

## Appendix B: Further Design Information

Something about the design being detailed, however, must be finalised once supplier is found.

### a) Design Process and Options Analysis

- 1 The Designer assessed several options against the criteria set out in the designers brief, using previous experience in delivering award winning public art installations on a similar scale. Throughout these early feasibility studies, five alternative options were explored based on cost, deliverability and overall impact to the entire Esplanade.
- 2 The options listed out below are the concept options considered, with a summary of their ability to meet the criteria in the design brief based on a £150,000 budget for the installation.

Option	Design	Cost	Pros	Cons
1	One Artwork	£150,000	<ul style="list-style-type: none"> <li>• Creates a singular installation</li> <li>• Robust and vandal-proof structure designed to last</li> </ul>	<ul style="list-style-type: none"> <li>• No unity between all three zones along the seafront</li> <li>• Ignores almost all of the promenade</li> </ul>
2	Three Smaller Artworks	£150,000	<ul style="list-style-type: none"> <li>• 'Moments of delight' along the promenade</li> <li>• Bring a more human scale to lights</li> </ul>	<ul style="list-style-type: none"> <li>• Adds additional clutter to the Conservation Area.</li> <li>• Individually expensive.</li> <li>• Only experienced every 500m (no impact)</li> </ul>
3	10 Small Scale Artworks	£15,000 each	<ul style="list-style-type: none"> <li>• Creates ambient lighting</li> <li>• Brings a human scale</li> <li>• Responsive to the weather and human flow</li> </ul>	<ul style="list-style-type: none"> <li>• Adds clutter</li> <li>• Lighting level too high in addition to existing highways / pedestrian lighting</li> <li>• Cost means number limited to only 10 (no overall impact)</li> <li>• Small in scale – more vulnerable to vandalism</li> </ul>
4	Catenary Lighting	£67 / linear metre (for LED lighting units only)	<ul style="list-style-type: none"> <li>• Re-create delight of the 'fairy lights'</li> <li>• Creates unity along the promenade</li> </ul>	<ul style="list-style-type: none"> <li>• Cost – can only cover 600m out of the 2250m length of the promenade</li> <li>• Cost – high maintenance costs</li> <li>• Requires new columns (Sapa aluminium columns cannot take the additional load).</li> <li>• Distance between existing columns above 30-40m.</li> <li>• Vulnerable to wind damage.</li> <li>• Adds clutter (i.e. new columns)</li> </ul>
5	Using Existing Columns  (with new lighting units attached)	£2,380 / column	<ul style="list-style-type: none"> <li>• Cost effective – allows for high number of existing lighting columns retrofit with LED strips</li> <li>• No light pollution for hoteliers and residential areas</li> <li>• Lightweight and compact</li> <li>• Proven technology of 'off the shelf products'</li> <li>• Creates unity</li> <li>• No additional columns.</li> </ul>	<ul style="list-style-type: none"> <li>• Limitations to total weight of attaching fittings to existing Sapa columns</li> <li>• Varying column profiles for one attachment to fit to.</li> </ul>

## b) Proposed Lighting Scheme Design

- 3 Due to the coastal environment, the product must have a high Ingress Protection (IP) rating. The IP67 rated luminaire is a small and discrete fitting that can be fixed to both sets of existing columns with minimal detailing, all directed towards the sea, eliminating any light pollution to the residential and hotel areas. The fittings available at our budget will be insignificant in size to the existing columns and discrete during the day, though their profile will be visible they will not add any further infrastructure to the promenade. With the position of the existing columns and the gentle curvature of the bay, the lighting scenes will provide a visual artwork whilst walking along the entire promenade.
- 4 A temporary trial on one column only took place on Tuesday 31 August 2018, using samples sourced by the Designer from a potential supplier, free of charge and with no expectation of securing a supplier contract in the future. WPBC must gain the appropriate approvals from Management Committee and Planning Committee before procuring the products and progressing with installation.
- 5 The temporary installation was a 5.6 metre strip of LED lighting fixed onto a Sapa column for one night showing three scenes on loop. As such the cables were externally run on the columns and the fixings to the columns were not as sleek as the final design will be. Photographs of this temporary install are provided in Figures 1 through to 5. However, these photographs do not give the appreciation of the full artwork and its impact, on a personable scale. Nor do they convey the full brightness and colour that is achieved.



*Figure 1. Temporary installation of the 5.6 metre example lighting on a Sapa column, looking south west in day time*



*Figure 2. Temporary installation of the 5.6 metre example lighting looking north east in day time.*



*Figure 3. Temporary installation of the 5.6 metre example lighting at dusk.*

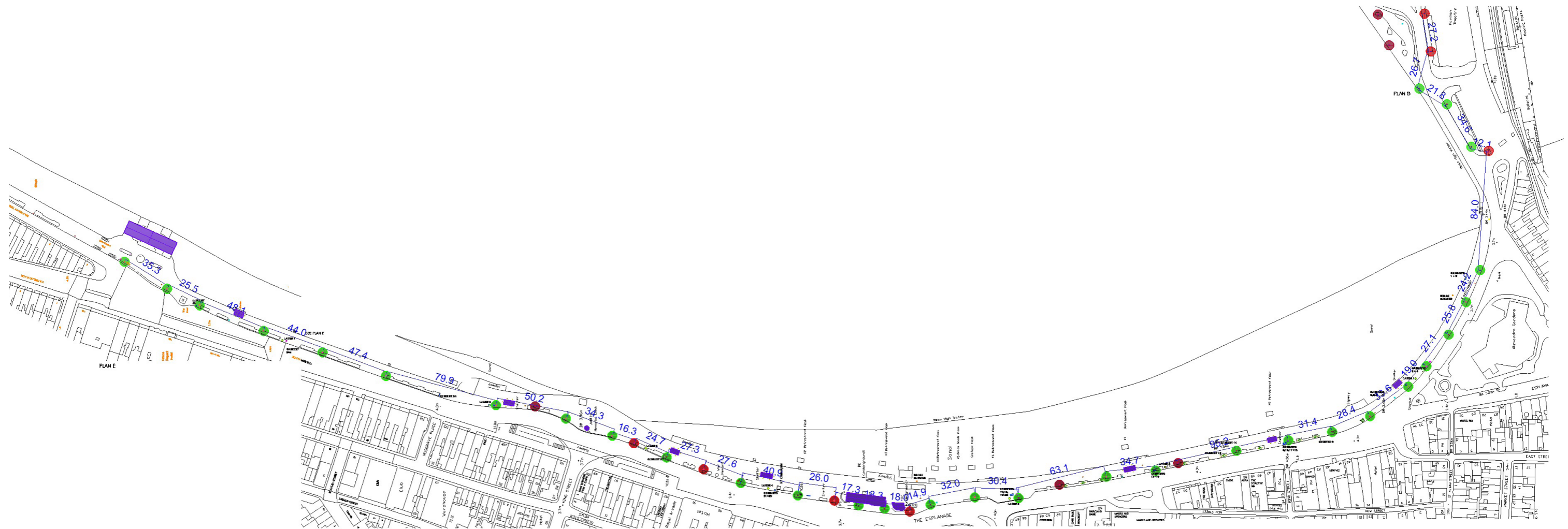


*Figure 4. Temporary installation of the 5.6 metre example lighting at night showing the impact of the installation, lifting away from the column*



*Figure 5. Temporary installation of the 5.6 metre example lighting at night showing the subtle and striking simplicity of the design and the range of colours that are achievable*

- 6 The artists storyboard of several different scenes and the location of the proposed columns for the final installation are shown (see pages overleaf).



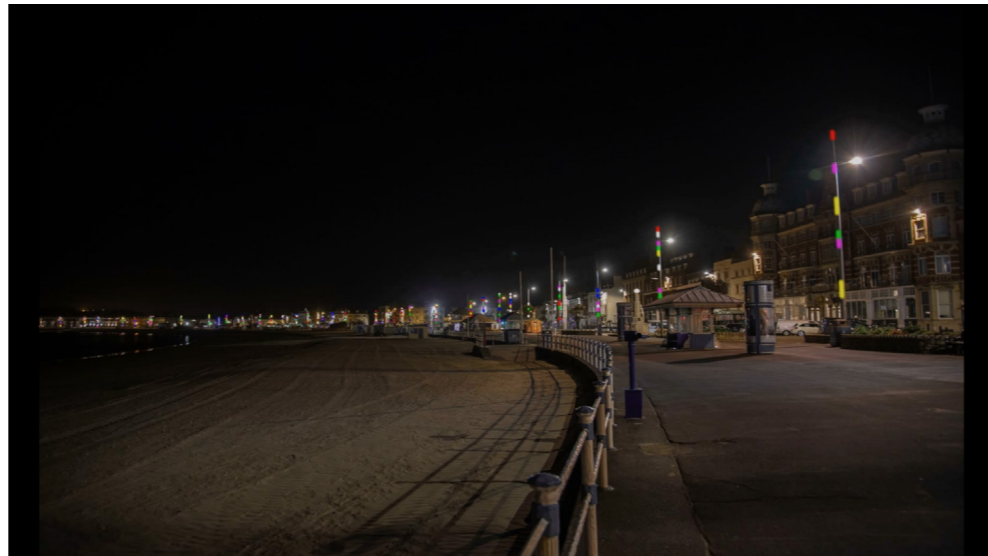
- Columns to be attached to
- Omitted columns

### Identified Columns Along Promenade





Ambient Light



Joyful Colour Range



Falling Rain





Sunrise