

Tutors: Mr.Fu/Changrui, Miss.Zhuang/Fan
Designer: Chia Hui Yen

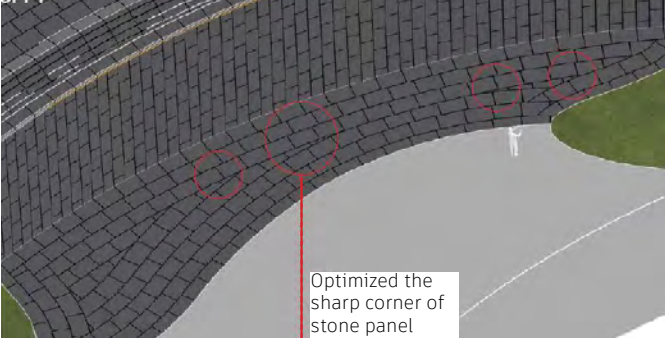
Internship Works: Panelling

_parametric design, panelling, details

Project Background

The pool's surroundings feature concrete ledges, steps, and cascading waterfalls, creating intricate expansion joints that need to align with the adjacent elements. Dark faux stone was chosen to achieve a mirror-like effect, presenting challenges in detailed design. Notably, the pool bottom required careful consideration of stone joints, factoring in dimensions, shapes, and curvature. Budget constraints led to an economical approach, focusing on constructing complete stone belts for user interaction. Internally, control lines were established to centralize triangular crushed stones. Despite non-modular dimensions, stone sizes were kept uniform. Addressing the irregular pool bottom, a solution involving divided zones, calculated starting points, and vertical lines was implemented for visual consistency. This process was executed using a parametric approach on the Grasshopper platform.

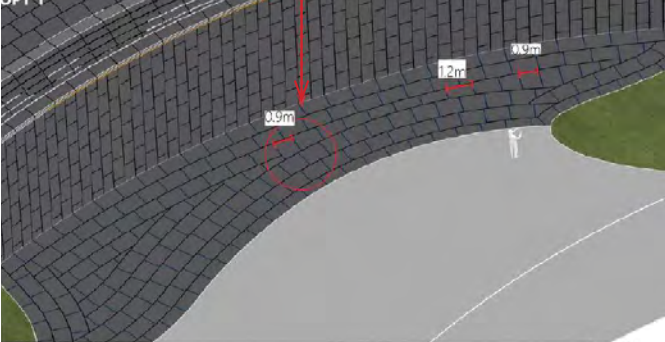
Intro: Before:



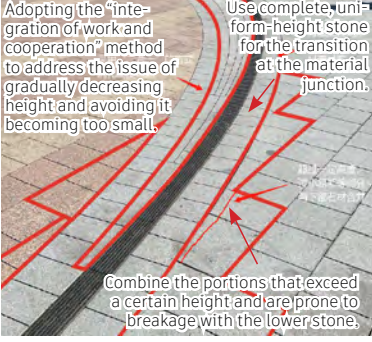
Dimension:



After:



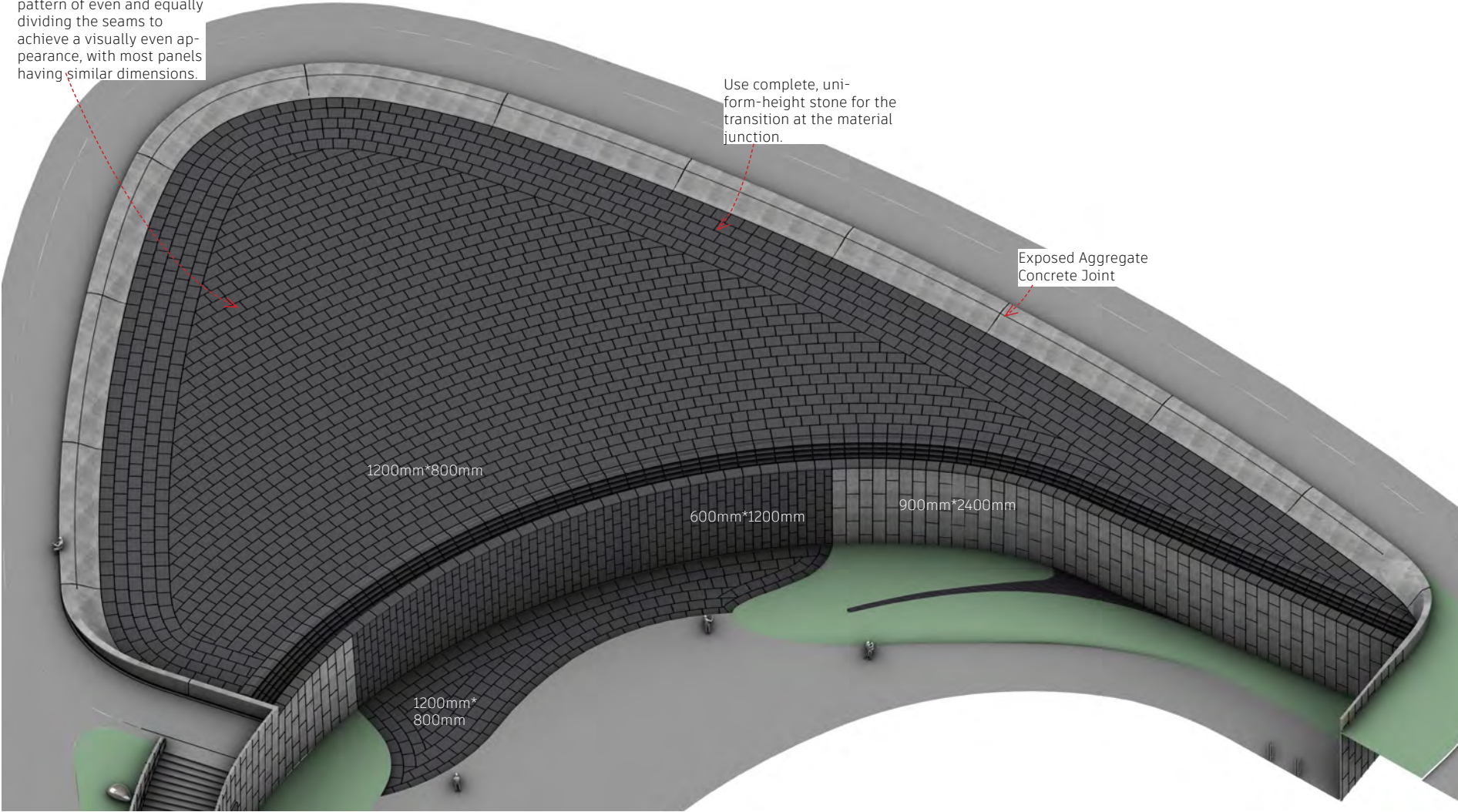
Optimization reference:



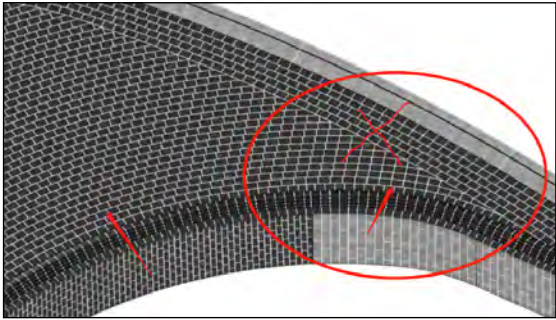
Divide the irregular base into several sections, employing an alternating pattern of even and equally dividing the seams to achieve a visually even appearance, with most panels having similar dimensions.

Use complete, uniform-height stone for the transition at the material junction.

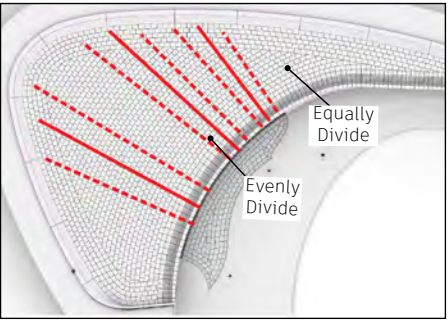
Exposed Aggregate Concrete Joint



Problem:



Solution



Optimization:

