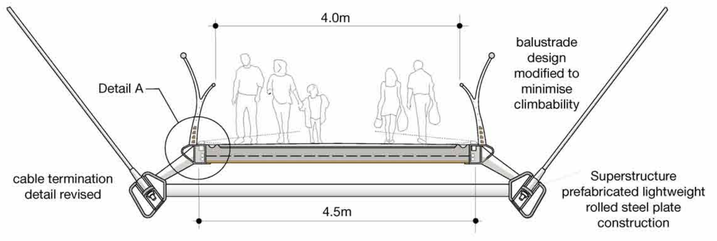
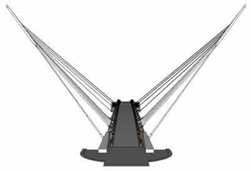
Flying Bridge

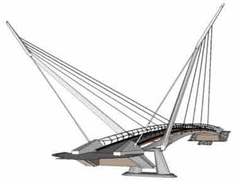
Douglas River - Lancashire - Stage 2



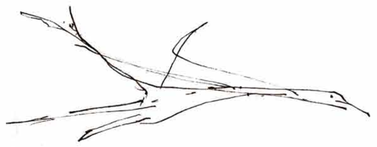
Typical Cross Section - Mid span
Scale 1:50



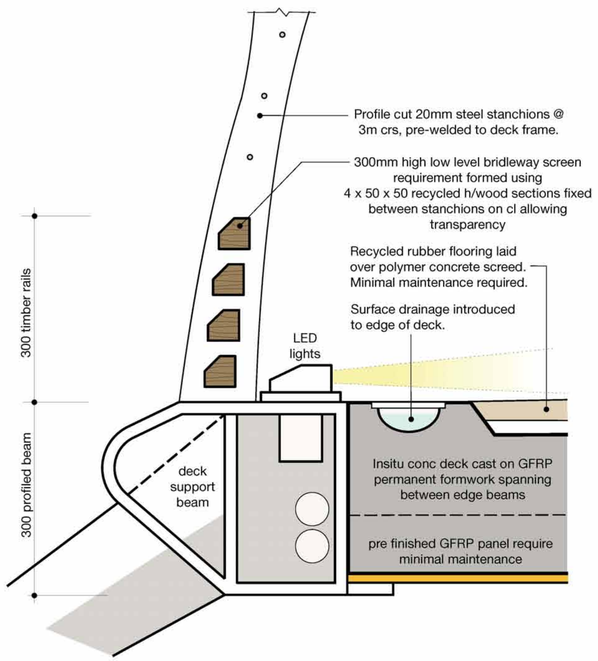
Lightweight



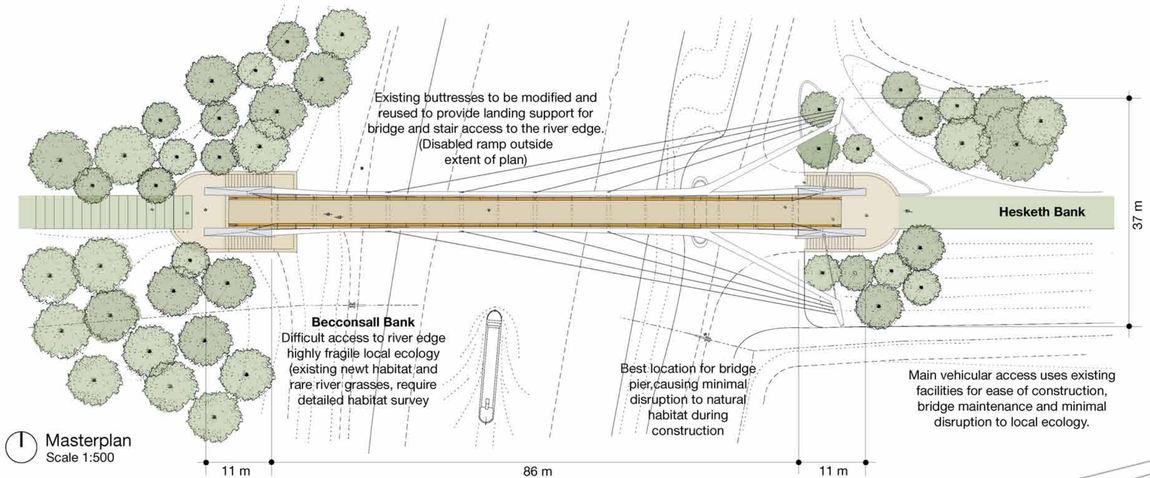
Dynamic



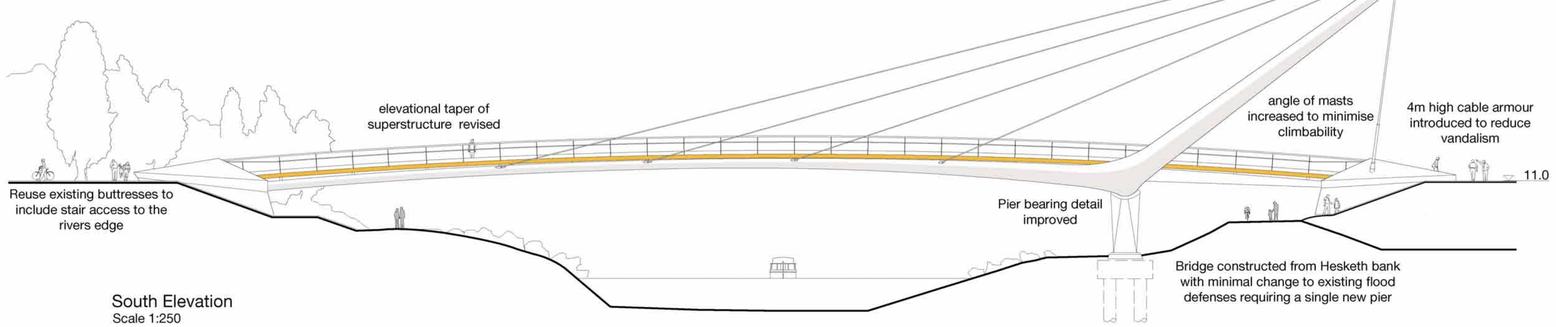
Poetic.
Clean Lines



Deck Interface Detail A
Scale 1:5



Masterplan
Scale 1:500



South Elevation
Scale 1:250

Design Refinements

The benefits of the new rounded profile include

- improved structural dynamic performance
- improved performance under wind loading
- softened visual impact in the landscape
- refined the anthropomorphic visual language
- increased pitch of mast and removal of hard graspable edges makes the superstructure impossible to climb

- front cables supporting deck are out of reach to vandals
- balustrade curvature revised to reduce the ability to climb
- profiling of superstructure makes it difficult to walk along
- cables have been oversized and bridge will be designed for single cable - out scenario for front stays
- anchor point concealed within superstructure allowing free movement of cable

“Inspired by nature - Connecting nature”

The Flying Bridge will be an icon for the Ribble Coast and wetlands, an area of outstanding natural beauty with a unique ecosystem supporting an abundant array of animal life.

The Flying Bridge’s elegant design has been created with maximum attention to its environment, and to constructability. The bridge is a lightweight steel structure taking its form from a bird in flight; its distinctive asymmetric shape is designed to ensure that construction is concentrated on the Hesketh Bank, minimising disruption to the delicate habitat on the western bank. The bridge rests on the buttresses of the former railway bridge and provides access to the riverbank on both sides, via stairs carved into the buttresses themselves.

The bridge touches the riverbank lightly and, because of its use of the existing buttresses, will require the construction of only one pier. The process of building the bridge informed its asymmetric shape: all materials will be brought in by road on the Hesketh Bank side of the bridge, which is also where the bulk of construction will be focused. Most elements are prefabricated and assembled rapidly on-site, further reducing disruption.