

The site for the string bridge shall be directly above the commons, going from the farthest railings on the second floor. One end is by the East Perimeter 83 room, the other is by Room 208.

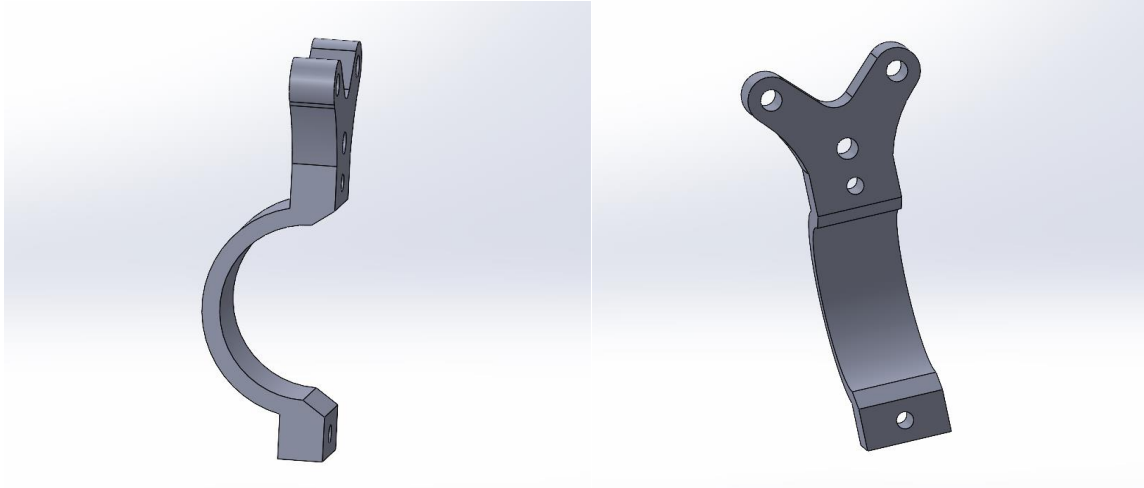
The plan is for three lengths of string to be brought across the 60-foot gap. After that, the drone will return for one more string, which the drone will wrap around the entire assembly.

Site Measurements:

- Wall to Wall: 61'3"
- Railing Diameter: 38mm
- Railing Height: 41.75"
- East Railing from Wall: 5'5"
- West Railing from Wall: 5'7"

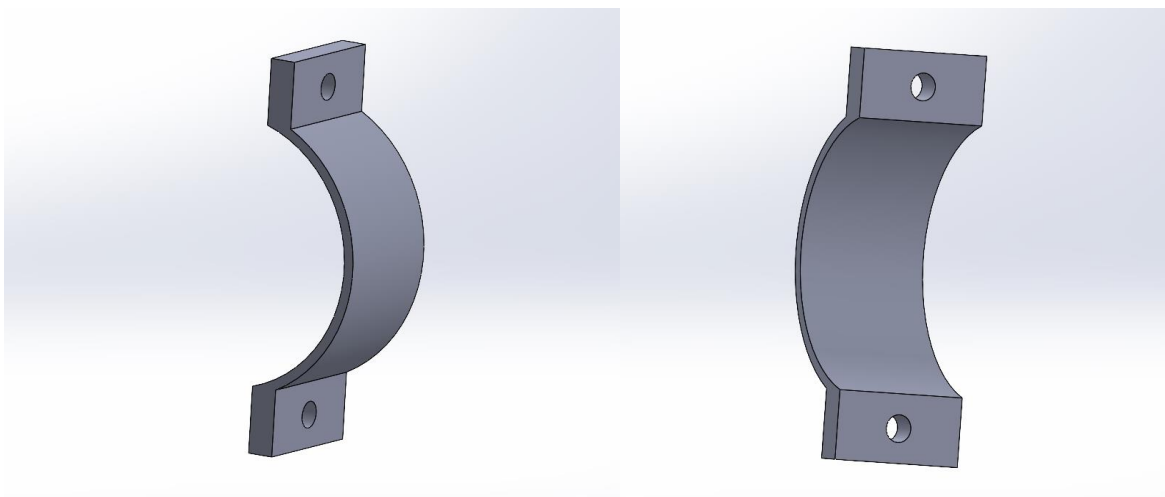
Models:

1. Rope Bridge Anchor



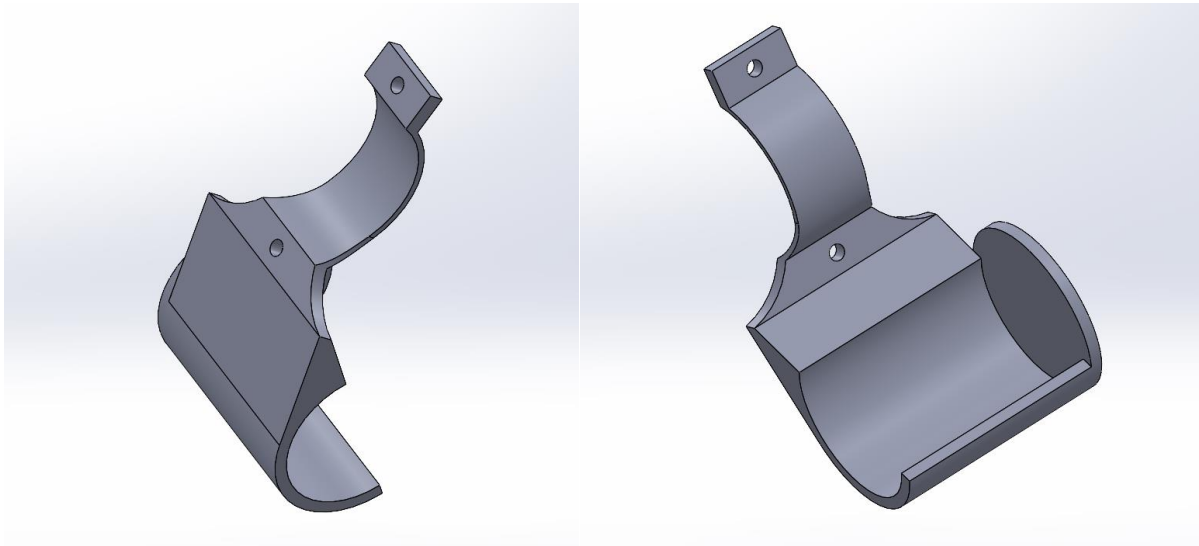
This piece is the base anchor for the bridge and will attach to the East and West railing. The top 3 holes are for the string, the lower two will attach to the anchor bracket and fasten the anchor to the railing. Two of these pieces will be printed in PLA.

2. Anchor Bracket



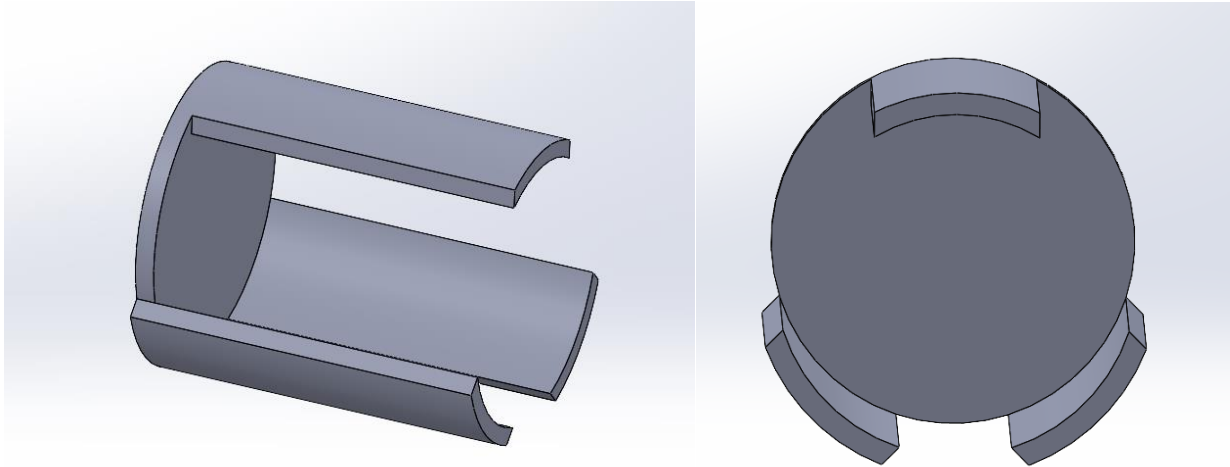
The anchor bracket attaches to the bridge anchor, bolting to it via the two screw holes. This allows the entire anchor to friction fit onto the railings. One of these will be printed in PLA.

3. Anchor Bracket with Spool Holder



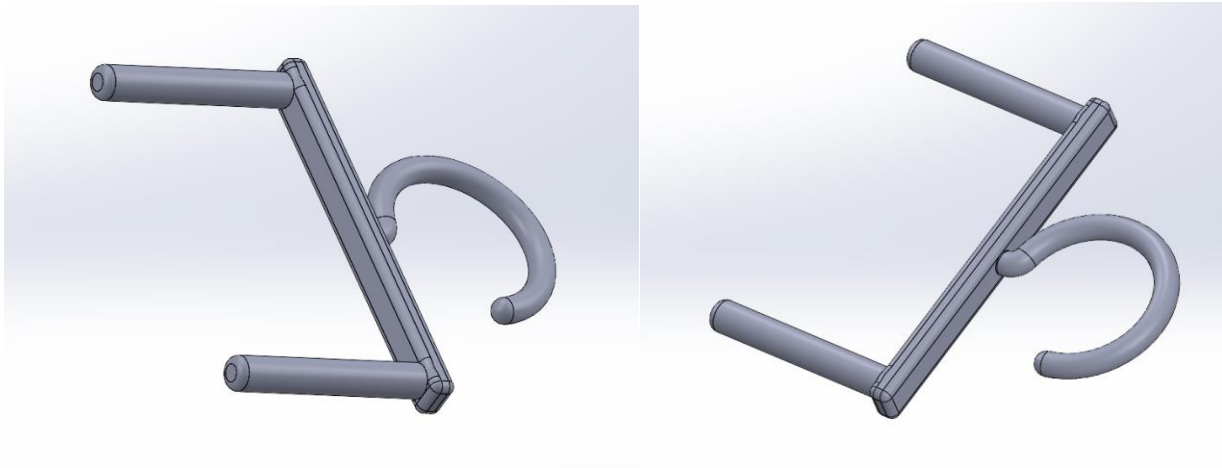
This is an altered version of the anchor bracket, that has an included spool holder. The drone will be carrying the length of string across the gap, which will be taken from the spool. Therefore, this spool holder is included to keep it secure. One of these will be printed in PLA.

4. Spool Lock



The spool lock attaches to the anchor bracket with spool holder and is there simply to lock the spool in place so it is not lifted out of the housing. The top spoke rests on the spool, the lower two wrap around the bracket. One of these will be printed in PLA.

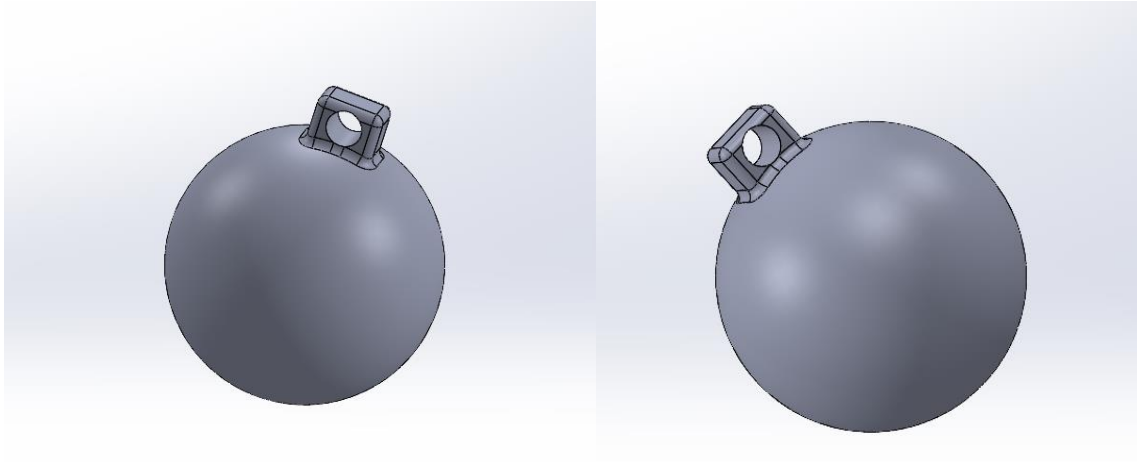
5. Drone Hook



The drone hook holds the strings as they are carried across the gap. The two cylinders are inserted into the rear two legs of the drone and fastened with hot glue or tape.

The hook extends out to the back. When the drone rotates, the strings will come free of the hook and be left hanging over the West railing. One of these will be printed in PLA.

6. String Weight



Finally, the string weight will attach to the carried end of the string to be carried across the gap. The string will be manually tied through the top hole. This model is intended to be printed with high infill, possibly even solid, to get enough weight for it to really have an effect. Four of these will be printed in PLA.