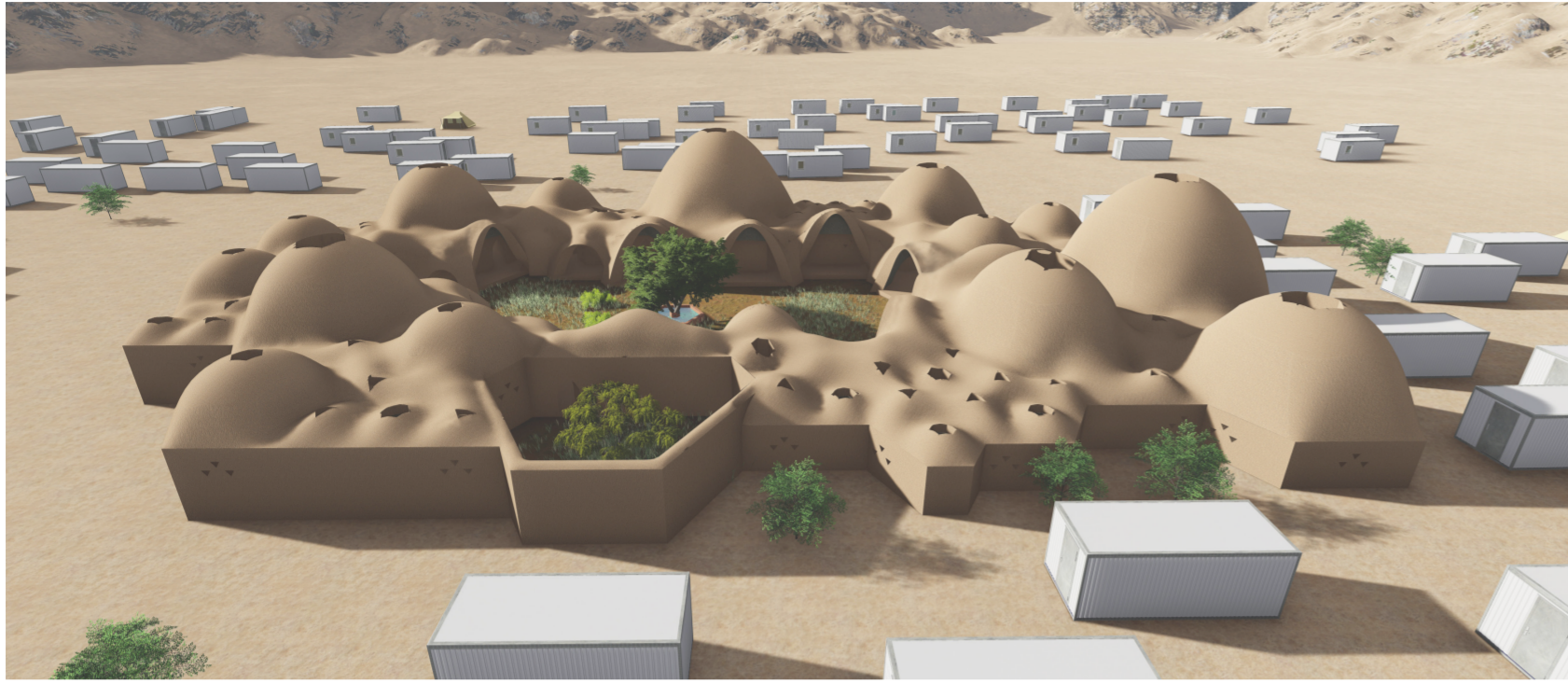


JANNAT AL-TOHR

A RETREAT FROM EVERYDAY LIFE

Nikoleta Sidiropoulou 482255, Hans Gamerschlag 4783190, Noah van den Berg 4282620
 Hamidreza Shahriari 4931963, Rick van Dijk 4373618, Maximilian Mandat 4931068

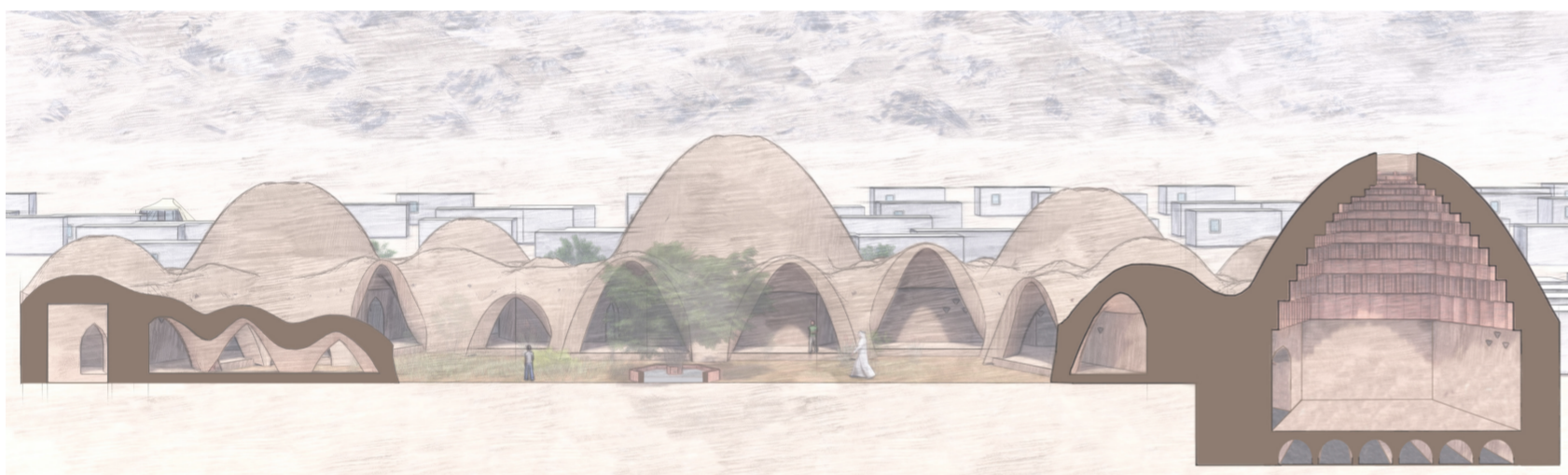
جنة الطهر



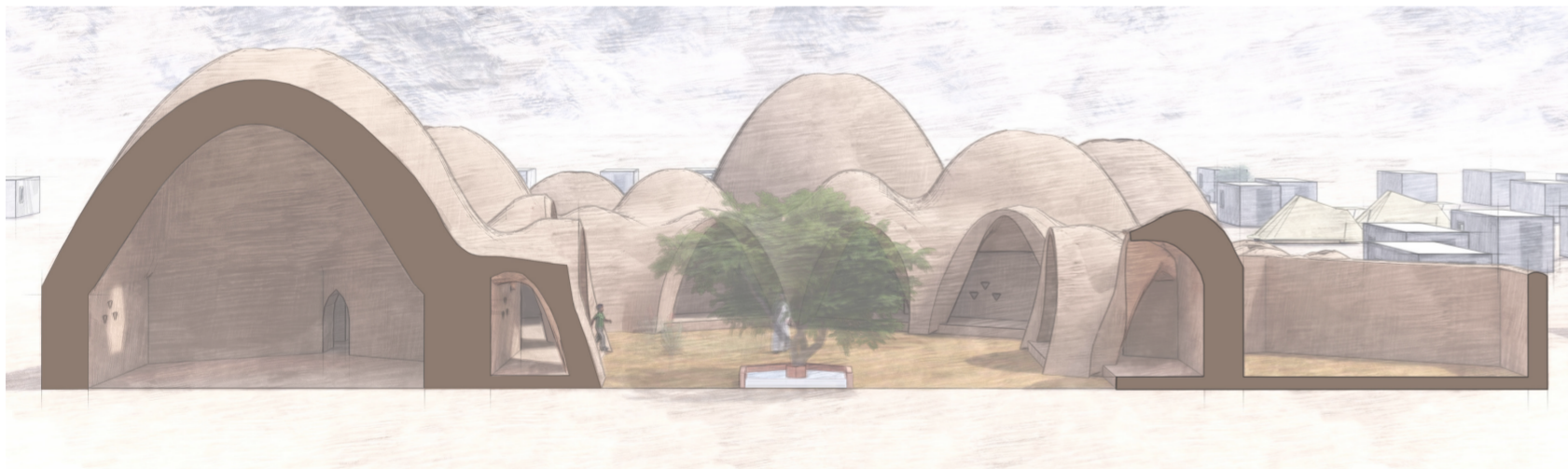
Birdeye view



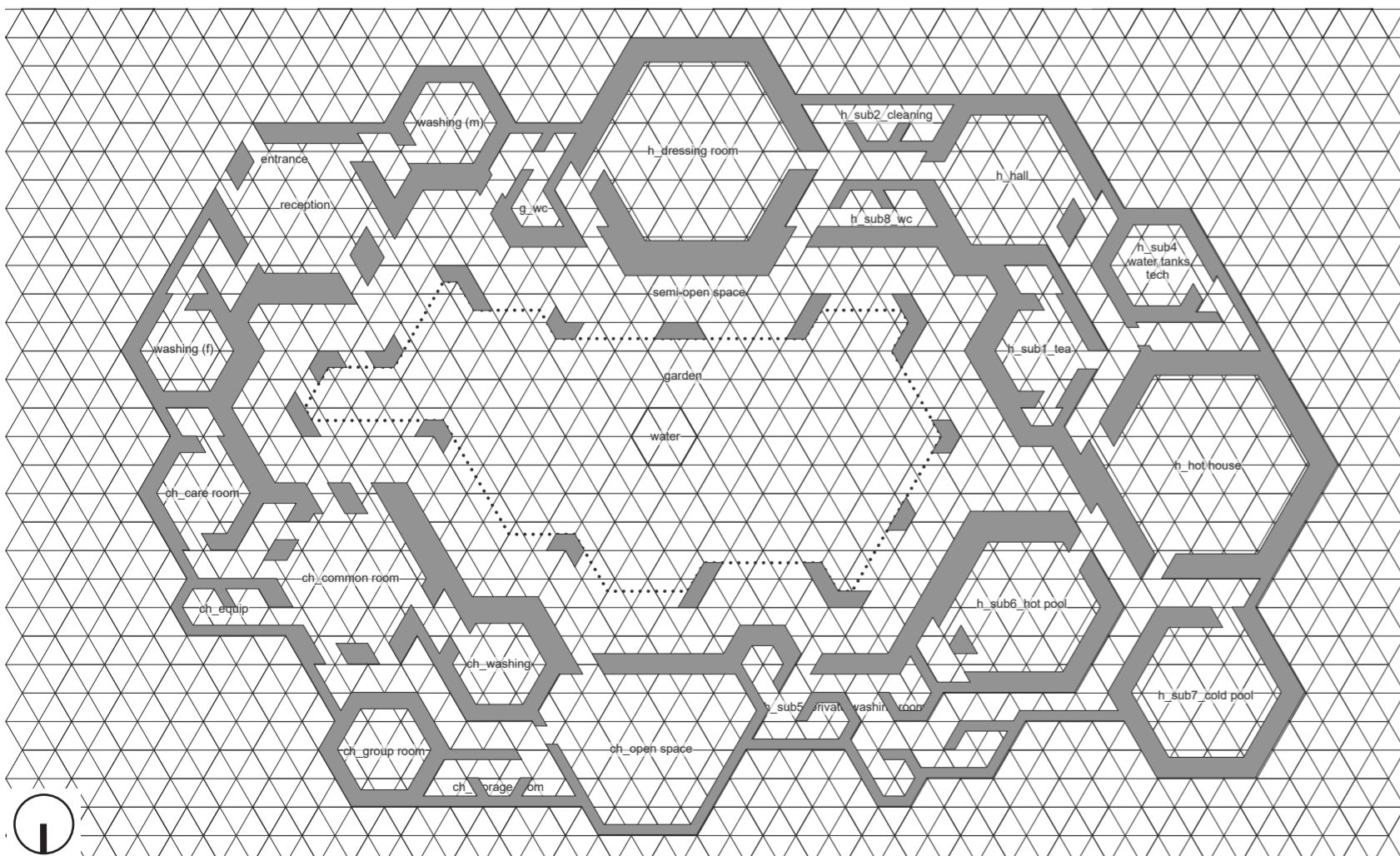
courtyard gardenw view



longitudinal section



cross section



floor plan

EARTHY 2019 AR3B011



site plan

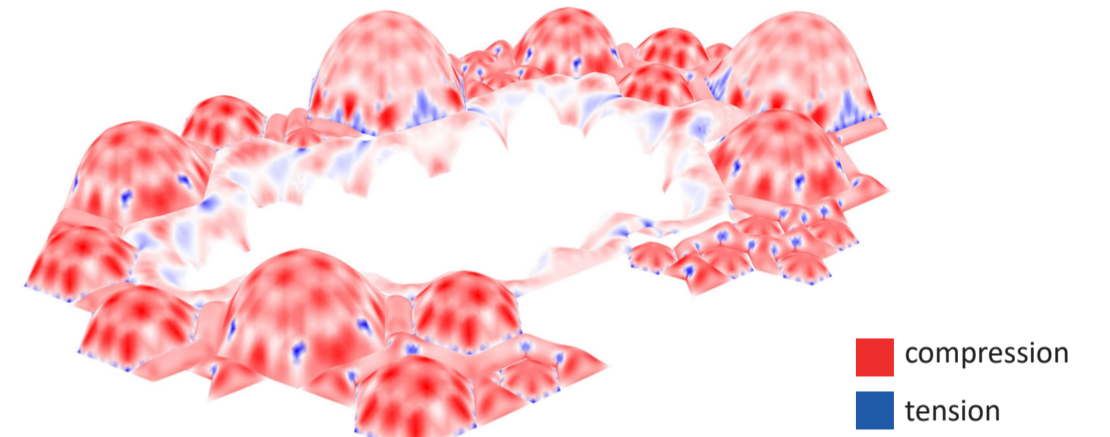
Located in the north of Jordan the Zaatari camp houses over 80.000 Syrian refugees for and undetermined period of time.

The main idea behind this project was to give the inhabitants of Zaatari a temporary retrieve from their daily lives in the camp. Hammams are a big part of islamic culture, they serve as a place of relaxation and purification. By introducing hammams into the camp we want to give the inhabitants back something they lost during the war.

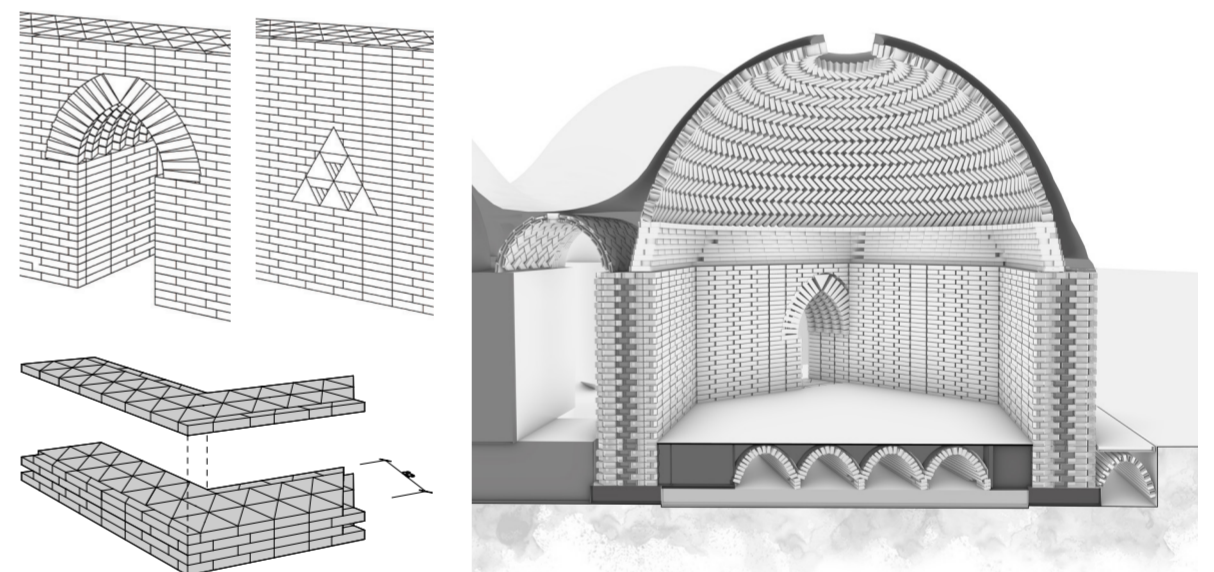
During the design process of the project the emphasis was placed on the use of the computational approach, as we set out to designing a methodology of designing a hammam that could be used in other locations not just for this camp. This made it so that the construction will not be the easiest thing to realize, with the large spans and the irregular shapes we are trying to push the limits of what one can build with adobe.

Chosen Mixture		Material properties used in structural calculations [Mpa]	
clay	30%	Youngs modulus	7,6
fine sand	30%	maximum compressive strenght	1,88
coarse sand	40%	maximum compressive strenght after safety factor	1,27
water (weight of the total mix)	10%	maximum tensile strenght	0,254

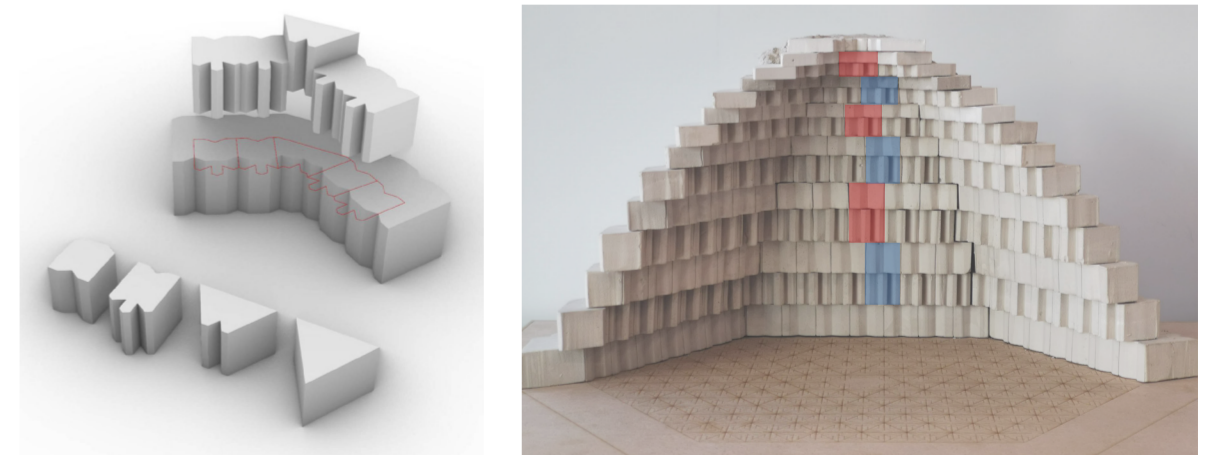
material properties



karamba analysis of ceilings



construction method



muqarnas elements and dome