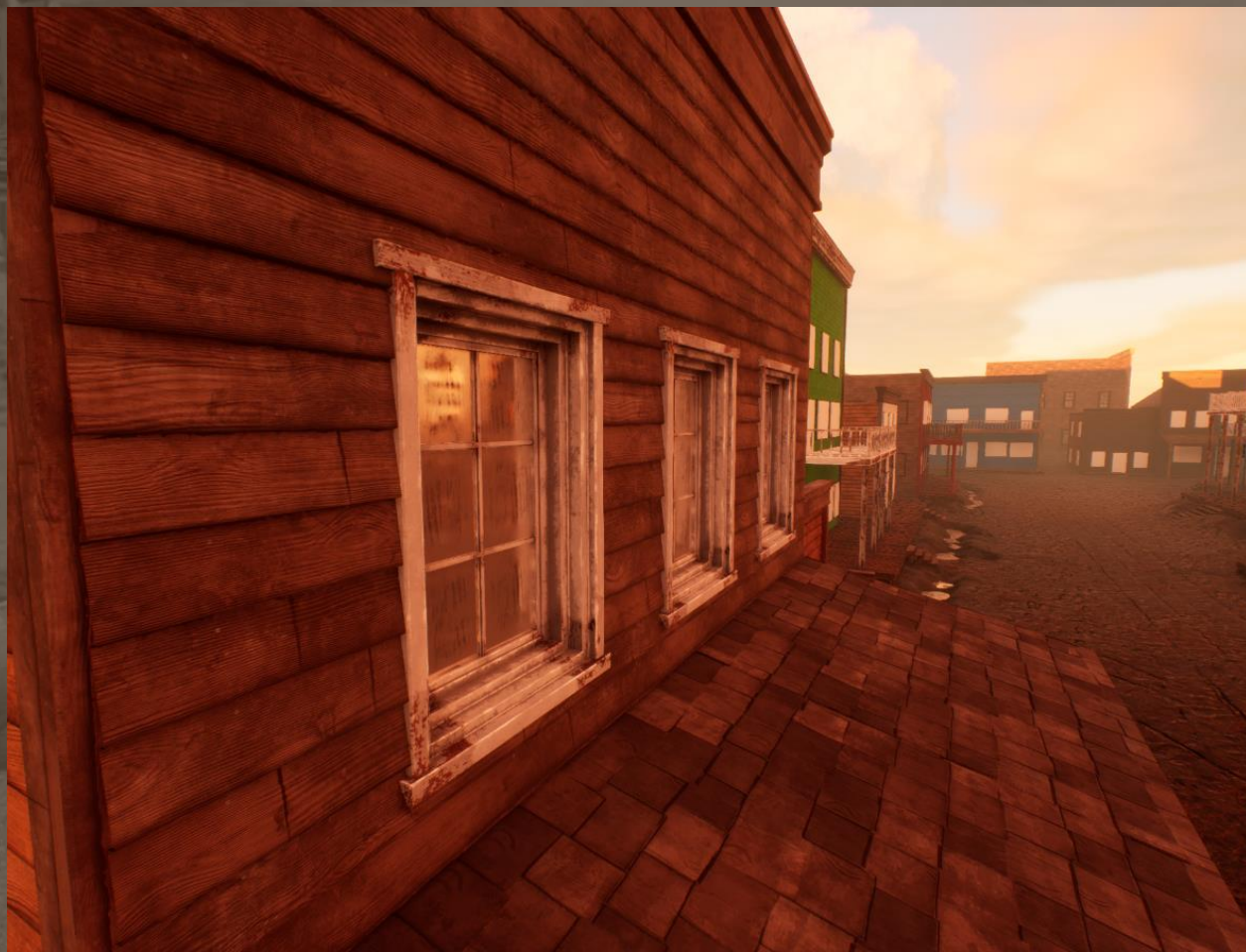
Big problem present in the environment



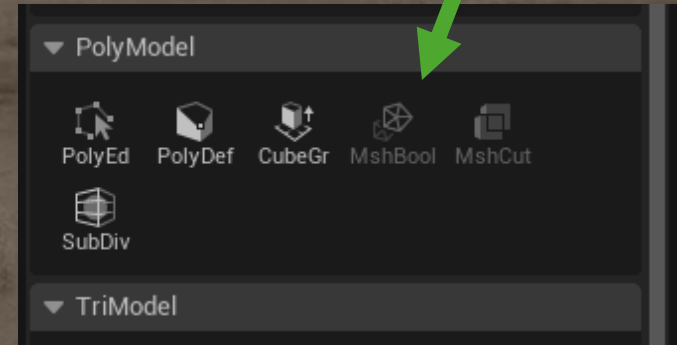
Boolean process applied to environment

BEFORE

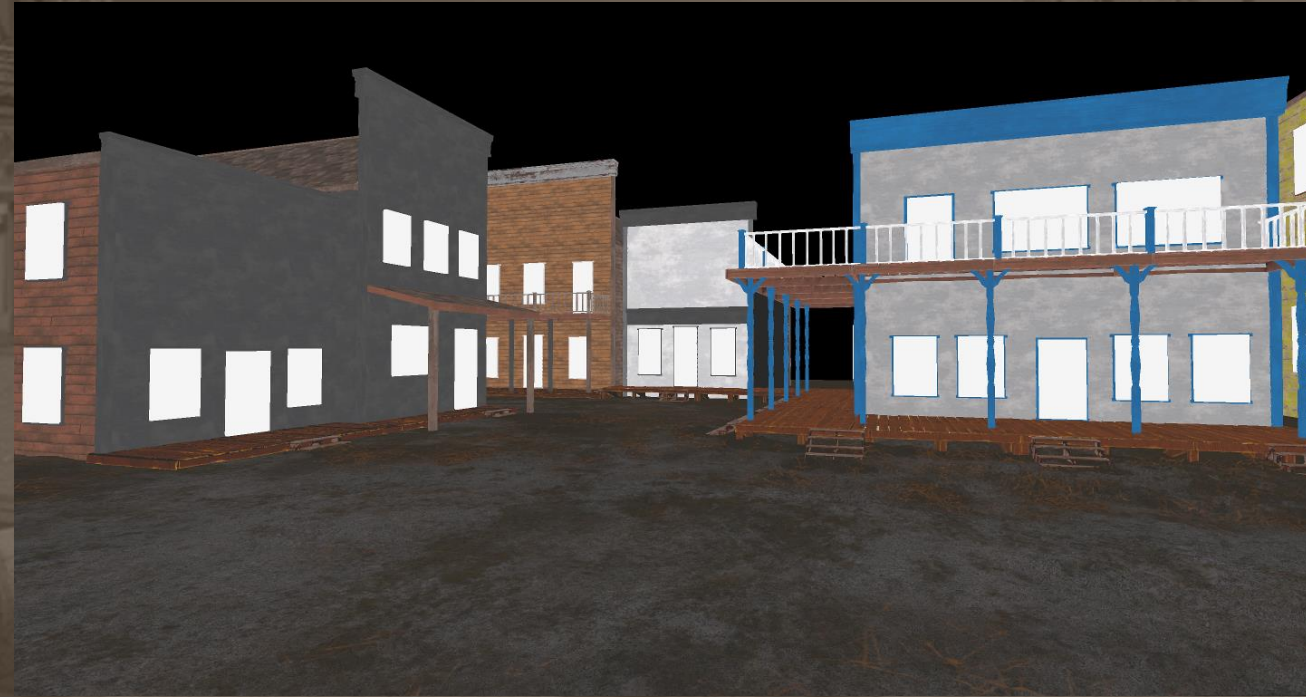
AFTER



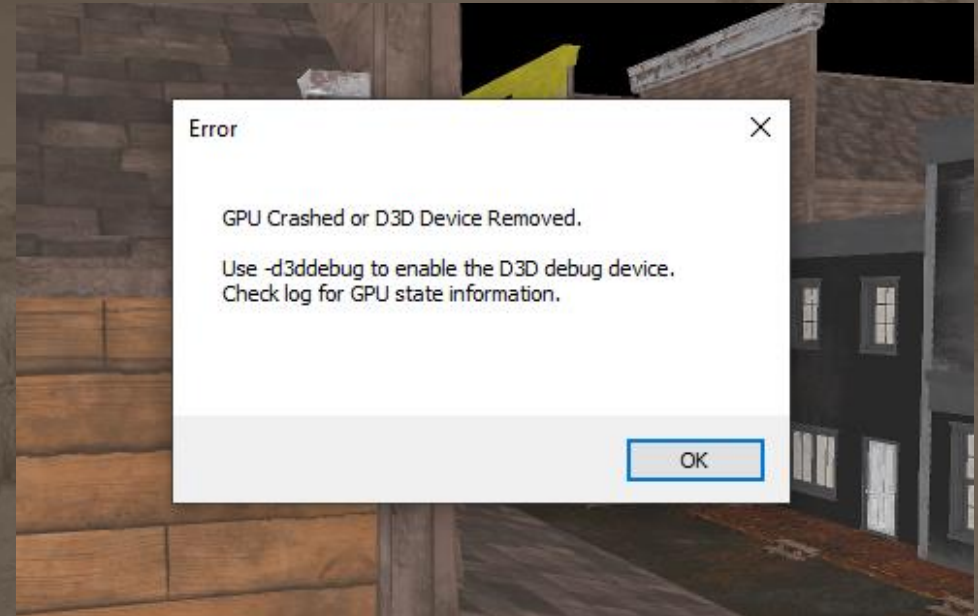
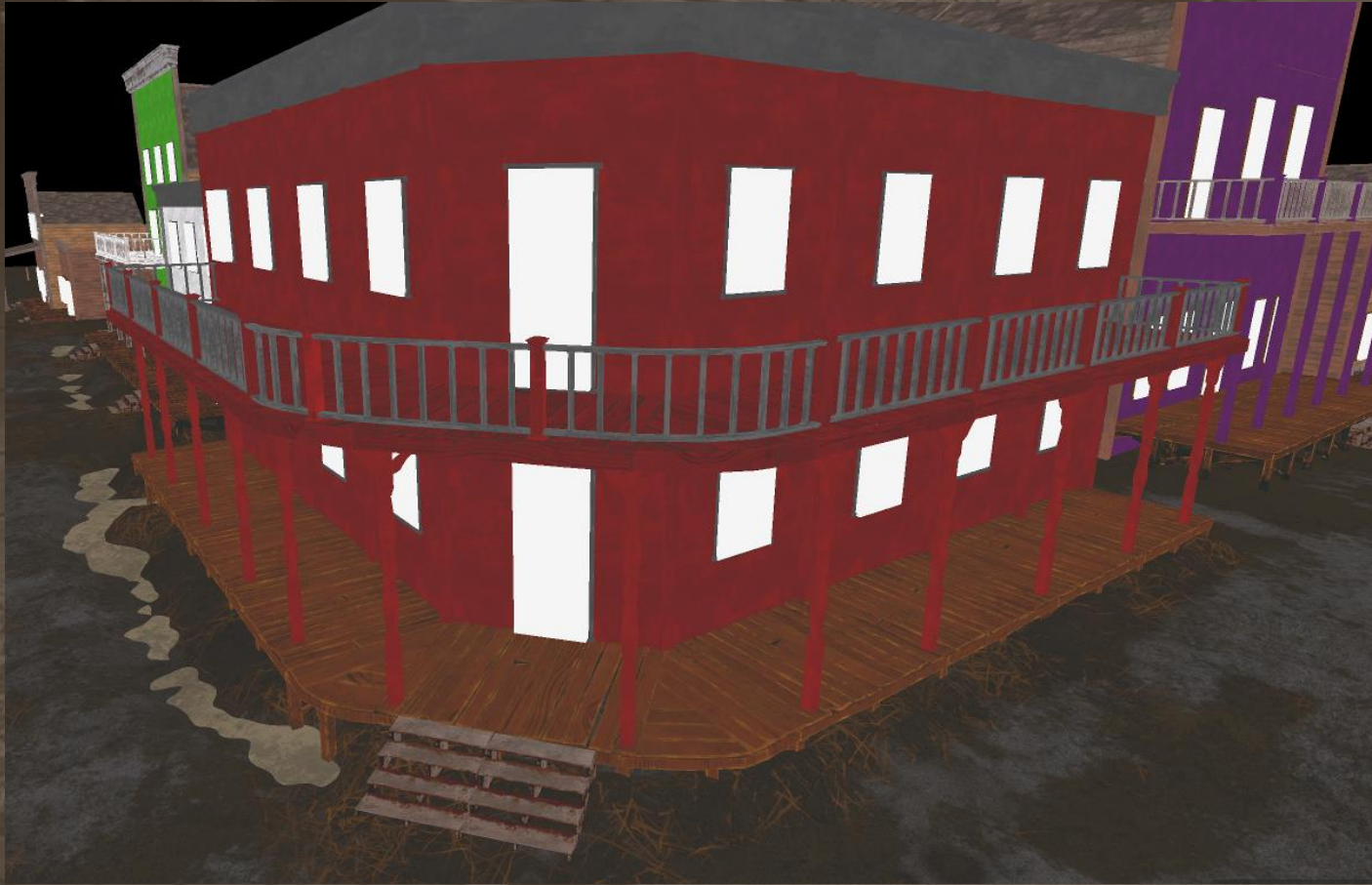
Boolean process applied to environment



Boolean process applied to environment



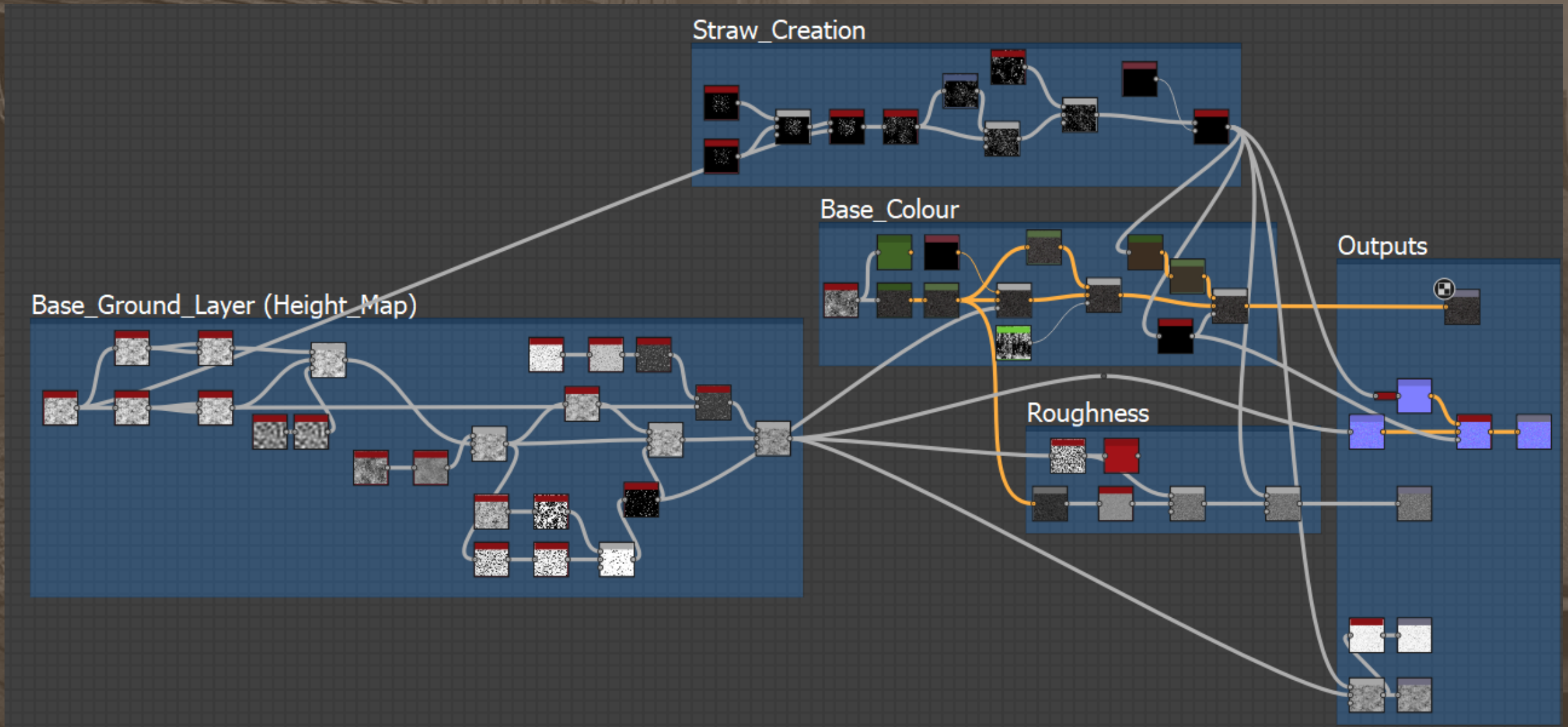
Boolean process applied to environment



Boolean process results in Saloon



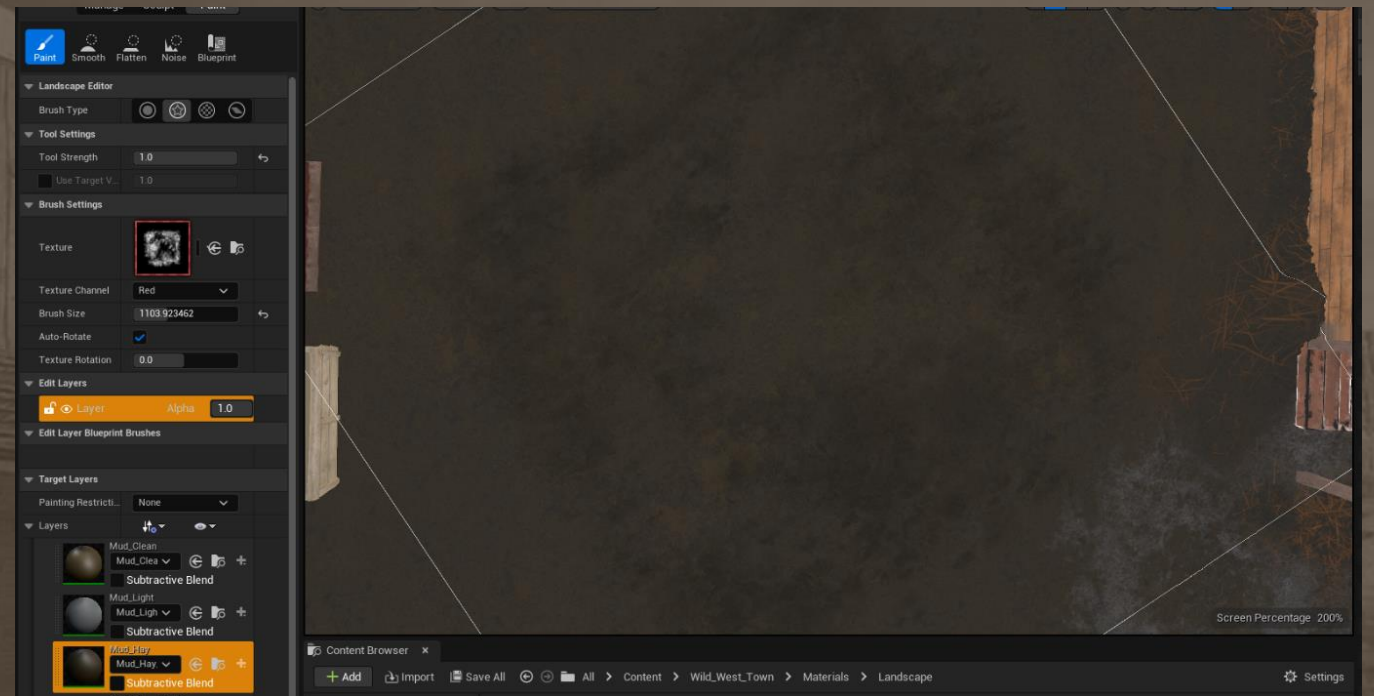
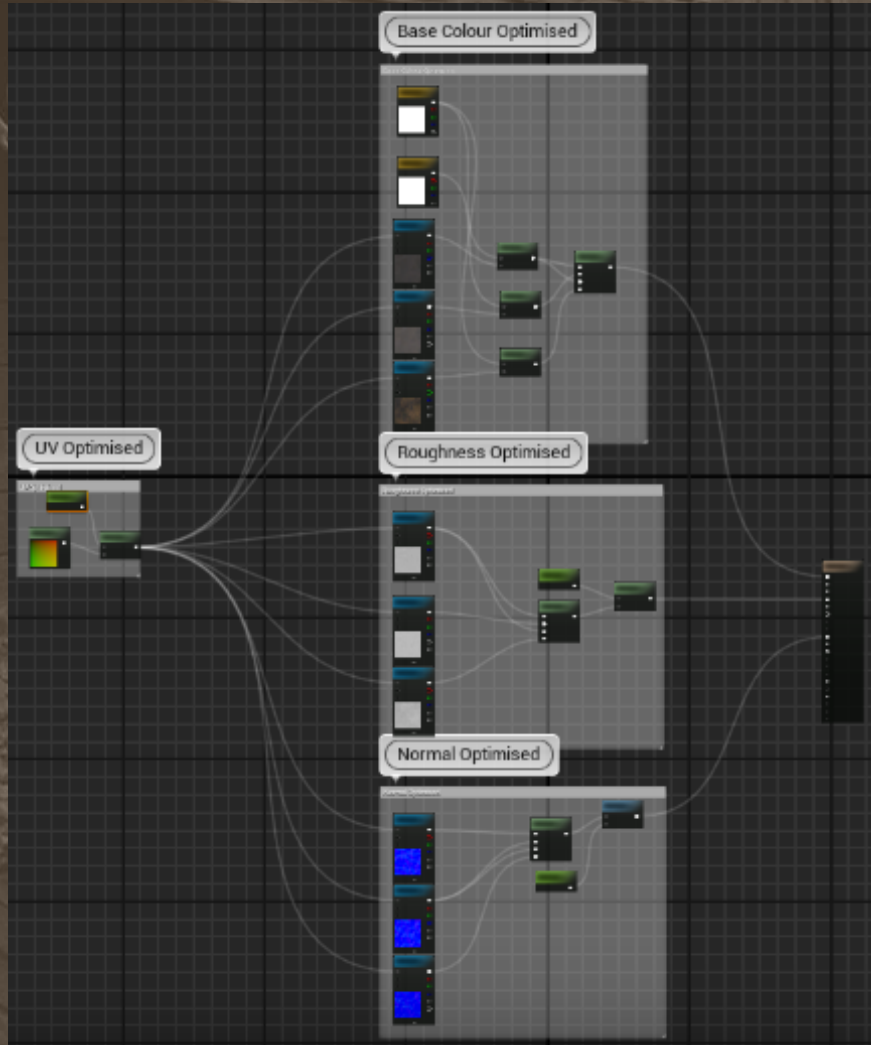
Terrain Creation – Substance Designer



Terrain Creation – Substance Designer



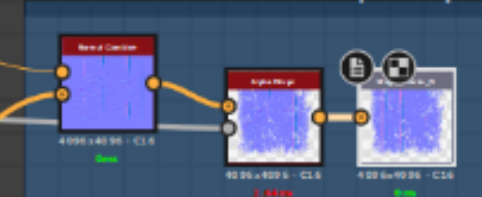
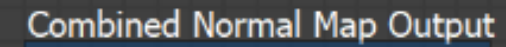
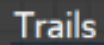
Terrain Painting



Terrain Final Appearance



Footprints



Footprints and Trail Decals Applied



Decal Usage Throughout Environment



[11] Photoshop
[12] Textures.com
[13] DaFont.com

Decal Use in Environment awareness



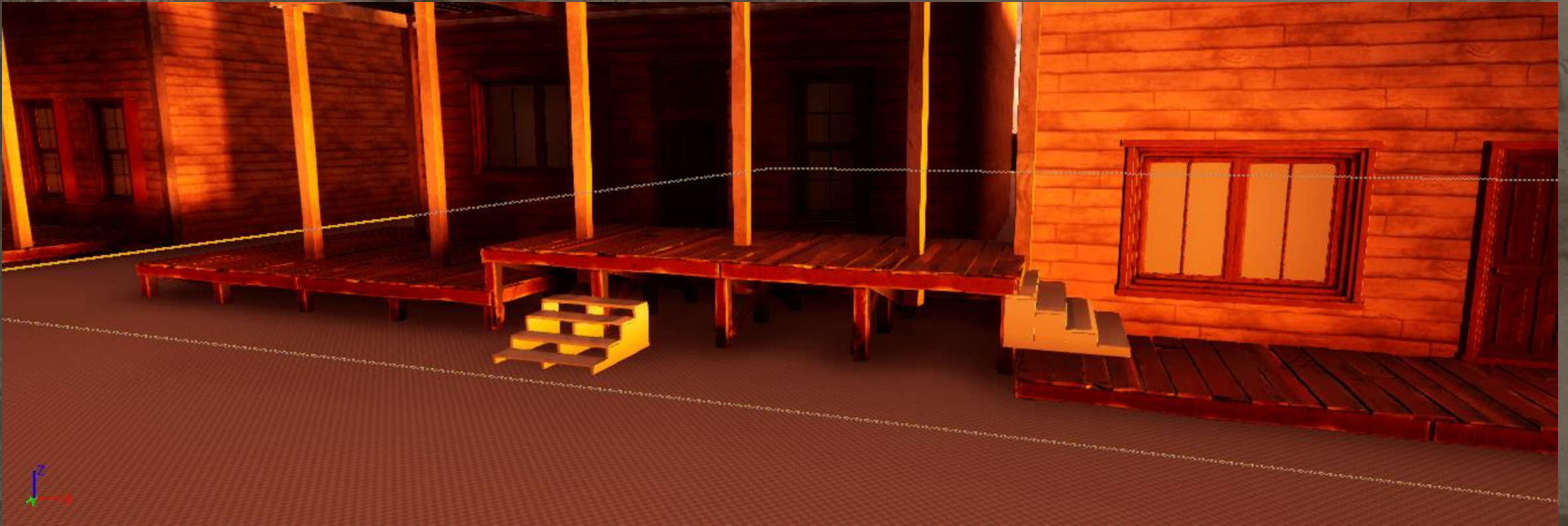
Landscape Sculpting



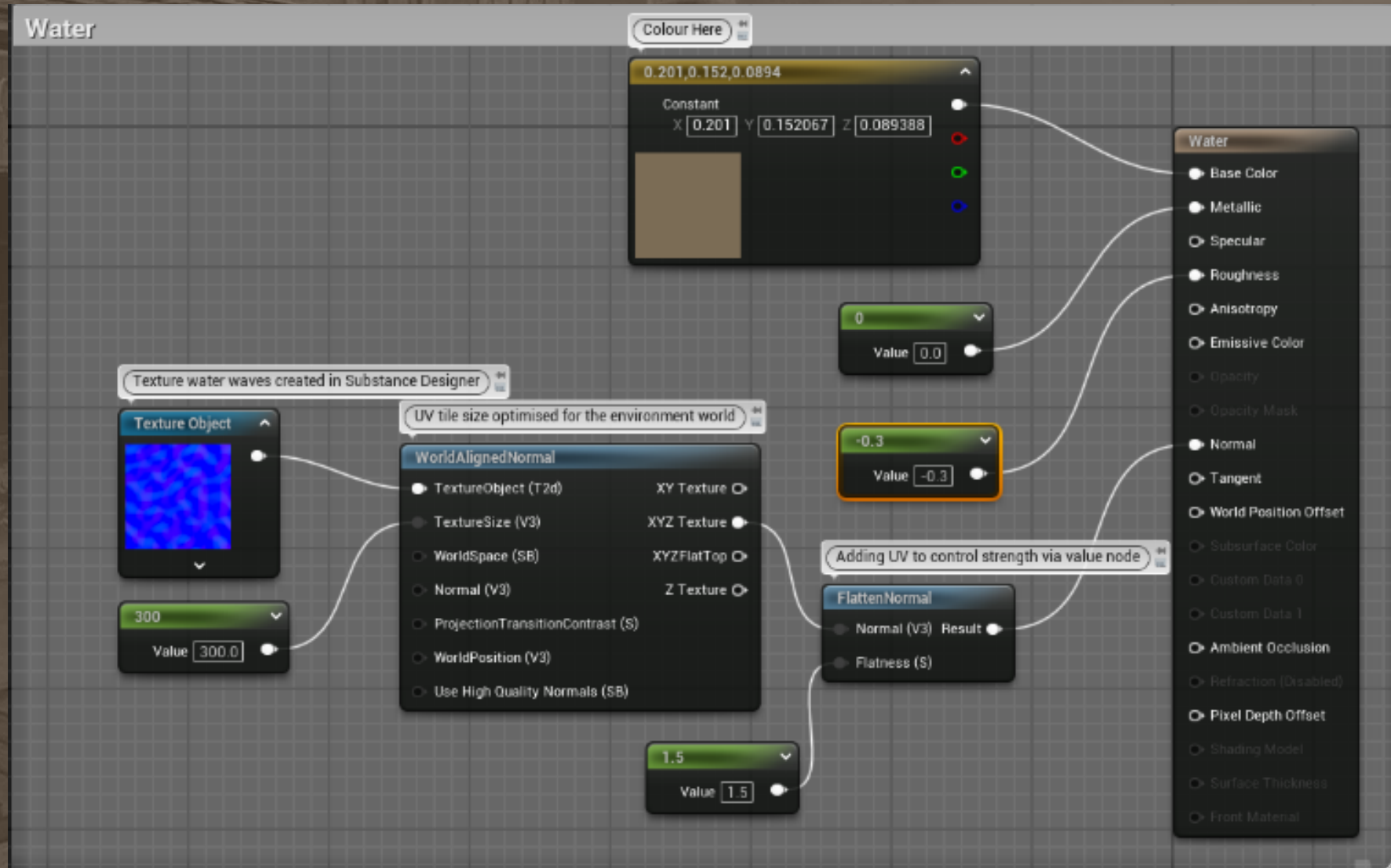
Water Potholes Creation



Planning Error Leading to a Better Landscape and Storytelling Feature



Water Potholes Creation



Water Potholes Creation

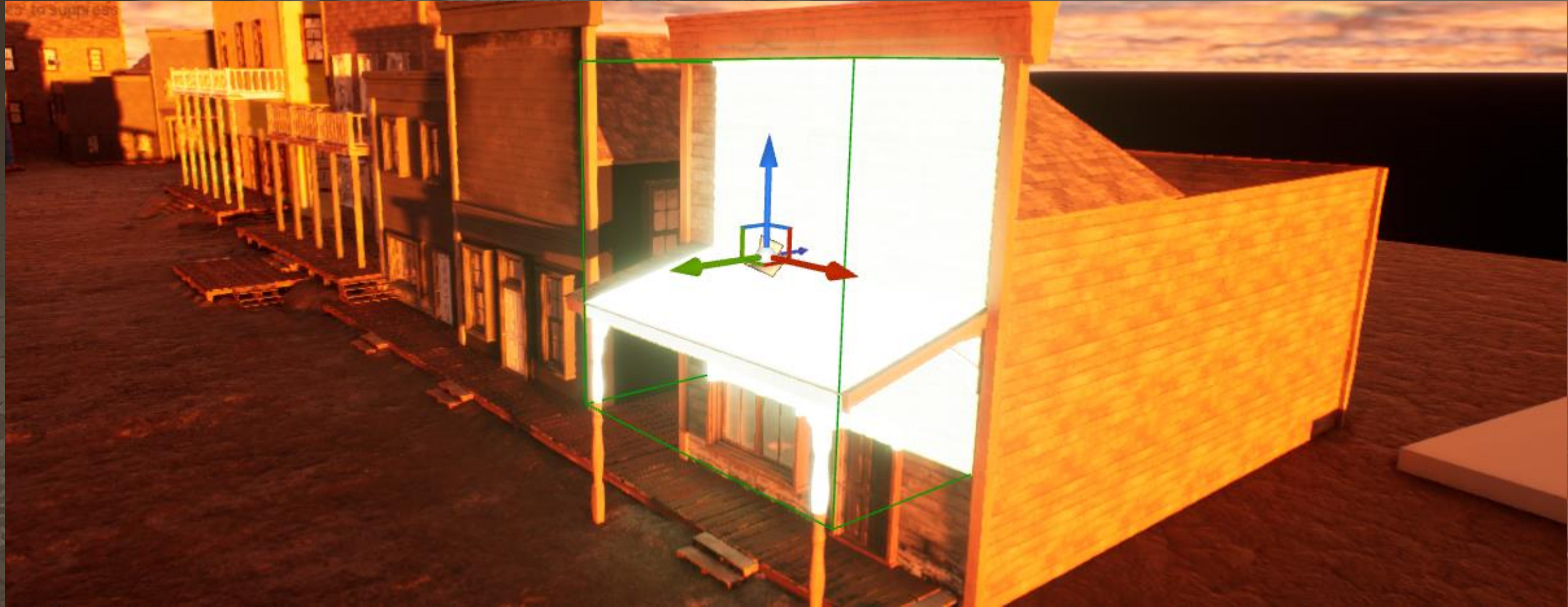


Evaluation of content

“Immersion is critical for creating a believable and captivating virtual reality game. It allows developers to craft engaging stories, create a sense of presence, and provide users with an interactive and memorable experience, [...] which can cause players to feel as though they are part of the story or world” – Zero Latency Montreal [14]



Creating Decals - Issue





Problems & Solutions

Long-Term Health Illnesses

Chronic Testicular Nerve damage

Hardware Issues

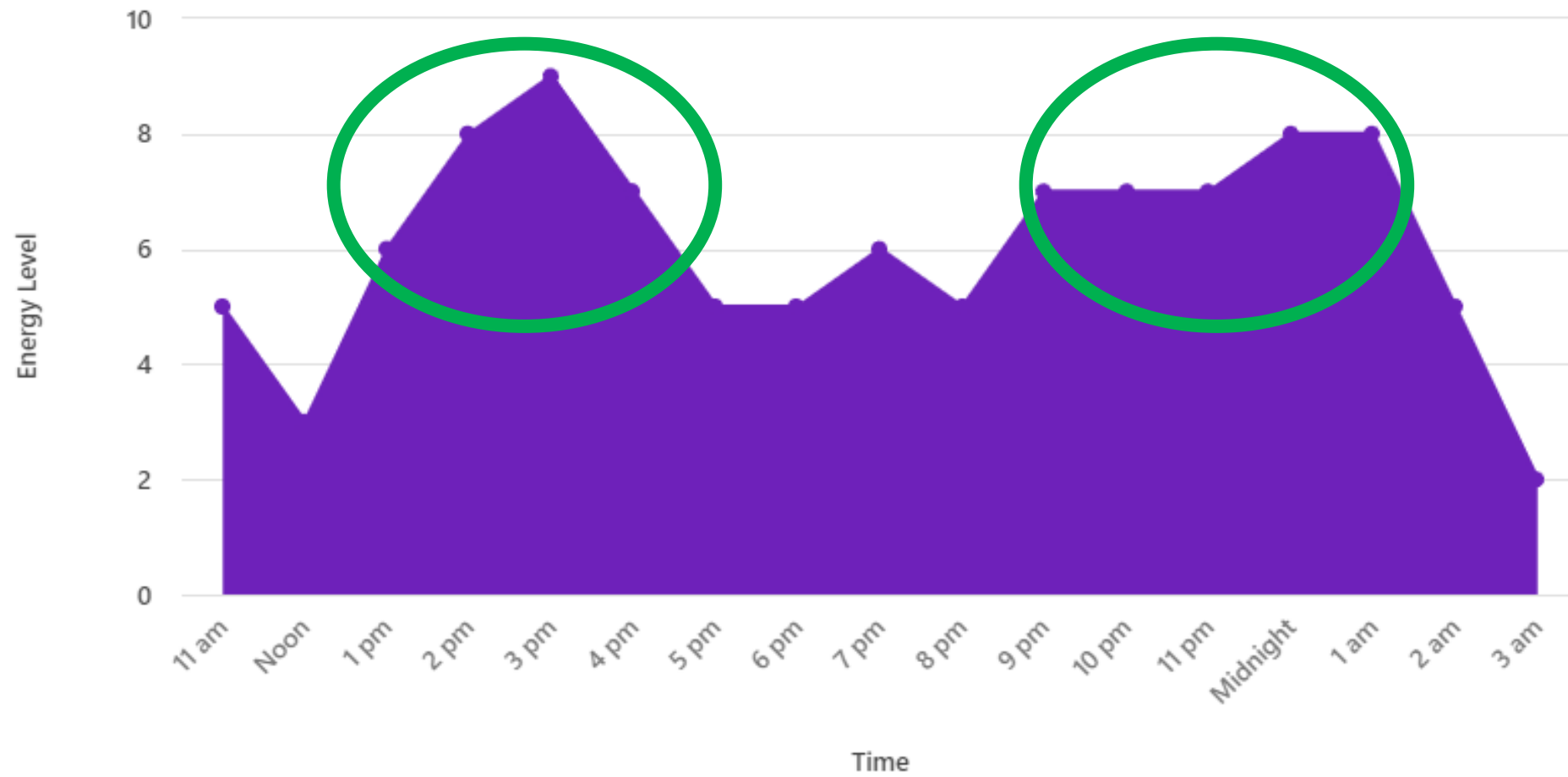
Mental Clarity Issues

Time Management Problems

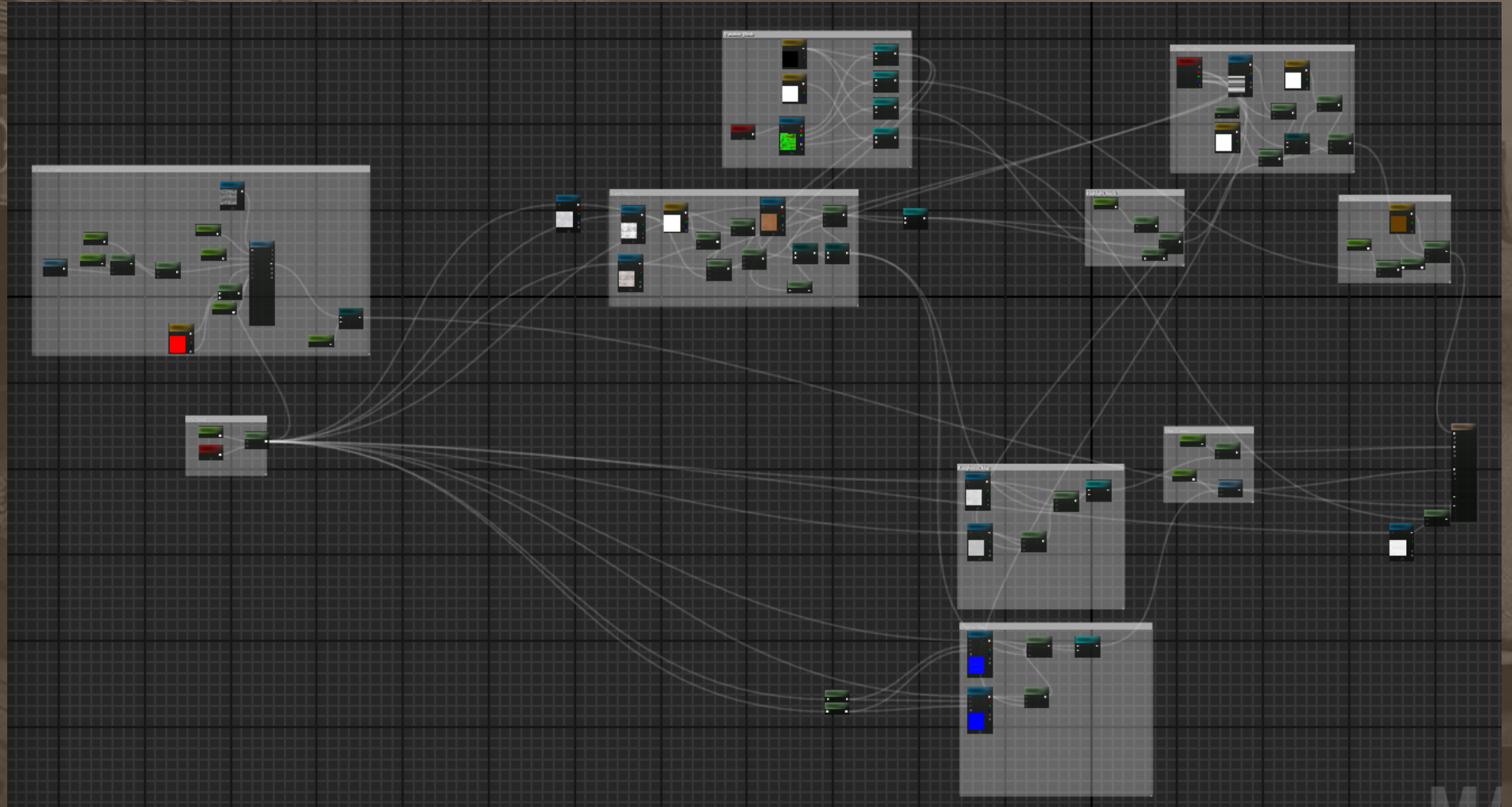
Project Gantt Chart

				OCTOBER				NOVEMBER				DECEMBER				JANUARY				FEBRUARY				MARCH				APRIL				MAY			
TASK #	TASK NAME	START WEEK	END WEEK	WK1	WK2	WK3	WK4	WK5	WK6	WK7	WK8	WK9	WK10	WK11	WK12	WK13	WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26	WK27	WK28	WK29	WK30	WK31	WK32
T1	Research & Reference Collecting	WK1	WK2																																
T2	Setting up UE5 Project and Metrics	WK2	WK2																																
T3	UE5 Environment Blockout Creation	WK2	WK4																																
T4	Substance Designer Prep & Plain Wood Texture	WK5	WK7																																
T5	Wood Planks Texture Creation & Testing	WK8	WK10																																
BREAK	CHRISTMAS & NEW YEARS BREAK																																		
T6	Interim Viva Presentation Preparation	WK13	WK15																																
T7	Final Asset Creation & Import Replacing Blockout	WK16	WK19																																
T8	Master Material Creation	WK20	WK20																																
T9	Creating Roof Material & Parallax Nodes	WK21	WK21																																
T10	Substance Painter Final Models Application	WK22	WK22																																
T11	Apply Vertex Painting to All Buildings (& Models)	WK23	WK23																																
T12	Window Glass Texture Creation	WK24	WK24																																
T13	Creating Saloon Corner Pieces	WK24	WK24																																
T14	Complete Boolean Process on each building	WK25	WK25																																
T15	Creating Decals & Apply them to Environment	WK25	WK25																																
T16	Creating Terrain Material	WK26	WK26																																
T17	Applying Terrain Material & Modelling Landscape	WK27	WK27																																
T18	Text Decals Created & Applied	WK28	WK28																																
T19	3rd Party Assets Added	WK28	WK28																																
T20	Final Polish throughout Environment	WK28	WK28																																
T21	Final Viva Presentation Preparation	WK28	WK29																																
T22																																			
T23																																			
T24																																			
T25																																			

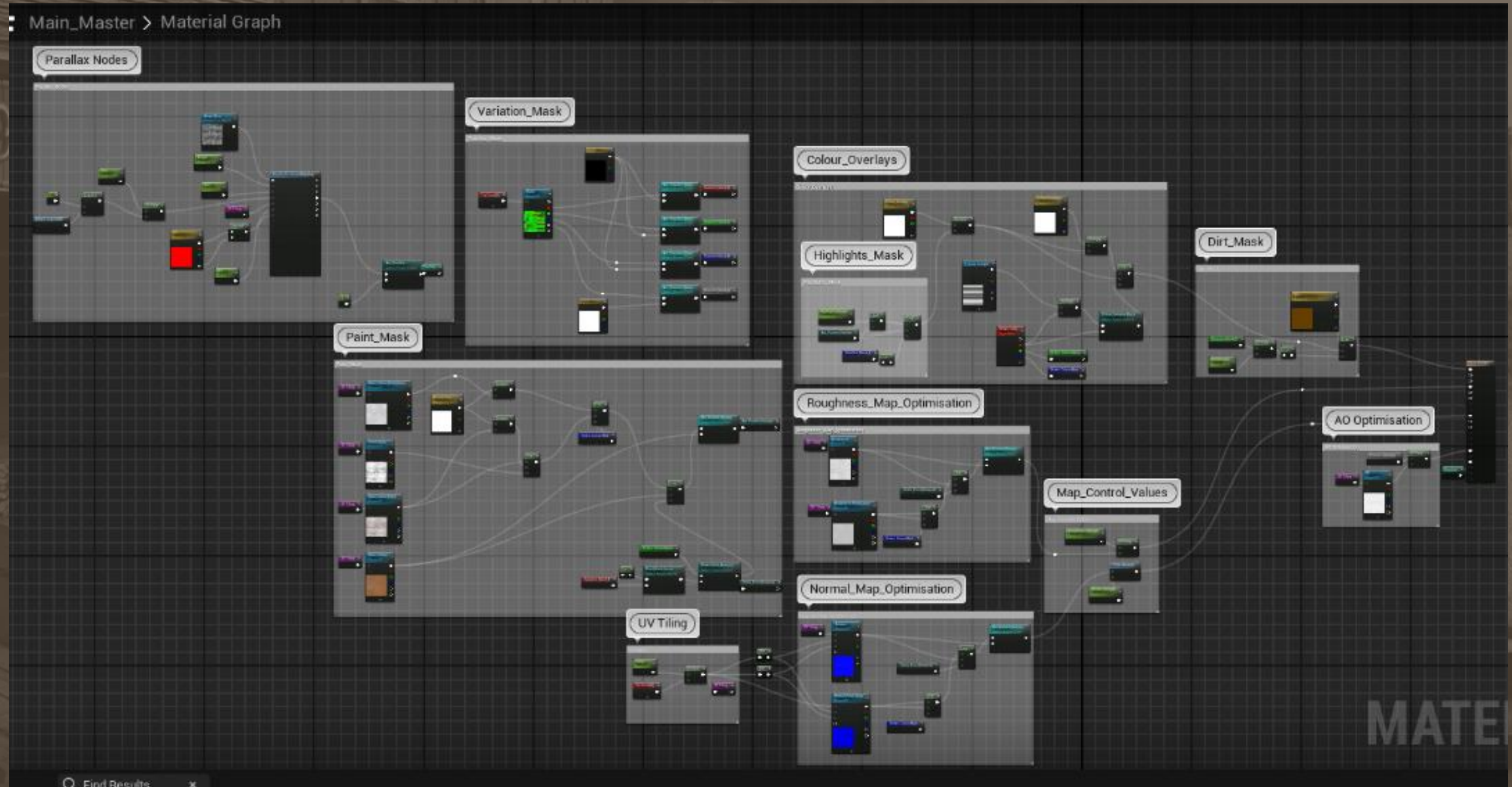
My Energy Graph



Low Energy Task Example



Low Energy Task Example



Future Additions to environment

Additional models for variations (signs, windows)

Adding 3rd Party Character Models

Foliage and decorations

Interior Areas

My own props

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