

Botwell Bridge Boardwalk Extension - Planning Ref: 74251/APP/2018/3686
Lighting Strategy Review

In consultation with the Canal and River Trust, the council has considered four options to increase lighting levels beneath and in the vicinity of the proposed boardwalk extension to Botwell Bridge in Station Road, Hayes. Below details the options considered.

Option 1: Soffit Lighting

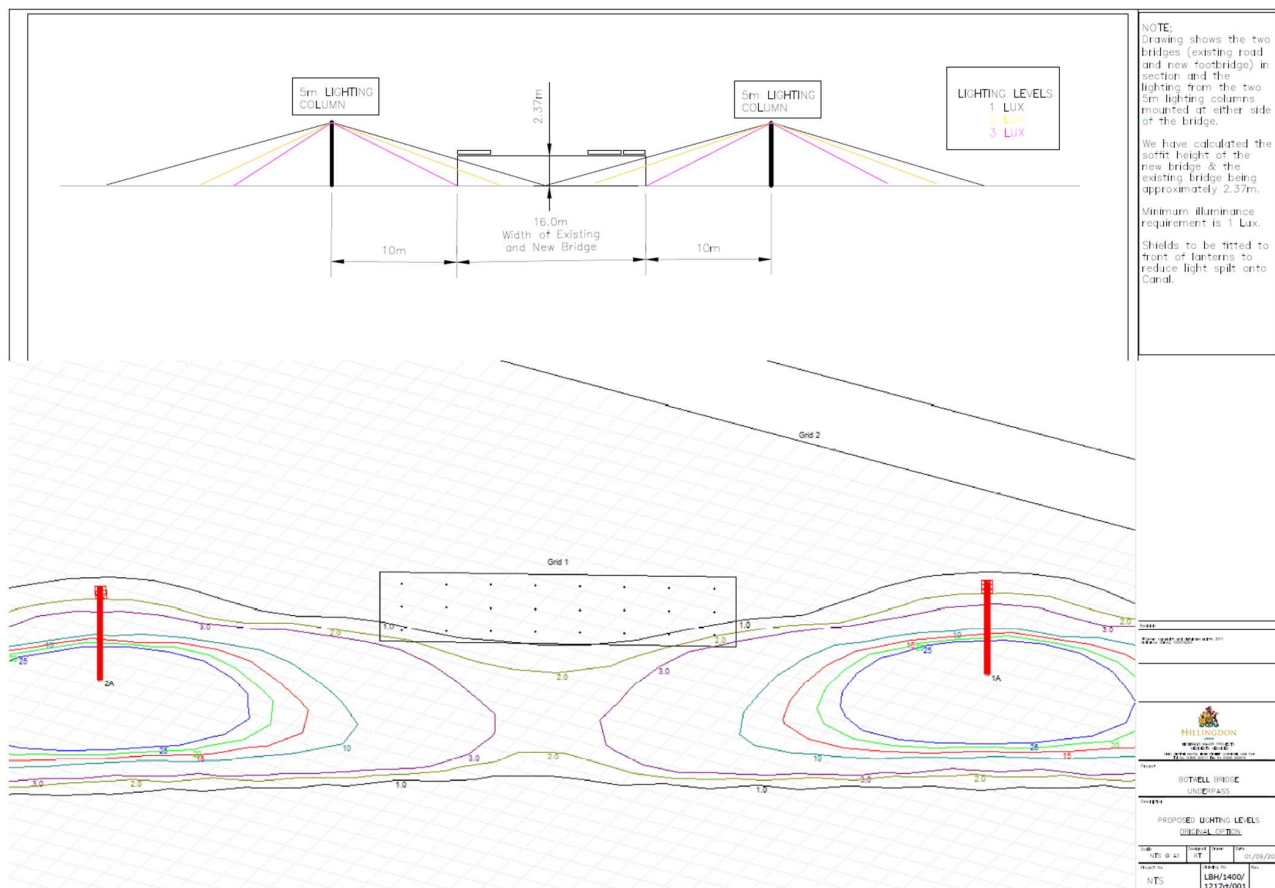
The first option considered by the street lighting designer was soffit lighting under the bridge, however a design could not be found that would satisfy the Councils health & safety, CDM and maintenance standards and that would not be prone to vandalism.

Option 2: Soffit Lighting over canal

This option was considered during the feasibility design, however it was deemed unsatisfactory due to health and safety concerns as well as maintenance constraints. The council does not have a contract with a service provider to maintain over water lights.

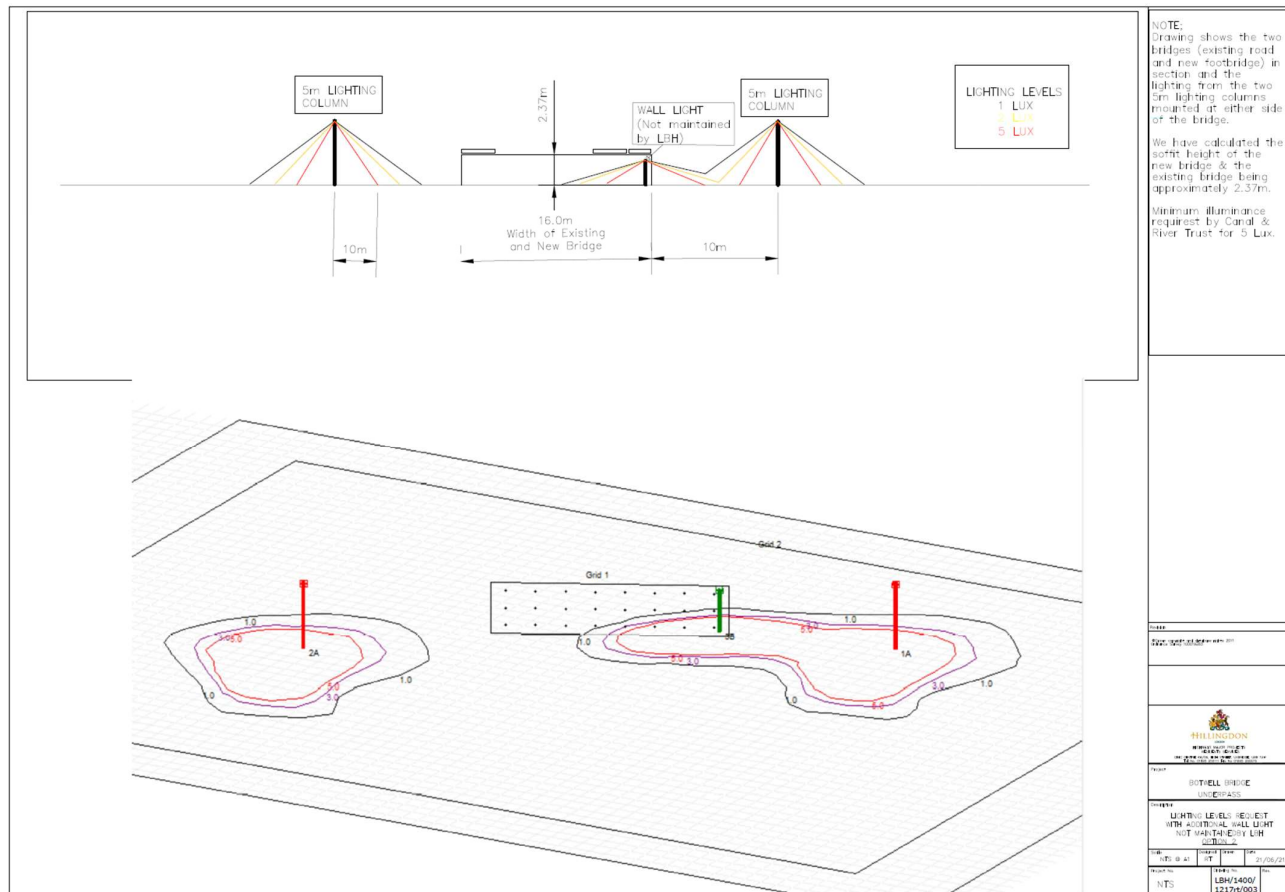
Option 3: Lighting Columns

This option includes the installation of two 5m steel columns either side of the bridge. These would be the raise and lowering type that will facilitate ease of maintenance on the narrow towpath. The lanterns proposed as part of this option uses optimised light spectrum which is bat friendly. As the lights do not serve the public highway the final lighting option can be flexible, but as part of this application we proposed warm white. This option will provide the recommended 1 lux under the length of the bridge, however the lighting levels at the point of the lighting columns would be in excess of 20 lux. To avoid this excess light spill onto the canal, the lanterns would be fitted with shields.



Option 4: Combination of Lighting Columns & Wall Mounted Light

As with option 3, this approach would see the installation of two raising and lower 5m steel columns with optimised light spectrum, however, at the suggestion of the Canal & River Trust the maximum lighting level at the point of the lighting column would be 5 lux. This alone would not provide any lighting beneath the bridge, so an additional wall mounted light to the eastern abutment wall was explored. Unfortunately, even with the additional light source, this approach was still unable to provide the minimum 1 lux under the entire stretch of the bridge. There are also concerns that any abutment light would not meet the Council's maintenance standards and would be vulnerable to vandalism. For this reason, this form of lighting could not be maintained by the Council.



Proposed lighting column:

- 5m SCC specification steel road lighting column with planted base and post top bracket arrangement.
- Raise and lowering type.
- Column to be powder coated black with lantern shield (lantern as shown on images below)



Proposed luminaire:

- Philips Lumi/Unistreet

Provide optimized
ecosystems for bats



DigiStreet



Lumi/UniStreet

Optics	DN10	DM11	DW10	DX51
--------	------	------	------	------

Proposed Drawing (0125-aQ-1300-001 Rev B):

