
Hybroot

KORY BIEG

The University of Texas at Austin

The design of Hybroot reflects the balance between the urban fabric and natural landscape that is indicative of the site. The 10-acre landfill that once occupied the site has been covered by a new layer of earth, re-mediating the brown-field and providing the Circle Acres Neighborhood of Montoplis a community park and gathering space in Austin, TX. The form, color and material of Hybroot mimics the surrounding landscape and tree canopy, while the fabrication, assembly and surface patterning evoke a more synthetic sensibility. At first glance the two are inseparable, but on closer inspection, one notices artificial formal compositions, unnatural pixilation of colors, and the artifact of the CNC lathing process exposed as surface texture. The sheen and reflectivity of each paint color varies between the natural and plastic. It is both root and robot. By mixing the two design sensibilities, the projects aim is to offer a new model for environmentally sensitive design that is neither solely natural nor artificial, but a blend of each.

Hybroot is parametrically designed, allowing for a more exact fit between the site and project. The final design is only one iteration of a number of possible alternatives. The project can be scaled – both in branch number and length – to meet budgetary constraints or reconfigured depending on alternative siting of the project.

The installation does not permanently impact the site. Though the length is approximately 20'-0", the installation is primarily

self-supporting. Branches occasionally insect, forming a stiff joint that adds to the projects overall stability. Where the installation touches the ground, a metal fabricated stake is temporarily anchored into the ground. The installation is then fixed to these anchors, forming a rigid attachment between the project and ground. Once disassembled, the anchors are removed from the ground leaving no trace of the project.



IMAGE 02 _ Photograph



IMAGE 03 _ Photograph

HYBROOT

Kory Berg, OIA

The design of Hybroot reflects the balance between the urban fabric and natural landscape that is indicative of the site. The 10-acre landfill that once occupied the site has been covered by a new layer of earth, re-seedling the brown-field and providing the Circle Acres Neighborhood of Montopolis a community park and gathering space in Austin, TX. The form, color and material of Hybroot mimics the surrounding landscape and free canopy, while the fabrication, assembly and surface patterning evoke a more synthetic sensibility. At first glance the two are inseparable, but on closer inspection, one notices artificial formal compositions, unnatural gradations of colors, and the artifact of the CNC lathing process expressed as surface feature. The sheen and reflectivity of each paint color varies between the natural and plastic, it is both real and robot. By mixing the two design sensibilities, the projects aim is to offer a new model for environmentally sensitive design that is neither solely natural nor artificial, but a blend of each.

Hybroot is parametrically designed, allowing for a more exact fit between the site and project. The final design is only one iteration of a number of possible alternatives. The project can be scaled – both in branch number and length – to meet budgetary constraints or reconfigured depending on alternative siting of the project.

The installation does not permanently impact the site. Though the length is approximately 20'-0", the installation is primarily self-supporting. Branches occasionally insect, forming a stiff joint that adds to the projects overall stability. Where the installation touches the ground, a metal fabricated stake is temporarily anchored into the ground. The installation is then fixed to these anchors, forming a roof attachment between the project and ground. Once dissembled, the anchors are removed from the ground leaving no trace of the project.

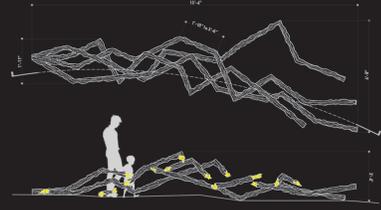


IMAGE 04 _ Plan and Section

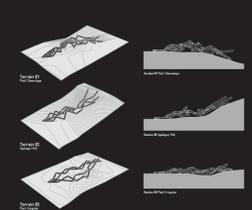


IMAGE 05 _ Terrain Samples and Site Strategy

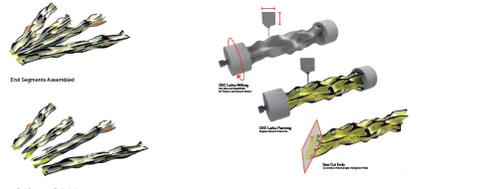


IMAGE 07 _ Fabrication of Segment

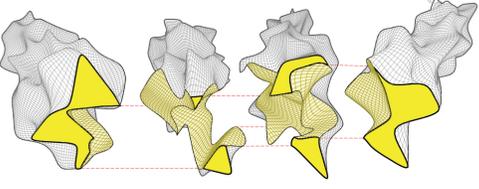


IMAGE 06 _ Joint at End Segments

Parameters	Values
1 Total Number of Segments	4 to 15
2 Length of Segment	12' to 42'
3 Height of Joint	-36" to 36"
4 Angle between Segments	-90° to 90°
5 Division of Segment	3 to 5
6 Radius of Segment	7 to 15
7 Division of Circle	2 to 15
8 Paint on Line	1, 0

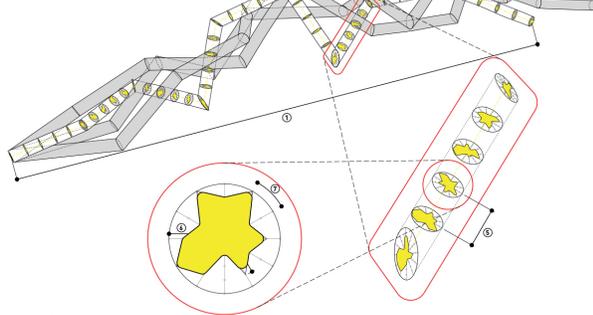


IMAGE 08 _ Parametric Model Diagram



IMAGE 09 _ Photograph