

REPORT TO TWEEDDALE AREA PARTNERSHIP - ESHIELS TUNNEL DAYTIME LIGHTING PROVISION. Nov 2019

- **INTRODUCTION AND BACKGROUND**

The Area Partnership is being asked to consider the options regarding the Eshiels Tunnel which was previously railway infrastructure and now forms part of the multi user path between Peebles and Innerleithen.

The tunnel sits close to the Eshiels Recycling Centre and is approximately 60m long and 4m wide. The height changes from 3.5m at the eastern entrance to 2.4m at the western entrance.

There has previously been a site visit with officers from the Scottish Borders Council. Photos of the tunnel from both sides are attached for reference.

As the Partnership will be aware there have been incidents and accidents which have been reported as due to the unlit tunnel. Mitigating works have previously been installed including warning signs, slow signs painted on the path and path lining in white paint.

- **LIGHTING DESIGN**

In order to consider lighting provision during the daytime for the Eshiels Tunnel and to comply with legal requirements to protect bats a Bat Survey was carried out. This was done in association with Sustrans who funded the Bat Survey by Tweed Ecology (copy survey available on request).

The Bat Survey did find evidence of bats and has summarised permissions and conditions for any lighting works. Approval for any works will need to be sought from Scottish Natural Heritage.

Three Lighting Consultant firms as recommended by Sustrans have now provided quotes to carry out Lighting Design or Parameters to provide guidelines for seeking Scottish Natural Heritage approval. The summary of the quotes and a breakdown of detail provided in each quote are below. (full details of quotes with all terms and conditions are available)

SUMMARY OF QUOTES FOR LIGHTING

	Amount	Lighting Design	Lighting Parameter
Quote 1 Connected Light	£3750		Yes
Quote2 Brentwood Group	£2460		Yes and Obtrusive Light Statement
Quote 3 Williams Lighting Consultants	£495	Yes	

Please note that the SBC Assistant Engineer has advised any lighting installation for the tunnel at Eshiels would need to be agreed by Scottish Natural Heritage to satisfy them that any artificial lighting would not negatively affect the legally protected bats in this area.

The two quotes from Connected Light and Brent Wood Group seem to provide figures for assisting in this process, with Scottish Natural Heritage seeking an agreement for a principle lighting strategy with parameters and mitigations for this tunnel.

After such a process has been undertaken and if an agreement can be reached, a lighting design would need to be undertaken that satisfies all of the criteria laid out in the strategy. A design would specify the equipment, layout and controls to be used as well as all the relevant information needed to purchase the materials and install the lighting scheme on site.

The quotation from WLC seems to be a quote for a lighting design only, assuming an agreement with Scottish Natural Heritage has been reached.

All three firms were given the same details in the request to quote.

SUMMARY OF DETAIL PROVIDED IN QUOTES

Quote 1 **£3750**
Connected Light

This is not a quote at this stage but the initial basis for a fee proposal. Review the current proposal and enter into discussion with SBC & Scottish Natural Heritage to gain an understanding of the requirements versus limitations. Draw up a draft proposal and a CAD lighting schematic that meets the legal requirements of Bat Mitigation and ask Scottish Natural Heritage to comment. Changes to design might be requested because no two officers hold the same views. Please be aware that your ideal requirement for high levels of light for pedestrians & cyclists will not be conducive to seeking approval. The light levels will be low to meet the Bat mitigation especially because of the low height of the tunnel.

1. Provide 3 days Senior consultancy fee at £650/day	=	1950.00	
2. Provide 1.5 days designer fee at £450/day	=	675.00	
3. Provide 2 days administration fee at £250/day	=	500.00	
4. Allow a contingency budget	=	625.00	
Total		=	£3750.00

The contingency would only be charged if used.

Quote2 **£2460**
Brentwood Group

Below provides a summary of the scope and fee.

1) Lighting Parameters

The outline product type strategy based on operational uses and excludes any external lighting associated with landscape feature, building feature and signage illumination.

The lighting parameters are modelled for the Site to achieve the specific lighting requirements for the function and use of the areas. This is supported by a visualised overview of the Site rendered impression and operational illuminance levels achieved.

Furthermore, this is supported by generic luminaire and lighting aspiration / criteria data sheets.

This does not form a final lighting design deliverable but summarises the operational lighting and is on the assumption that future detailed lighting design considers best practice standards and technology, as appropriate. The final external lighting specification(s) and design(s) for the proposed development of the Site should be prepared by a specialist lighting engineer with due regard to obtrusive light guidance and the sensitivities of surrounding receptors.

2) Obtrusive Light Statement

The intention of the Light Statement is to summarise how the Proposed Developments will affect the illumination profile of the area in relation to achieving a dark corridor within the cycle tunnel (above the proposed lighting)

Fee: £2,460 + VAT

Quote 3 **£495**
Williams Lighting Consultants

1. Sensitive lighting design to illuminate pedestrian / cyclist tunnel at the location.

Total costs to provide the above services are **£495 (no VAT to pay)**

RECOMMENDATIONS TO THE TWEEDDALE AREA PARTNERSHIP

- POINTS TO CONSIDER

Advice on the Lighting Design quotes has been sought from an Assistant Engineer at Scottish Borders Council.

The undernoted advice may be helpful in reaching a decision.

- This would be the first Tunnel within the Scottish Borders Area to be lit during daytime.
- To provide the required amount of light would be approx. 50k Lux and this may not be conducive to the dark area at the top of the tunnel required to protect the bats.
- The total cost of the work required if the Lighting Design/ Parameter is acceptable to Scottish Natural Heritage and the Area Partnership is not yet quantified. A lighting design will need to be agreed and will be subject to variables such as power access, time clock, motion activated or solar power designs. The lighting works cost will be significant and will require further approval.
- There will be ongoing revenue costs and maintenance costs if lighting provision is required.
- The window for any works approved must be Sep-Oct or Mar- April to meet bat regulations. Given the timescales, should approval for the Lighting Design be given by the Area Partnership – a cost has been included in the “Small Schemes” agenda item for further approval.

OTHER OPTIONS

If the Area partnership wishes not to proceed with the Lighting Design – other possible mitigation works eg reflective paints, could be reviewed. Additional Sustrans signage is also available eg Share with Care



EASTERN APPROACH TUNNEL



WESTERN APPROACH TUNNEL

