

To Cast Light on Seaweed

We imagined a piece of infrastructural sculpture to display a closer interaction of human activity and the growth of seaweed. We have made a floating concrete bath that would act as a tidal energy device and grow seaweed on a textured underside.

We have made extensive studies into the ratio of concrete mixes to create a formula that can float as well as ability to retain the texture of its fabric formwork. The potential of this floating infrastructure to produce energy is opportunistic and is making use of existing technologies being developed on the west coast of Ireland.

The energy aspect of this piece is the unquantifiable awareness it will create for the seaweed industry and should provide another platform for it to grow from. Concrete as infrastructural art is also a theme that could be incorporated into larger national projects to improve the aesthetic of Irish infrastructure networks.

The construction of the piece happens over a number of phased pours.

1 The precasting of a beautiful handrail that acts as the human threshold to the finished bath

2 The use of this handrail to act as the perimeter of a draped fabric formwork to make a catenary shaped bath

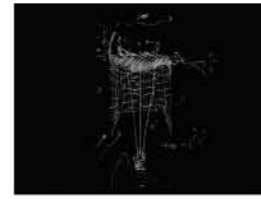
3 The final pour is to capture an air pocket between the underside of the bath and to create a textured surface using wrapped fabric from which the seaweed may grow



Concept Sketch 1



Concept Sketch 2



Concept Sketch 3



Handrail Concept Sketch



Handrail study 1



Handrail study: making the formwork



preparing the formwork



materials



Texture/Float study

Mix: cement sand vermiculite fibre glass water
2 0 3 1 2.5



Texture study



Catenary Study . 1



Catenary Study . 2

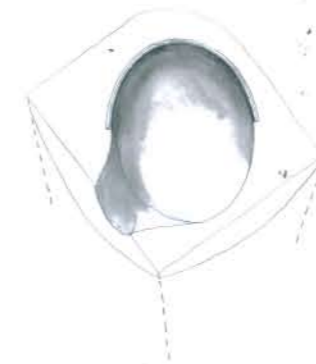


Catenary Study . 3

Phase 1: Handrail Pour



Phase 2: Bath Pour Connection made to Handrail



Phase 3: Float Device Pour Connection made to Bath



Air Pocket created with polyurethane foam and coated with lightweight concrete mix

Tidal movement energy device