



Lilla Lidingöbron: Guidelines for design

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Abstract

The 'little Lidingö Bridge' will be an important replacement crossing linking the island of Lidingö to the Stockholm mainland. Carrying both tram and pedestrian/cycle traffic, the new bridge will cross the open water of the Värtan strait in close proximity to a high level highway bridge. Knight Architects has worked with Lidingö Stad in the production of a set of pre-tender design guidelines that will inform and instruct the tenderer as part of the Design and Build procurement route. During the development of these guidelines; two crucial challenges to the success of the scheme became apparent: The formation of a harmonious visual relationship to the nearby highway bridge and to mitigate the potentially monotonous 750m length of the crossing to pedestrians with high quality 'human friendly' design.

Keywords: Lidingö, Architecture, Stockholm, Pedestrian, Cycle, Tram, Public Realm, Beam, Bridge

1 Introduction

The island of Lidingö is part of the Stockholm inner archipelago; physically separated from the main urban areas of Stockholm by the Baltic environment of the Värtan strait. Lidingö's existing connections to the mainland consist of a composite steel box/concrete high level highway bridge, completed in 1971, and a low level bridge dating from 1925 which carries pedestrians, cyclists and a tram line on a steel truss structure which includes a 140m arched truss signature span over the deepest waters of the Strait.

A replacement crossing for the latter is required due to the increasing costs of maintaining the aging structure of the existing truss. A new crossing, known as the 'Lilla Lidingöbron' has

therefore been proposed by the municipal government of Lidingö to cross the Värtan strait; providing improved capacity for pedestrian, cycle and tram usage between Lidingö and the rapidly urbanising Stockholm suburb of Ropsten (including the 12,000 new homes and 35,000 workplaces of the landmark Stockholm Royal Seaport development) on the mainland, and the city of Stockholm as a whole.

The local municipal government Lidingö Stad has worked with Knight Architects (alongside consultant engineers Atkins and Grontmij) at the pre-tender stage to develop an approach to the design of the new crossing. The principle product of this work is a set of design guidelines that will shape the content of the contractor's submissions for this design and build project. It is the aim of