

# Pooley Bridge concept design

## Constraints & Opportunities



### Project Location



### Introduction

Three possible design approaches for the new Pooley bridge concept design are outlined in this 2nd Public Discussion event. These three design approaches include potential variations in material and/or geometry that allow the solutions to be versatile and adaptable to different scenarios in terms of, for example soil properties (geotechnical investigation will be carried out in future stages of the design) or hydraulics (flood analyses are being carried out at the moment). There will be more certainty about this second aspect in the next stage of the work, but the final concept design to be presented in mid-October will still be based on assumptions related to several constraints, which will be clarified in late stages of the project development.

### Common aspects of the design

The three designs proposed in these boards have some common design aspects:

- The bridge should be high quality, aesthetically pleasant and sympathetic with the environment and a contribution to the identity of the village.
- The bridge must not contribute to further flooding and should preferably help to reduce flood risk. It should also withstand future floods
- Construction must happen with as little disruption and as quickly as possible. (October – Easter).
- The bridge should allow for free open views to landscape in both directions.
- The bridge should be a safe crossing for all users. It will have a single vehicular lane controlled with traffic lights and two side walkways specific for pedestrians. These walkways are proposed to widen towards the bridge center to create areas to stop and enjoy the views (or to play Pooh sticks).
- The designs should incorporate part of the stone of the old bridge, but not in a structural way.
- The new bridge won't be noisy as the temporary one is.

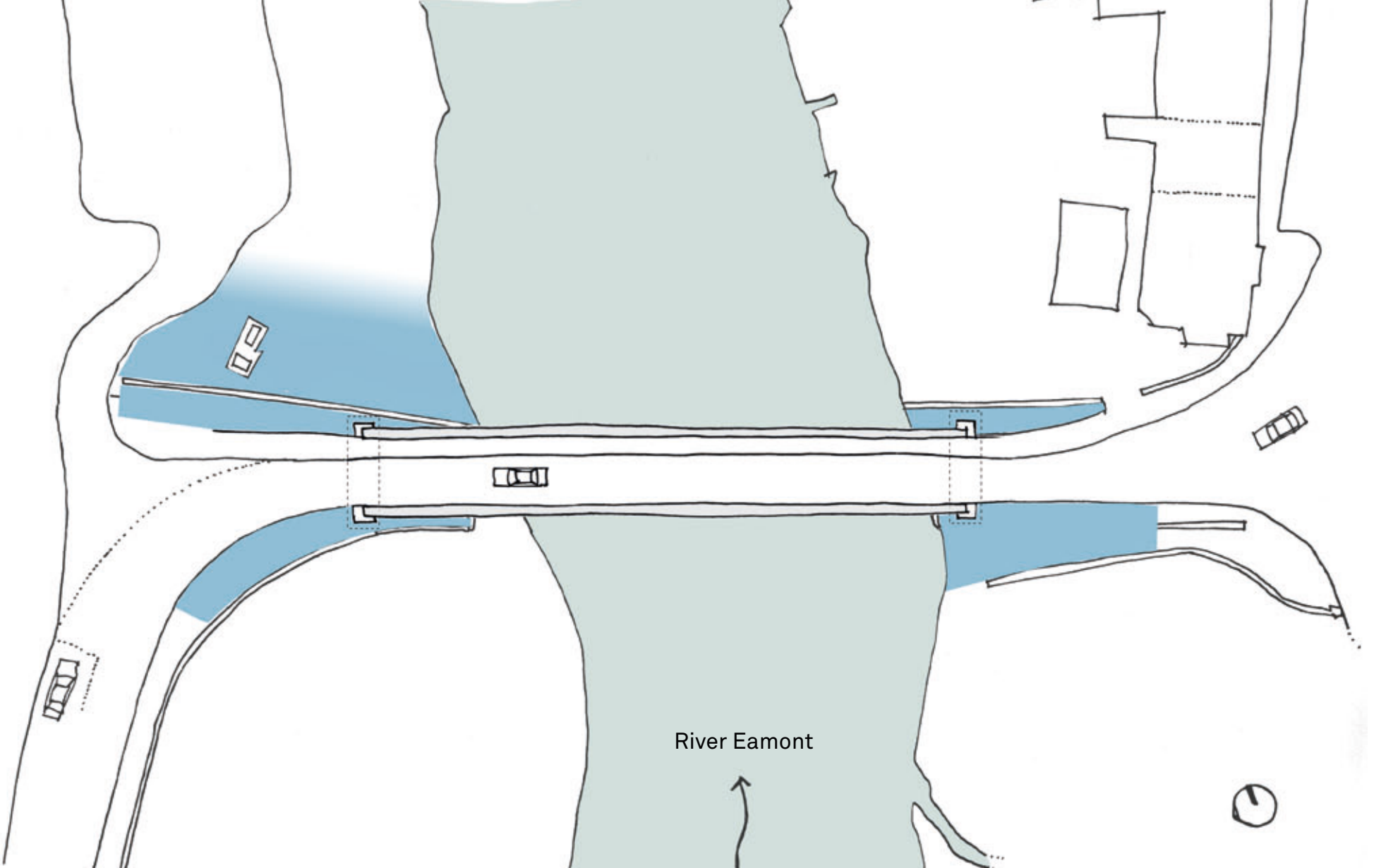
### Constraints | Analysis of the existing conditions



NW end



SW end

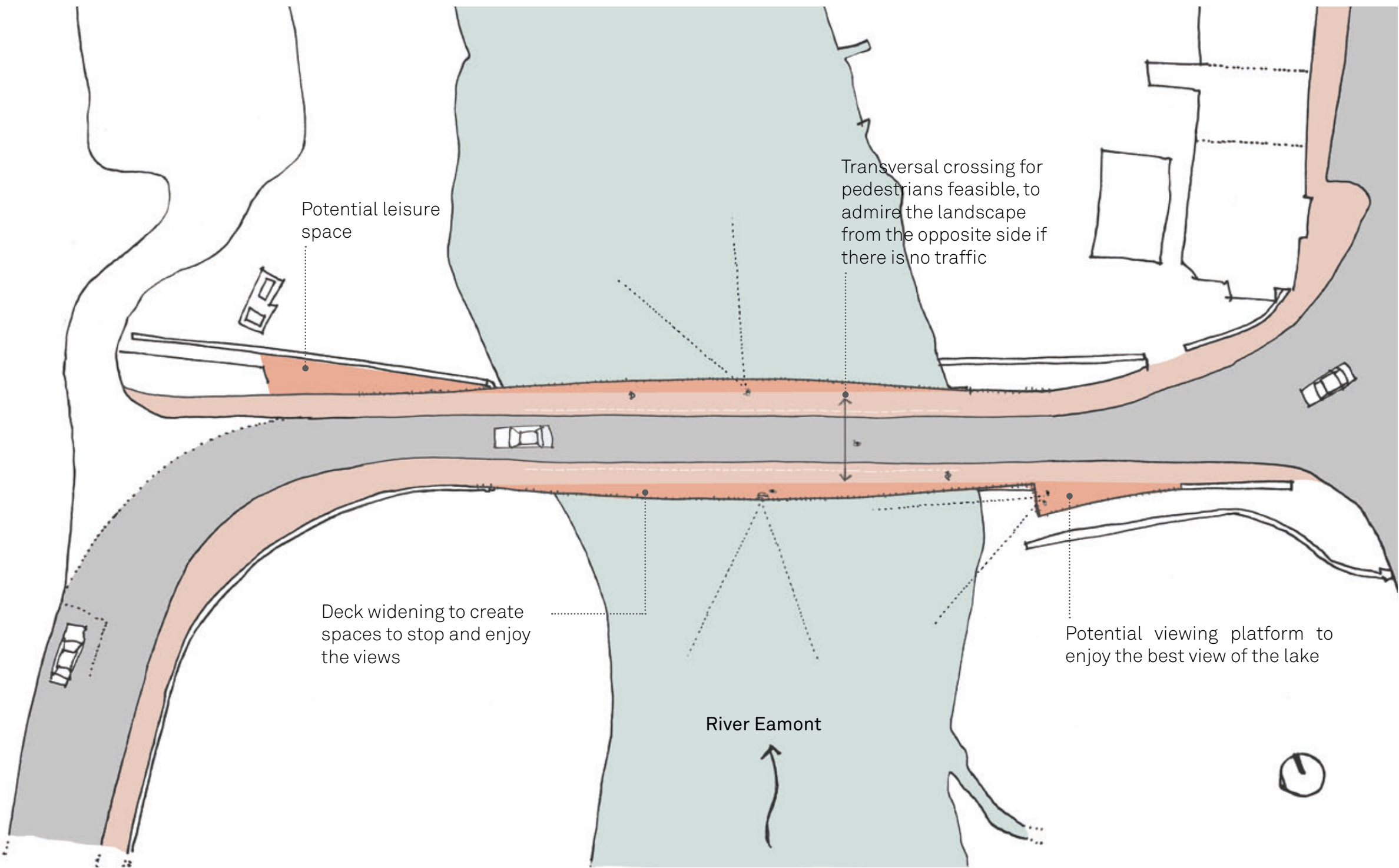


NE end



SE end

### Opportunities | For the new scheme

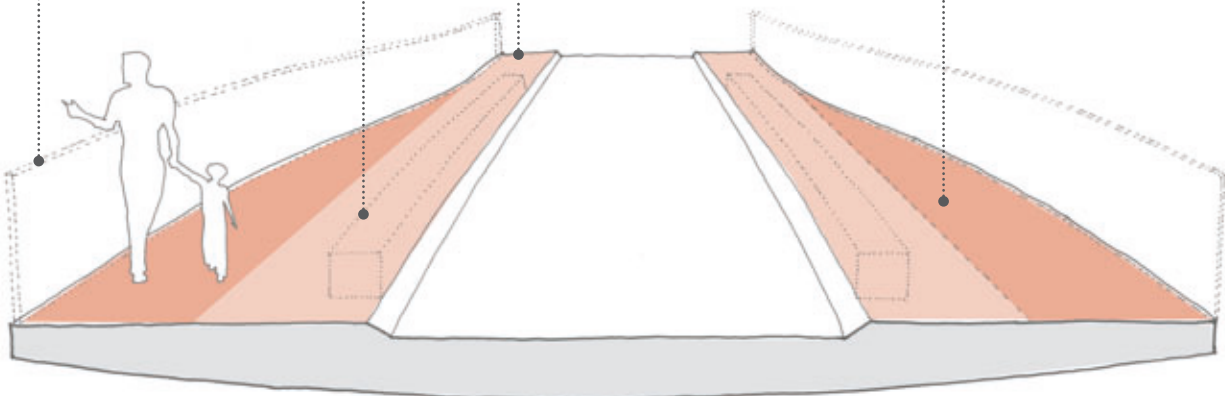


Just railing or potential vehicle contention system

Minimum pedestrian width 1.2m

Potential vehicle contention system + pedestrian furniture

Walkway widens up to 2.2m at the span centre to stop without bothering those crossing, admire the landscape... and play Pooh sticks



Cross Section (proposed for all the options)



view upstream



view downstream



view downstream

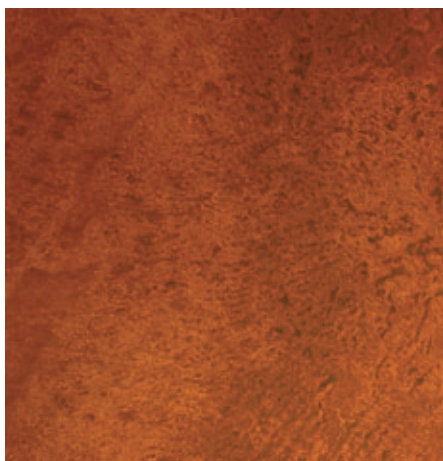


views from the current bridge are restricted

### Potential materials to be used for the bridge construction



Concrete



Weathering Steel



Painted Steel



Stainless Steel



Stone (local quarry)