HANNA INEZ MARIA LINDGREN



Graffiti Starter Kit

The Chatham hemp workshop introduces the community to hemp through farming the material on site. The building is open to the public, allowing for free socialising, exercise and activities, in hopes to provide the Chatham community with an accessible public space. The hemp plant farm and workshop will show the possibilities of the plant and the process of harvesting the plant into wood - seeing the product from start to finish. Courses will be taught in the workshop that focus on creating modular systems including tables, seating, plant containers and storage using hemp shiv sheets, creating employable skills for the youth community. The modular box system created could be used to fit out empty lets in Chatham, provide seating in public spaces and greenery for the city centre, with access to repairs at the workshop. The whole space is built using the boxes, showing public how accessible and usable the material is. The space will profit through selling the hemp wood systems at an affordable price, as well as through renting out studio spaces to young creatives



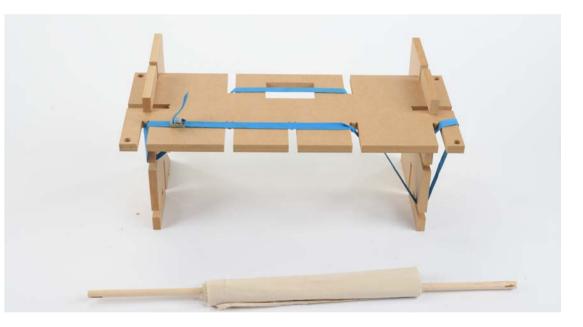
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Interior Visual









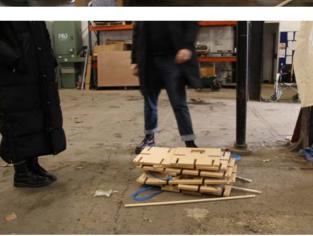










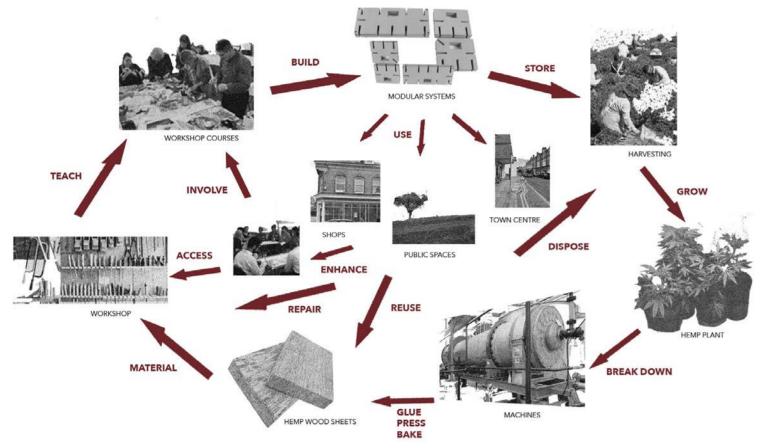


FLAT PACK in use on site





This device was initially a stool used for reaching higher spots for graffiting, but developed into a flat pack concept that could be connected in several different configurations. Seating, ladders, shade, conversation areas and more can be built. This showcased the importance of coming together and building with each other. This device was produced in the early stages of the project and inspired the modularity used throughout. Chatham town lacks public space specifically spaces for youth, the idea of building together was seen as a way of bringing youth together.



Circular economy diagram

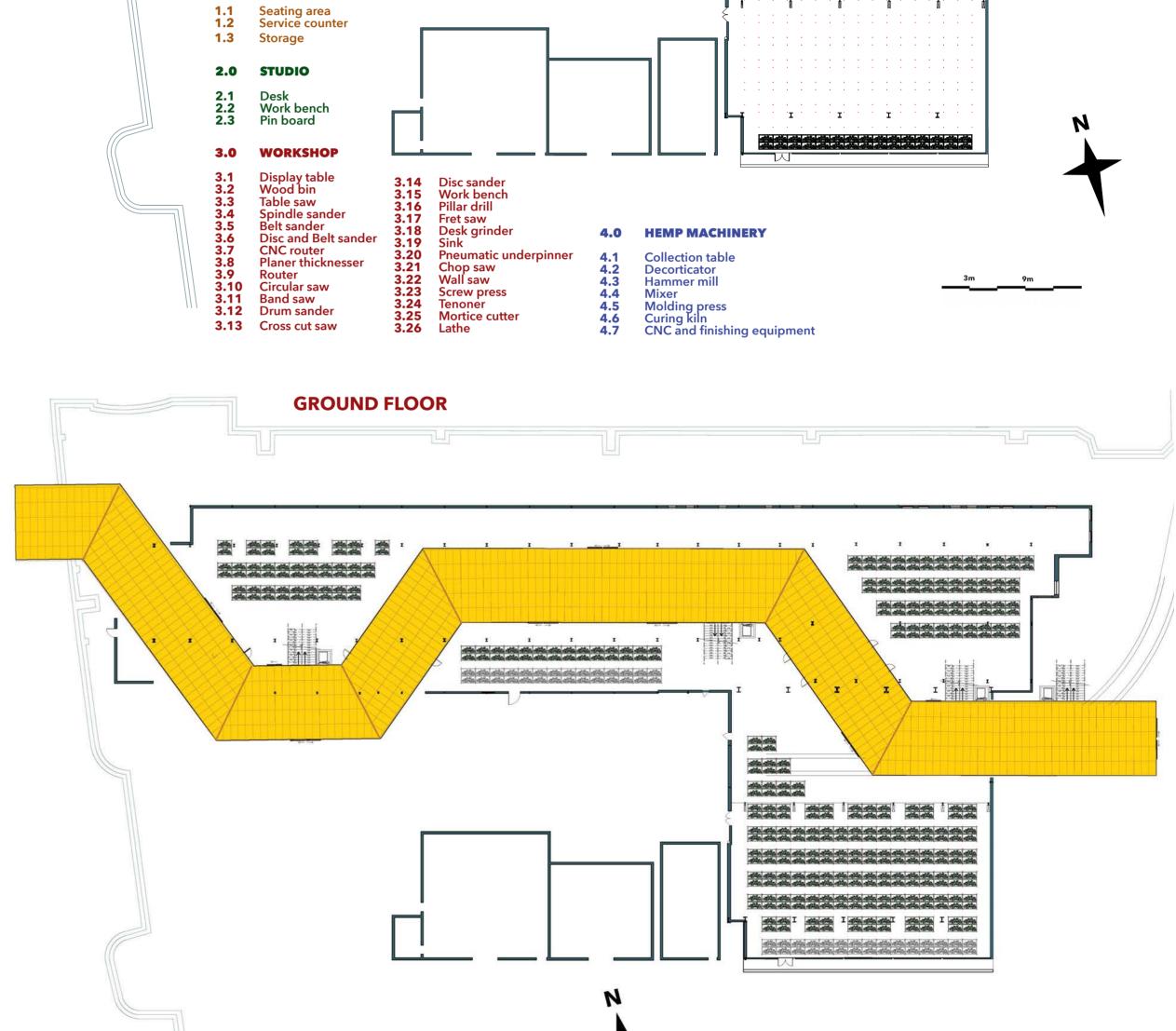
A public open access workshop used for repairs, hobby wood works and workshops. Introduces the community to hemp wood, with a public space filled with hemp plants. The public space will showcase the plant, the possibilities of the plant and the process of making the plant into wood. The workshop will have a course that focuses on creating modular systems using hemp wood to create employable skills for the youth community of Chatham.

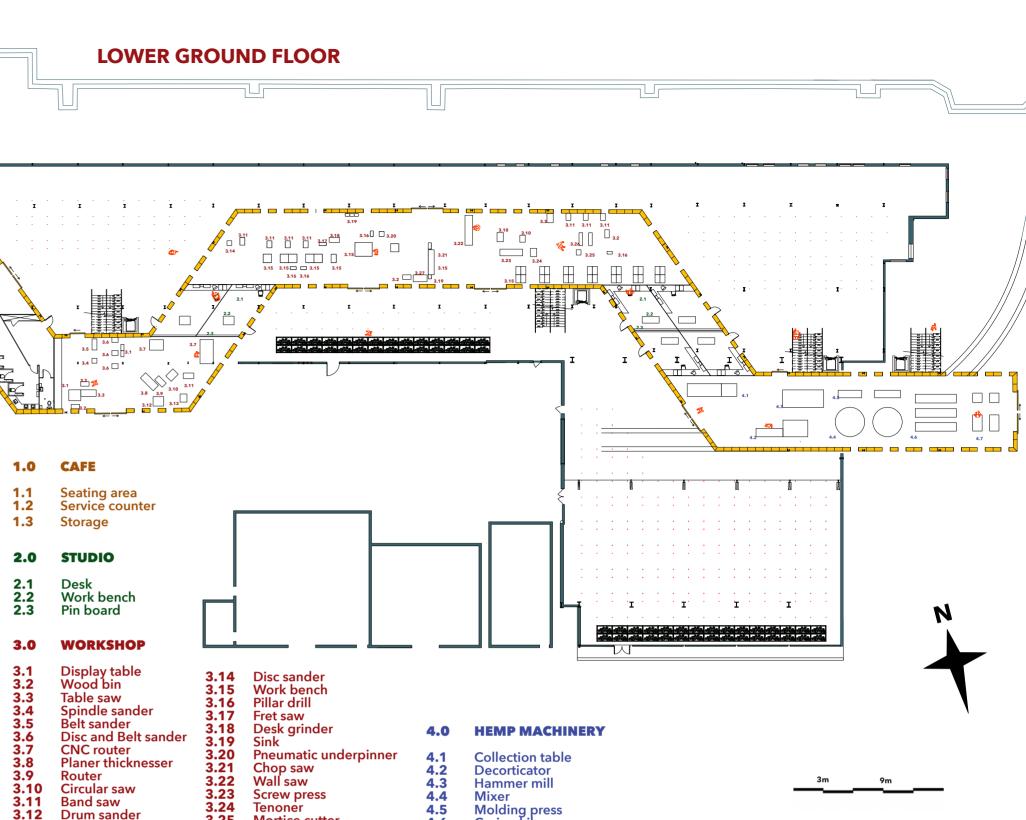
Concept collage





Interior Visuals

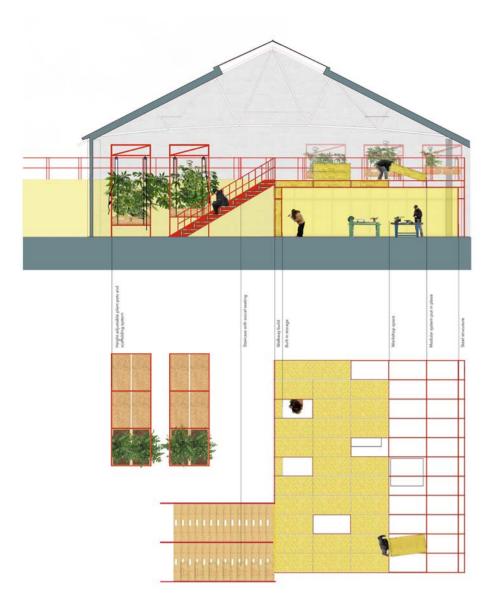








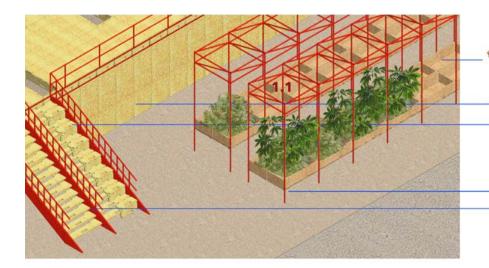


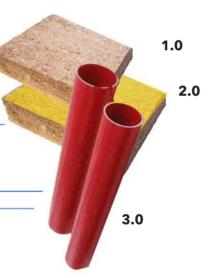


Two materials are used throughout the space which highlight the simplicity

and modularity of the scheme. Hemp shiv sheets with mineral binder are used for the boxes that build up the walkway, hemp plant containers, the stairs, and furniture. The walkway and stair hemp wood is laquered yellow. The structural details, such as the planting scaffold system, the walkway and stair structure are built with red patinated steel.

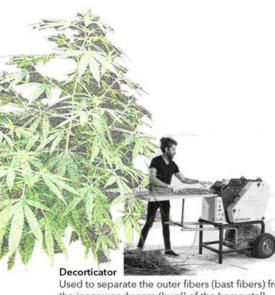




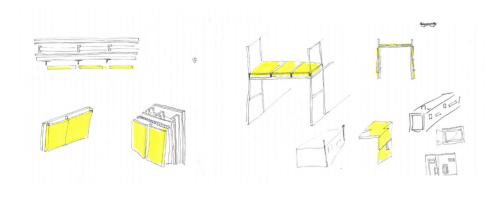


Hemp shiv sheet with mineral binder 1.0 Laquered hemp shiv sheet

2.0 3.0 Red patinated steel



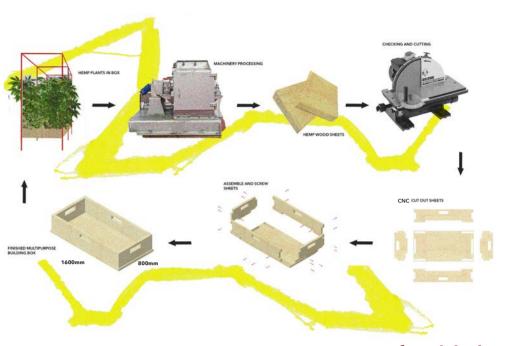
the inner woody core (hurd) of the hemp stalk.



The modular system of the project is built by multi-use boxes that are made from hemp shiv sheets that are CNC cut in a pattern that allows them to interlock and create a box that can then be screwed for extra rigidness. The construction system is not only for the use of the site but can also be brought into Chatham town and other locations. These collages show how the box can be used as plant containers, a fit out storage for shops, for a structure, and as seating and tables.



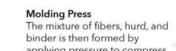
1:20 model of modular boxes



Process of modular box

Hammer Mill

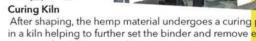
Hurd is broken down into smaller particles using a hammer mill, making it suitable for further processing.



applying pressure to compress the material into boards, block or other forms.



The fibers (bast) and hurd are mixed together with an adhesive binder such as natural or synthetic resin in a mixer.



After shaping, the hemp material undergoes a curing process in a kiln helping to further set the binder and remove excess moisture from the material.

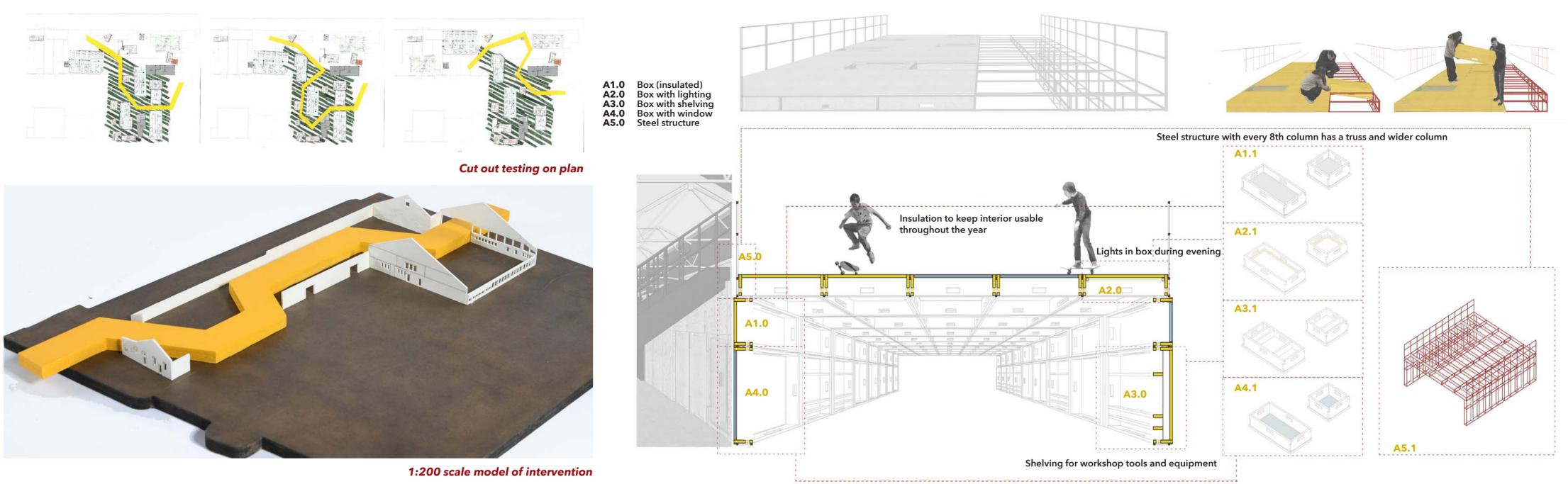
Finishing and Quality Control Equipment Sanders, saws, or routers may be used for trimming, shaping, and smoothing. Various quality control equipment such as moisture meters, thickness gauges, and strength testers are used throughout the manufacturing process.

Hemp machinery





Modular boxes application





Windows that can be used as skylights or vertical windows, giving view into farm and workshop