Week Two: Project Idea: Brick/Stone Design Automation

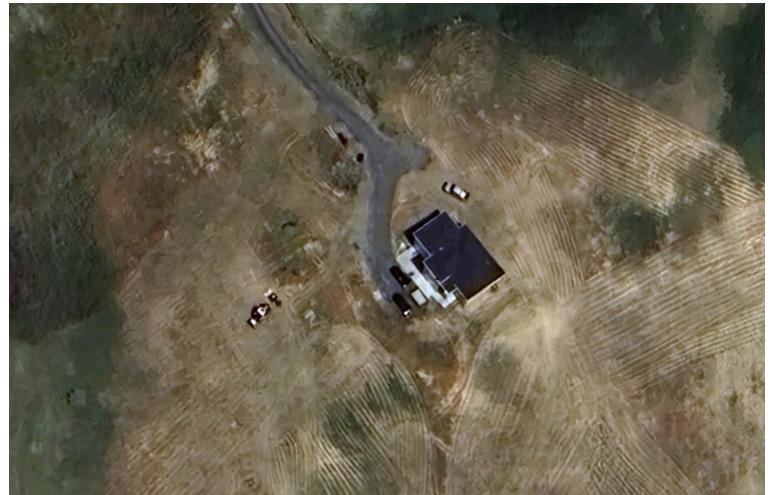
Andrew Walker Journal Submission 1/22/2025

In the past, I have been critiqued for a brick design I came up with, I was told it was not possible and that it would be too complex and not economically feasible for a project today because we don't have the industry or masons to support such a project.

My idea for a project would be to come up with an automated process for brick/stone laying that follows a curve or shape. It would be ideal if this design tool could stack bricks to make arches, vaults and at the very least a retaining wall. It would be helpful if the tool was capable of defining the cut of the brick or stone necessary to create the shape and keep track of how many stones are needed for the project.

My project would consist of a small pavilion made of bricks or stone arches with some retaining walls around the pavilion, demonstrating the flexibility of the tool. I would ideally like to design the project at my parent's house in Pullman, Washington because it is a hilly area, perfect for retaining walls and I am familiar with the site. I am inspired by Norman and Roman arches and vaults, but I don't know how to model them efficiently. If I could learn how to model them in a way that works, it would help me argue my case for them in future designs.





Pullman, WA Site Area

