



Earth Art

Ghana: 2011 Open ARchiTecture Challenge

Earth Art

Designer

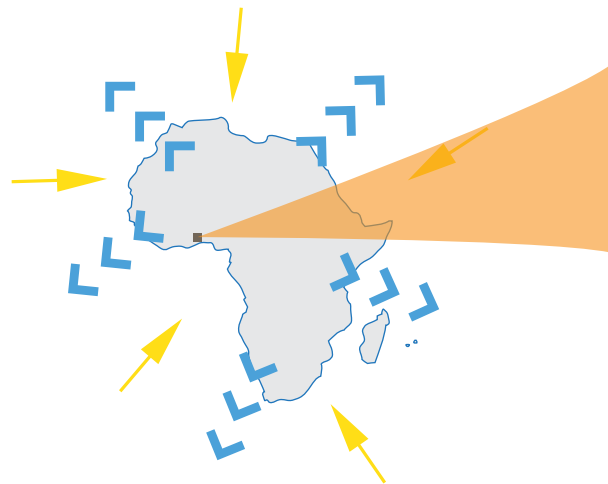
Kobina Banning, founder of Fusiou Architecture graduated from Arizona State University with Masters of Architecture with emphasis in Design. Recipient of George Christensen Travel Award, he graduated at the top of his class with a graduate research thesis that examined how displaced persons from other cultures can adopt architecturally into new urban settings. His passion and research throughout his professional career has been to examine how the design of architectural space can reflect a culture, a community, and an identity. Currently working at WHPacific as a project designer and an adjunct faculty, teaching drafting and design.

A native of Ghana, West Africa, Kobina has travelled widely to various regions in Africa, Europe and South America establishing first hand perspective of global architecture, with particular interest in changes in urban realities. In college, Kobina was nominated for several design awards and the recipient of the Design Excellence, a graduate research in Mexico City on developing a sustainable community for the Santa Fe favelas (shanty towns), a team project that was later published in the SALA journal. He has also received recognition for his work with the refugee community in Arizona.

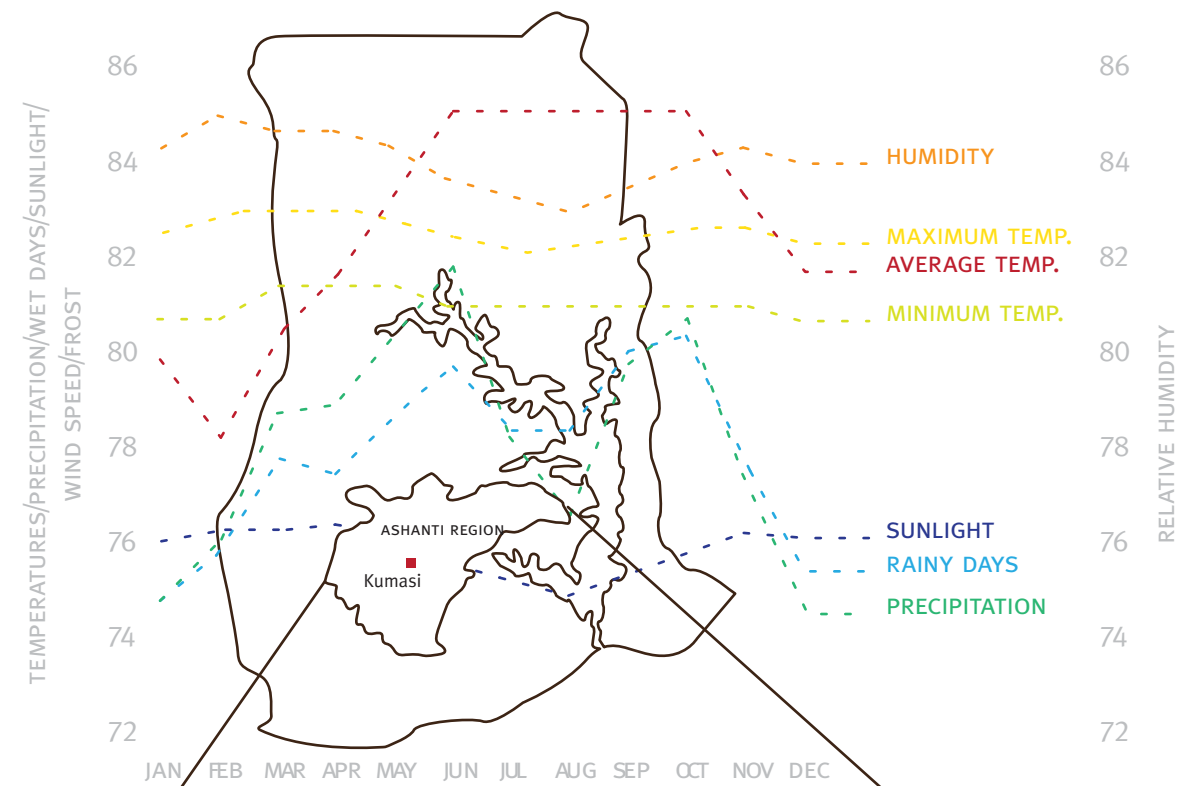
Co-designer

Banel Bucknor is a graduate with a B.S. in Visual Communication at Arizona State University (ASU) and since then has been a member of American Institute of Graphic Arts. Currently pursuing her Masters in Advanced Interactive Design at ASU, with a research that seeks to investigate the current trend in the use of graphics in architectural space and how it influences the human behavior and social interactions with emphasis on informal settings. She is the recipient of the Visual Communication Senior Show 2008. Prior to moving to Arizona, Banel received a BTEC National Diploma with Distinction in Art & Design at Barnet College, London.

A native of Ghana, West Africa, Banel has received recognition for her work with the Women of Darfur, "Break the Silence", a retrospective memoir of women who were caught in the warzone in Darfur, Southern Sudan, using her graphic talent to raise an awareness of social and health issues for the refugee community. As a co-founder of Fusion Architecture, her recent project includes "Journey of Hope", where Fusion Architecture teamed with Loren Anderson, artist and photojournalist based in Phoenix Arizona on a digital video production used for the AZLost Boys.



FORCES ACTING ON THE SITE



The main objective of the project is to create a communal intimate space, where the community could interact with the art community. The buildings' orientation was based on the sun orientation studies, allowing the artist courtyards to be shaded by the rammed earth walls for the most parts of the day.

The concept concentrated on framing the views of the site and bringing the community closer to the art culture.

The main structure is rammed earth walls with operable windows made from bamboo frames.

The construction is simple and will use local craftsmen to build.

The linear rammed earth walls extends out from the central courtyard into the landscape to bridge the harmony between the architecture and landscape.



KUMASI - ASHANTI REGION

Earth Art

Rammed earth formwork uses timber sides, held together with vertical timbers connected to horizontal timbers running through the wall. This formwork system is remarkably similar across the world.

Sustainable: Using rammed earth as a construction material greatly reduces the amount of CO₂ released during the construction of the building.

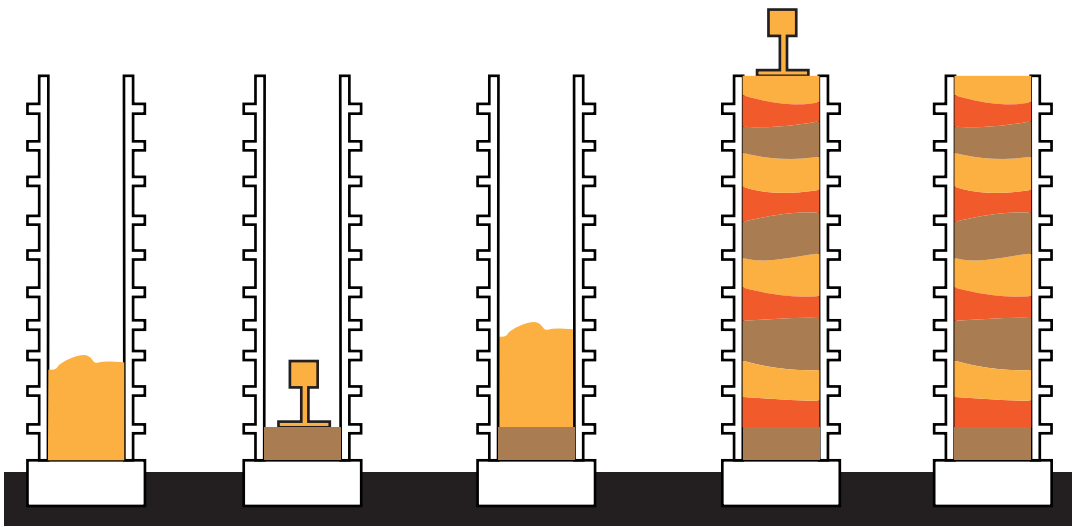
In using soil taken directly from the site, there is no transport requirement, directly reducing CO₂ emissions and taking vehicles off the road.

Rammed earth naturally regulates the internal relative humidity of the building, producing an improved air quality. This contrasts greatly with air conditioning systems, which act to dry the air in a building and contribute to harsh working and living environment.

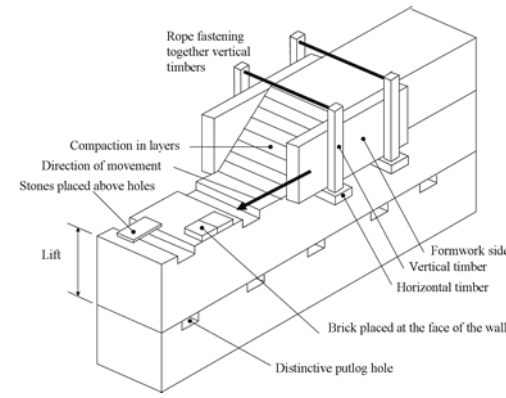
The roof is made of bamboo frames with thick woven straw matting forming an insulating ceiling structure and a sound barrier when the rain hits on the tile roof.



MAIN ENTRANCE



RAMMED EARTH STEPS AND FRAMEWORK



RESIDENCE COMMON COURTYARD

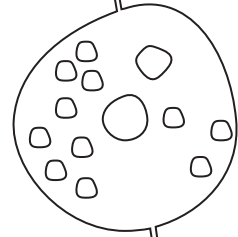


TRADITIONAL RAMMED EARTH FORMWORK IN KAGBENI, NEPAL AND MOROCCO

*Source: Historic Rammed Earth

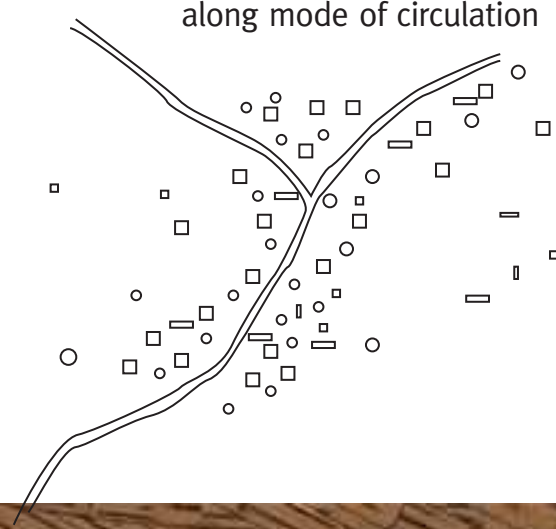
Earth Art

Traditional settlements around courtyard.



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Current settlement along mode of circulation



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→



Earth Art Community

Our interpretation of the design proposal called for a marriage between art and earth.

Thus, the site will serve as a place where artist from all over the world will immerse themselves in the Ashanti local region while collaborating with other artist locally and international.

The site then become a focal point that brings in art, a communal space for sleeping, working and recreational while appreciating the natural elements at the local region.

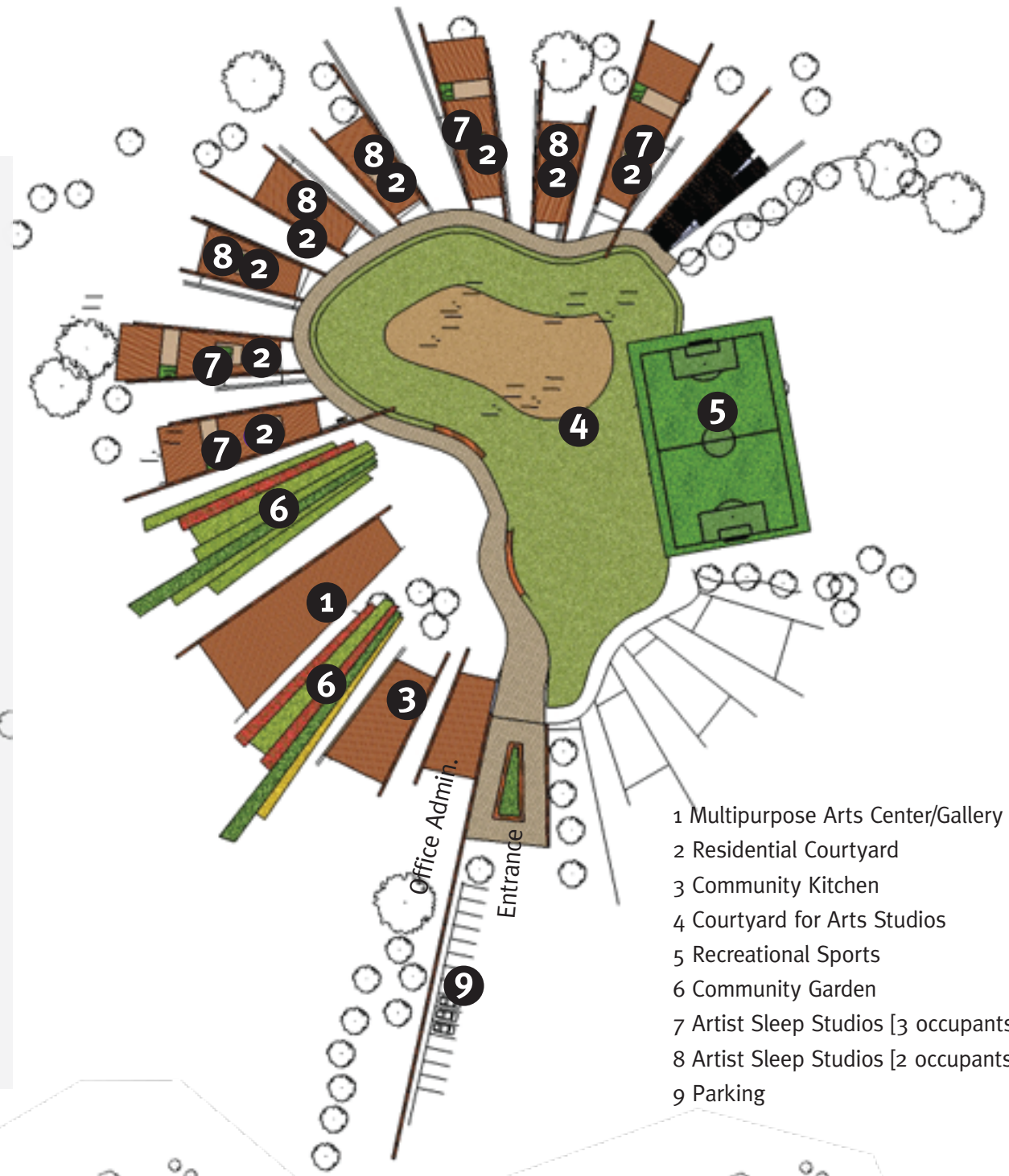
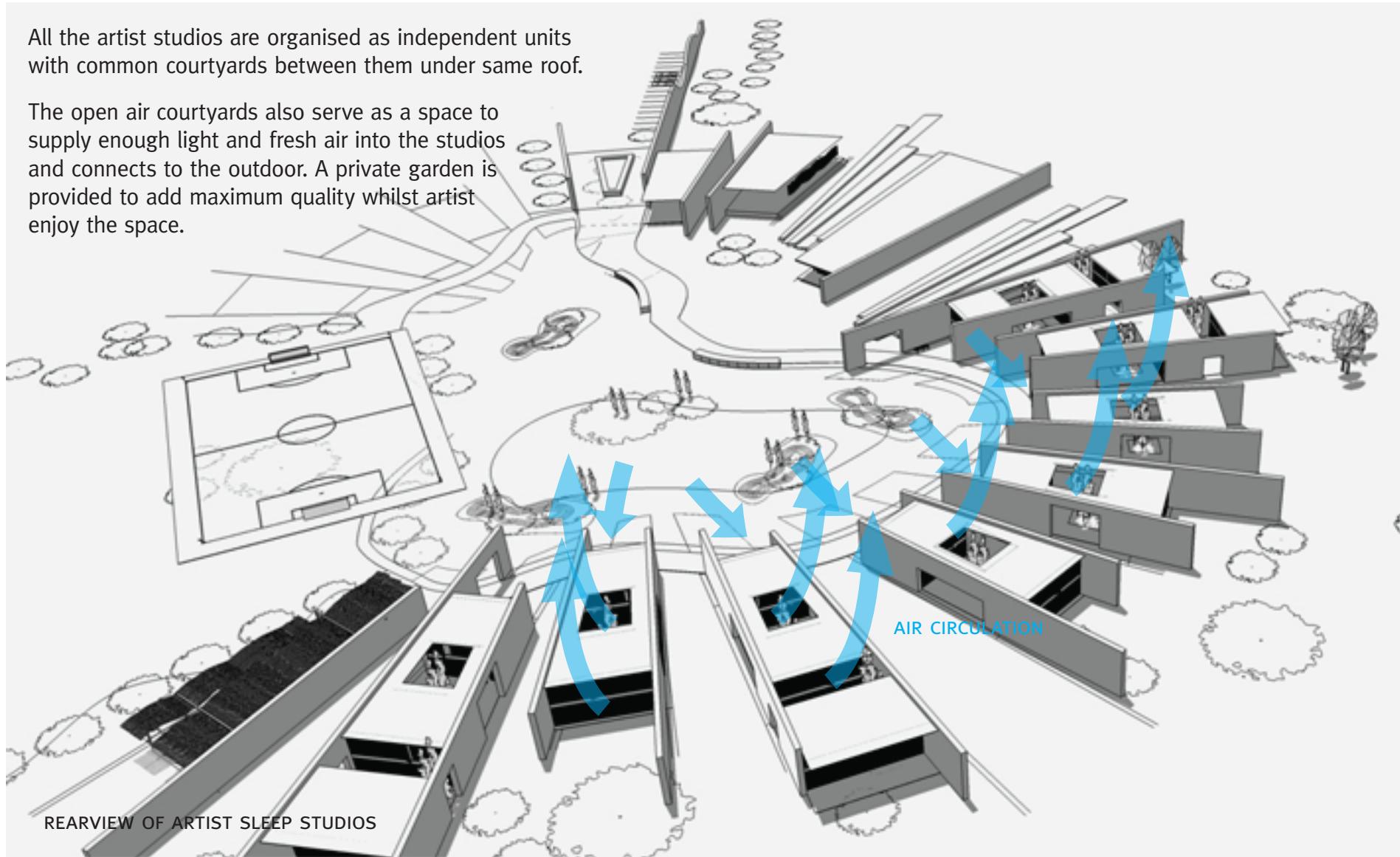


GALLERY PAVILION VIEWING SOCCER FIELD

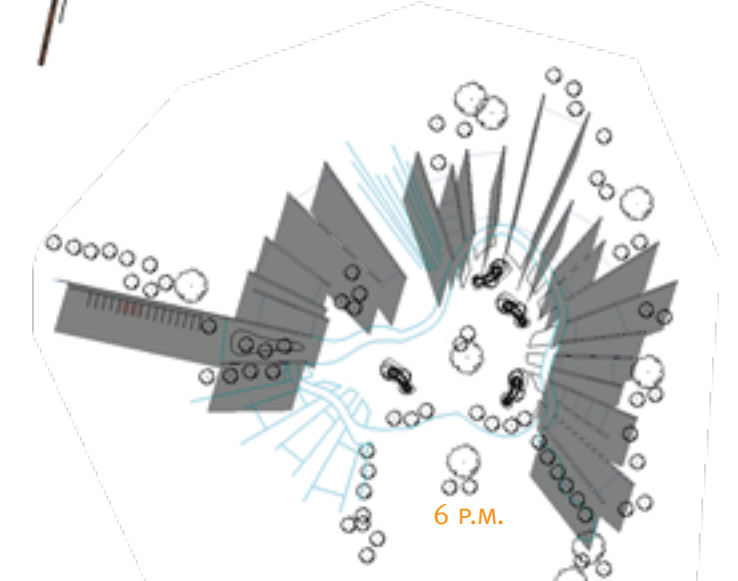
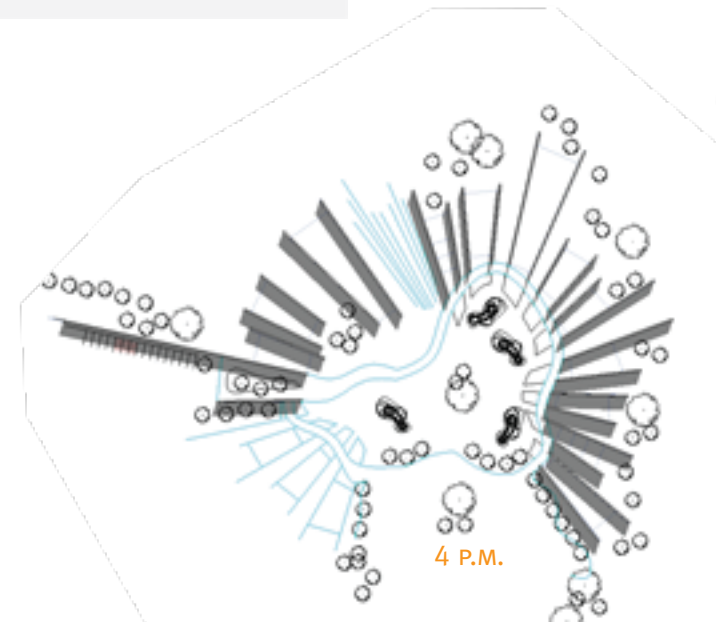
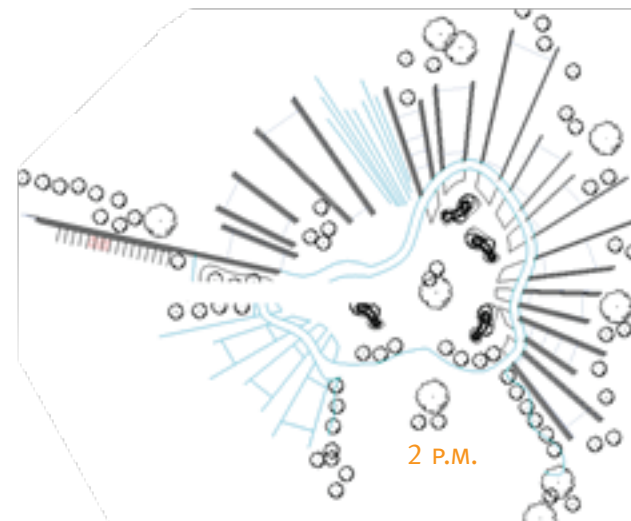
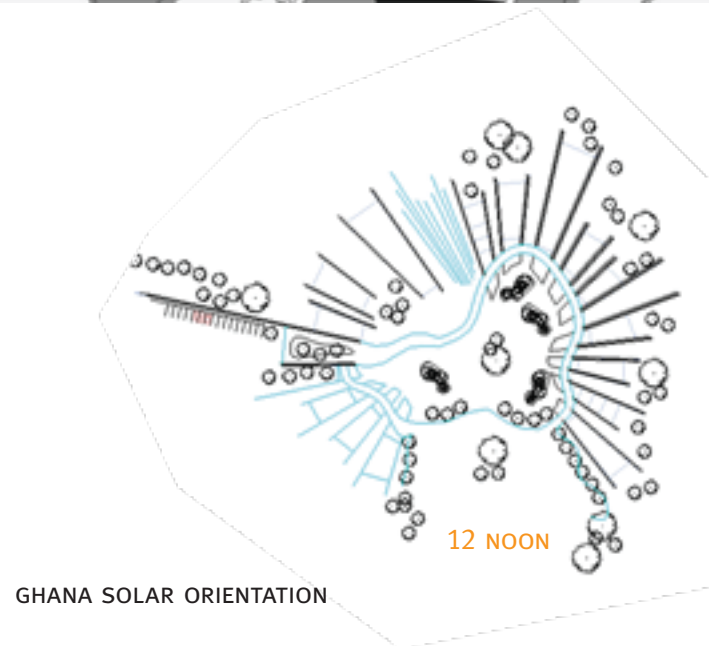
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All the artist studios are organised as independent units with common courtyards between them under same roof.

The open air courtyards also serve as a space to supply enough light and fresh air into the studios and connects to the outdoor. A private garden is provided to add maximum quality whilst artist enjoy the space.



- 1 Multipurpose Arts Center/Gallery
- 2 Residential Courtyard
- 3 Community Kitchen
- 4 Courtyard for Arts Studios
- 5 Recreational Sports
- 6 Community Garden
- 7 Artist Sleep Studios [3 occupants]
- 8 Artist Sleep Studios [2 occupants]
- 9 Parking



GHANA SOLAR ORIENTATION

