



WRIGHTS LAKE
KITCHITWAA SHKWAANDEM

KITCHITWAA SHKWAANDEM / HEAVENS GATE TRAIL

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01 - INTRO

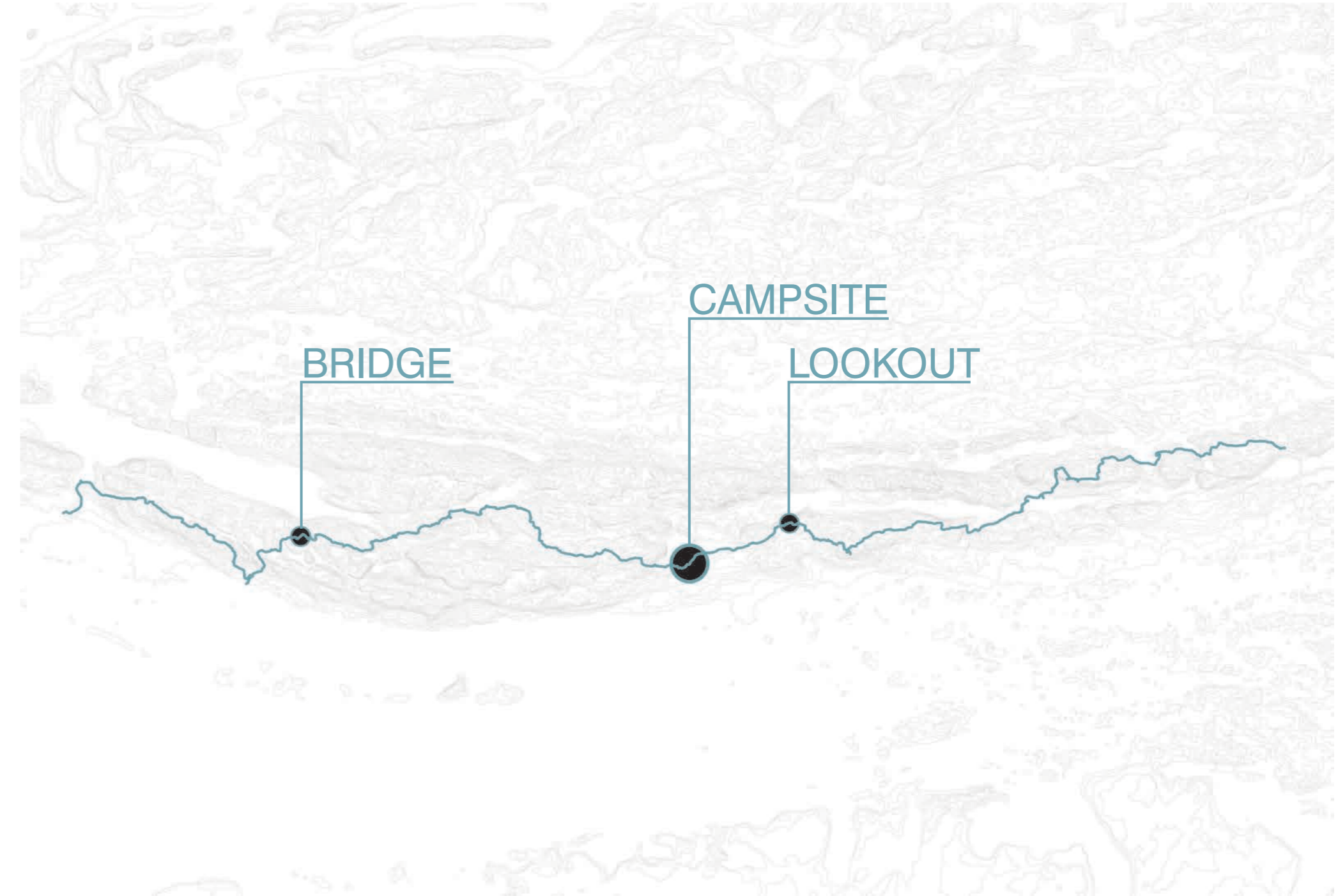
Proposal:

The Kitchitwaa Shkwaandem / Heaven's Gate Trail is currently situated on Indigenous and Parks land; creating a unique mixing of two cultures. This project attempts to merge them through the experience of the trail and the architectural interventions throughout it. This is achieved by drawing from indigenous and contemporary construction techniques to create a low impact design that is tensile in nature; representing the tense past between the Indigenous and the Canadian cultures intertwining. This unique construction typology will embody a respect of the land by being as low impact and sustainable as possible. The materials used are meant to allow the structure to decompose back into the earth at one point down the line, symbolizing that the two cultures come from the same place.

The construction typology will utilize lashing connections, drawn from the indigenous peoples bent wood structures and a respectful merging of traditional wood joints done with contemporary fabrication techniques, utilizing a CNC machine. By prefabricating the main sleeping structure this allows the construction to be done with no power tools, screws or nails. The members will have all the joints cut with extreme accuracy and can be delivered to the project site through the snowmobile trails that are close by. Allowing it to be delivered as a ready to assemble kit, where the only connection components are hemp rope and the metal anchors that the rope is tied through.

For the Bridge and lookout sites, it is much more inaccessible so the option of prefabrication isn't possible. This is where the strength of this construction typology becomes apparent by being able to utilize materials found on site to create the structures. The bridge and furniture designs are primarily lashing based with the bridge utilizing rudimentary joinery through simple notching of the logs.

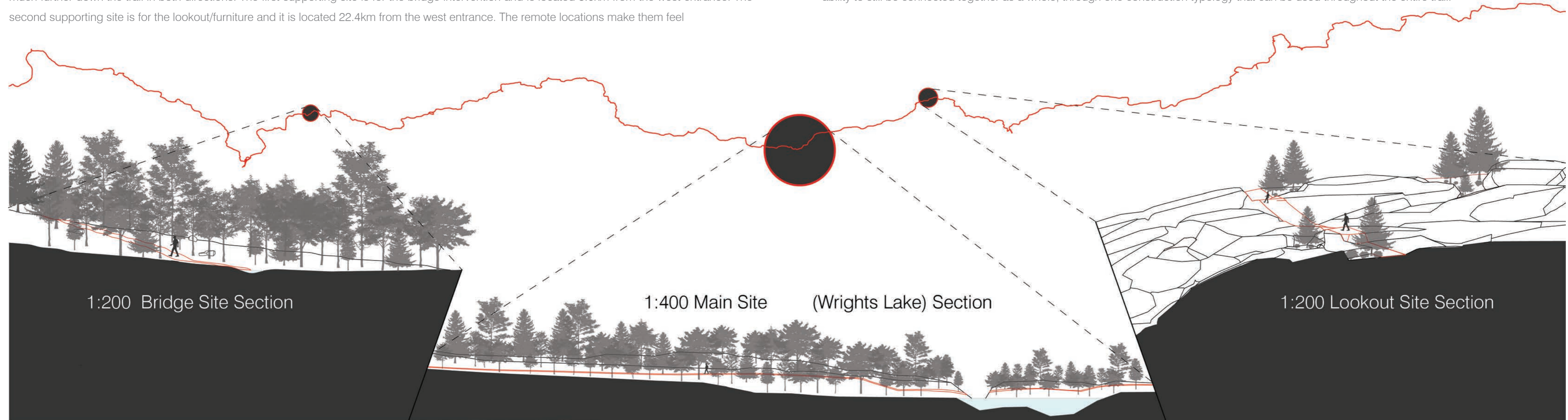
The Furniture designs are meant to be a collection that keeps on growing as people will be encouraged to make their own lashing furniture so that hopefully one day the trail will become a collaborative design build trail. This construction typology allows for campers to have a furnished campsite, even in the deepest parts of the trail.



Site Synthesis

The main project site is situated on the edge of Wrights Lake which is about 20km in from the west entrance or in other words; it's in the middle of the trail. This is where the sleeping structure for 6 people and furniture will be. The other two supporting sites are located to either side of Wrights Lake; much further down the trail in both directions. The first supporting site is for the bridge intervention and is located 8.6km from the west entrance. The second supporting site is for the lookout/furniture and it is located 22.4km from the west entrance. The remote locations make them feel

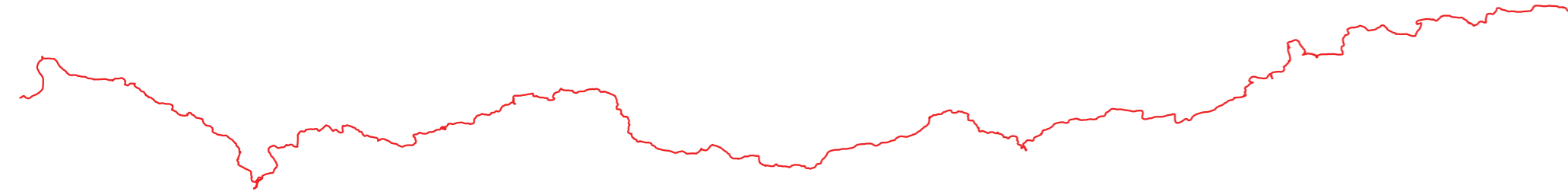
disconnected from the outside world and allows a feeling of immersion in nature, which the designs reflect. These three sites were chosen specifically to show the potential of this design when being applied to very remote locations where normally nothing could be built. It also conveys the project's ability to still be connected together as a whole; through one construction typology that can be used throughout the entire trail.



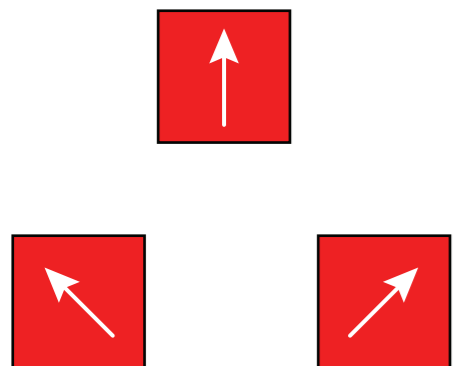
02 - SITE

Wayfinding 38.0 km

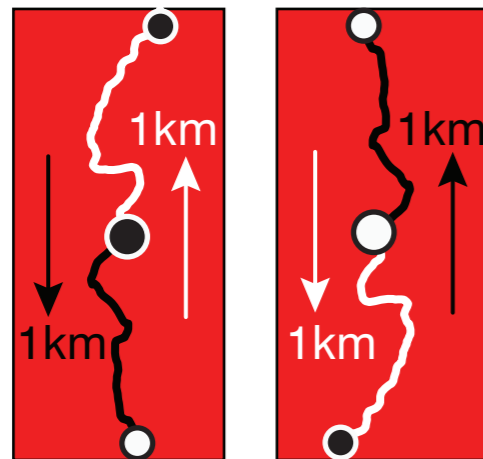
Currently the Heavens Gate trail is very poorly marked and is very hard to navigate without a GPS. This wayfinding system has been developed to make the trail markers simple, intuitive and easy to read. The markers are to be simply nailed or lashed to the tree and to be made of recycled plastic materials. The majority of the trail will be marked with the small increment markers and the diagonal ones are double sided to make sure the person putting up the markers won't run out of a left or right turn.



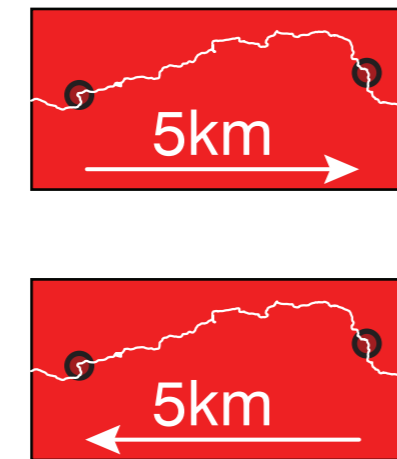
Small Increments



1km Increments



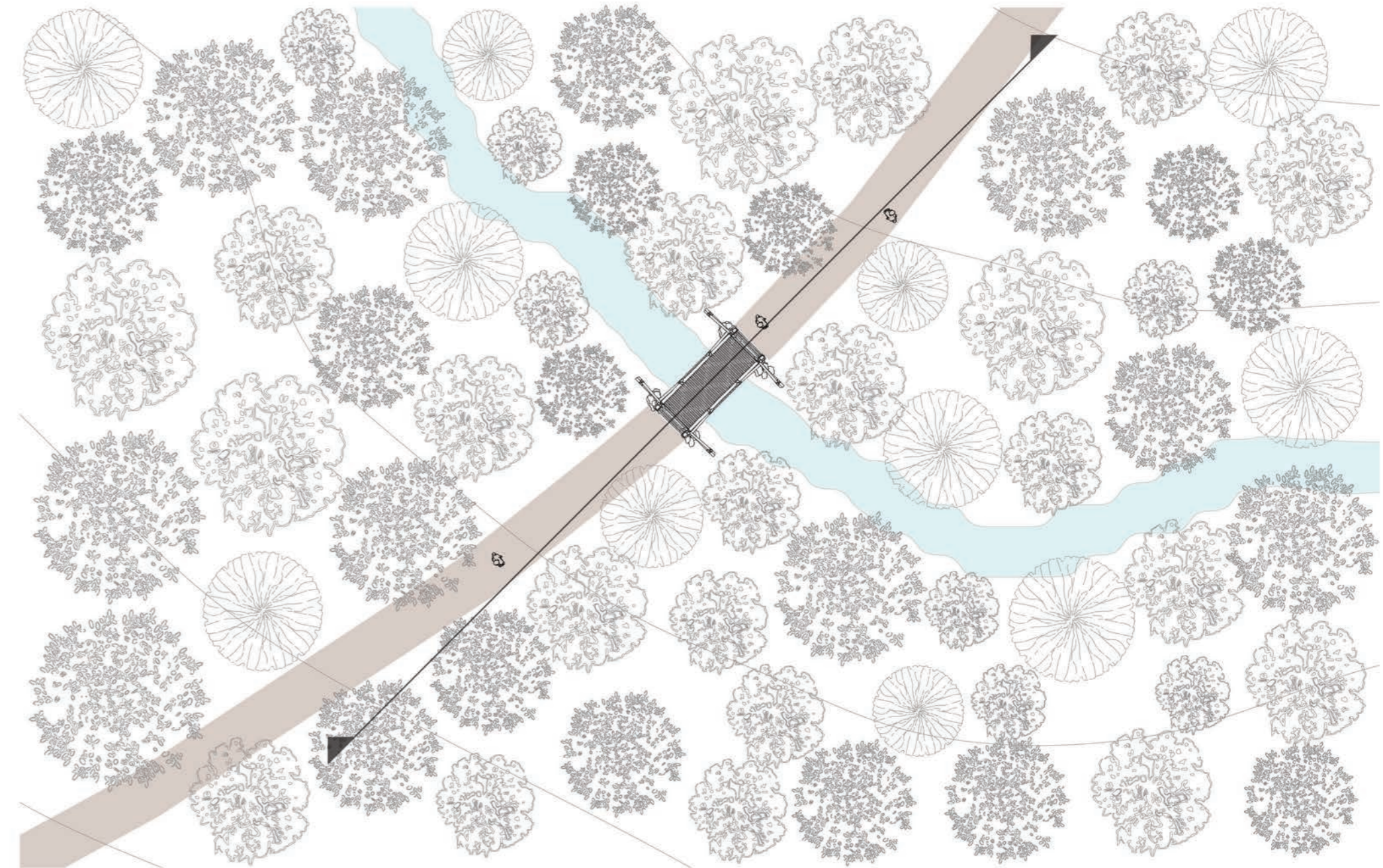
5km Increments



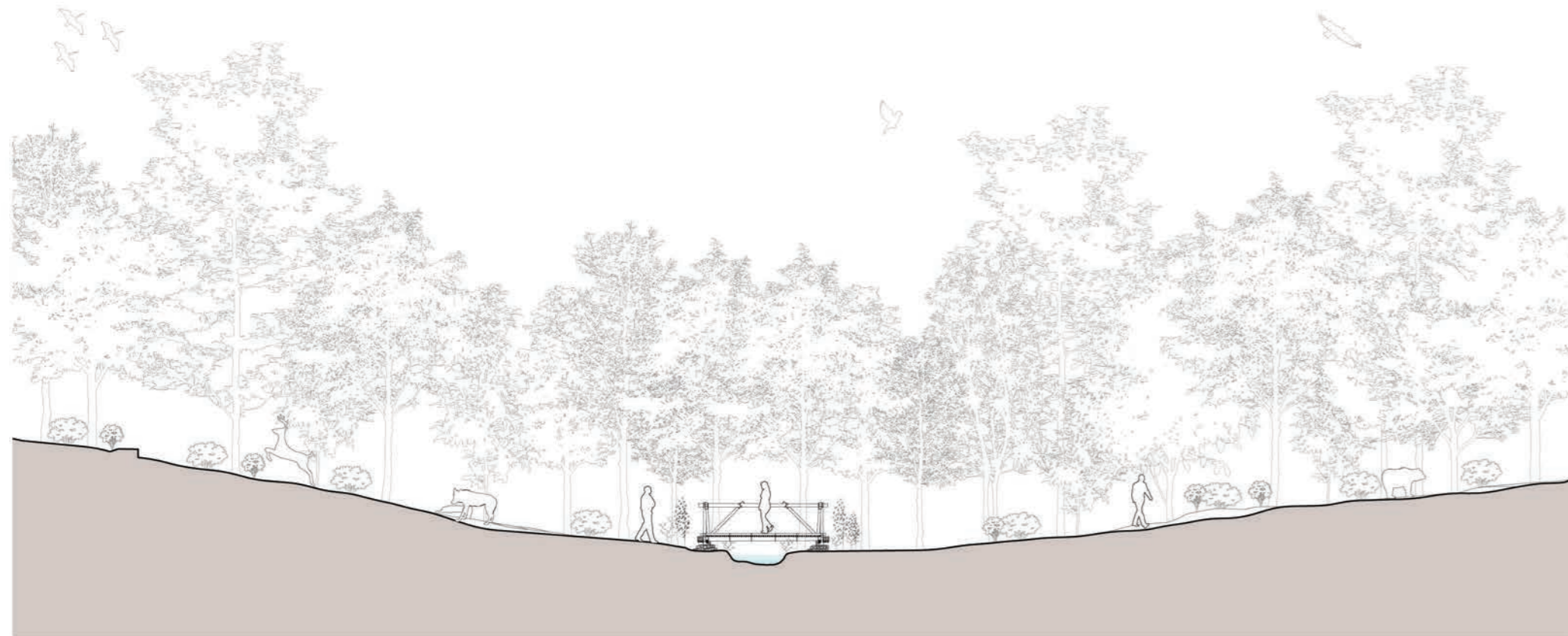
Campsite



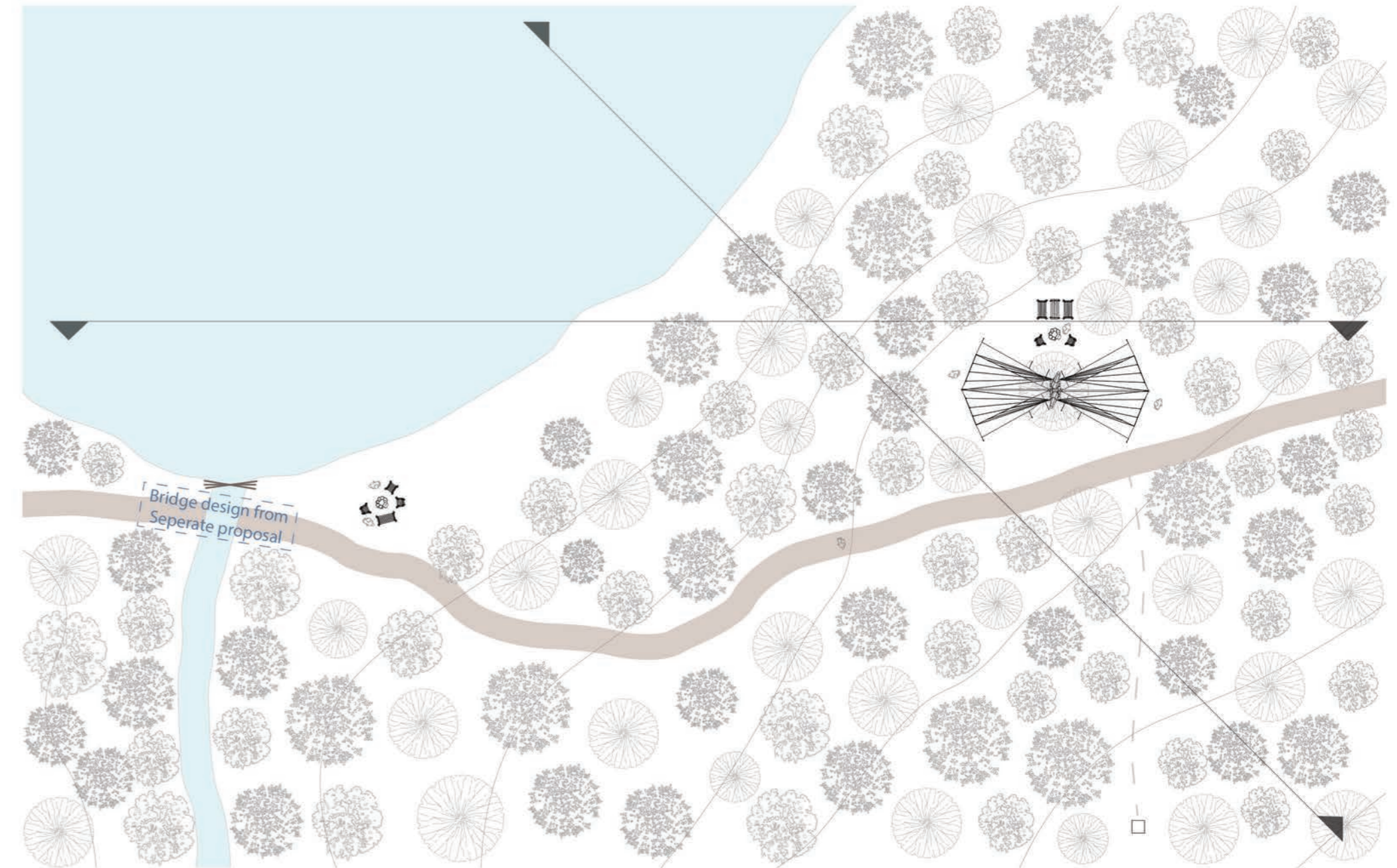
Bridge - Site Plan 1:200



Bridge - North West Site Section 1: 200



Wrights Lake Campsite - Site Plan 1: 400



Wrights Lake Campsite - North East Site Section 1: 200



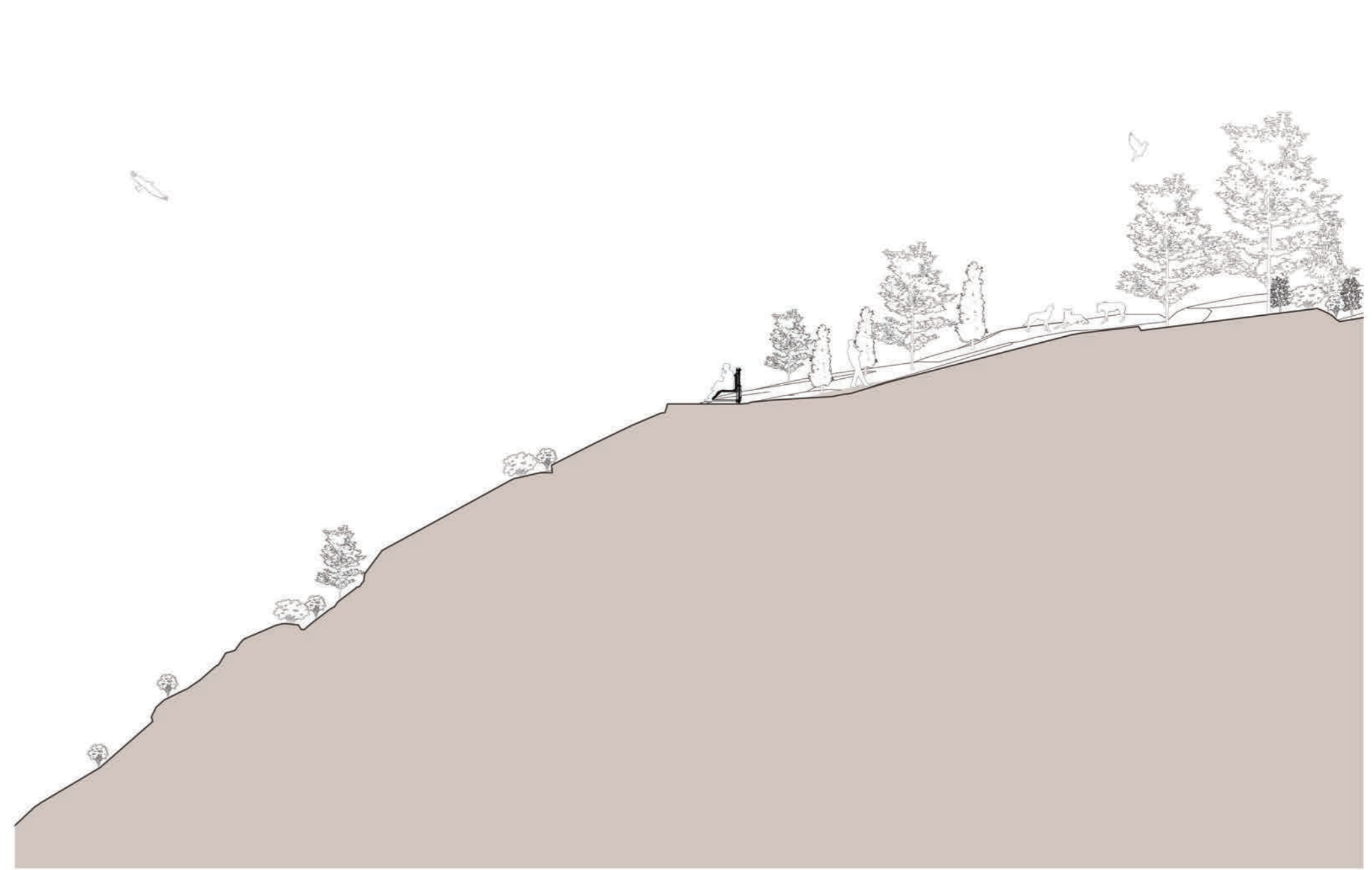
Wrights Lake Campsite - South Site Section 1:200



Lookout - Site Plan 1:200



Lookout - Site Section 1:200

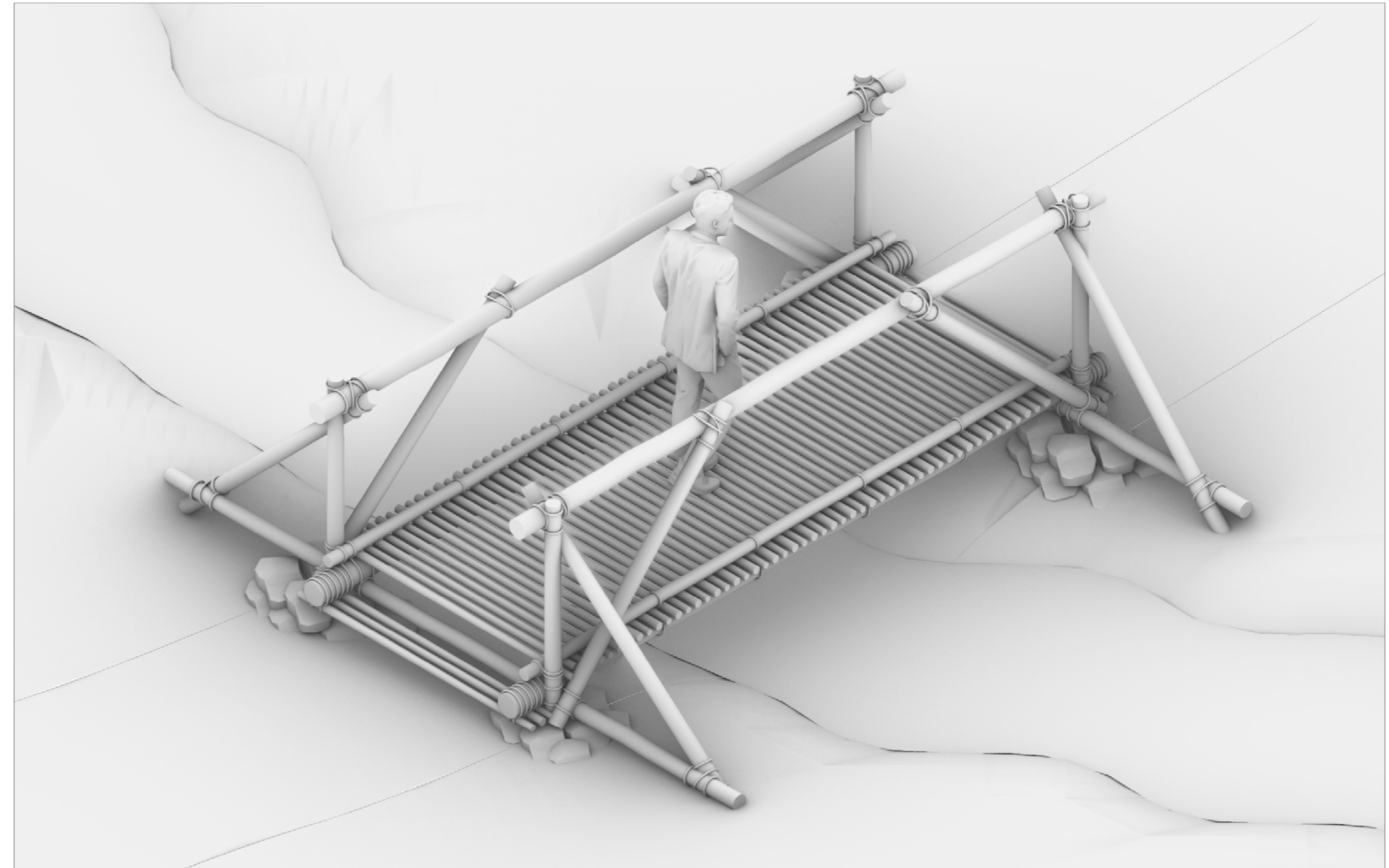


03 - BRIDGE

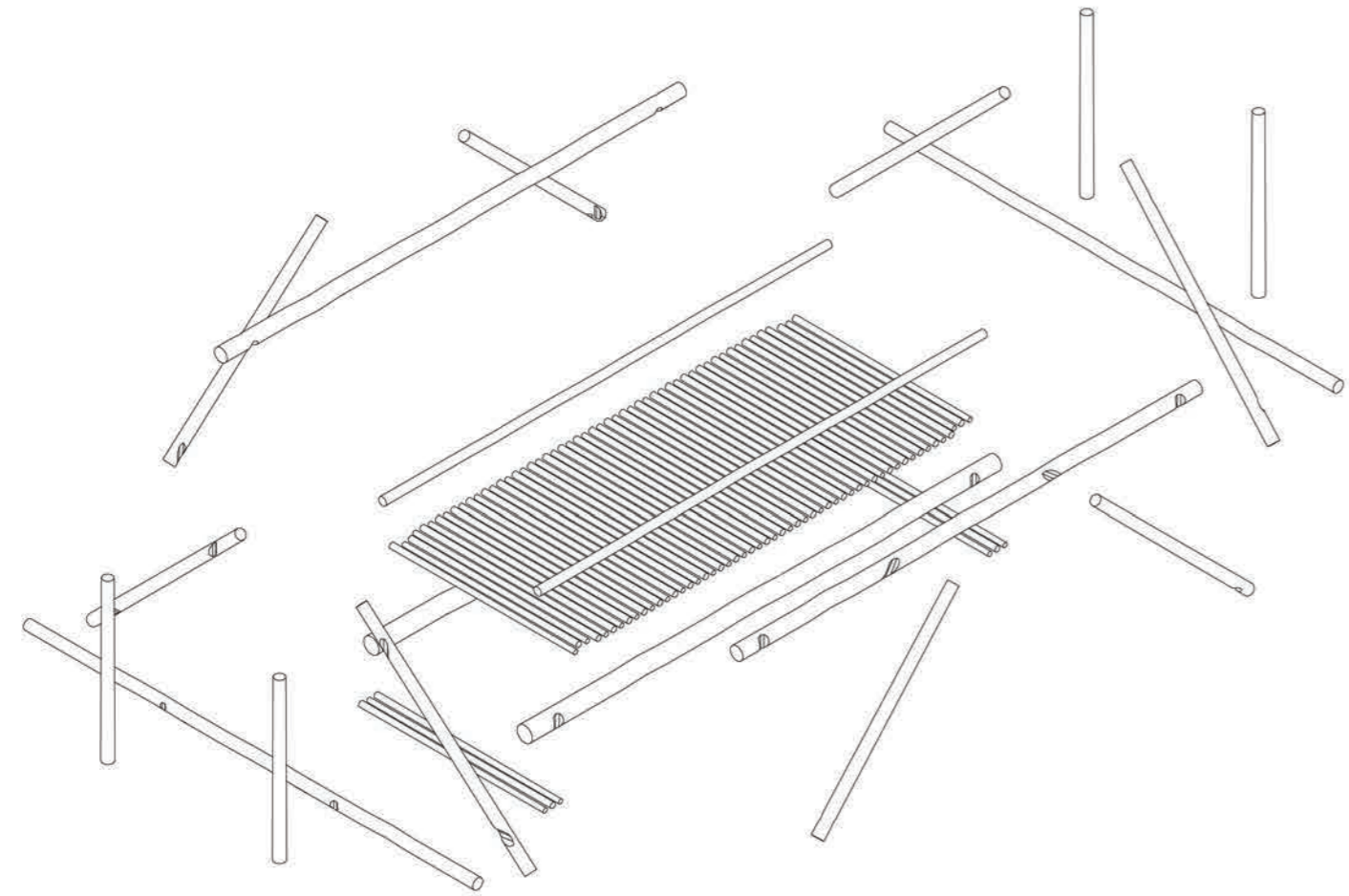
Bridge - Rendering



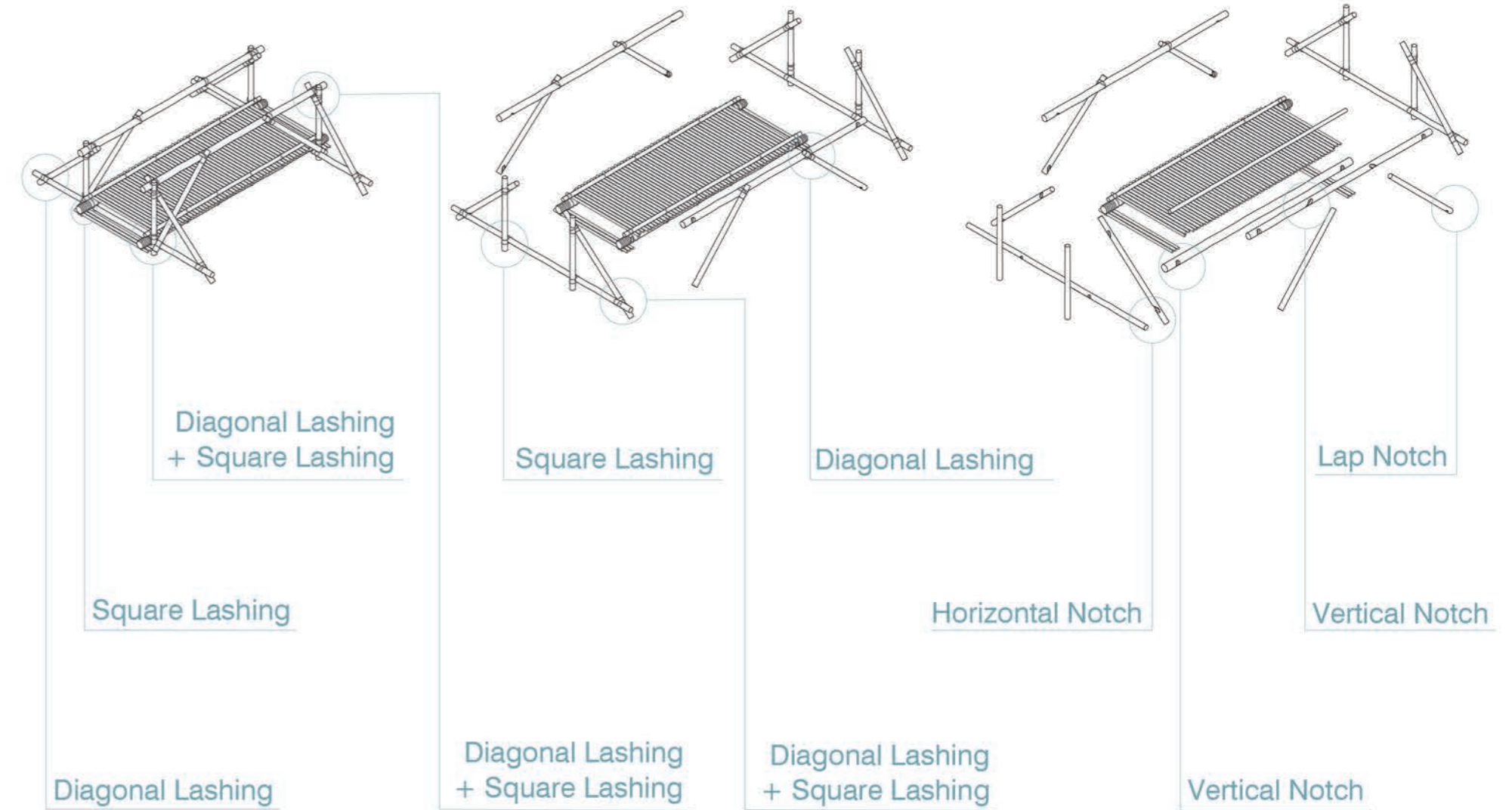
Bridge - Axo



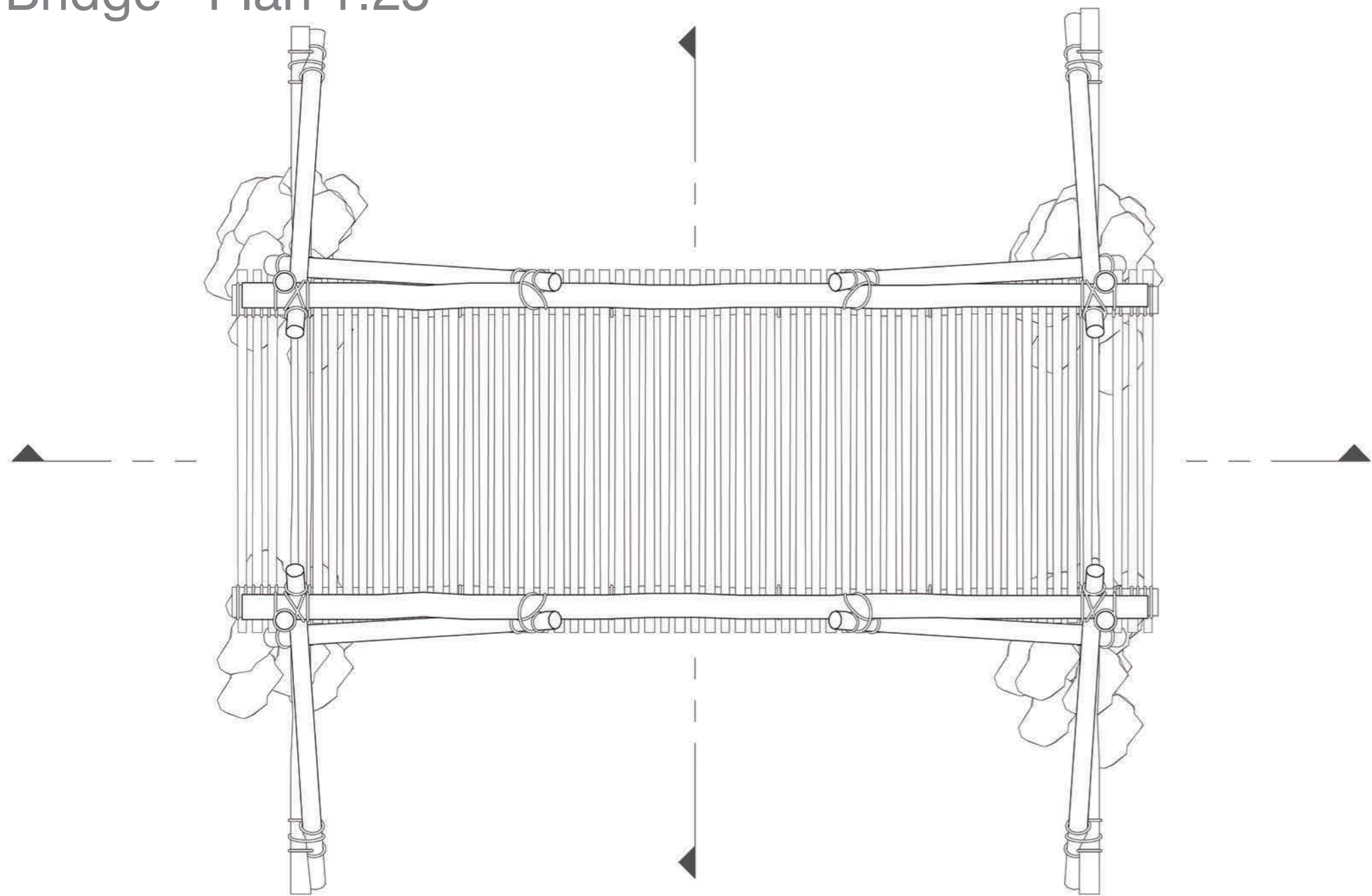
Bridge - Exploded Axo 1:50



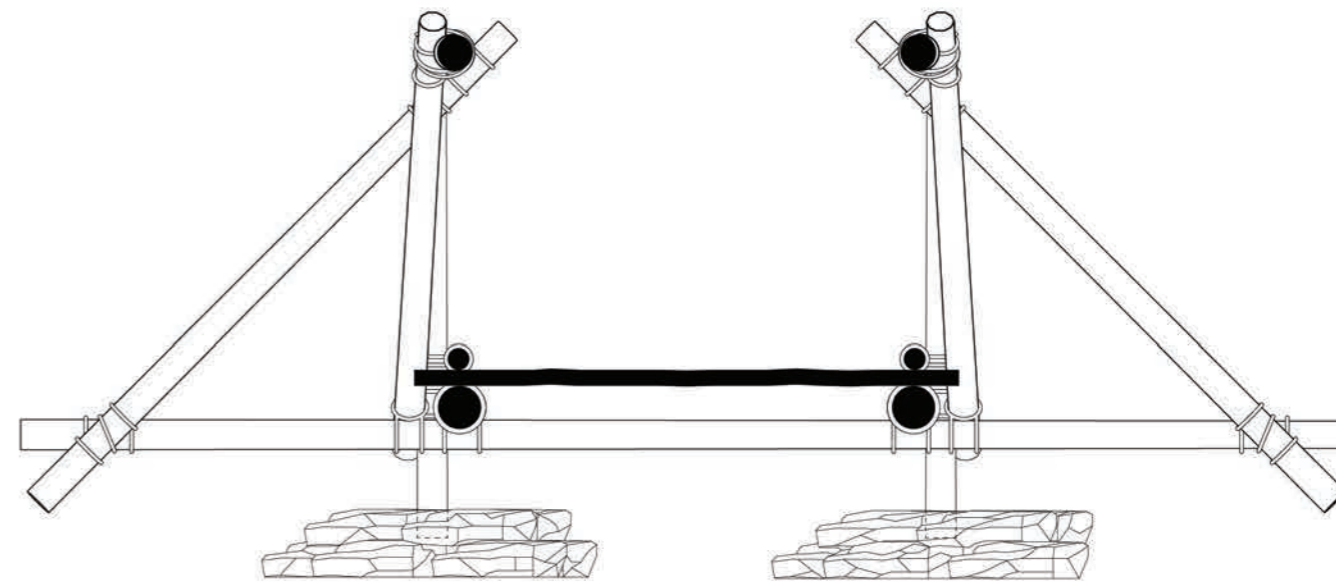
Bridge - Exploded Axo 1:100 + Connection Details



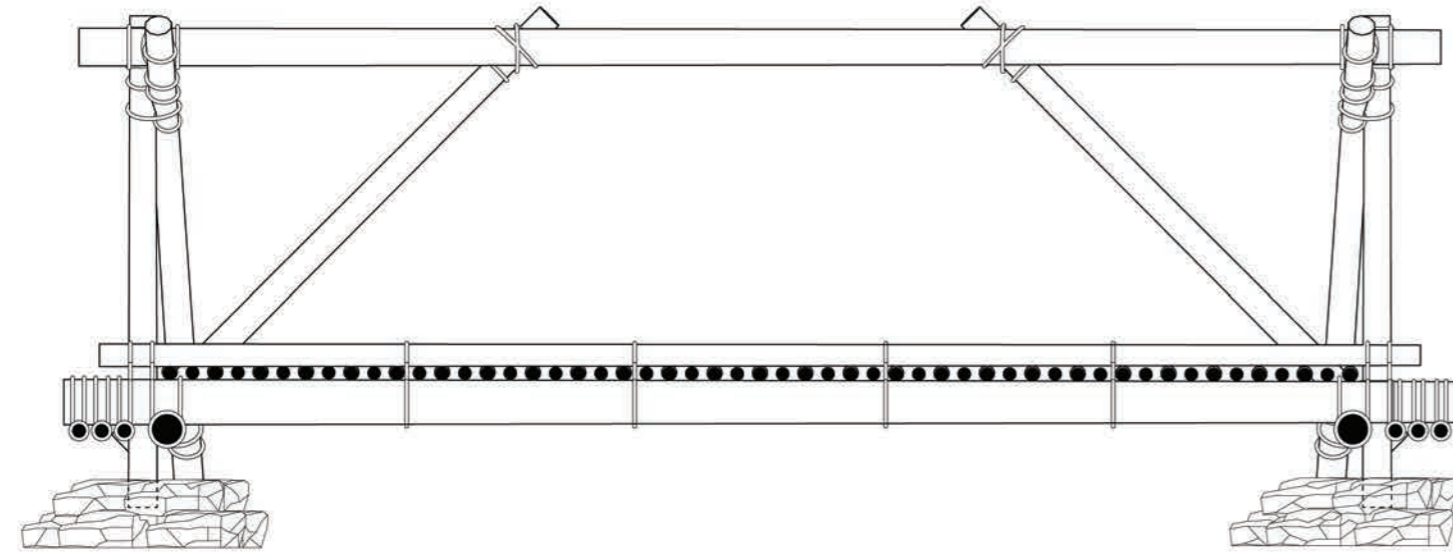
Bridge - Plan 1:25



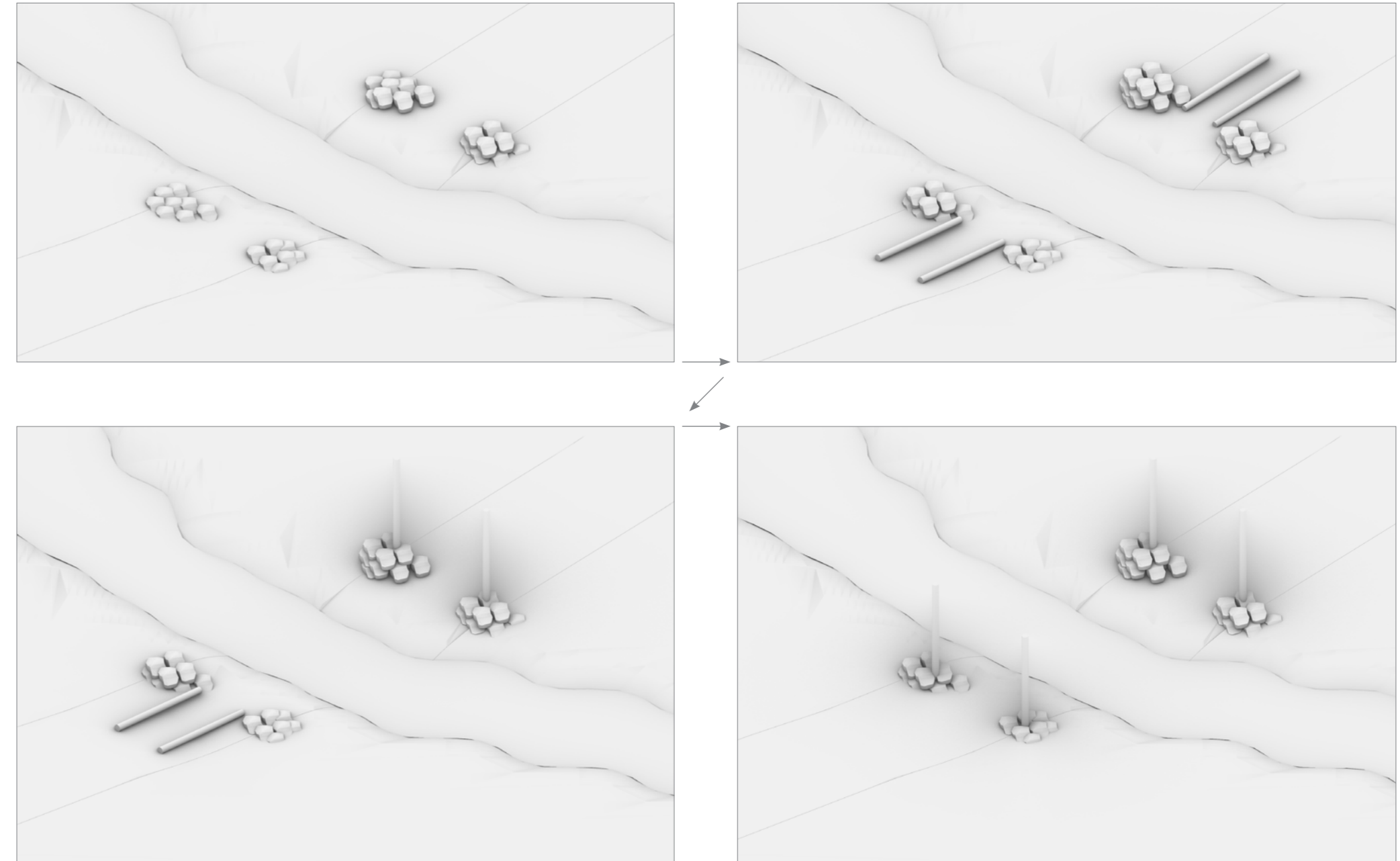
Bridge - Cross Section 1:25

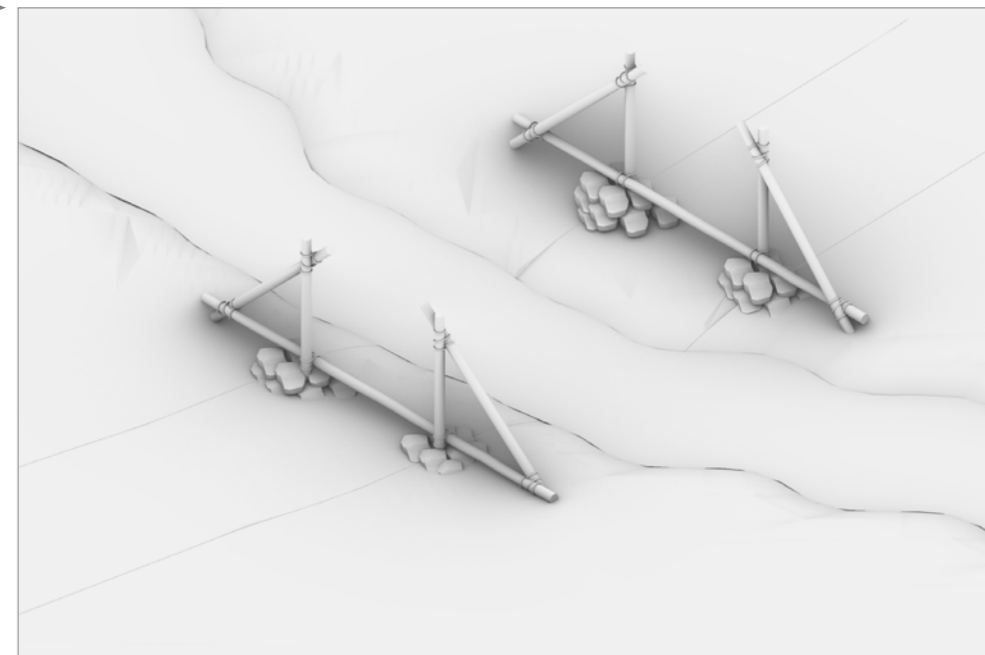
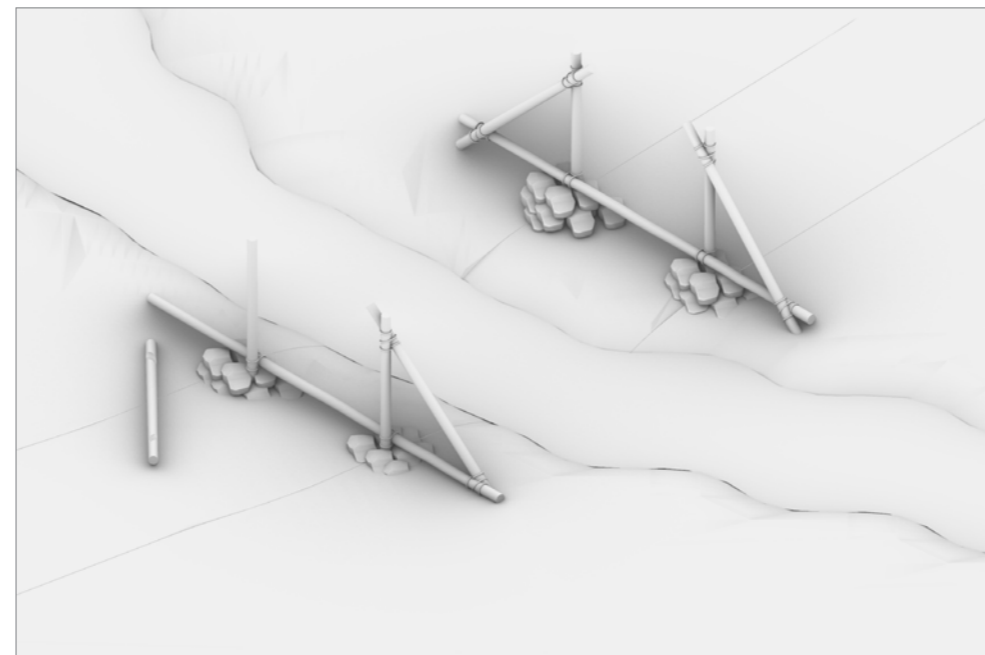
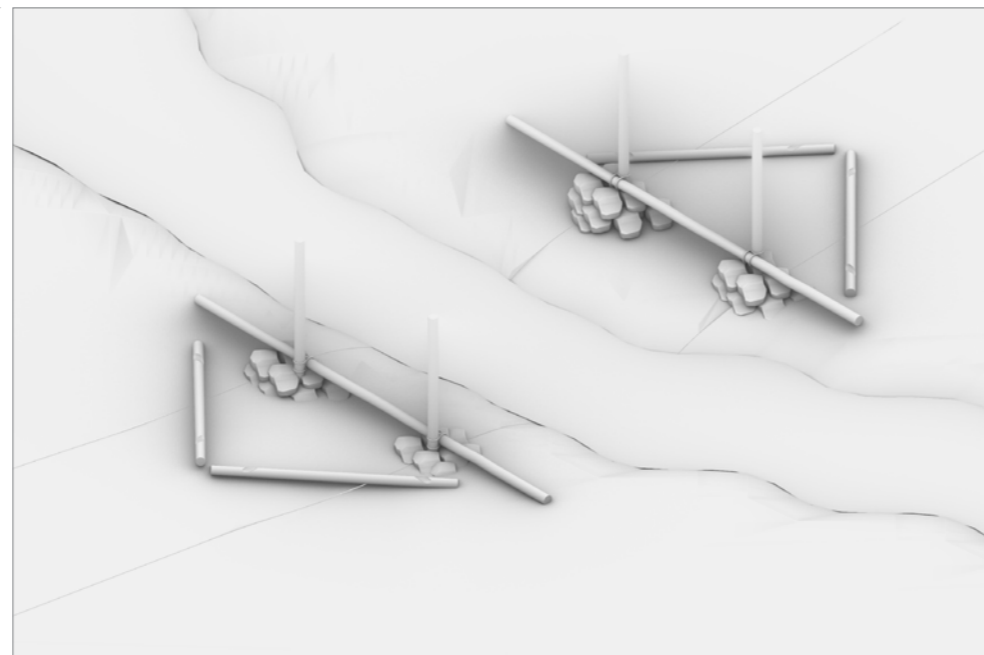
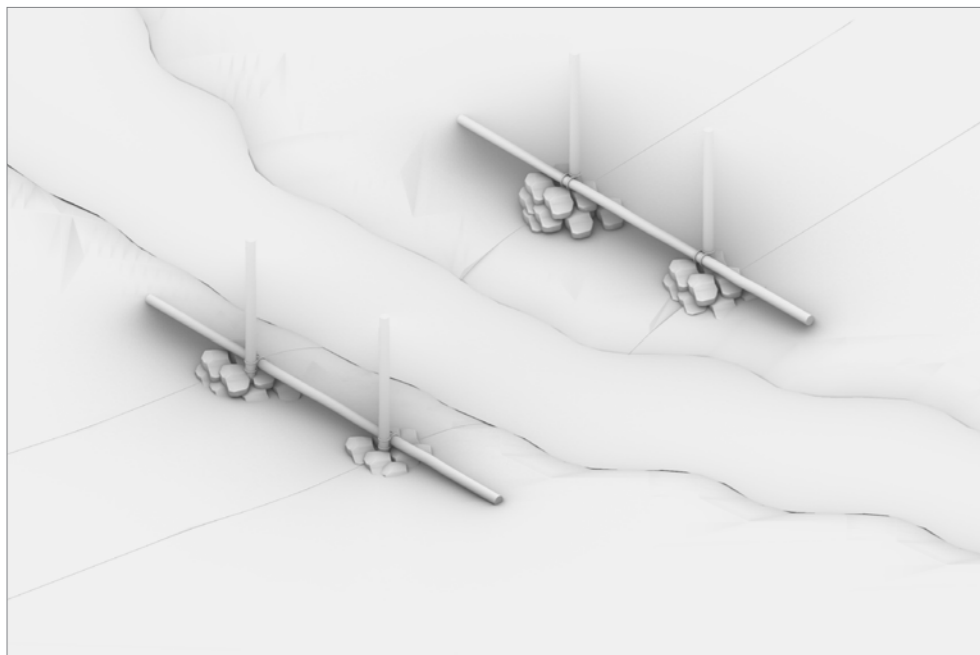
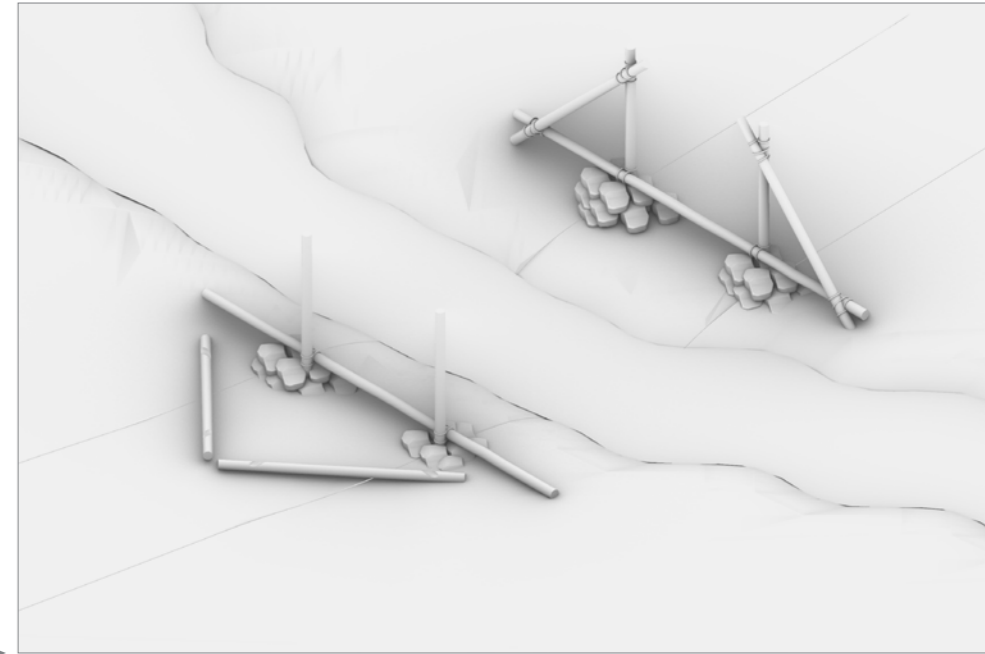
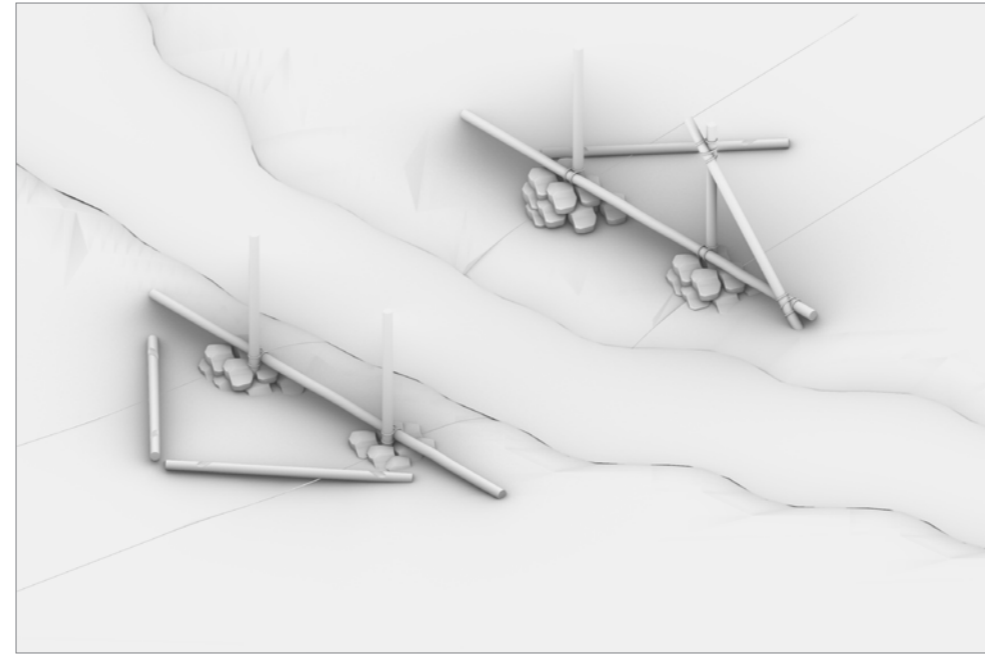
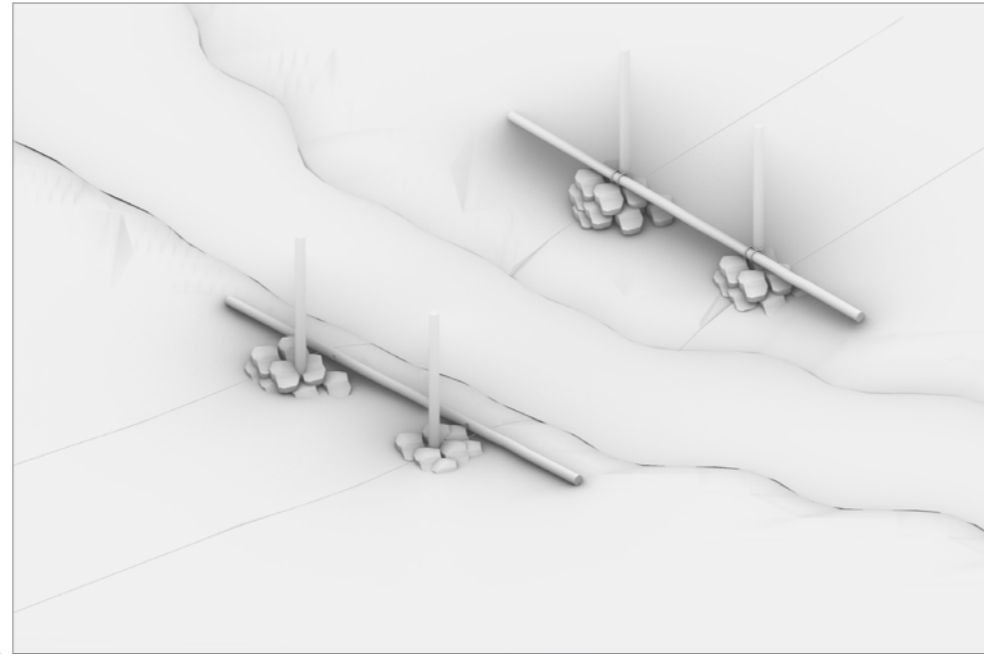
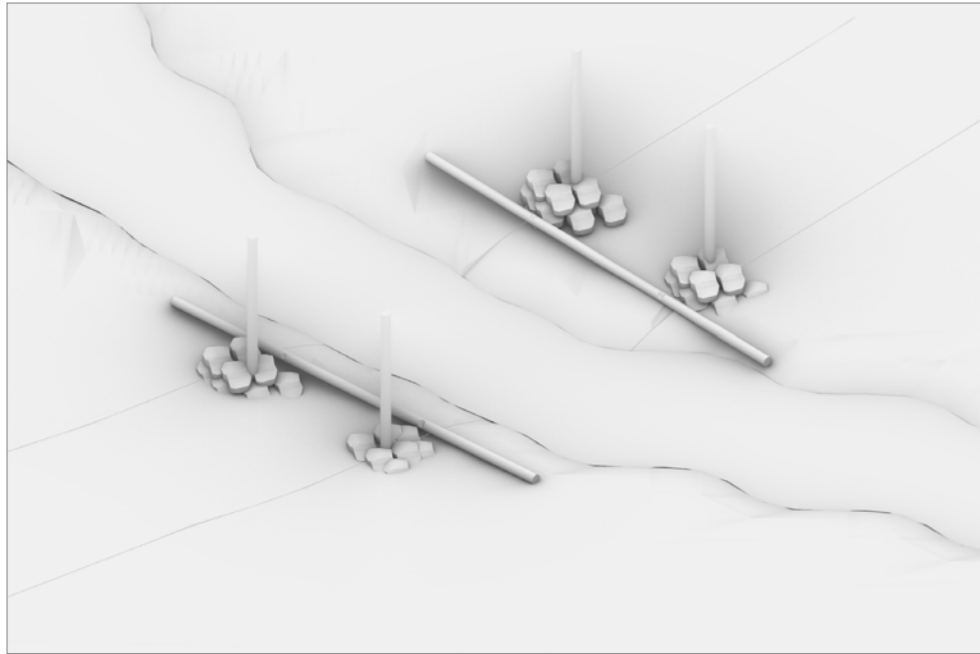


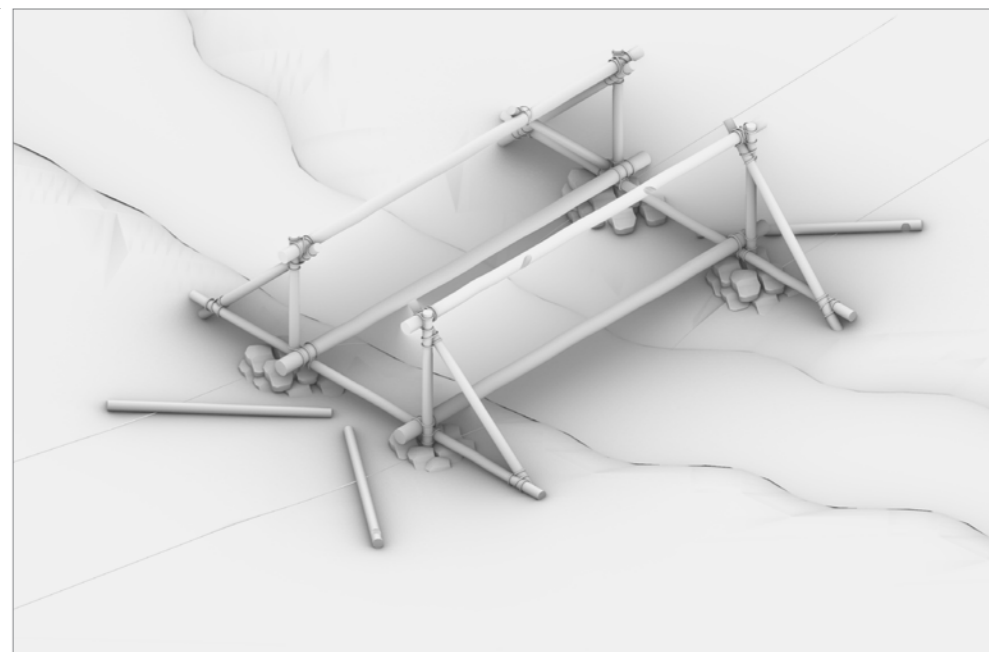
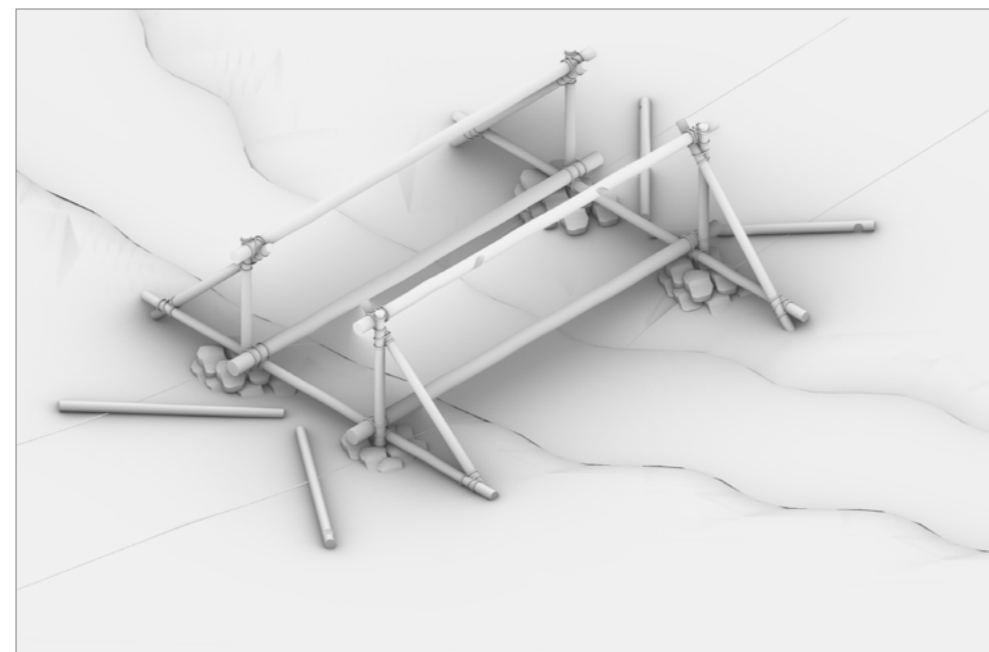
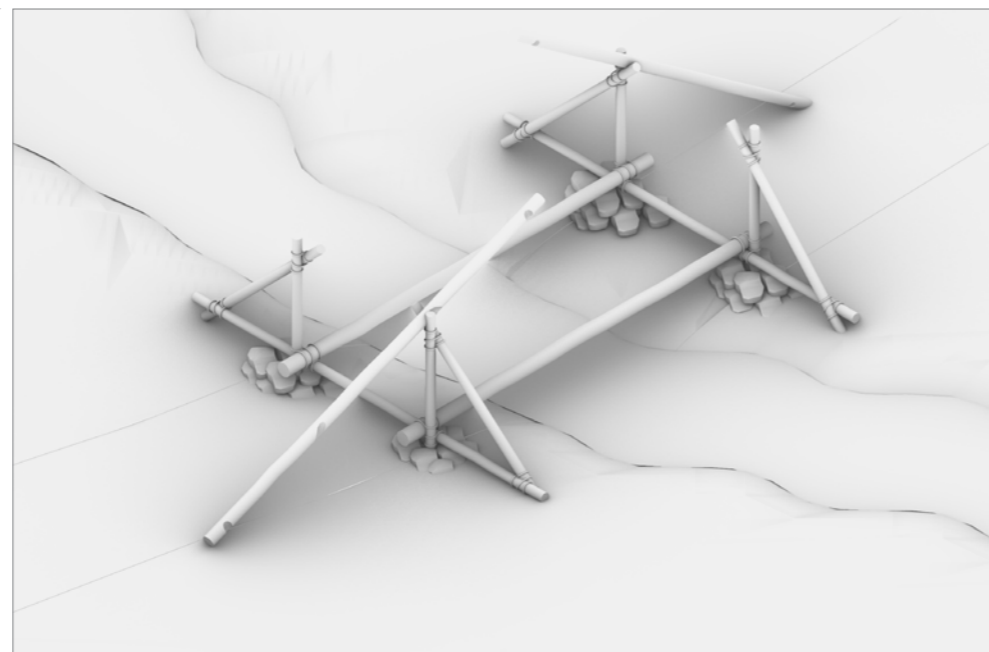
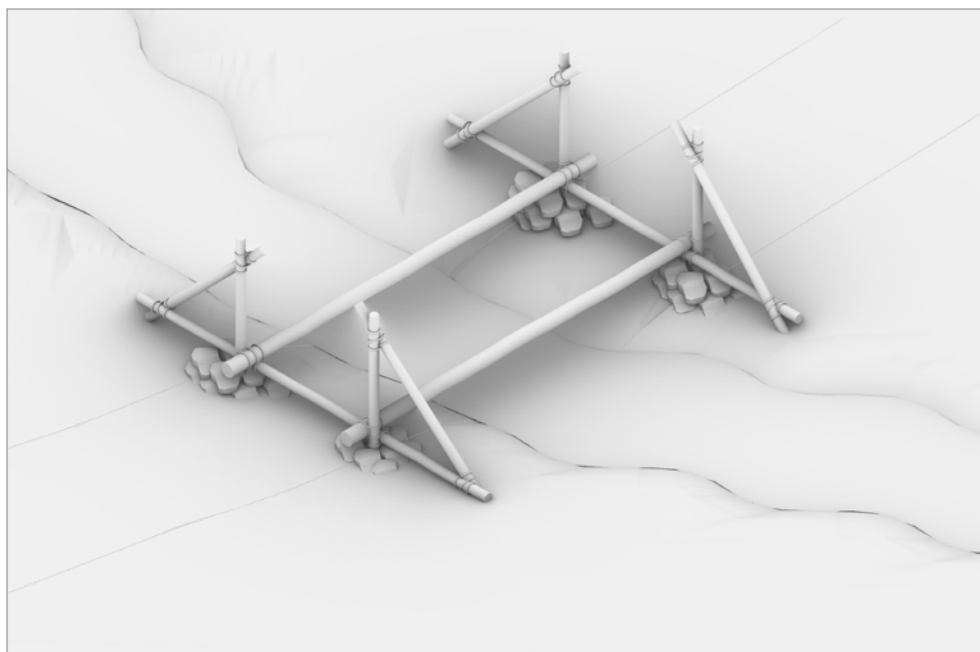
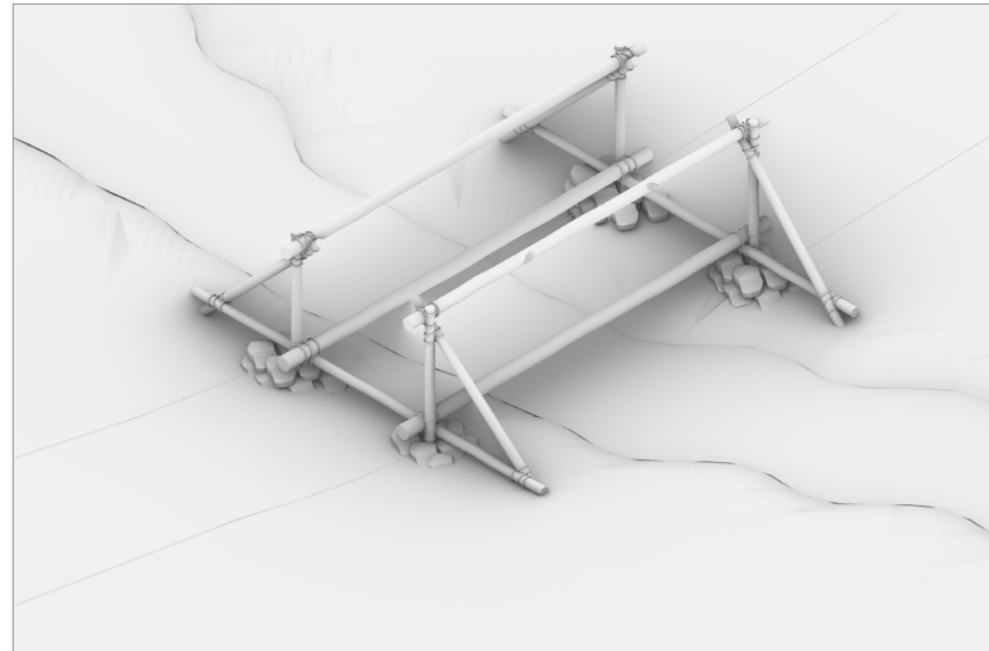
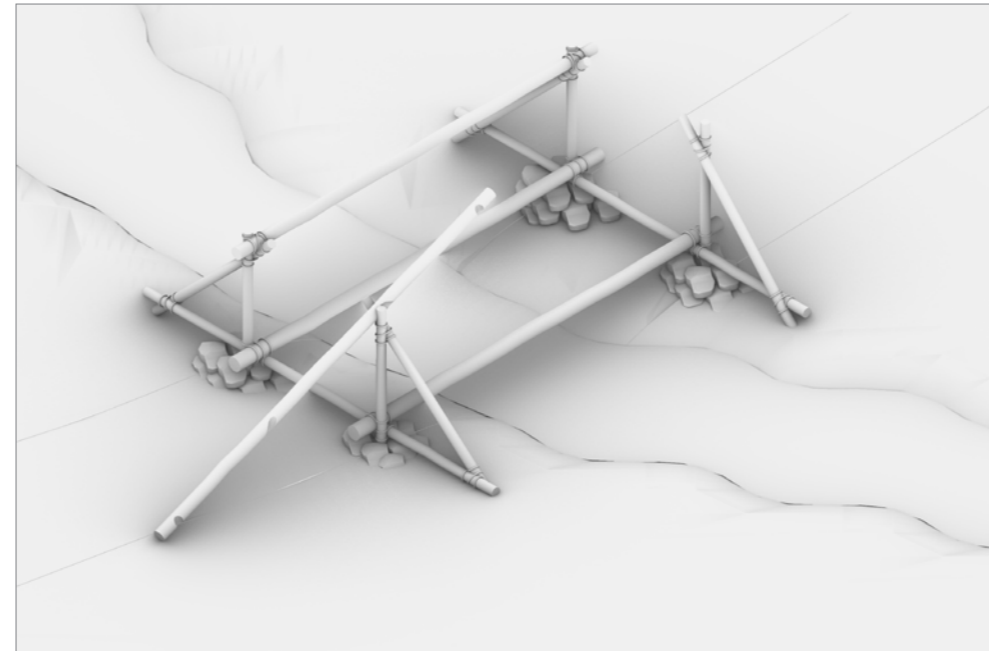
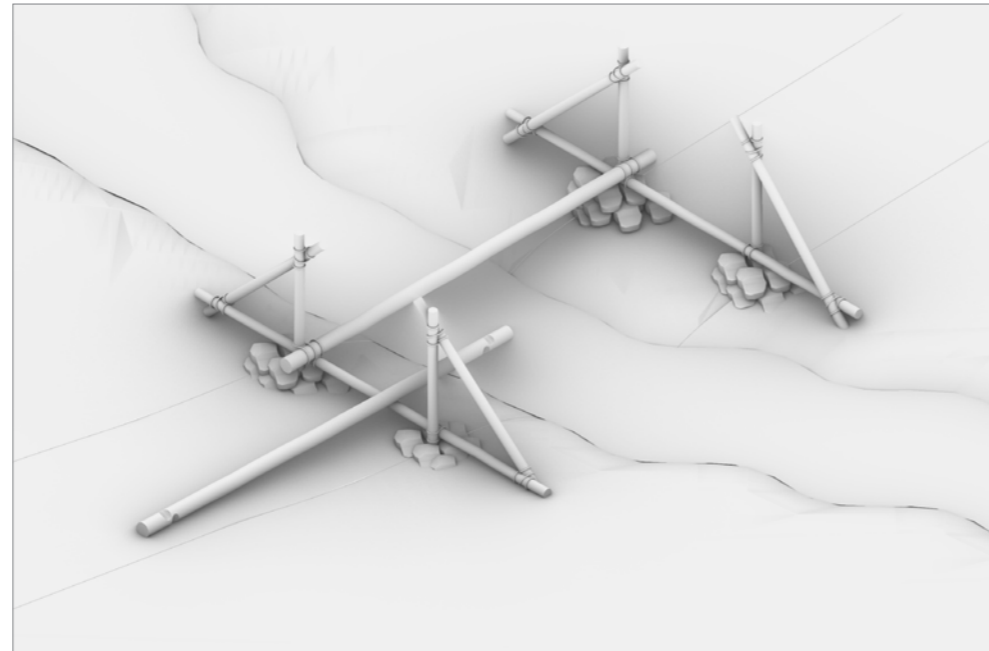
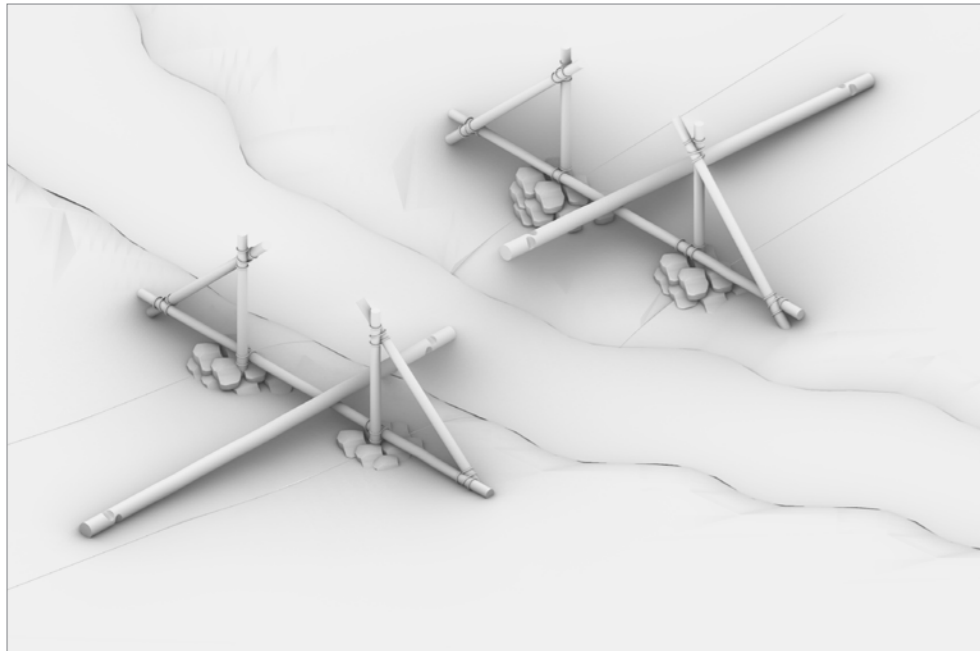
Bridge - Longitudinal Section 1:25

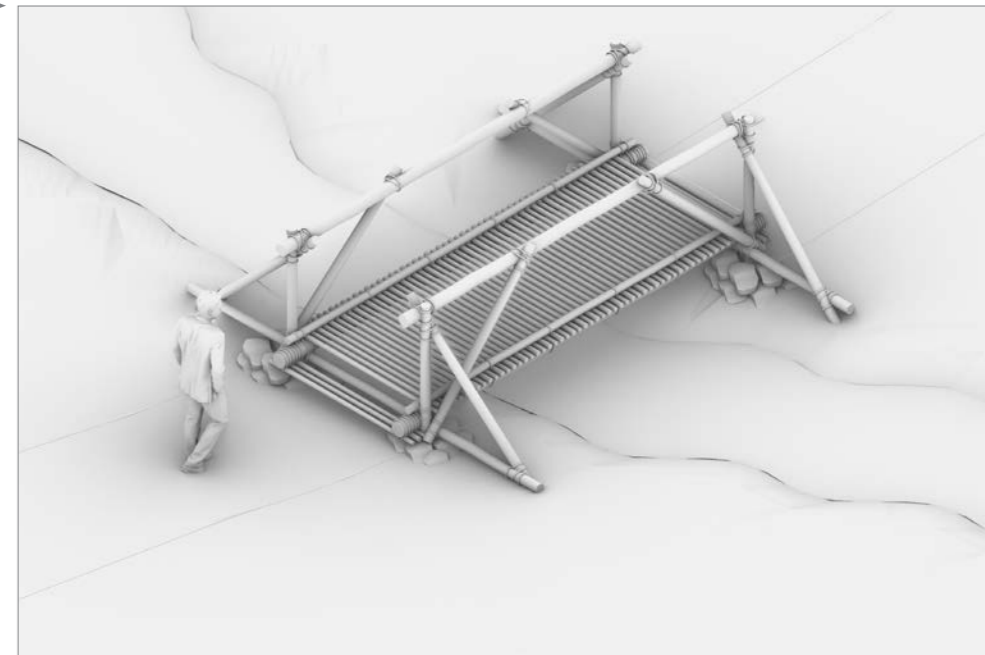
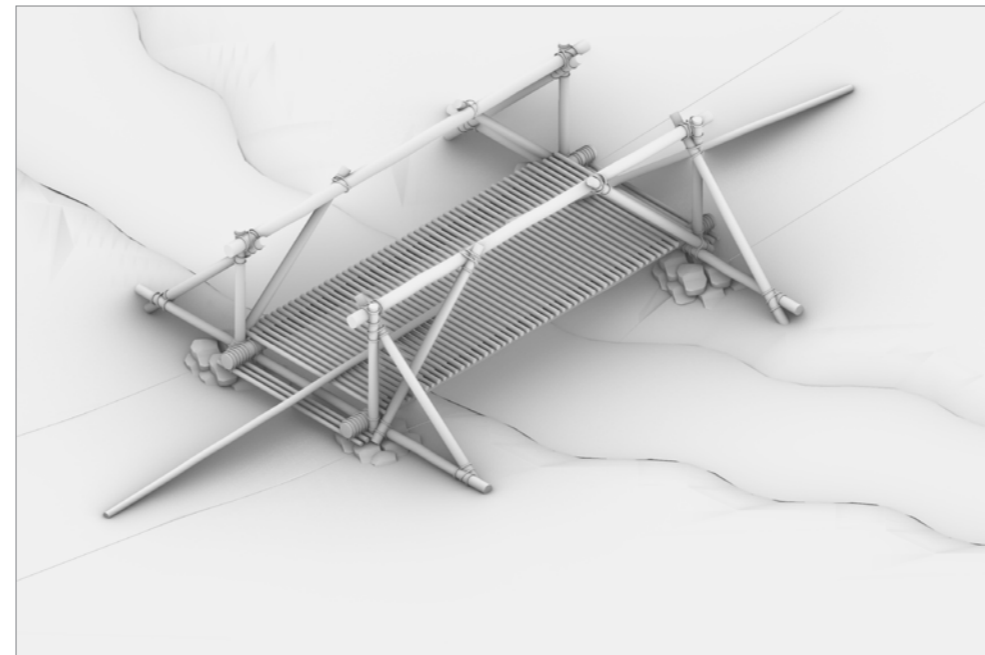
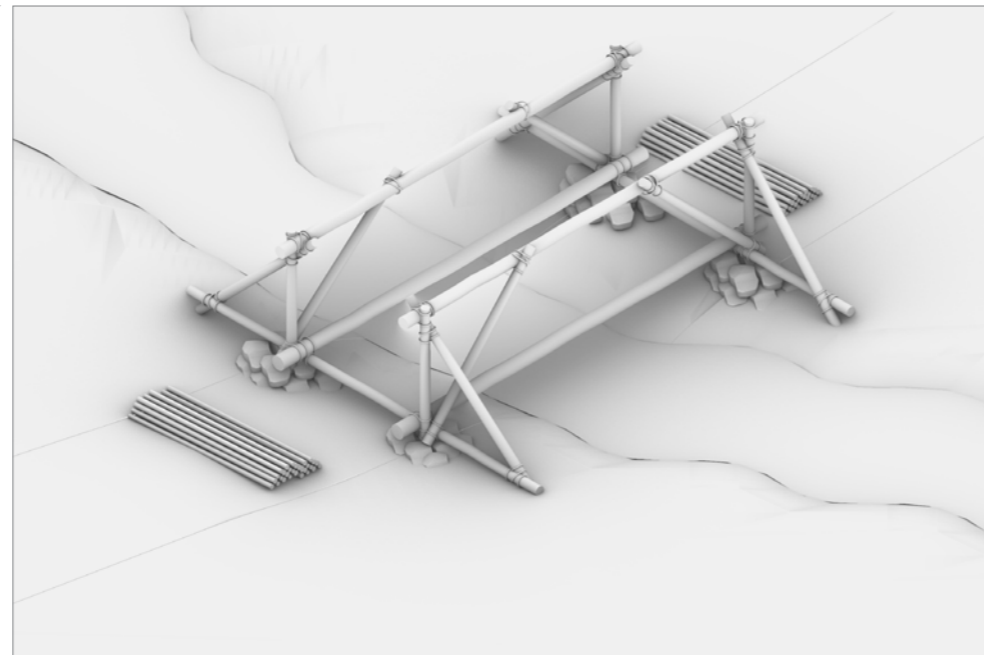
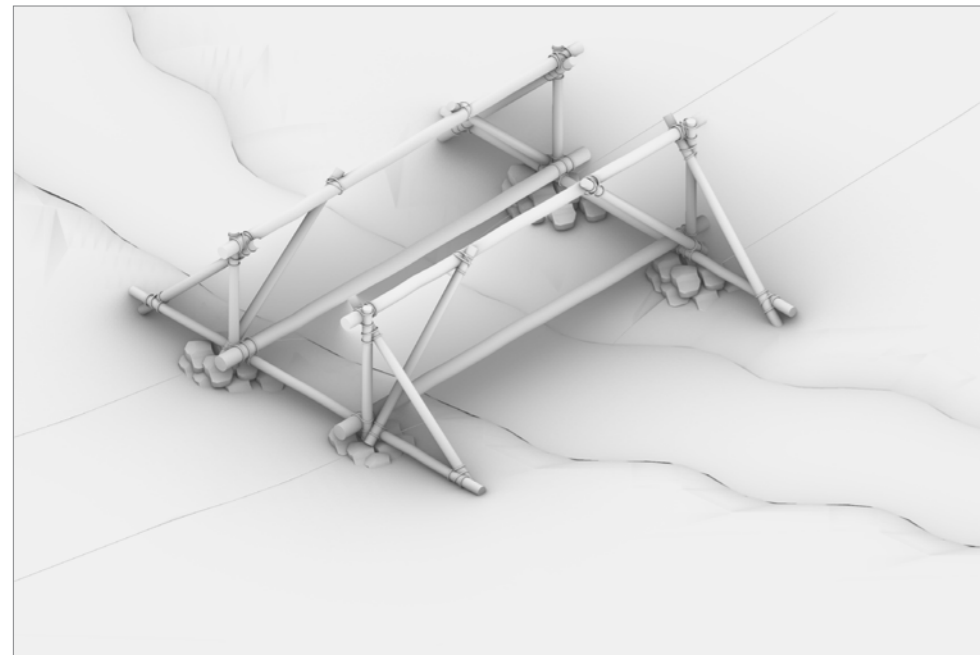
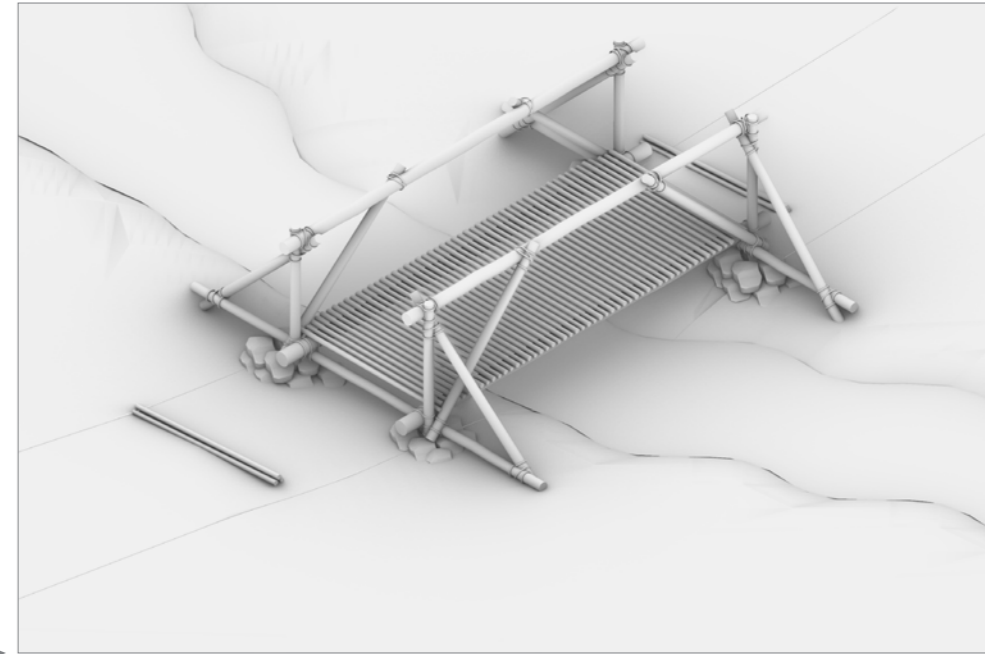
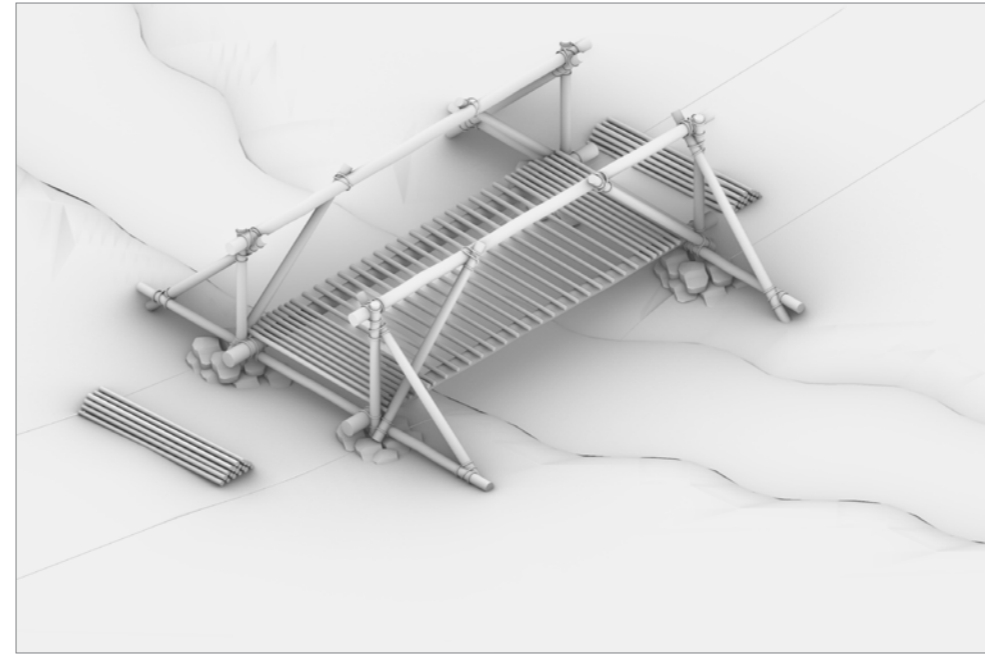
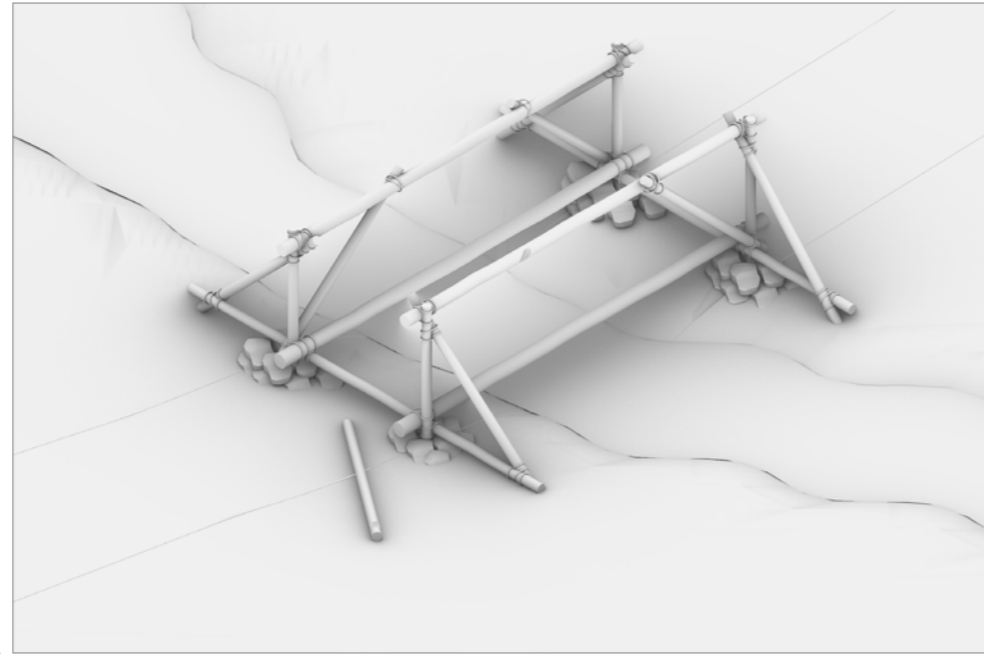
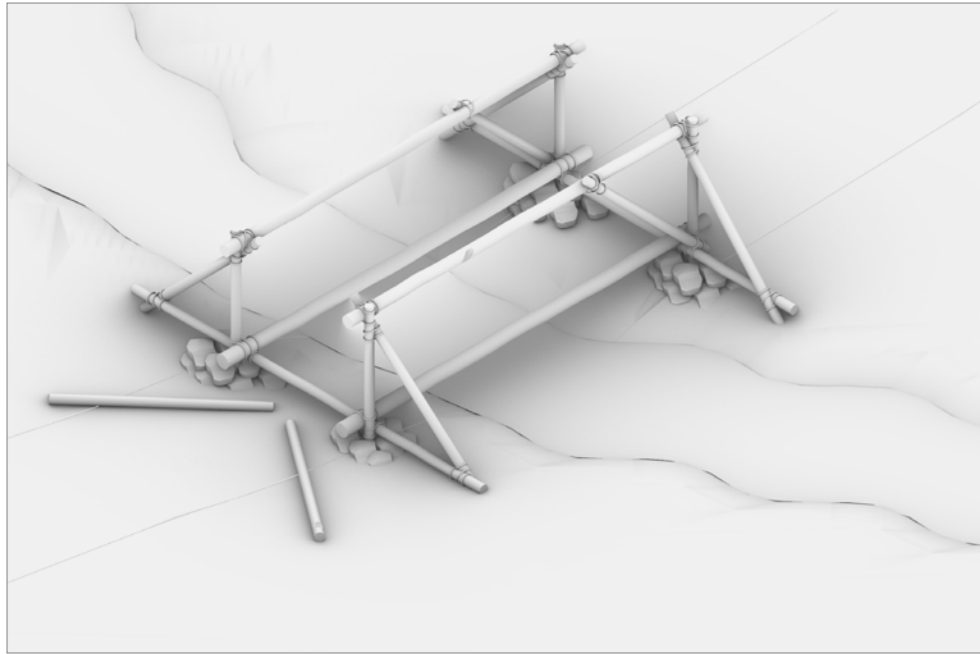


Bridge - Construction Process









04 - CAMPSITE

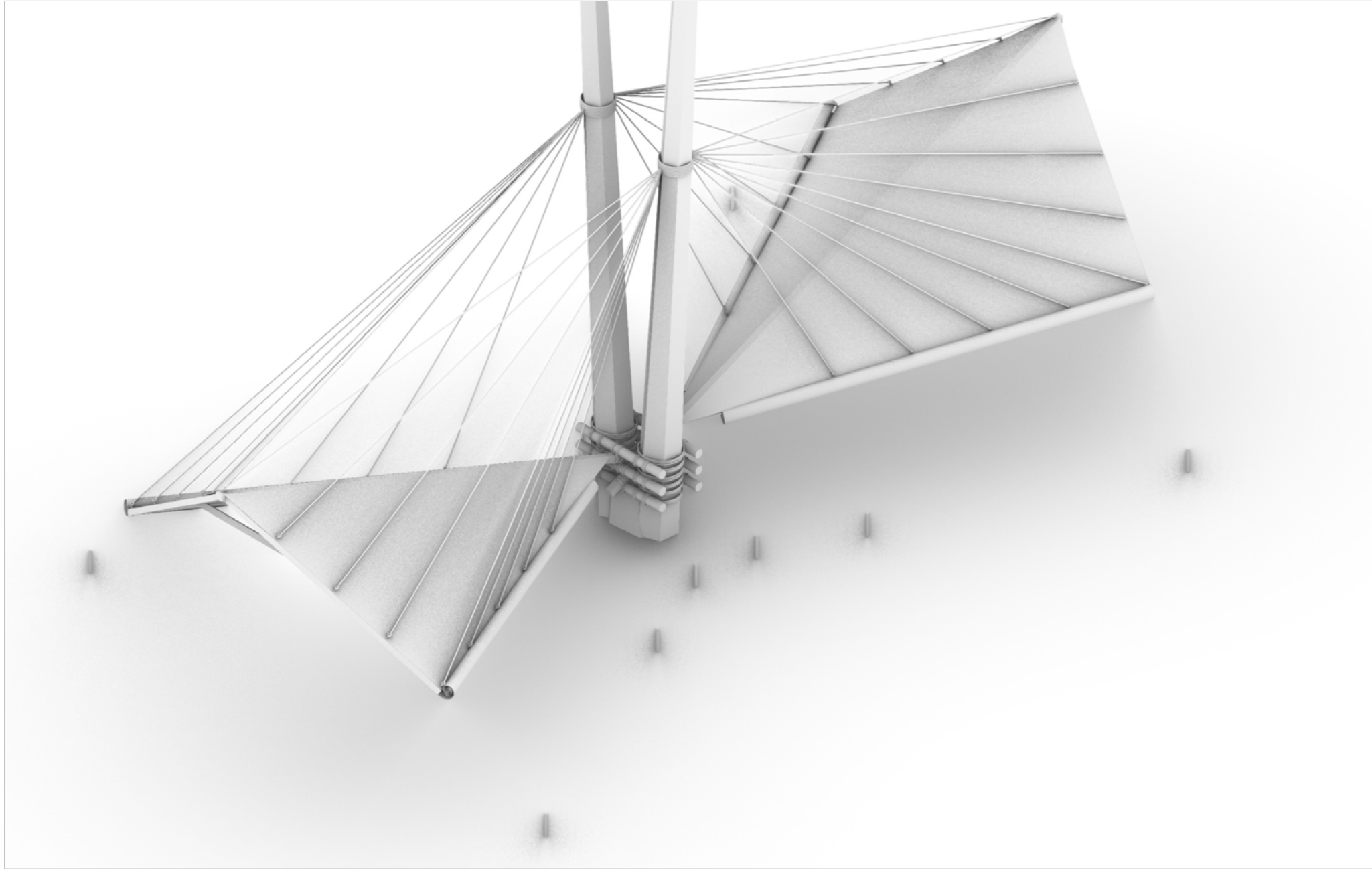
Sleeping Structure - Rendering (Daytime / Good Weather)



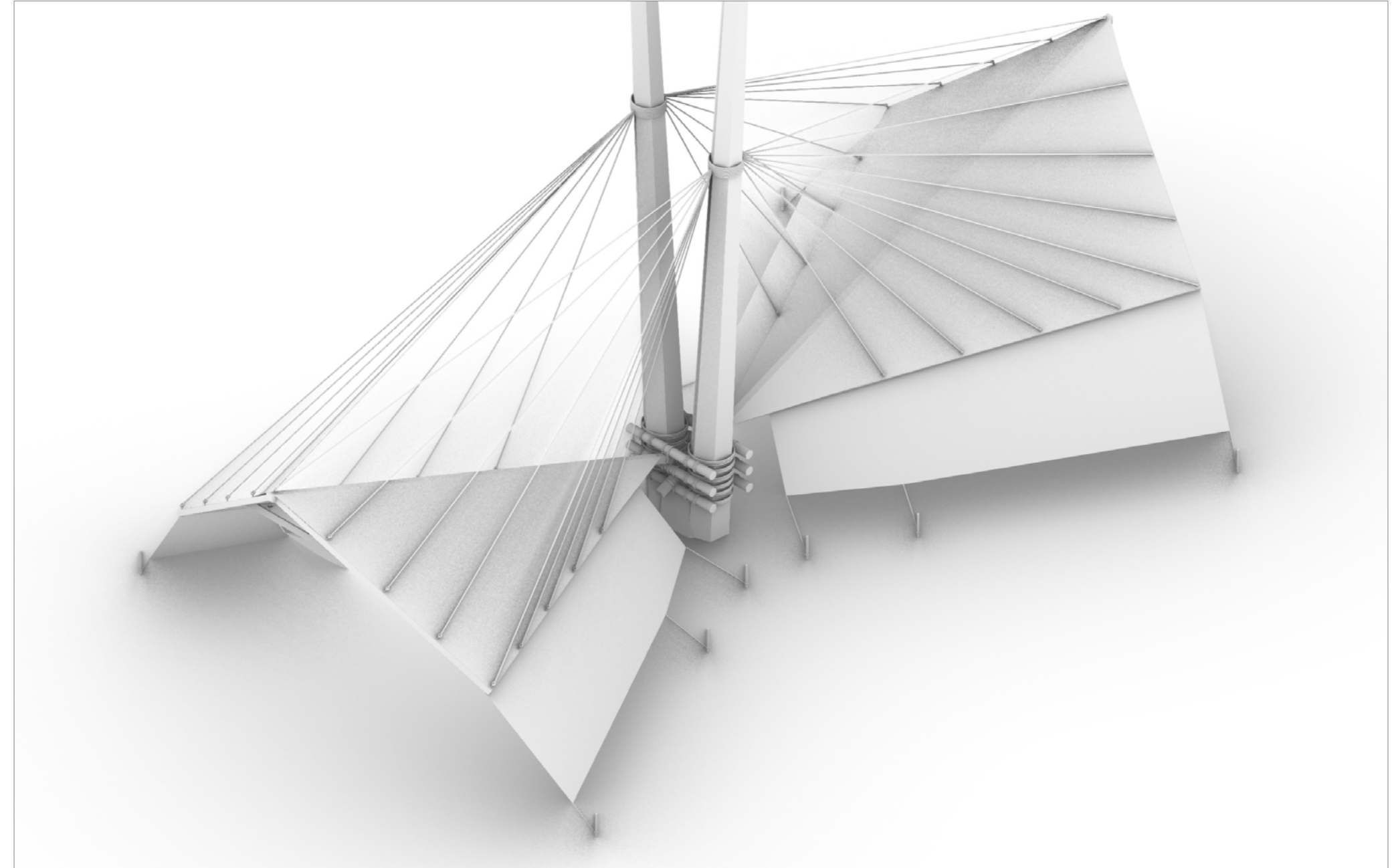
Sleeping Structure - Rendering (Night / Bad Weather)



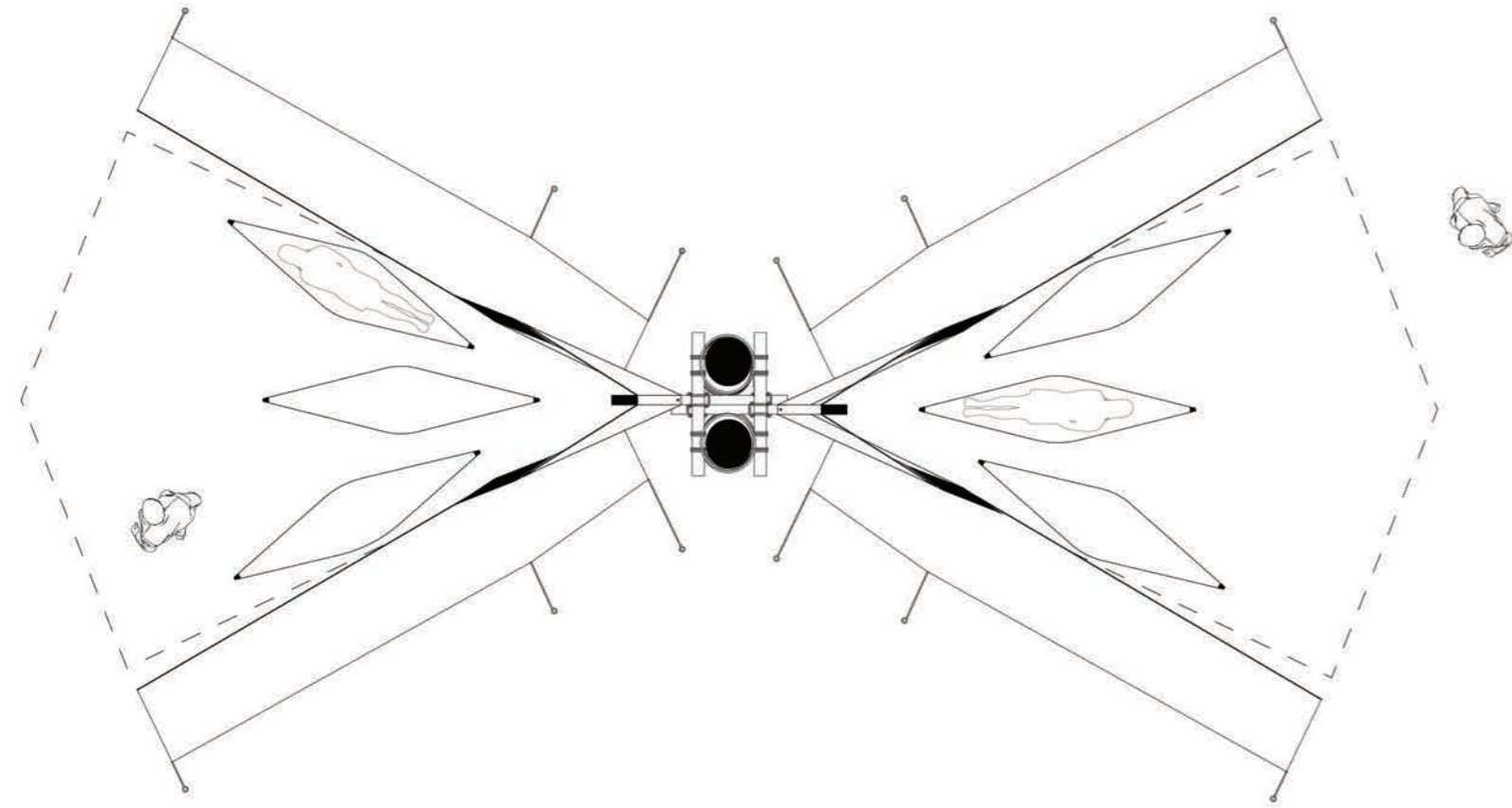
Sleeping Structure - Axo (Daytime / Good Weather)



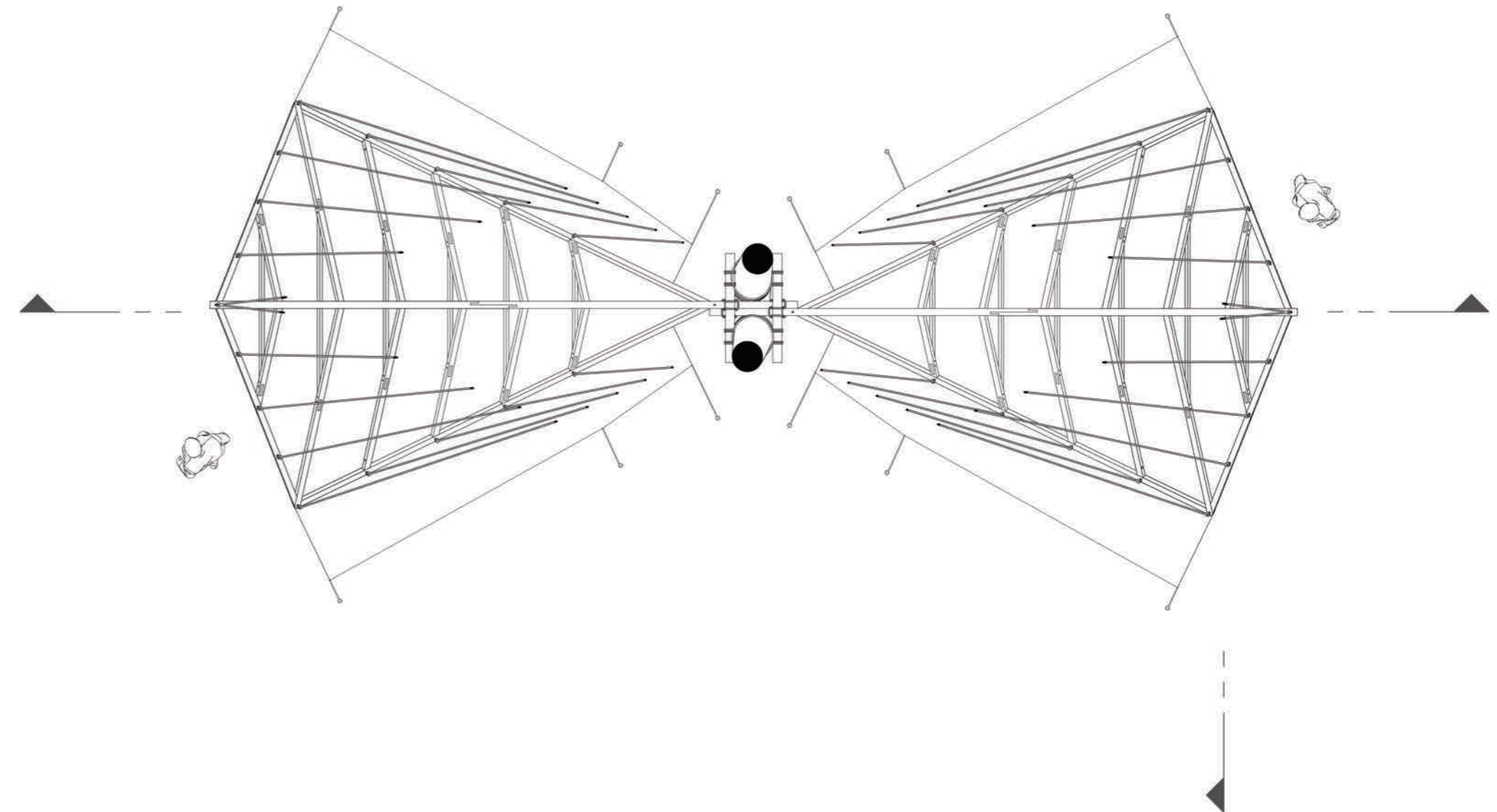
Sleeping Structure - Axo (Night / Bad Weather)



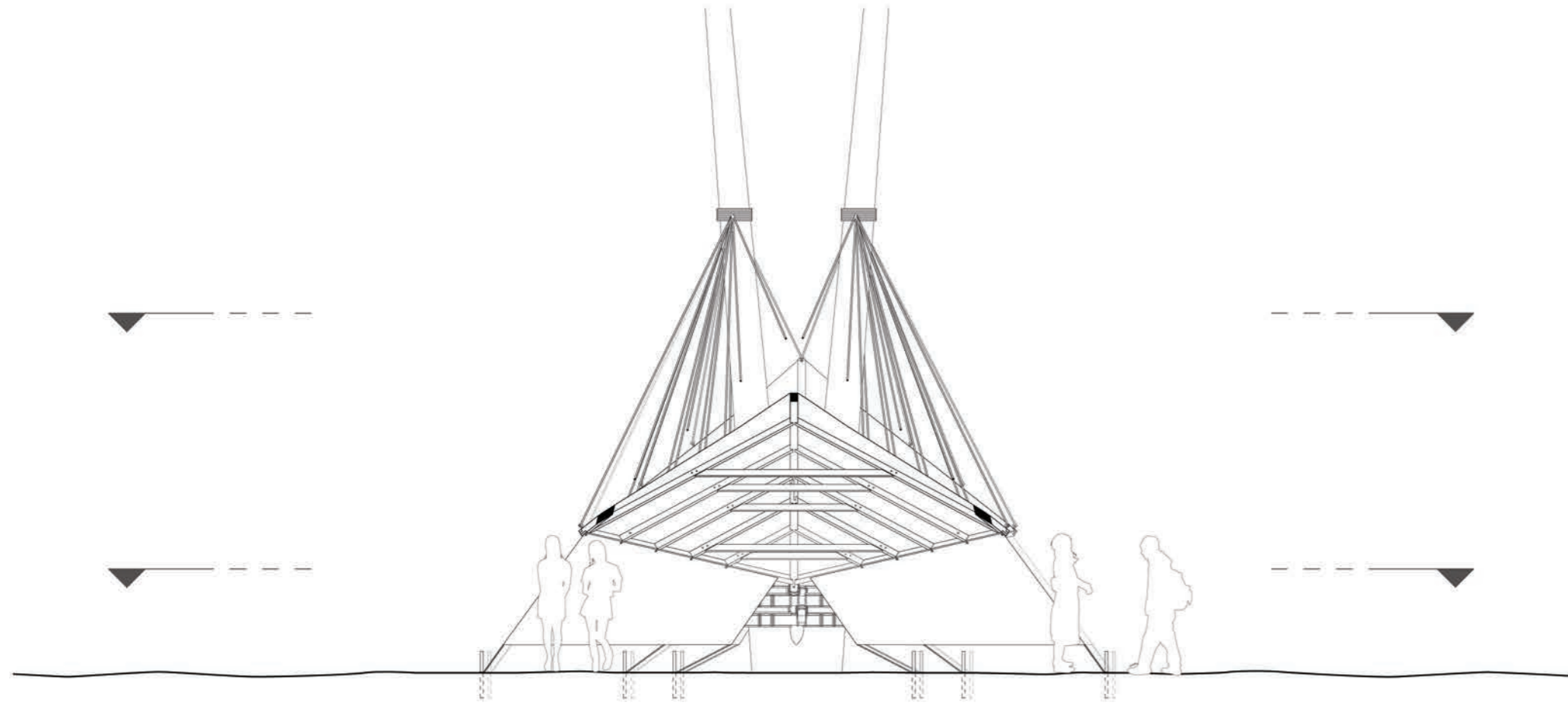
Sleeping Structure - Floor Plan 1:75



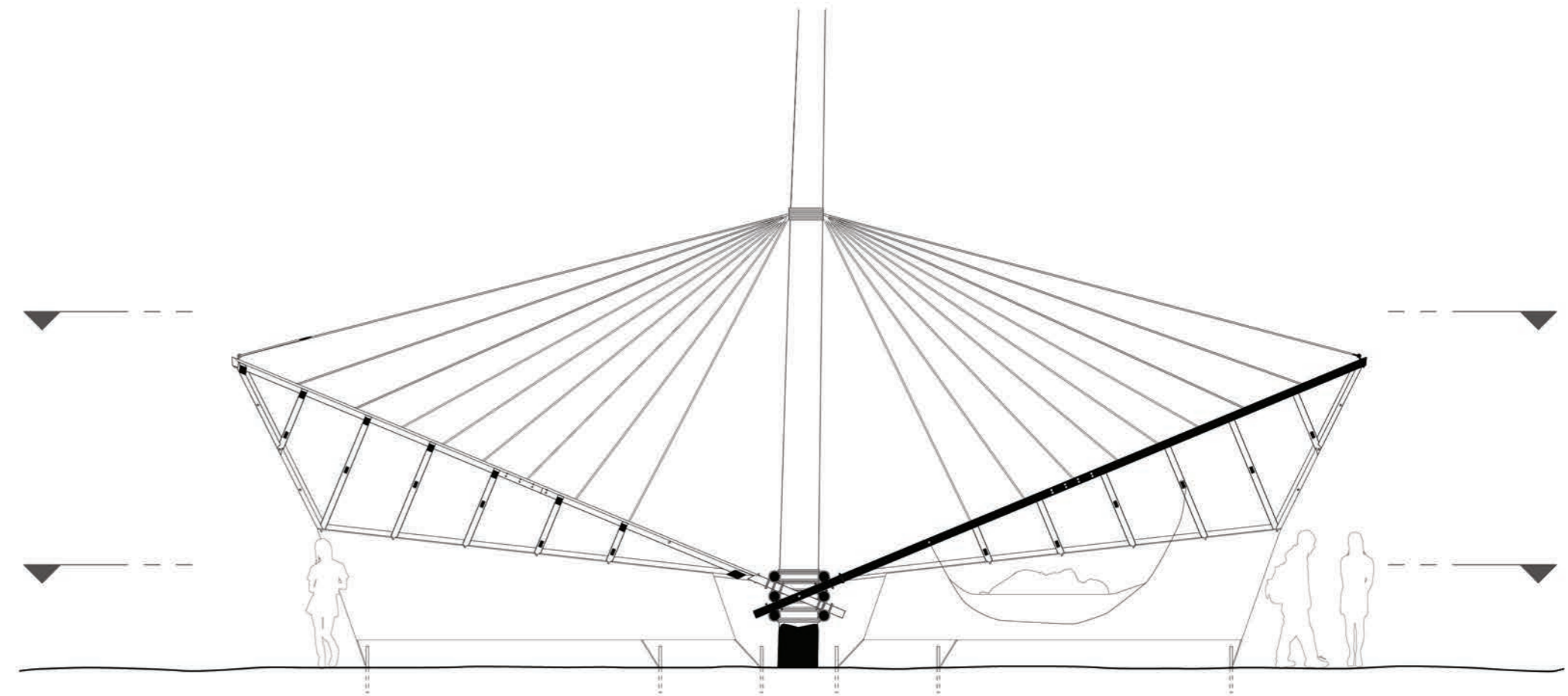
Sleeping Structure - Framing Plan 1:75



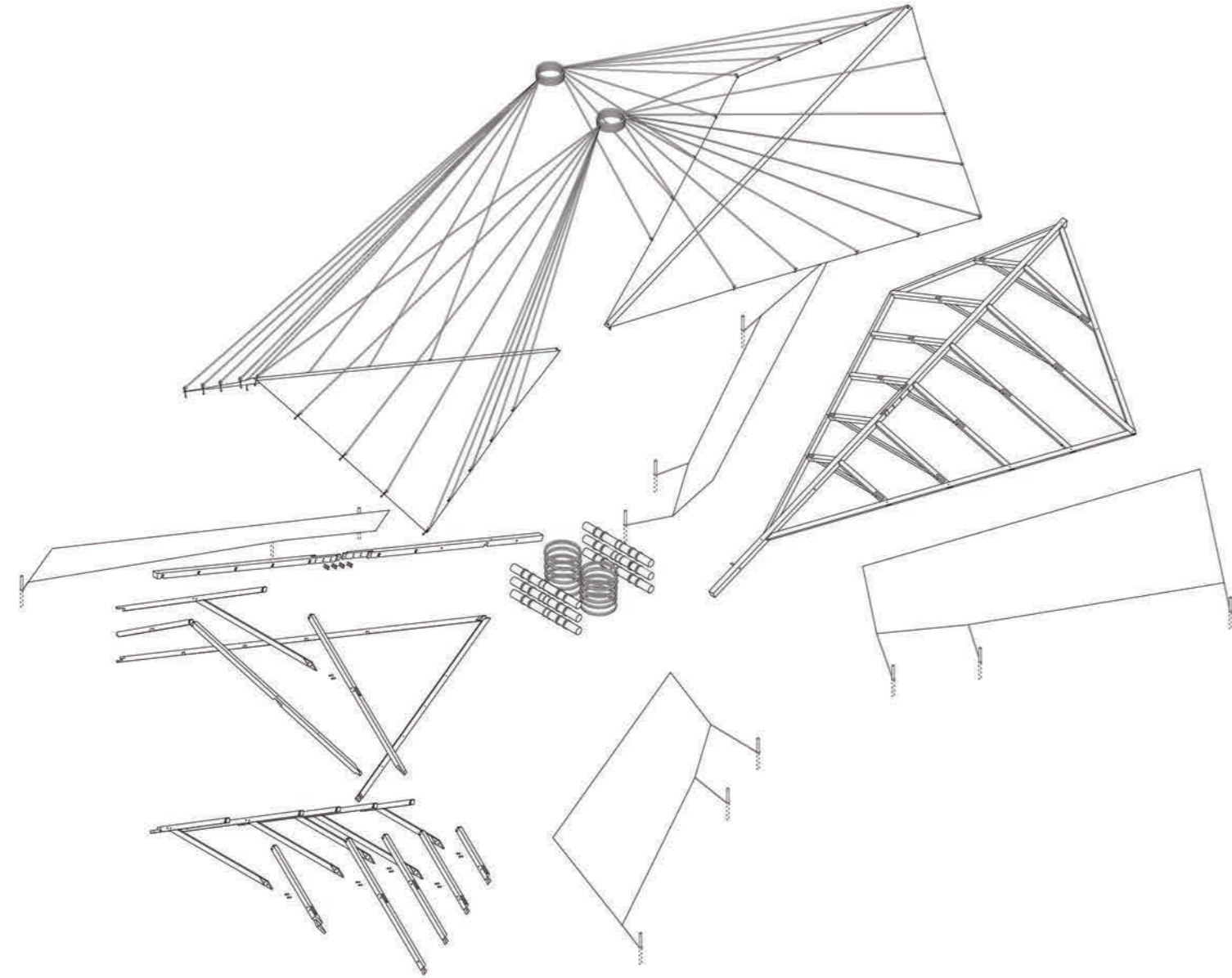
Sleeping Structure - Cross Section 1:75



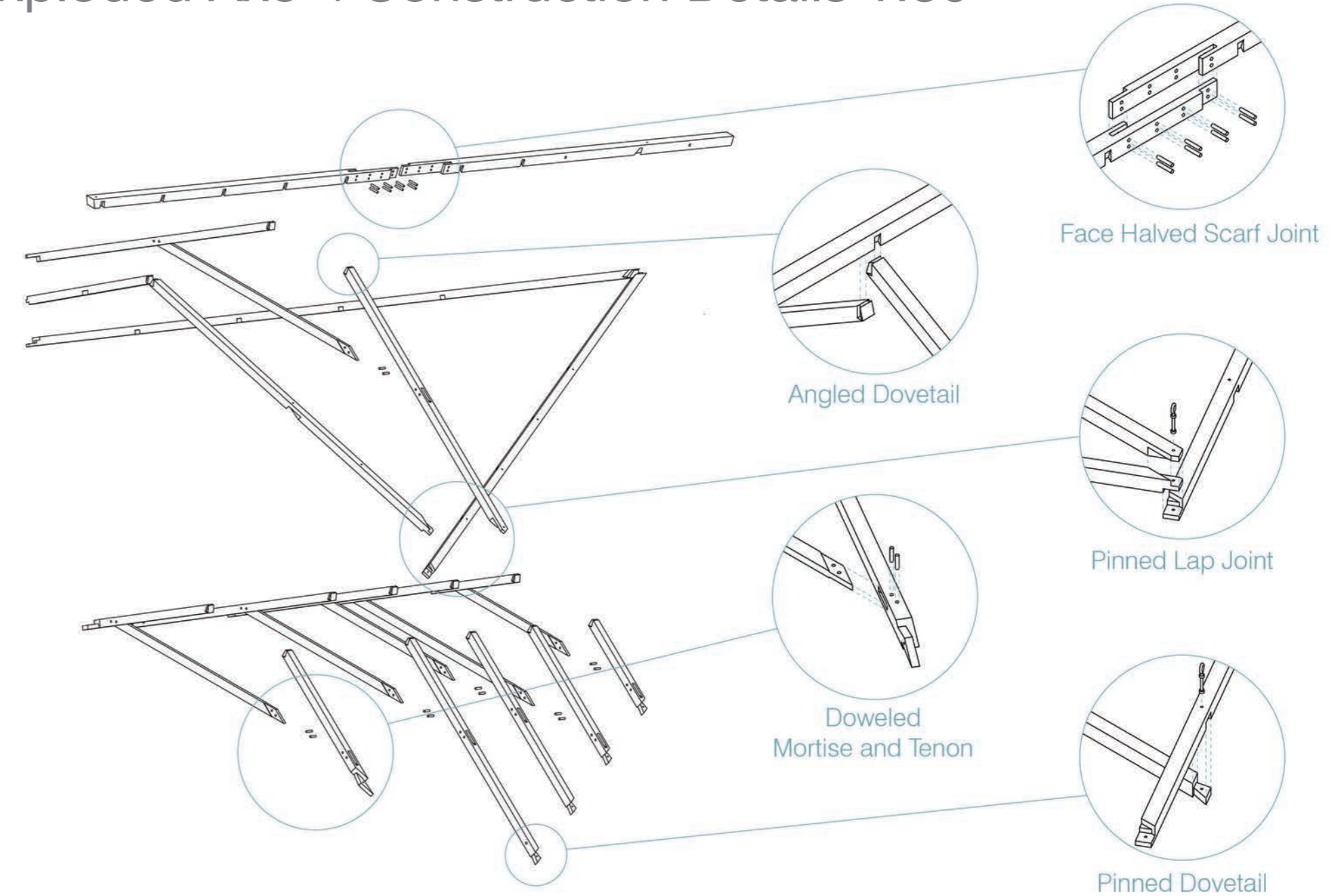
Sleeping Structure - Longitudinal Section 1:75



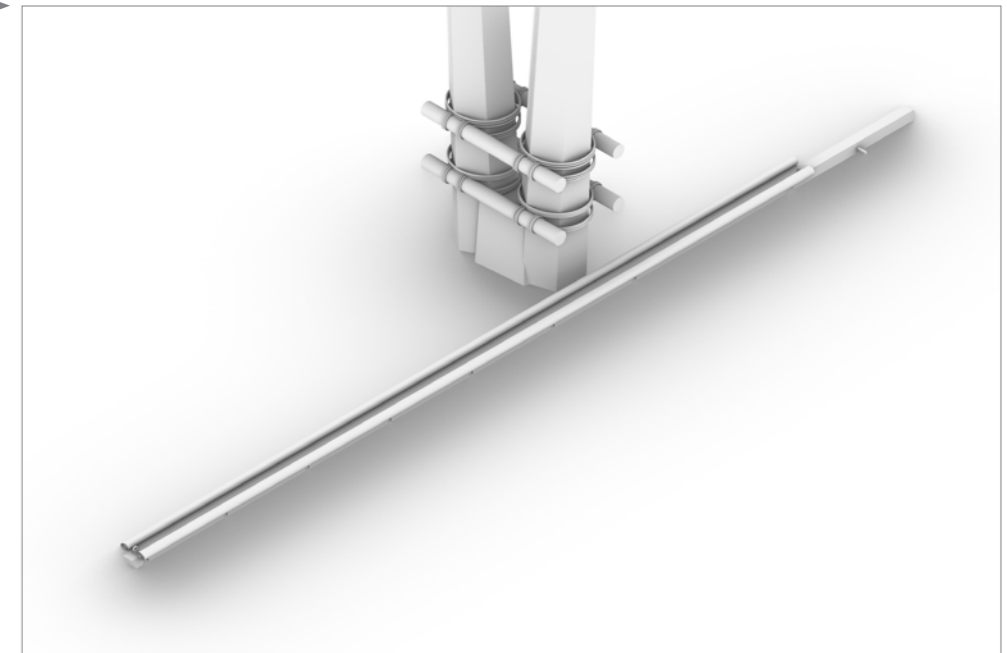
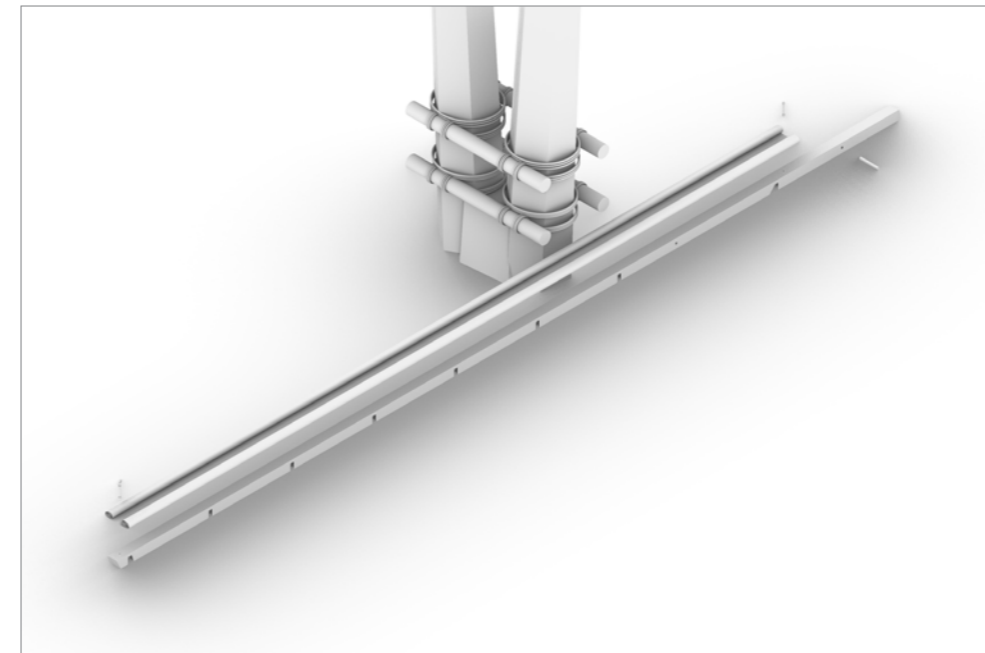
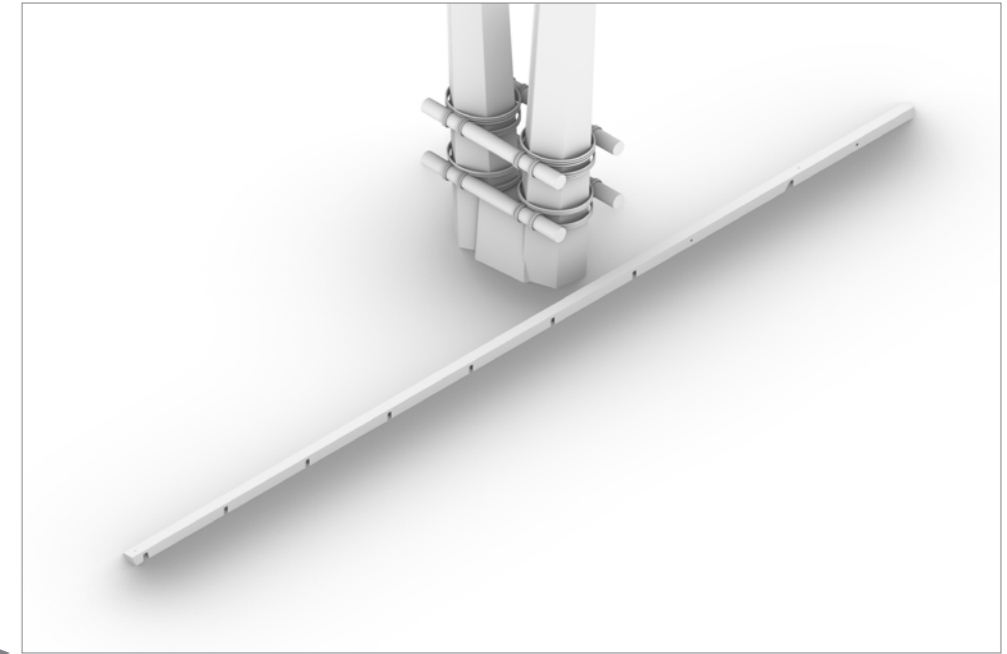
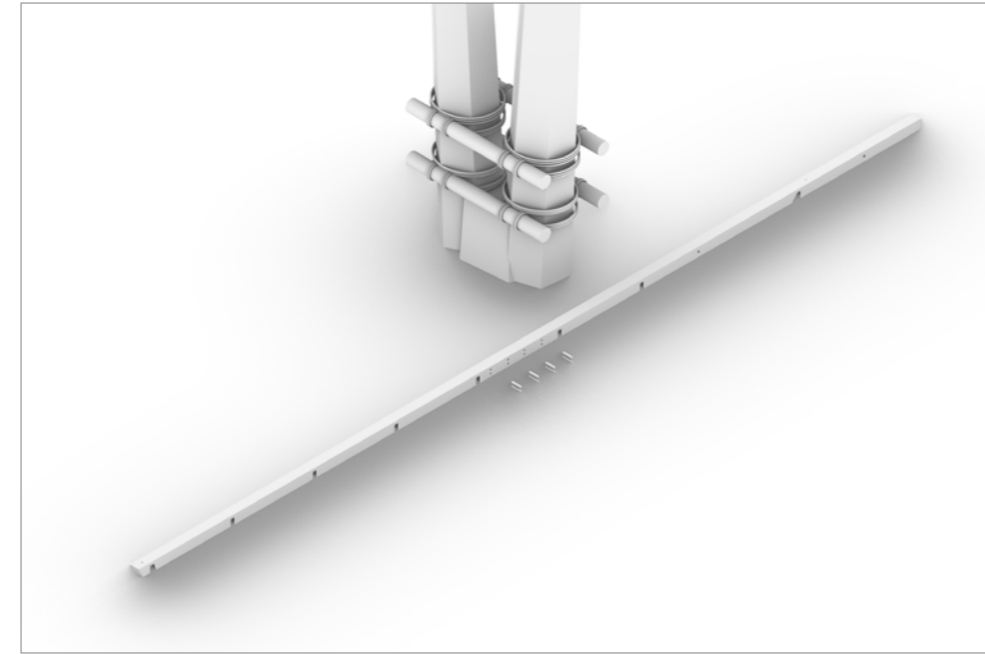
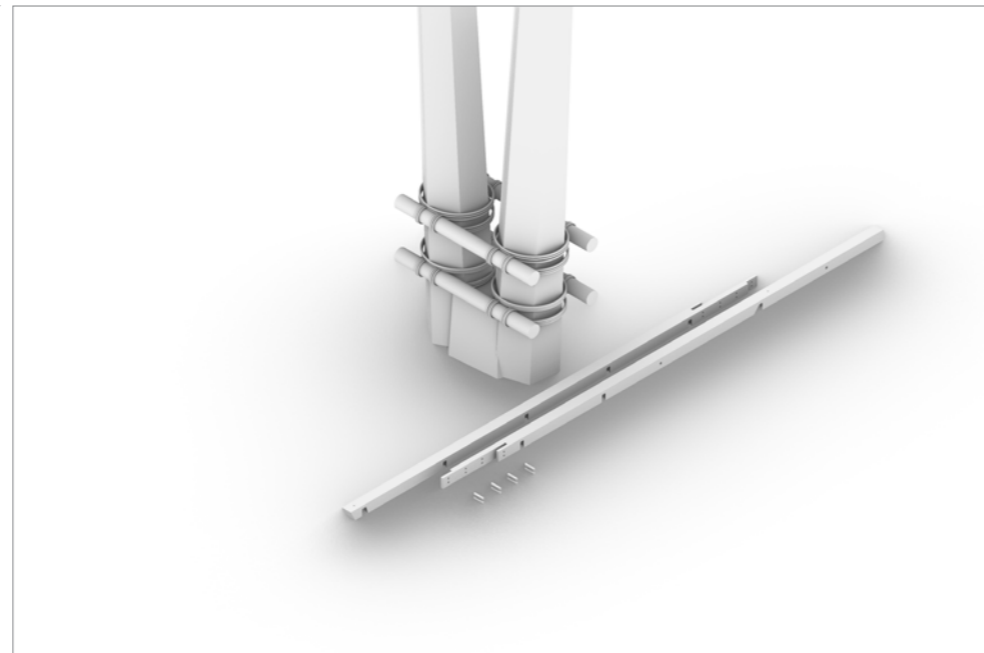
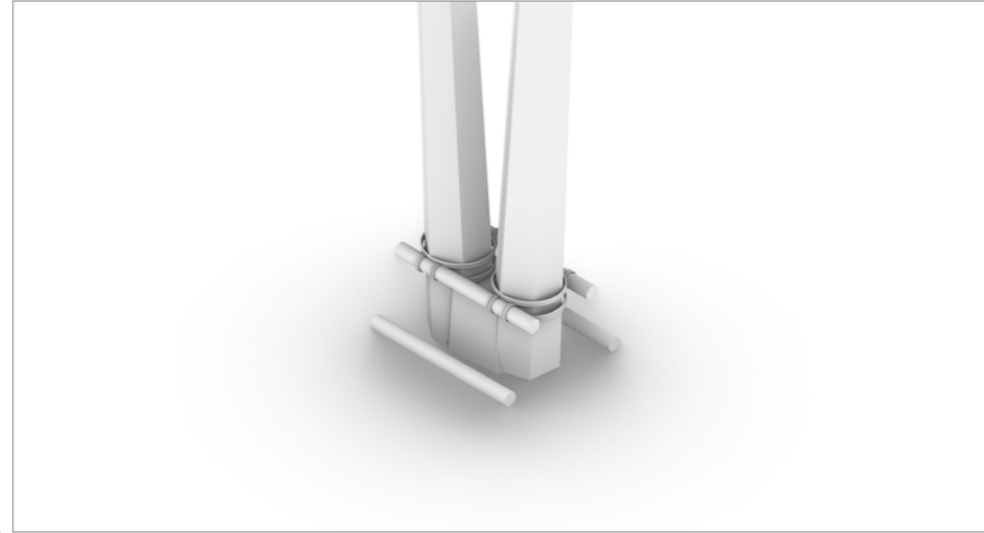
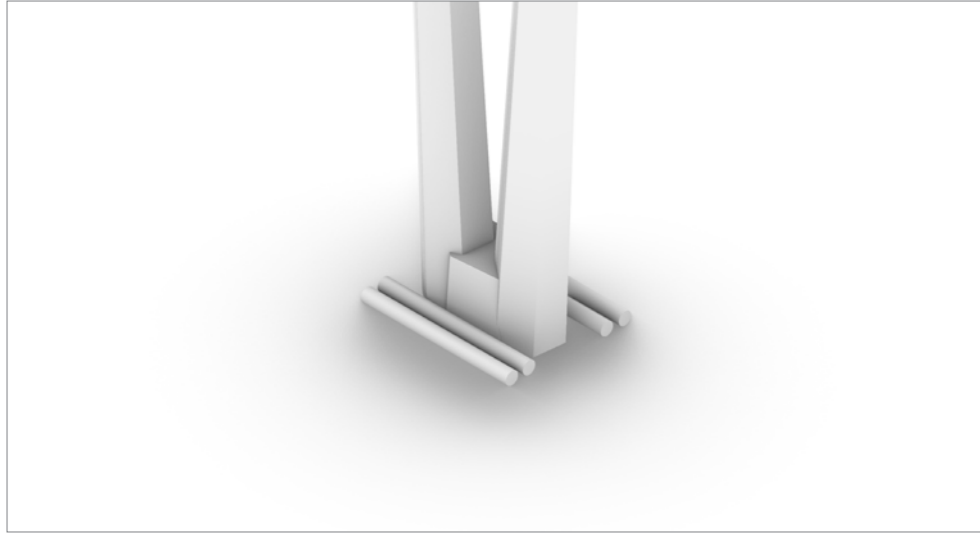
Sleeping Structure - Exploded Axo 1:100

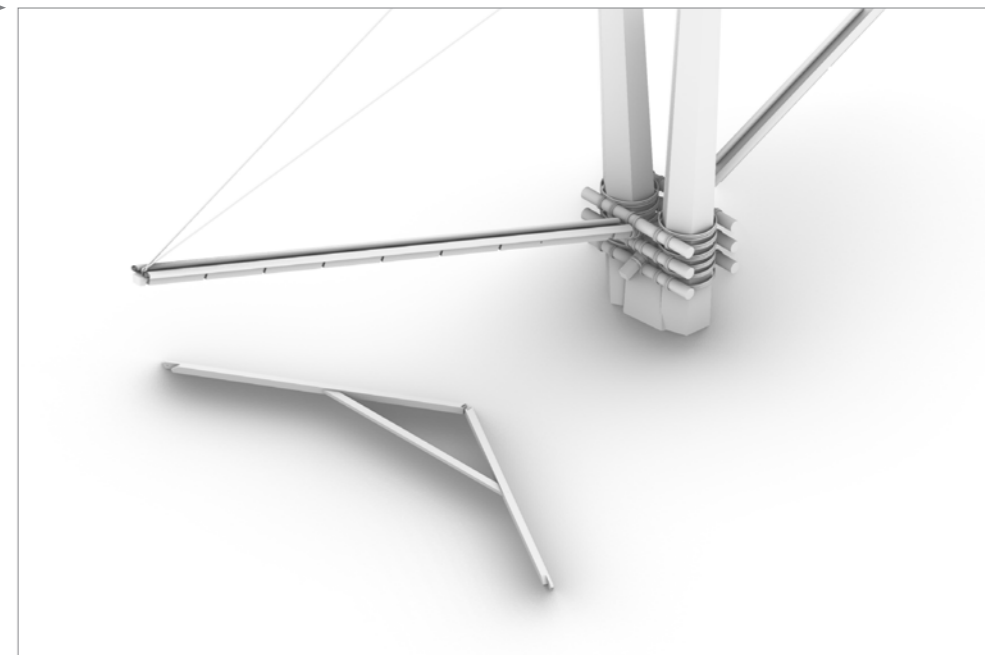
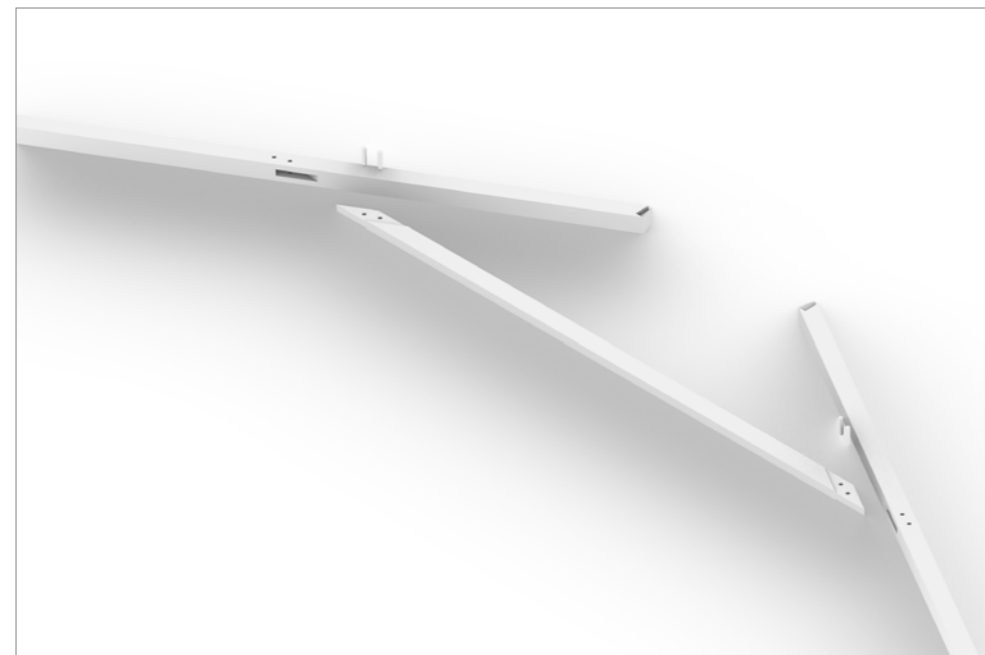
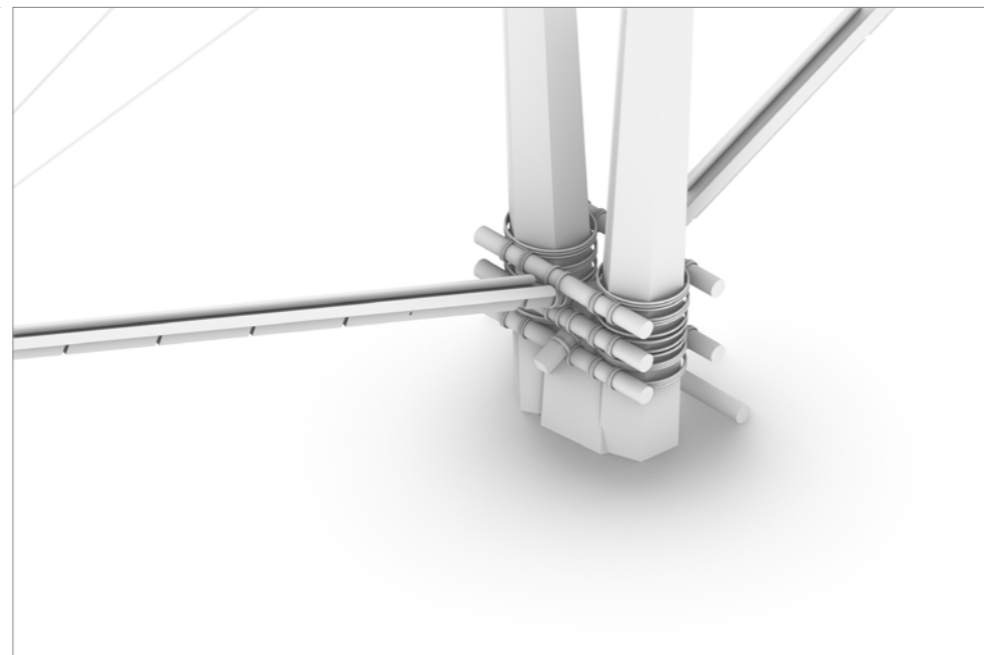
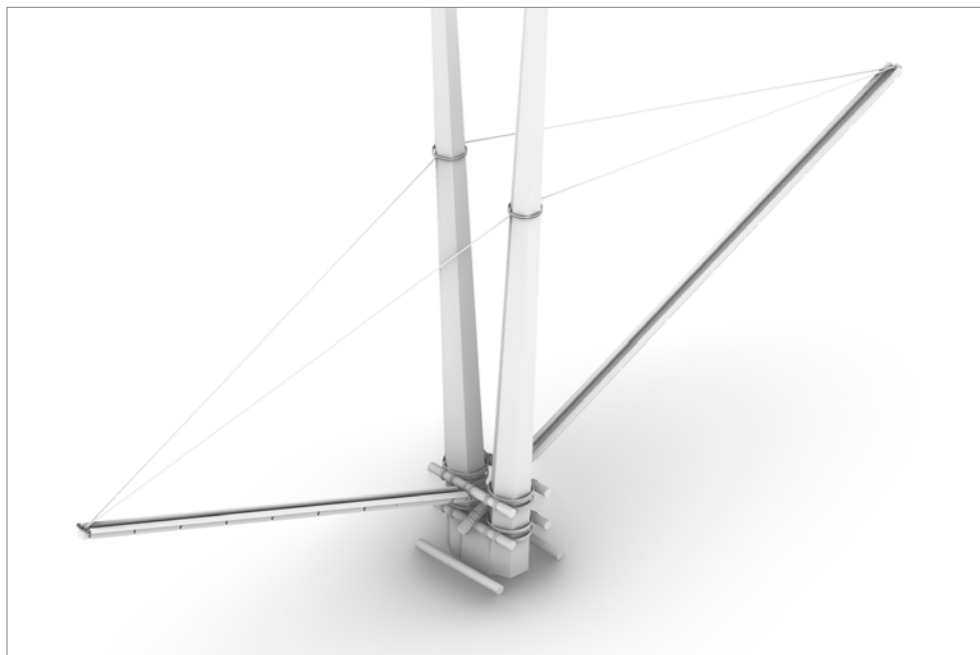
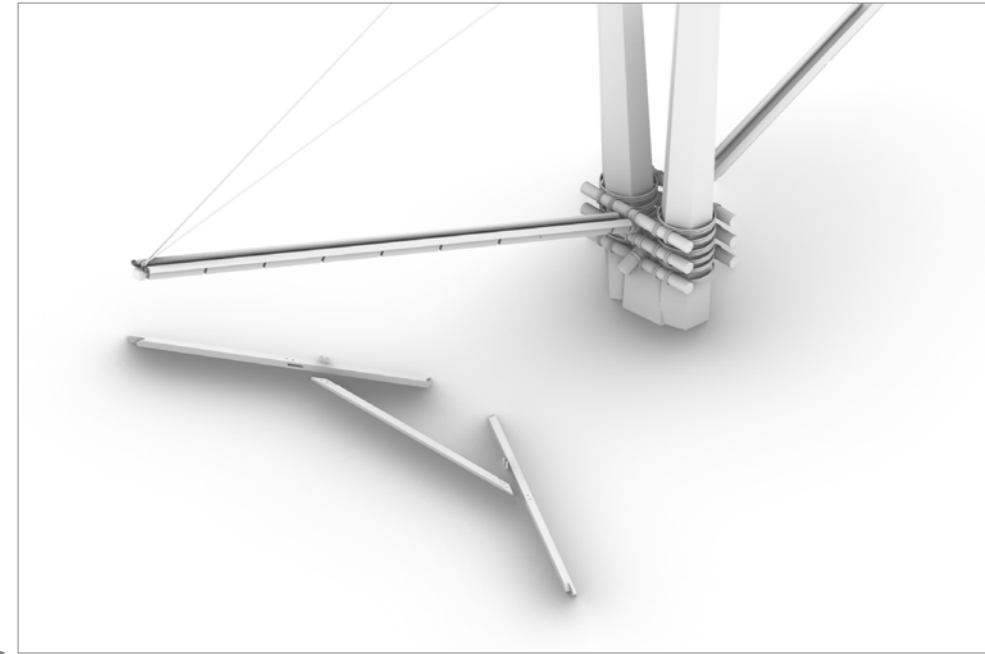
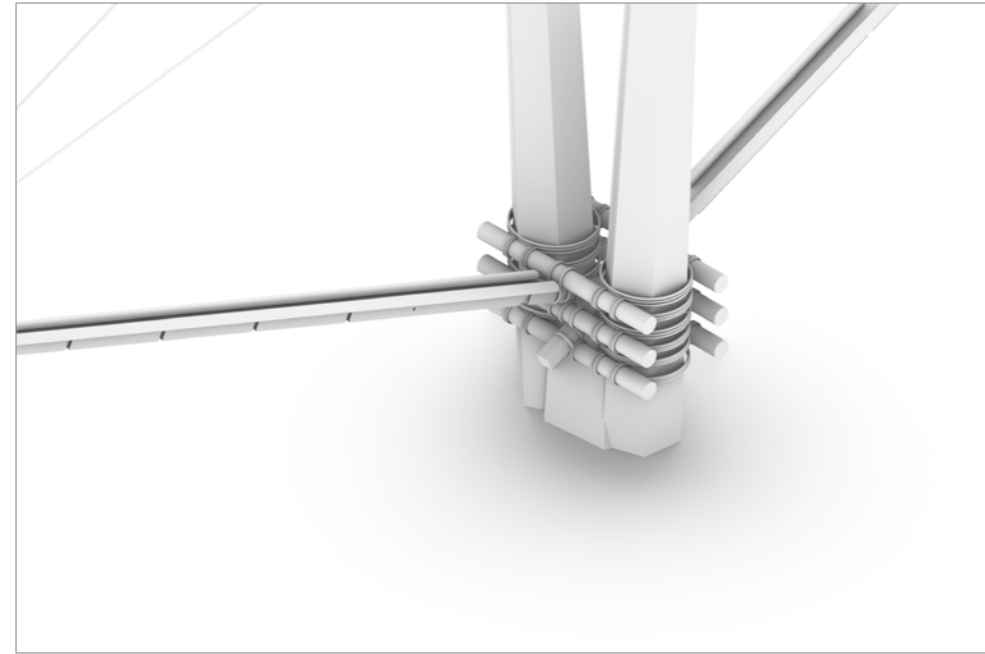
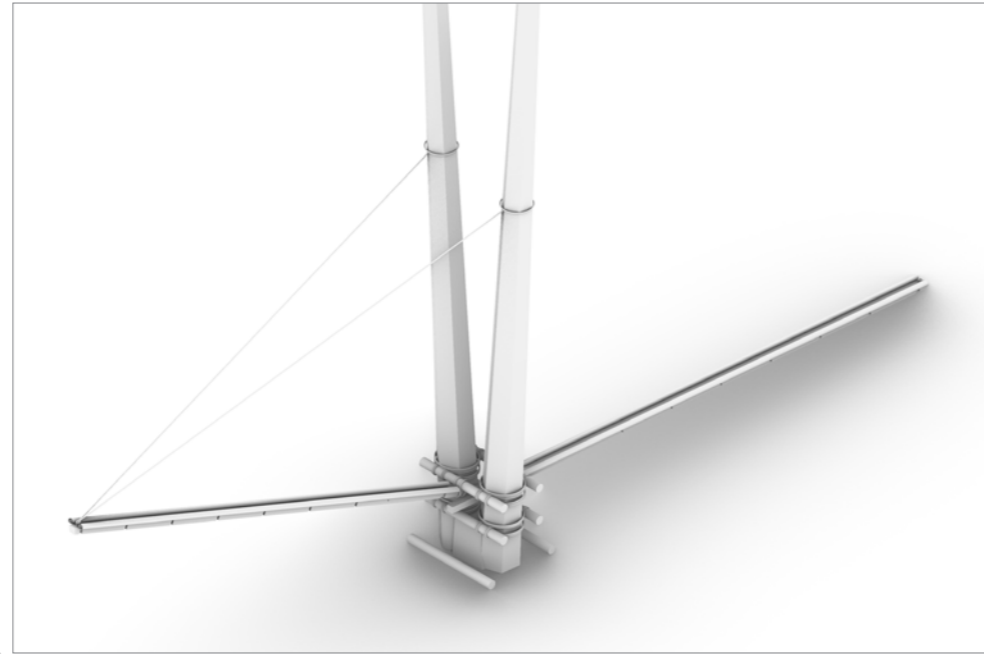
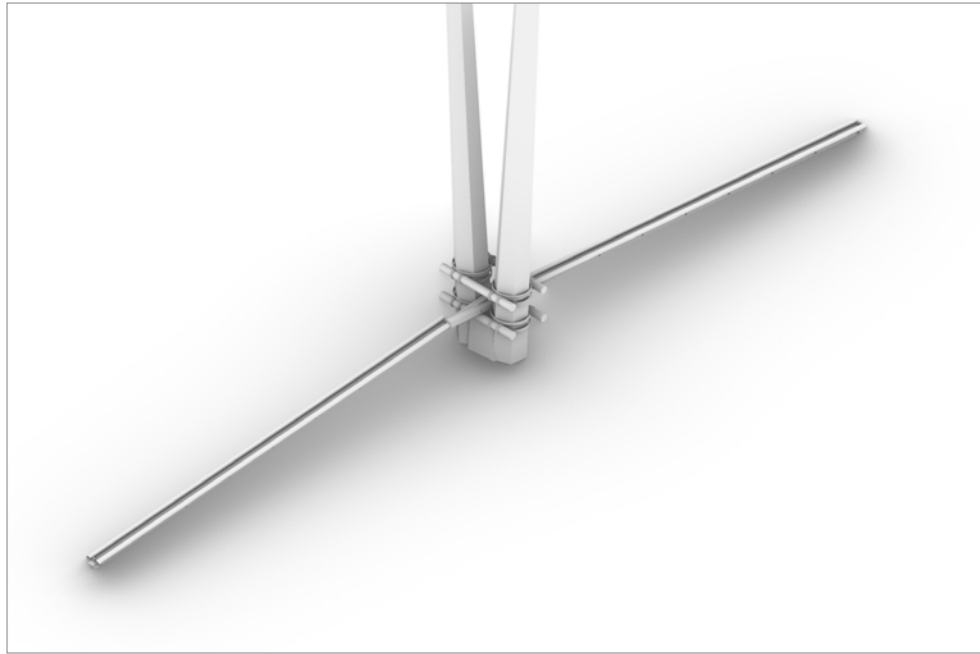


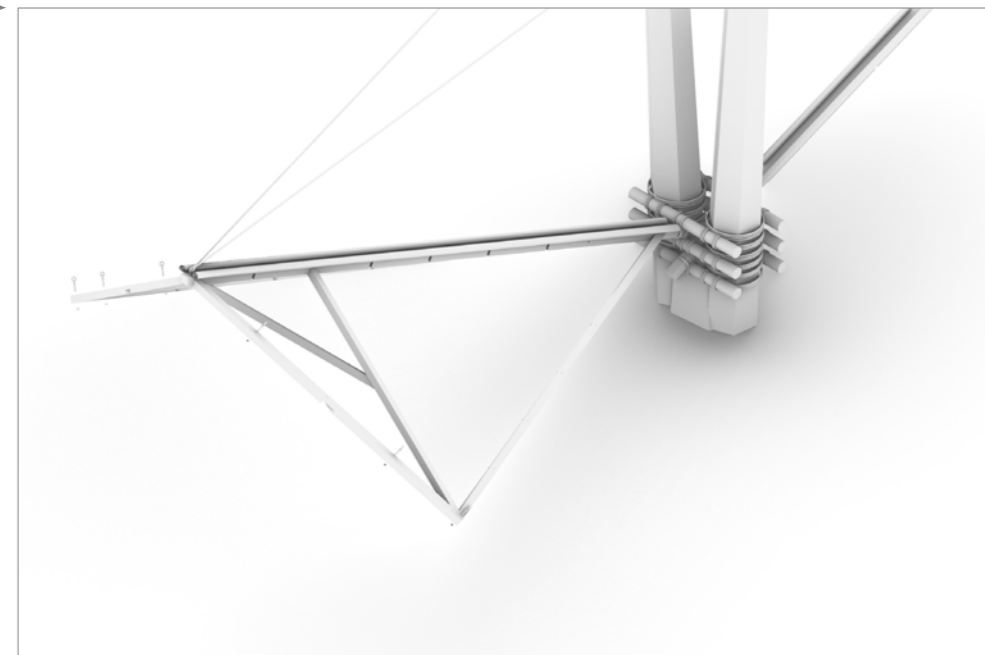
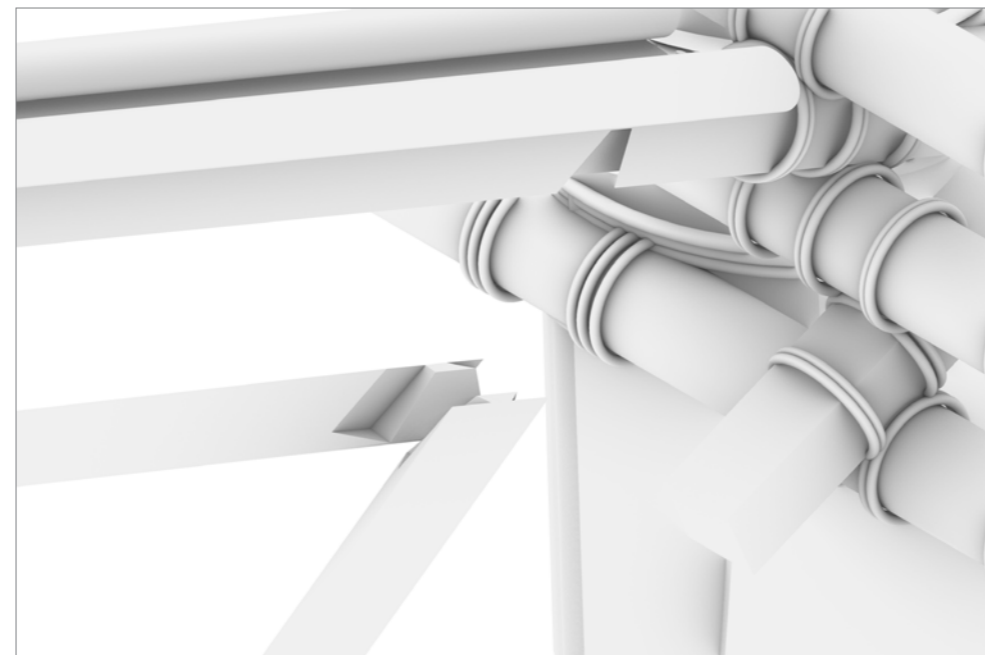
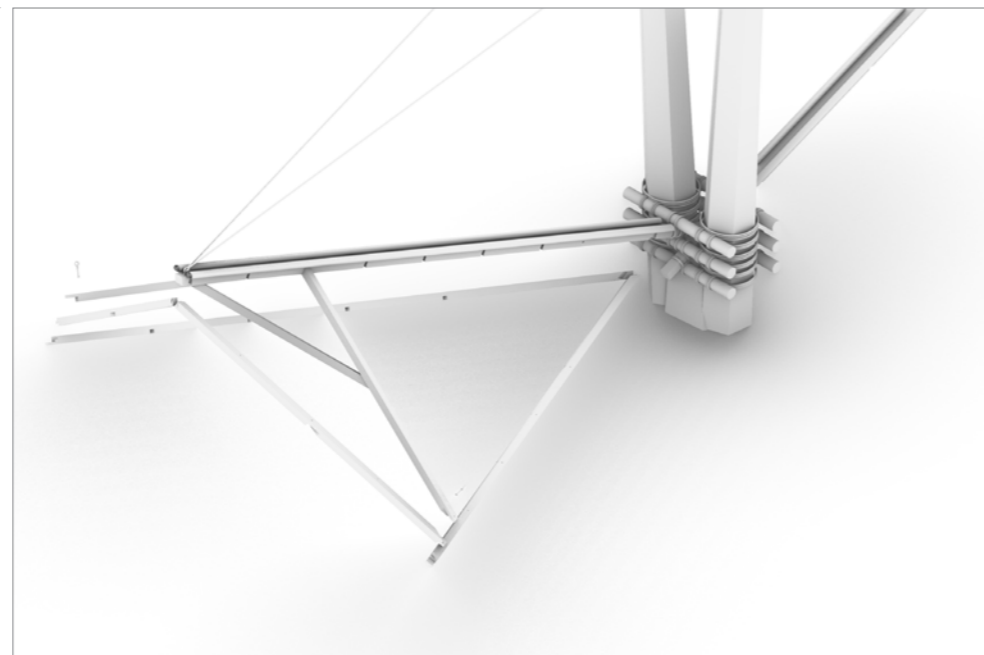
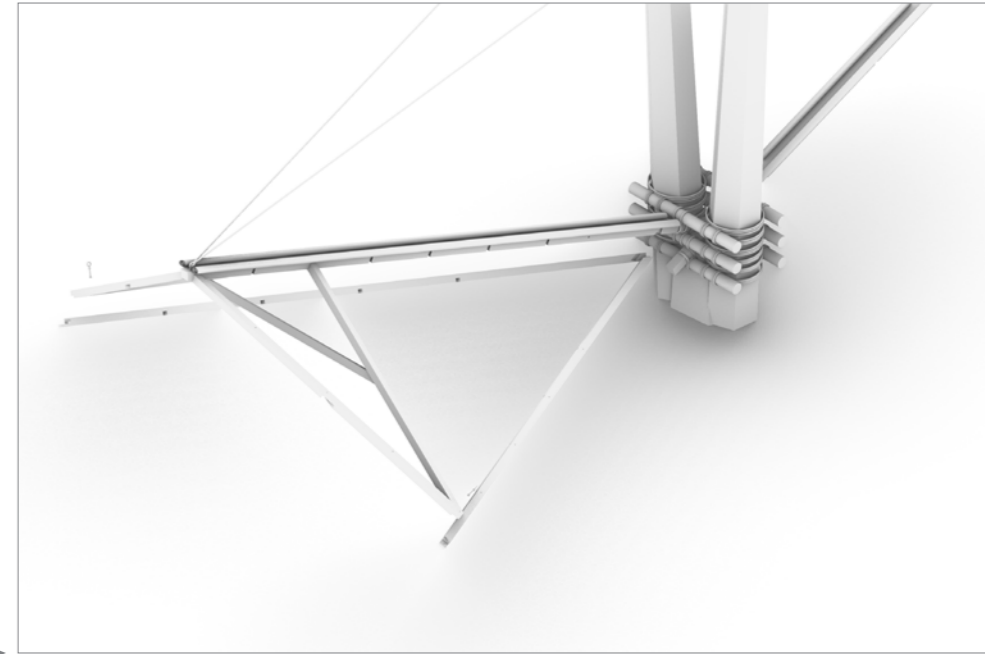
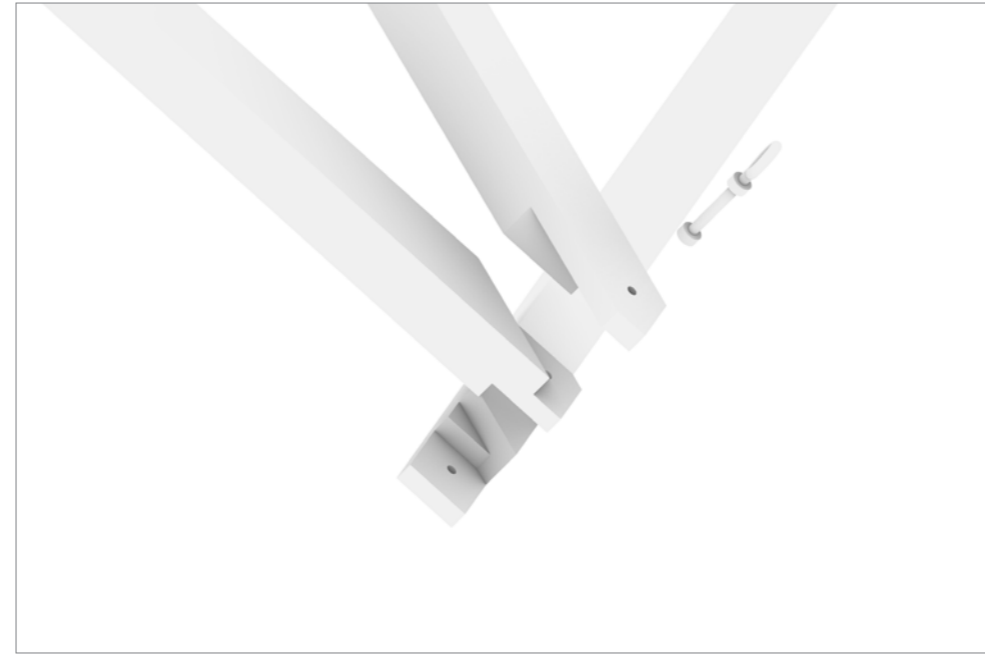
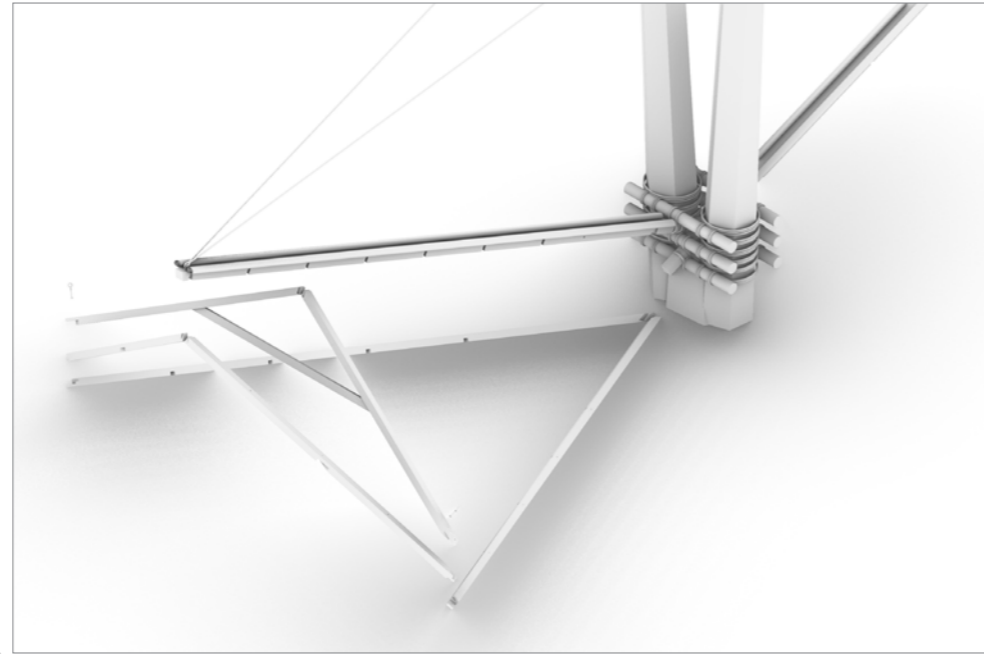
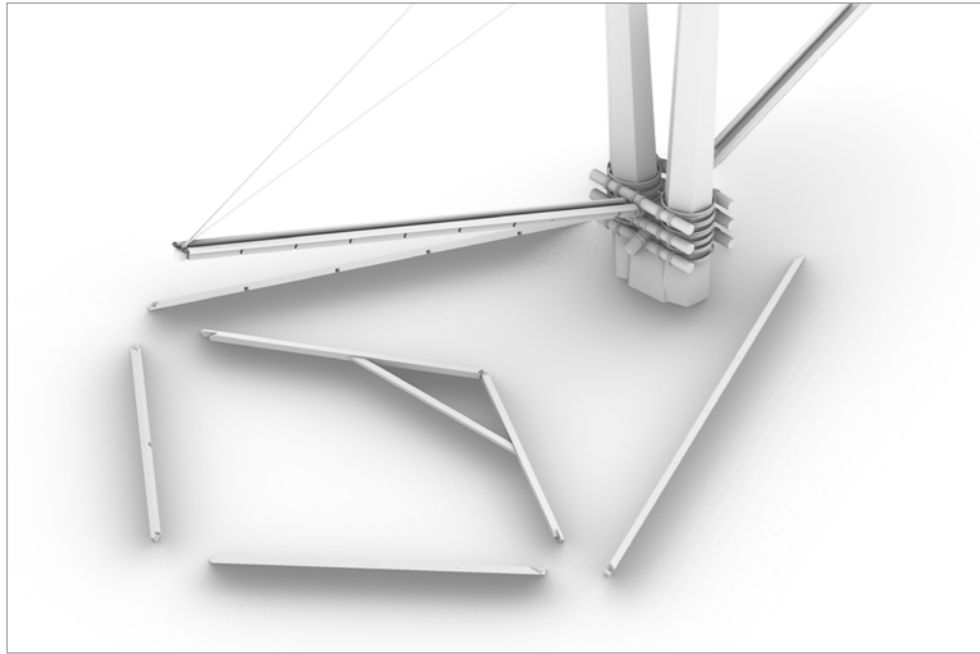
Exploded Axo + Construction Details 1:50

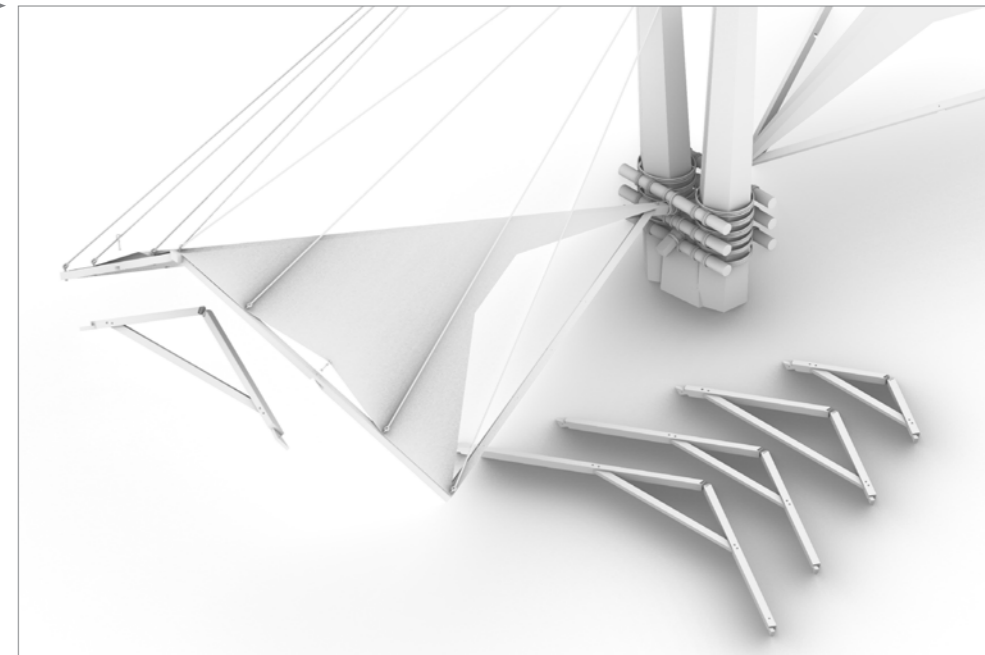
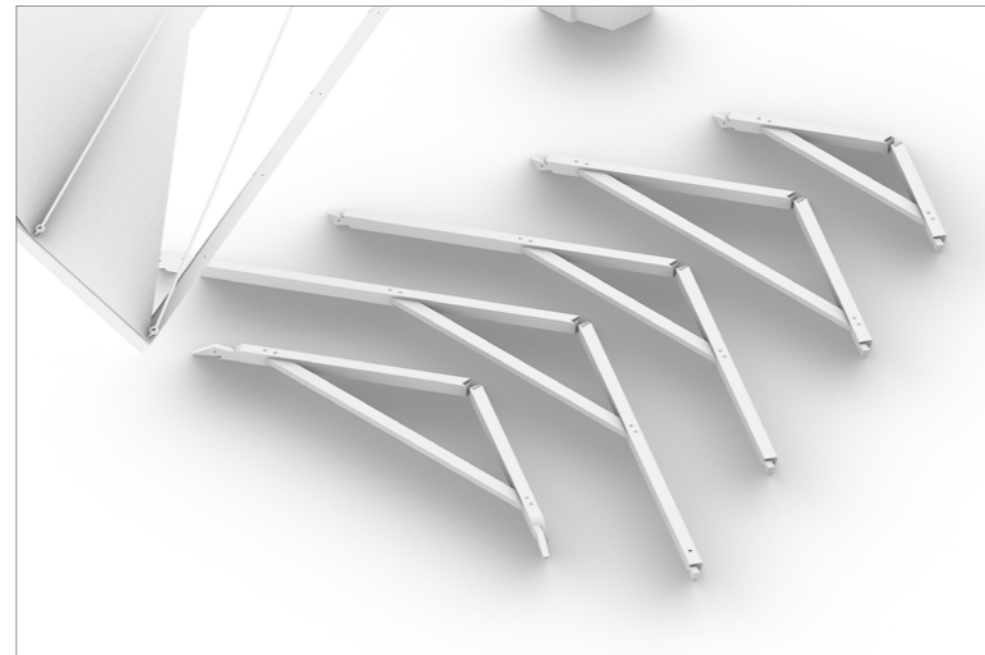
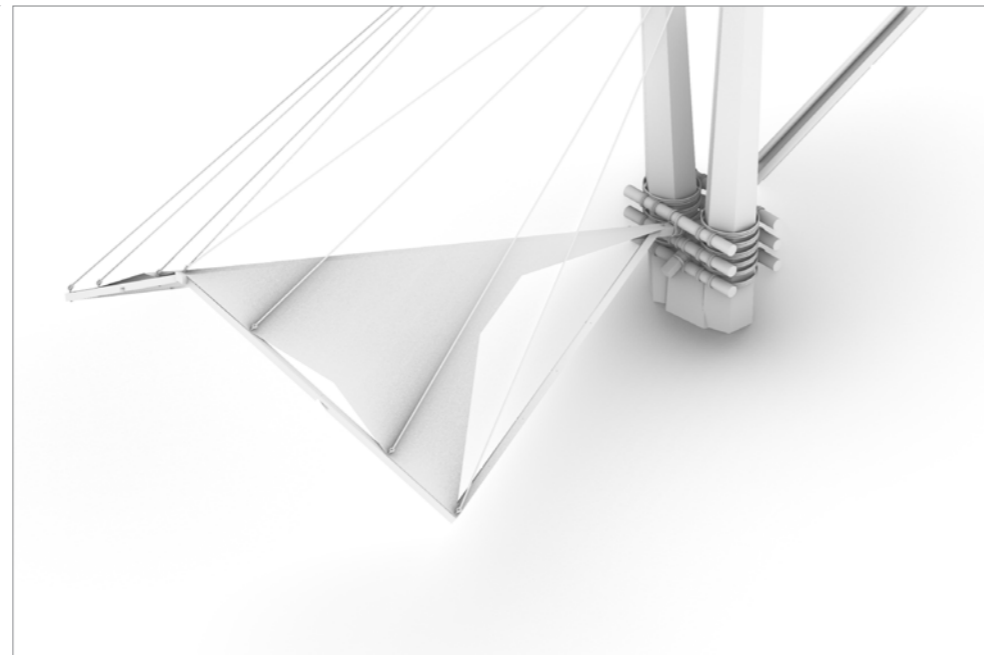
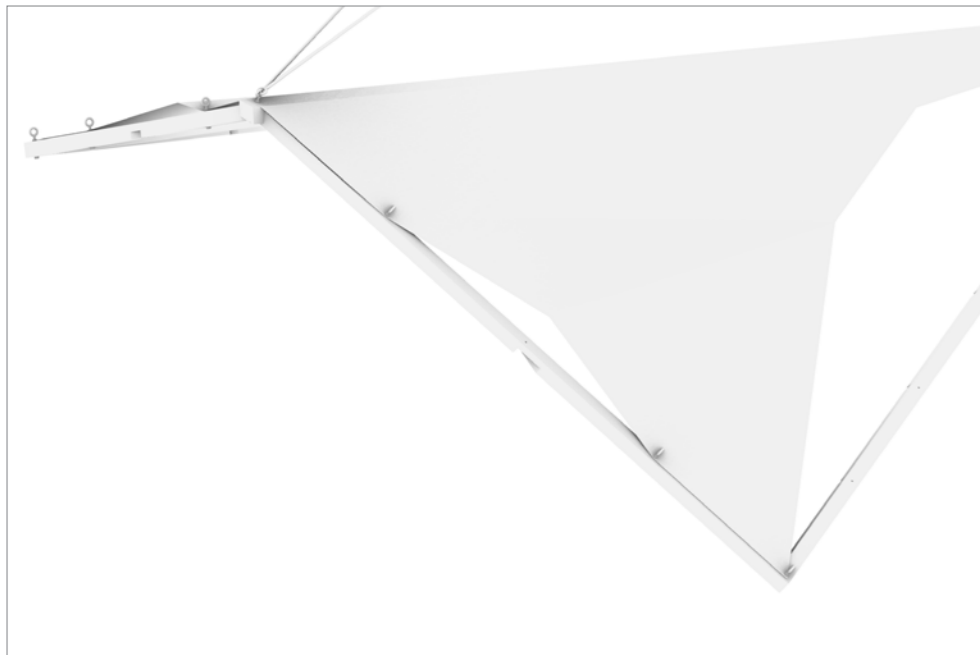
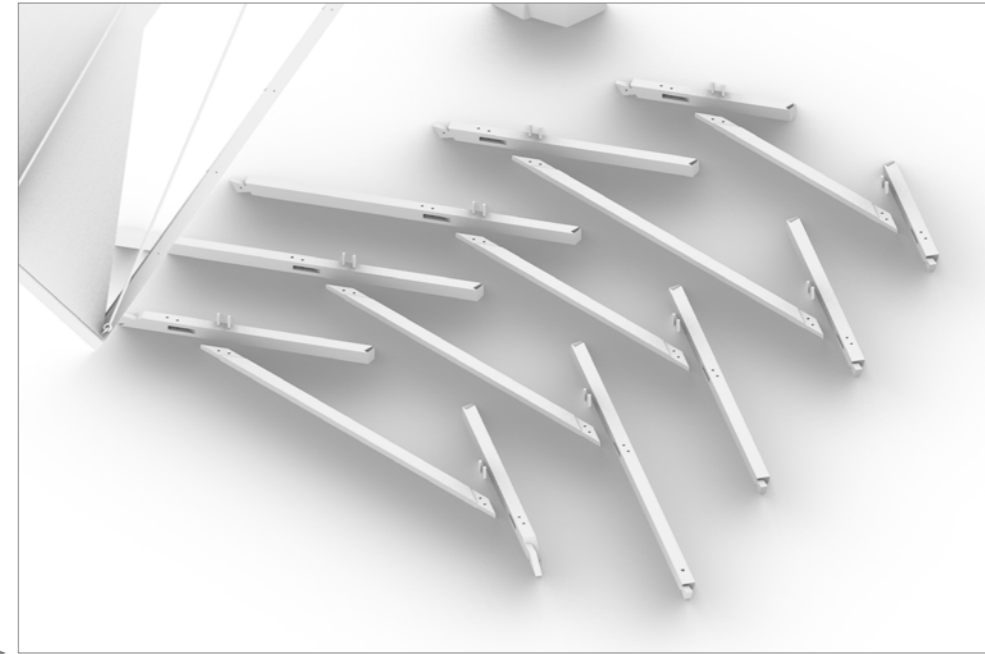
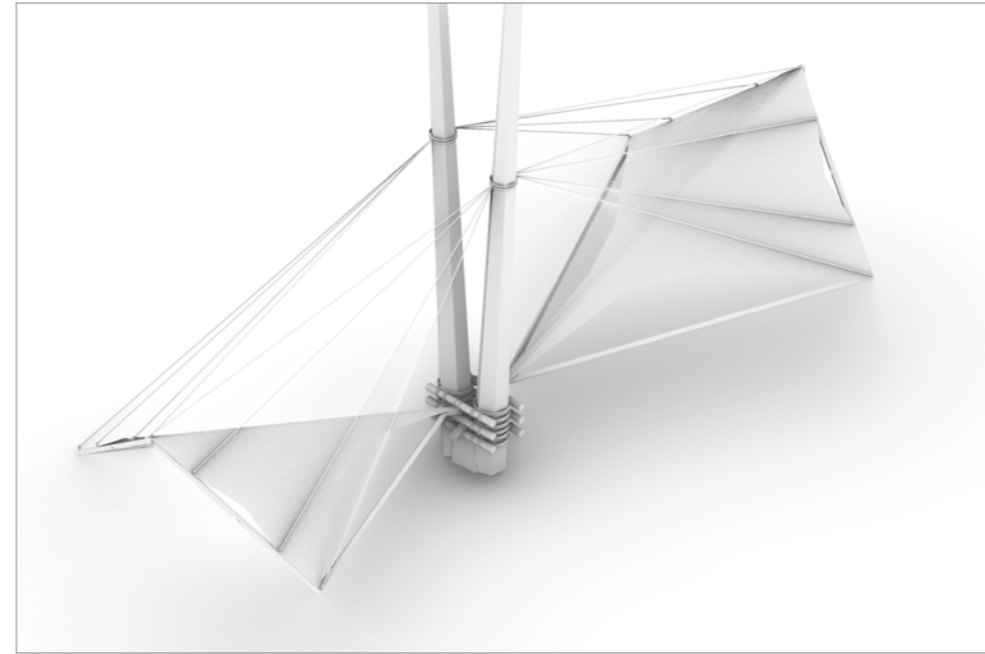
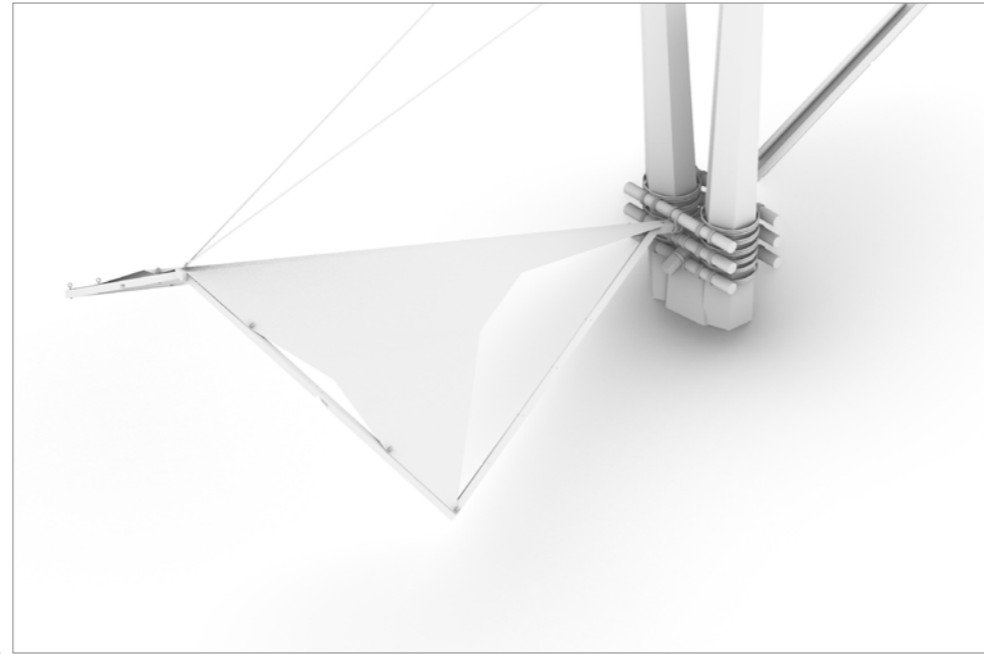


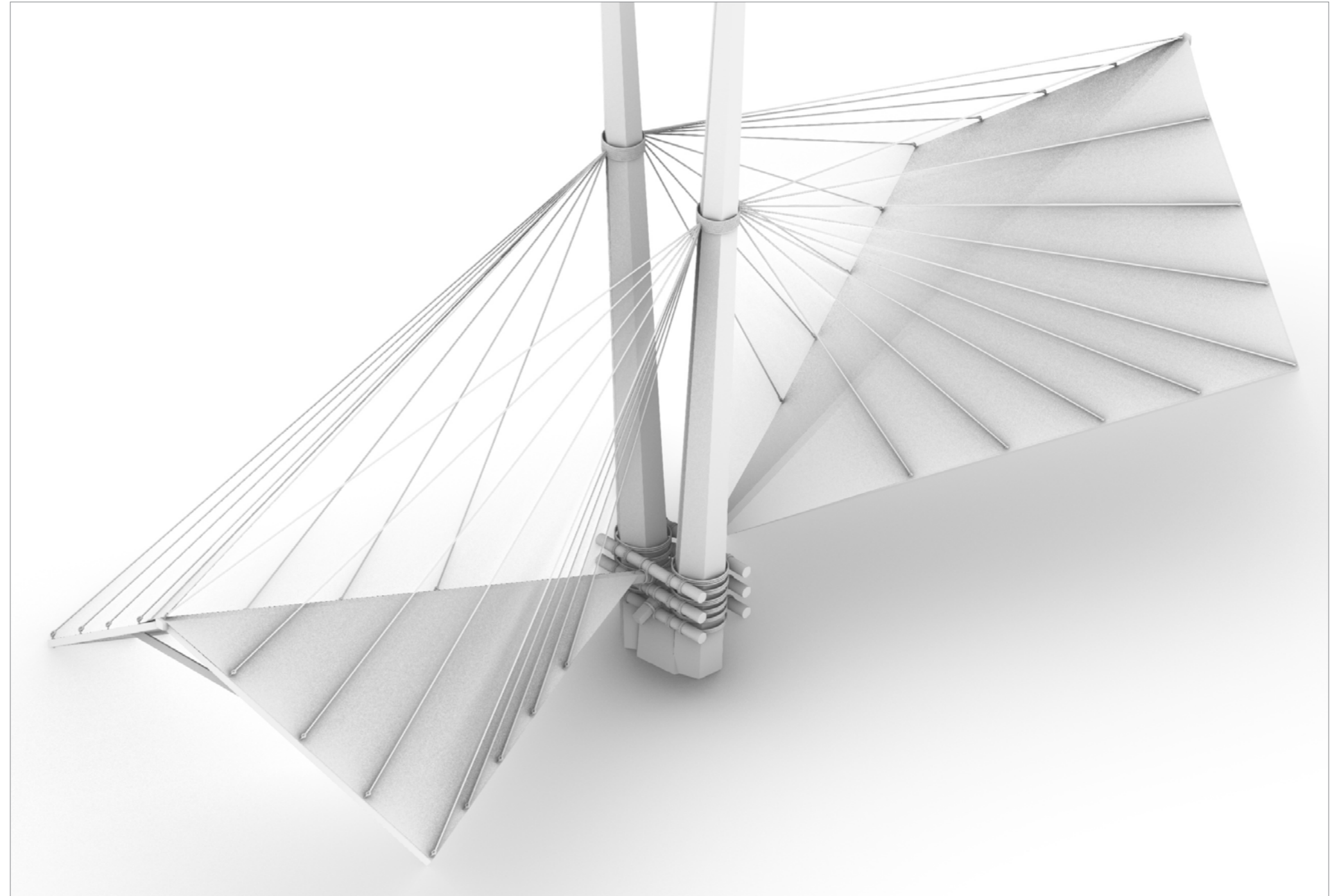
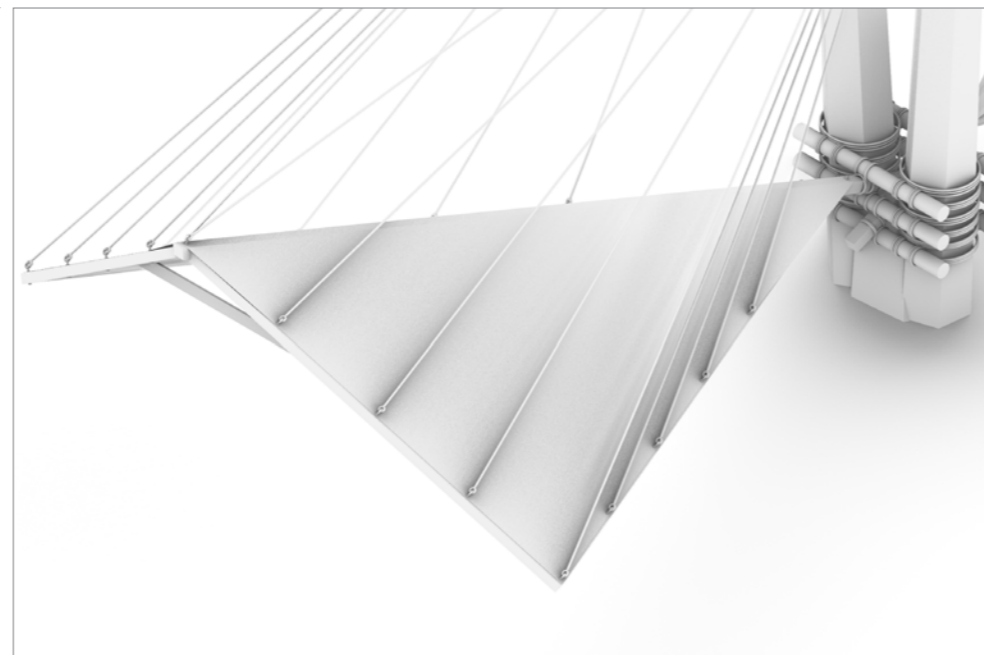
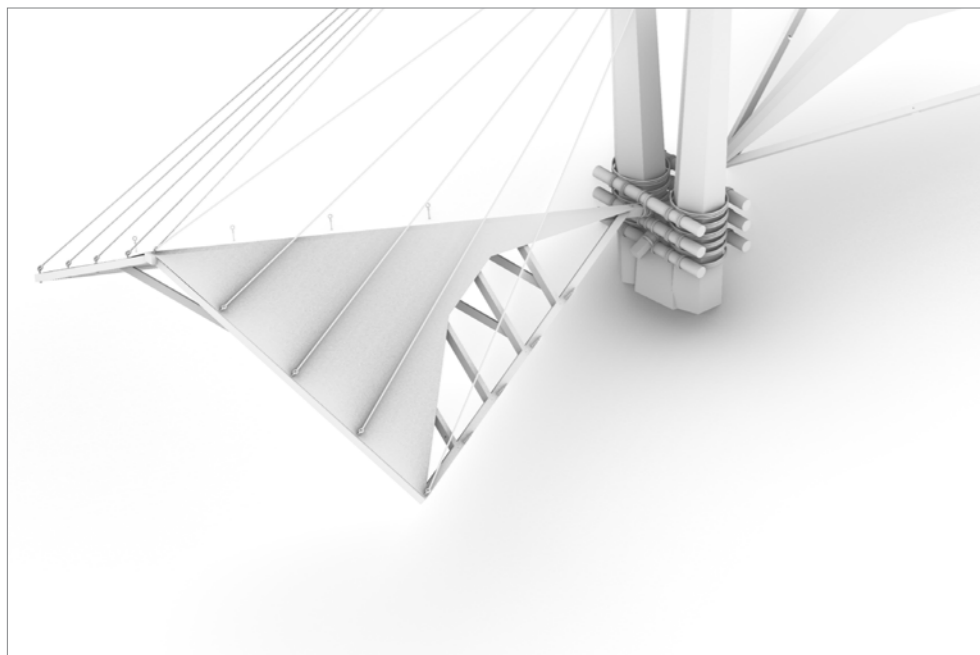
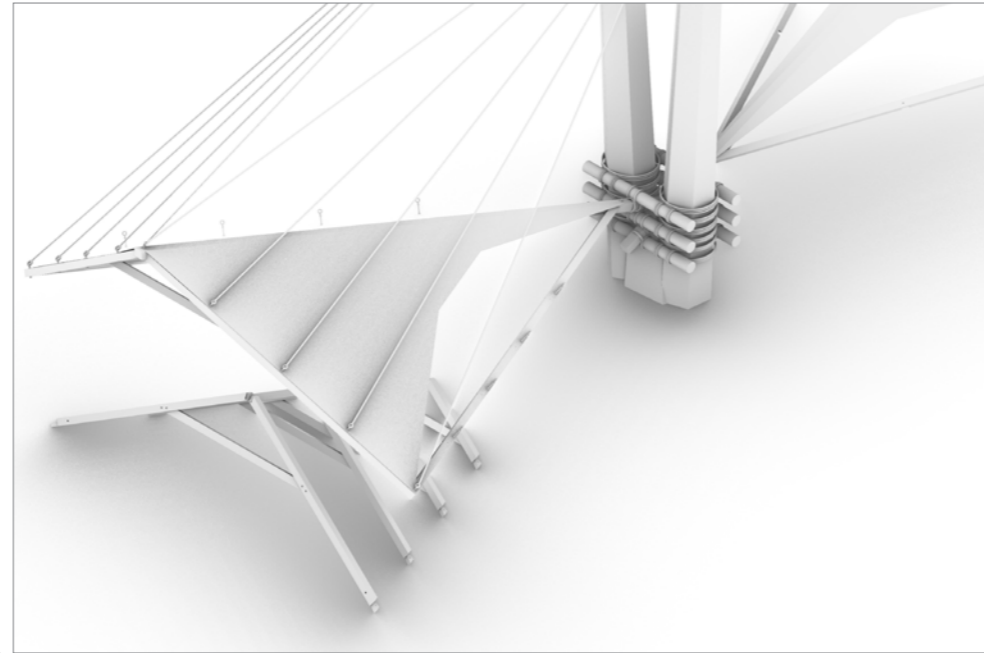
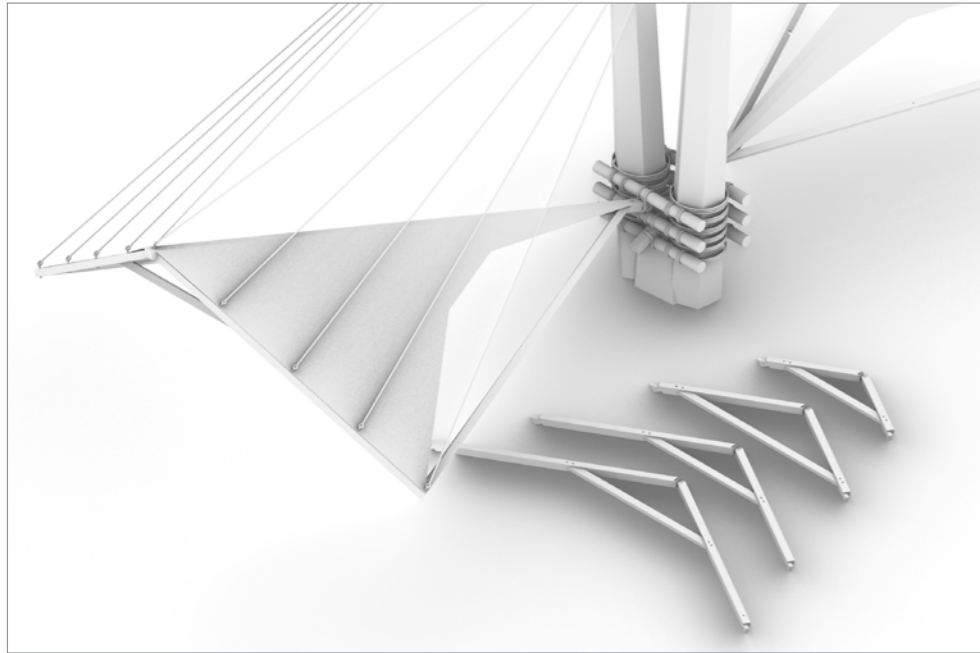
Sleeping Structure - Construction Process

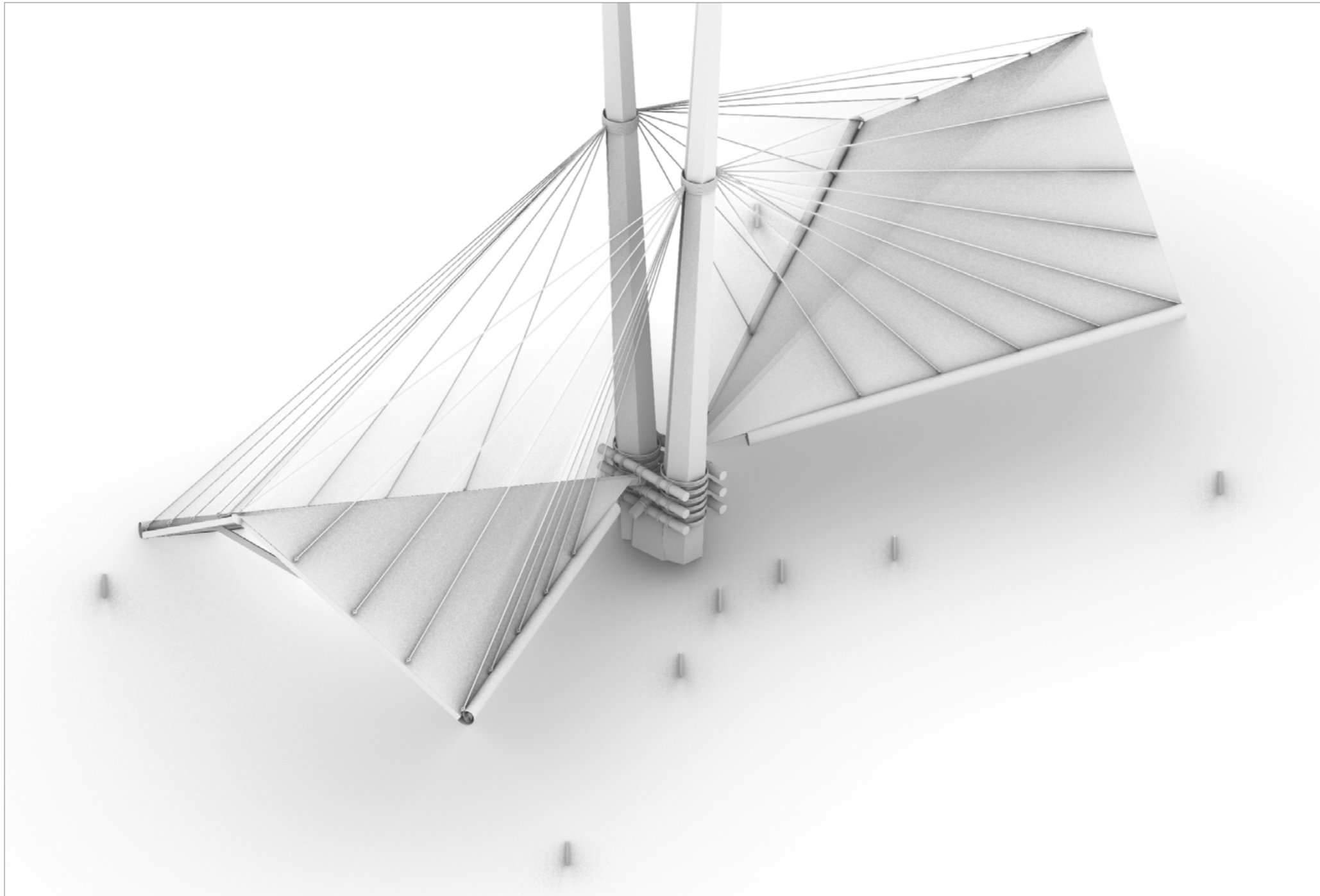




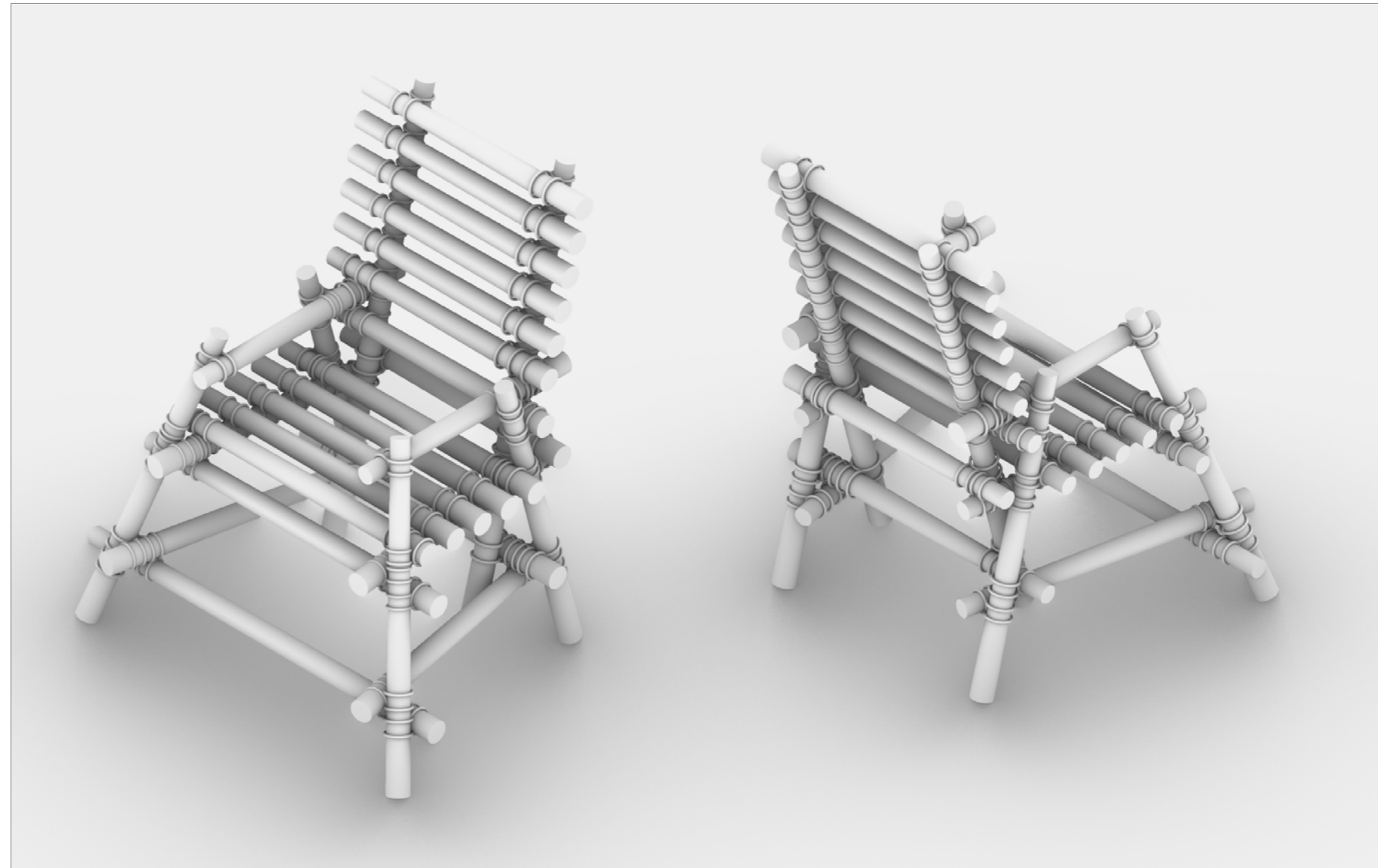




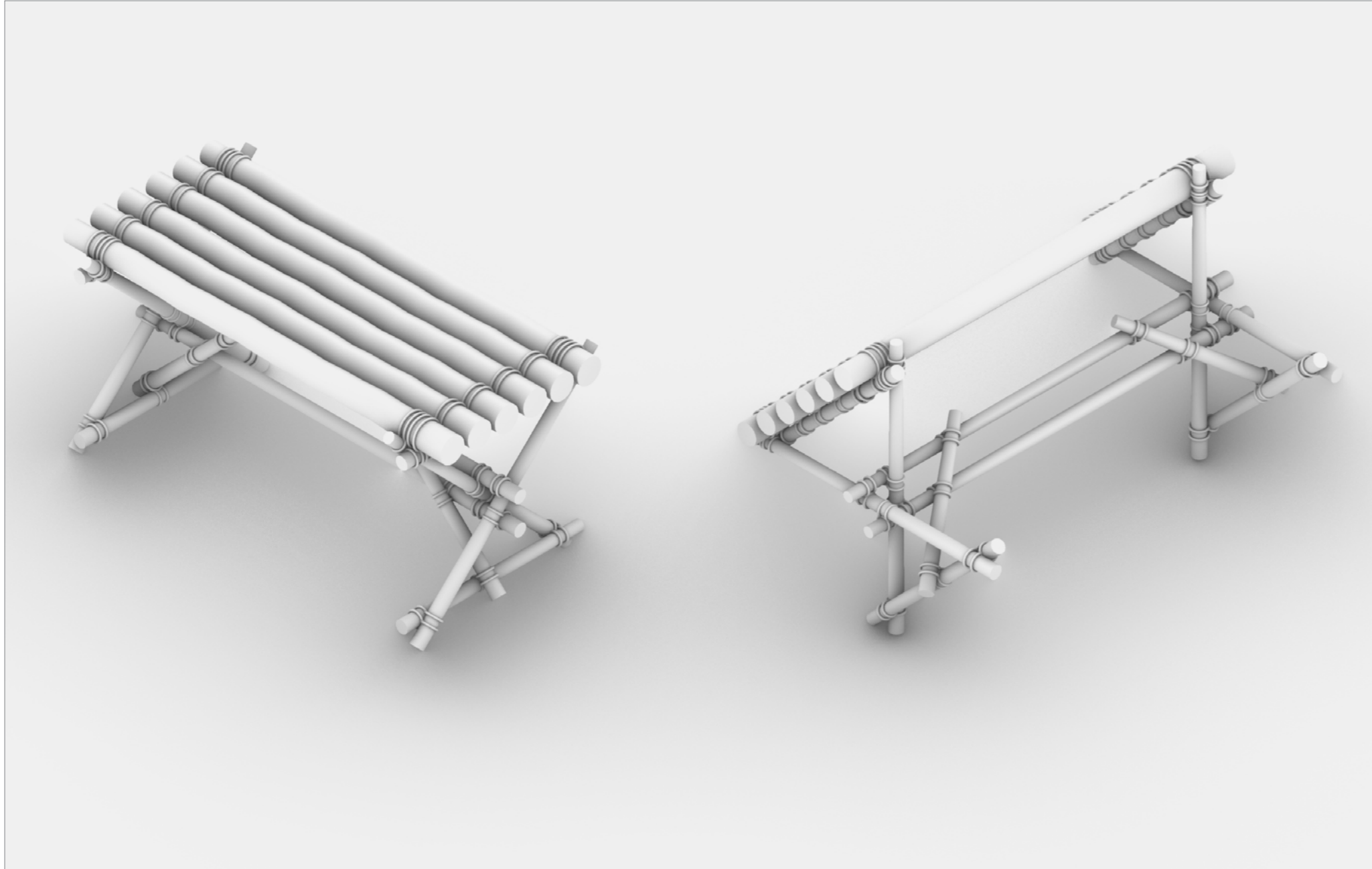




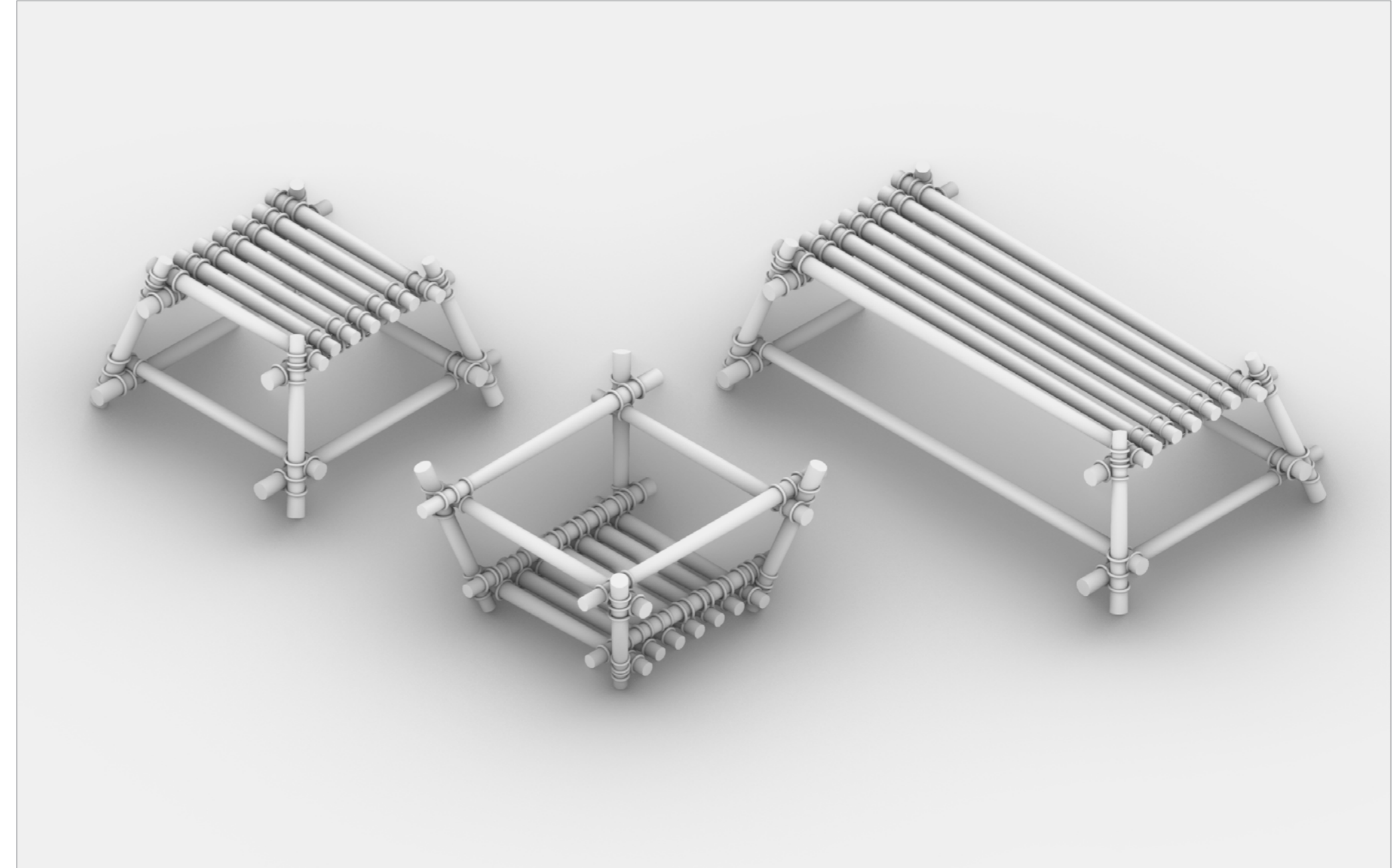
Lashing Chair



Lashing Table



Lashing Bench/Stool

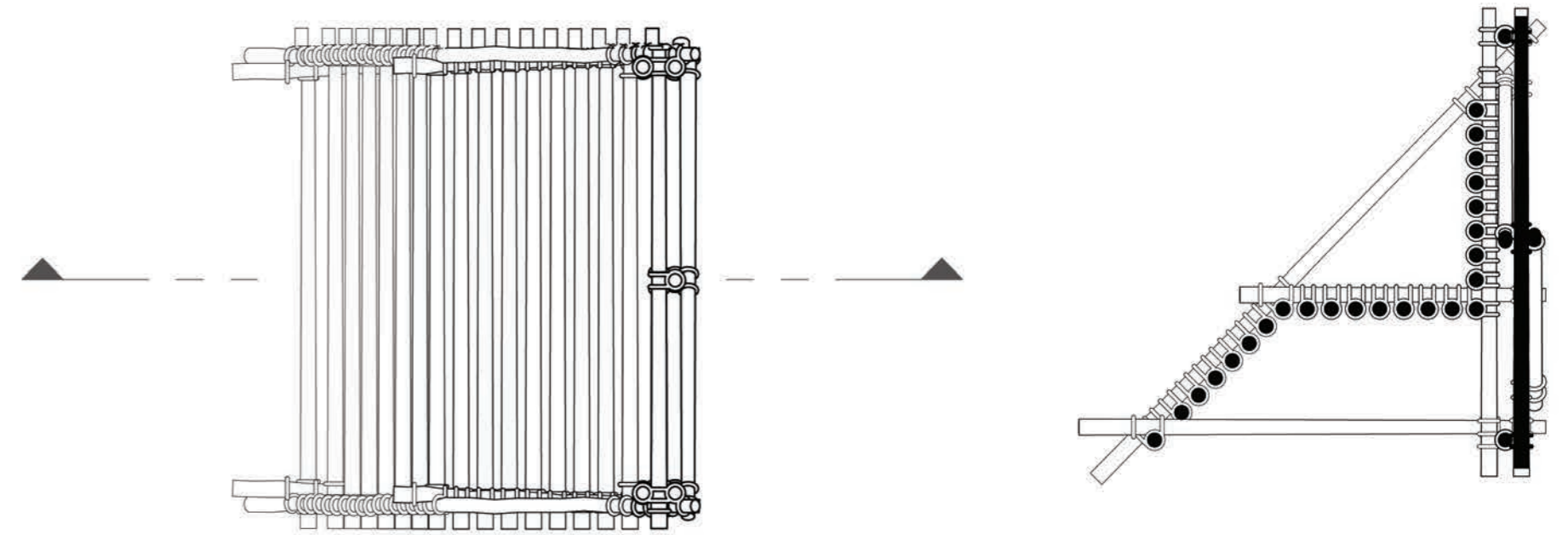


05 - LOOKOUT

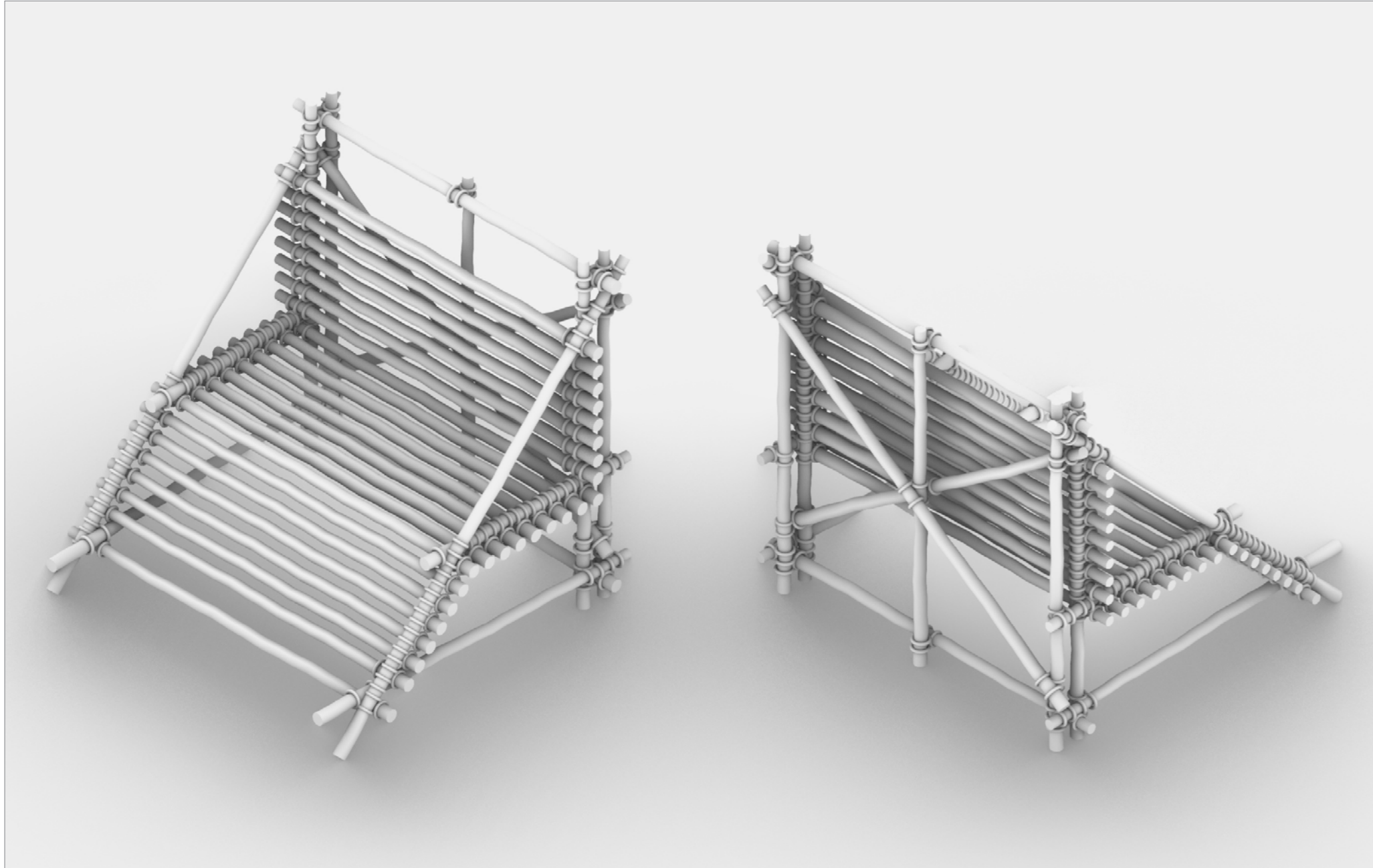
Lookout Chair - Rendering



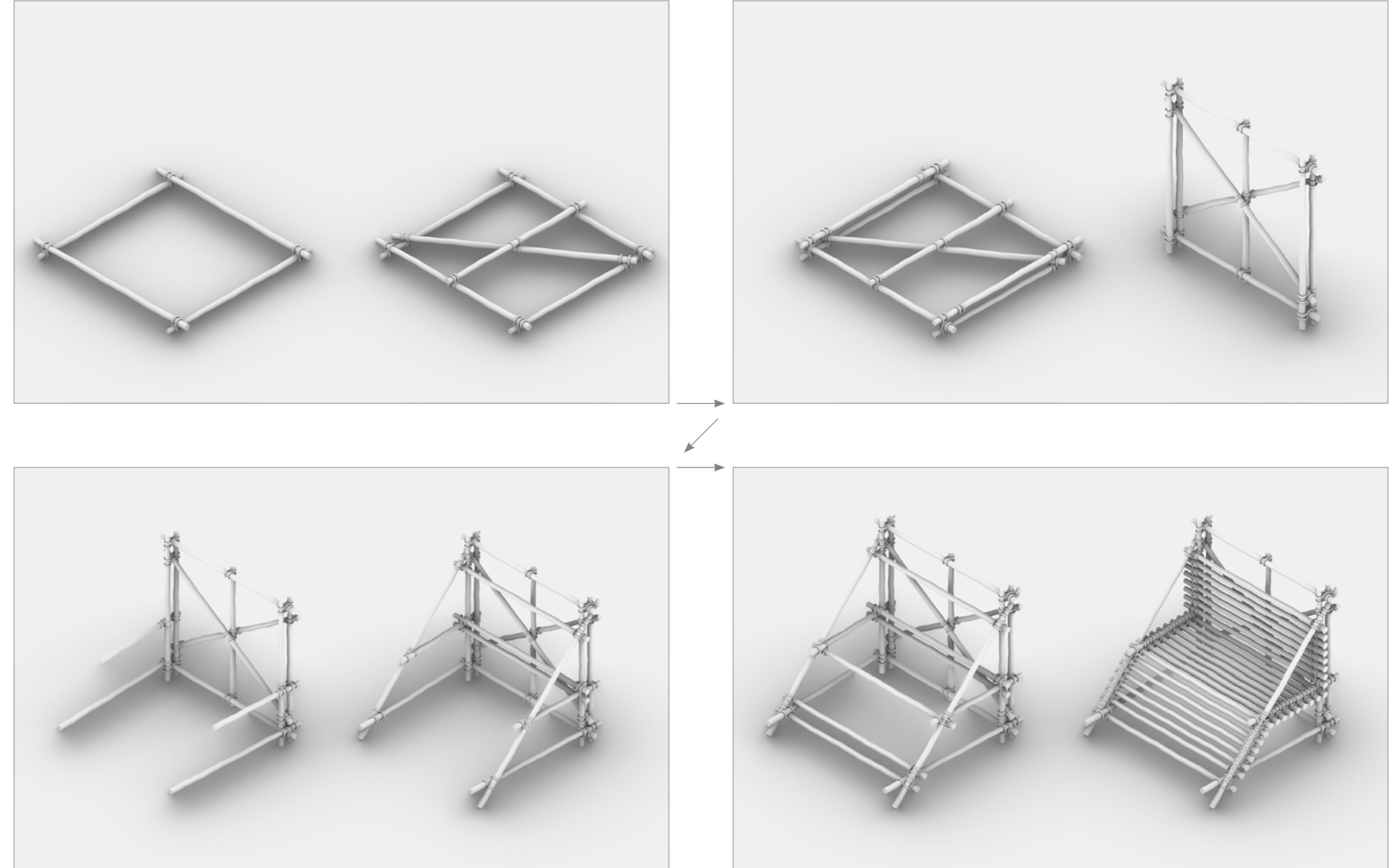
Lookout Chair - Section/Plan 1:10



Lookout Chair - Axo



Lookout Chair - Assembly Axo



KITCHITWAA SHKWAANDEM / HEAVENS GATE TRAIL

BY: DANIEL RODRIGUES

