



## THE NEST

Fire Pit made from Waste Materials / 2019  
AFTERHOURS Design Collaborative

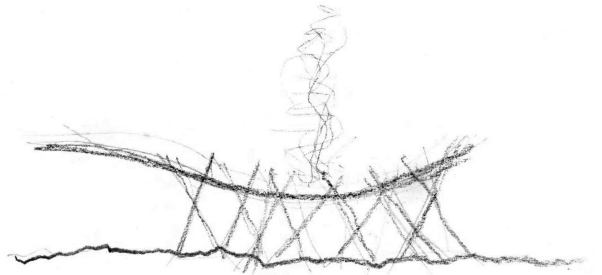
The Nest is an outdoor concrete firepit designed for an urban backyard in Pittsburgh, PA. Created almost entirely from found materials, both natural and man-made, the Nest explores low-budget and low-tech methods for organic form-making to create an authentic, approachable, and place-specific object which celebrates the drama of fire. Born from a deep desire to create something of beauty with others, the project is the result of a collaborative, intuitive design process which relied on conversation, sketching, and physical testing to drive decision-making and manifest built form.

During a preliminary conversation, three parameters were determined that would define the project: 1) We would work in concrete (because neither of us had worked with the material before, and we wanted to learn.); 2) The piece would be site-specific (because we believe in celebrating/revealing the particular over universality.); and 3) The formwork for the pit would be made of found, natural material.

The formwork for the concrete was built entirely of waste yard debris. Branches from removed overgrown shrubery were incrementally woven together to create a lattice that served as the primary structural skeleton for the pour. Fresh cut grass was laid in to increase density of the woven network, followed by fallen Japanese Magnolia leaves which formed the outer-most, "sealed" layer of the formwork, à la Andy Goldsworthy. Scrap steel angles were randomly placed to create a network of legs that would allow the concrete form to appear to float above the earth.

Akin to the transience and drama of fire and fire-making, the materials and methods for construction of the Nest were designed to facilitate and celebrate life-cycle transformation of the object over time: as the pit is used, the organic material which was used in its creation is gradually burned away, revealing the pure concrete mass, imprinted by leaves and the skeletal network of woven sticks which supported it.

After serving its users at its urban location, the Nest was relocated to a site in the North Hills of Pittsburgh, a transition which initiated the project's second phase.



The Nest was conceptualized as an organic form floating above the earth. A random arrangement of scrap steel members mediates between earth and pit, gaining strength through aggregation and allowing the concrete mass to appear to float.

### Years

Design 2018  
Construction 2018-2019

### Design

AFTERHOURS: Garrett Rauck, Brian Bollens

### Construction

AFTERHOURS: Garrett Rauck, Brian Bollens

### Contributors

Dan Gehr





(From top left) 1. Harvesting branches from overgrown bushes on family property. 2. Initial test of "hoop" strategy for formwork creation. 3. Staking out "loom" to serve as stick weaving framework. 4. "Loom", from top. 5. Side view of 3-dimensional "loom". 6. First branches are woven. Initially, branches were "green" and pliable. 7. Over time, we developed a feel for the weaving process, and let the lattice tell us where we could and could not weave. 8. "Nest" formwork, 50% complete. 9. Detail of woven nest. A point of maximum density was reached where it was too difficult to weave any more sticks. 10. "Nest" formwork, 100% complete. 11. A 2x4 frame was constructed around the nest that would be used to support the underbelly of the formwork via ratchet straps during the concrete pour. 12. Placing scrap steel angles through nest to ground. The steel would serve as legs for the pit once all organic material was burned away.

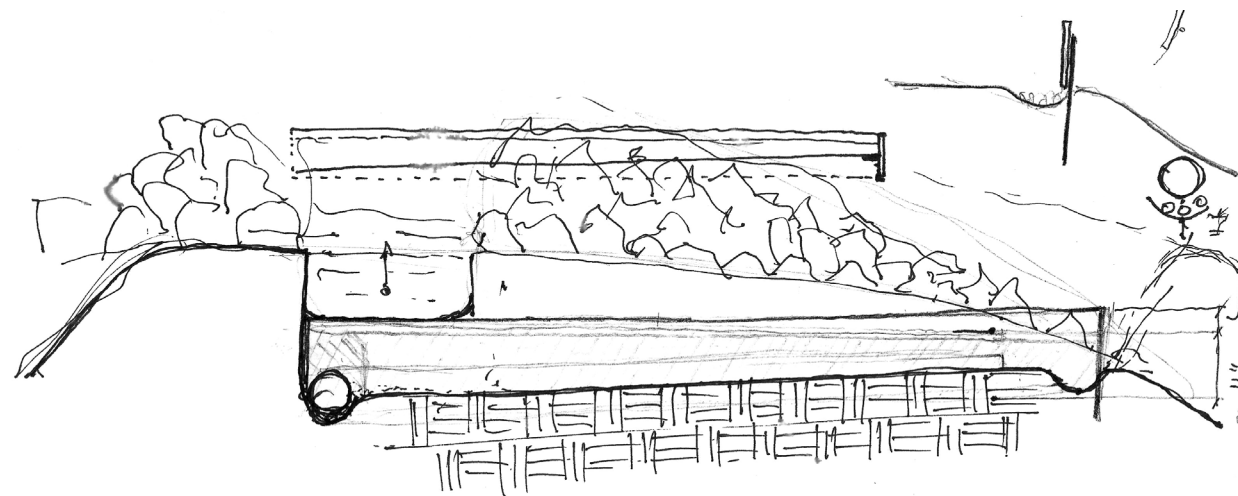
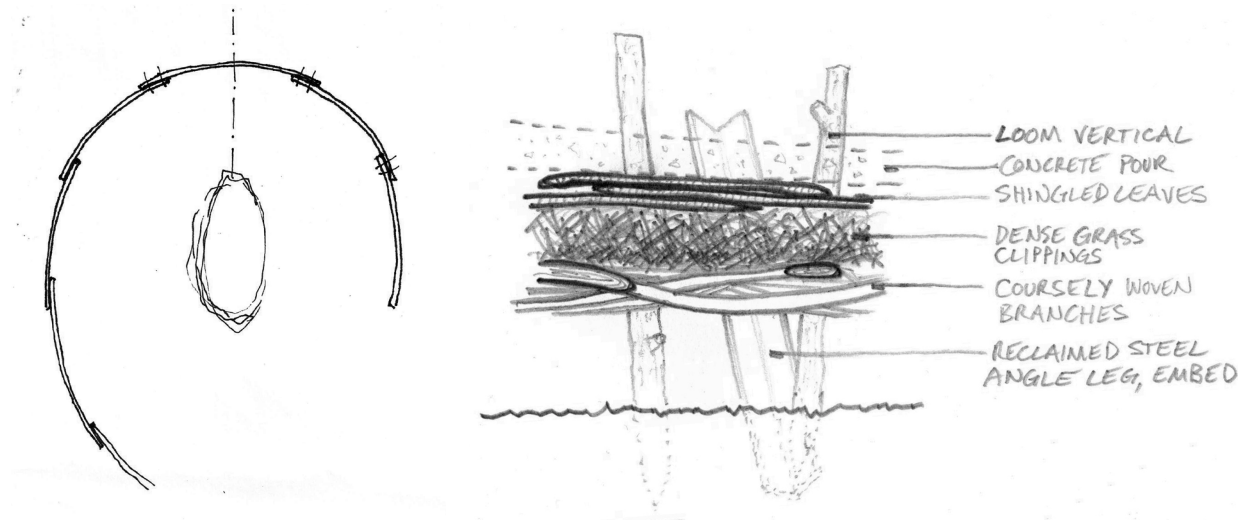
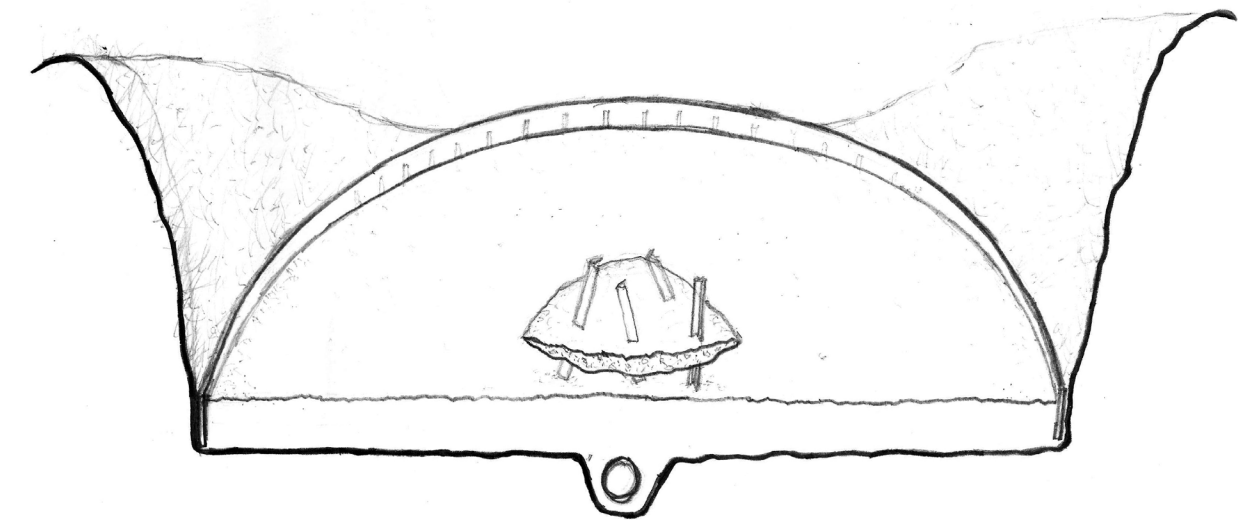


13. Testing use of grass clippings for next layer of density. 14. Placing fresh grass clippings on concrete pour day. 15. Completed layer of grass clippings on top of woven stick lattice. 16. First Japanese Magnolia leaf, selected for its availability and large surface area. 17. A trick picked up from artist Andy Goldsworthy, leaves were wetted prior to placement to enhance bonding and seal. 18. First concrete laid into form. 19. Detail of glass-fiber-reinforced concrete, Japanese Magnolia leaves, steel angle, and wood branch stake. 20. Concrete 100% poured. The vertical loom sticks poking through the concrete would be burned away over time, creating a constellation of holes that add interest and help with air flow to the fire. 21. First fire. Organic formwork still present. 22. Steel legs poking through provide support for fire building and cast dancing shadows. 23. During one fire, a large portion of the organic material went up in flames. 24. The Nest, bare of natural material.









Sketches served as a collaborative tool for quickly visualizing design ideas, evaluating their merit with respect to project aspirations, and final decision-making.

The Nest was relocated to a site in the North Hills of Pittsburgh in the second phase of the project. For the new siteA new site was developed