

### 1.1 Kerry County Council Response to Questions

Table 1.1 - Kerry County Council Response to Questions

Ref.	Question	Response
1.	<p>What is the setback of the saltmarsh from the project and from the permanent fence line or 5.0m wide greenway corridor?</p>	<p>The setback of the 5m greenway from the saltmarsh (CM2 on the attached Drawing below) to the north along this section of the greenway ranges from 3m to 6m from the verge and 4m to 7 m from the pavement. Refer to extract from Appendix 11.3 Designated Site Maps and Habitat Maps below:</p> 

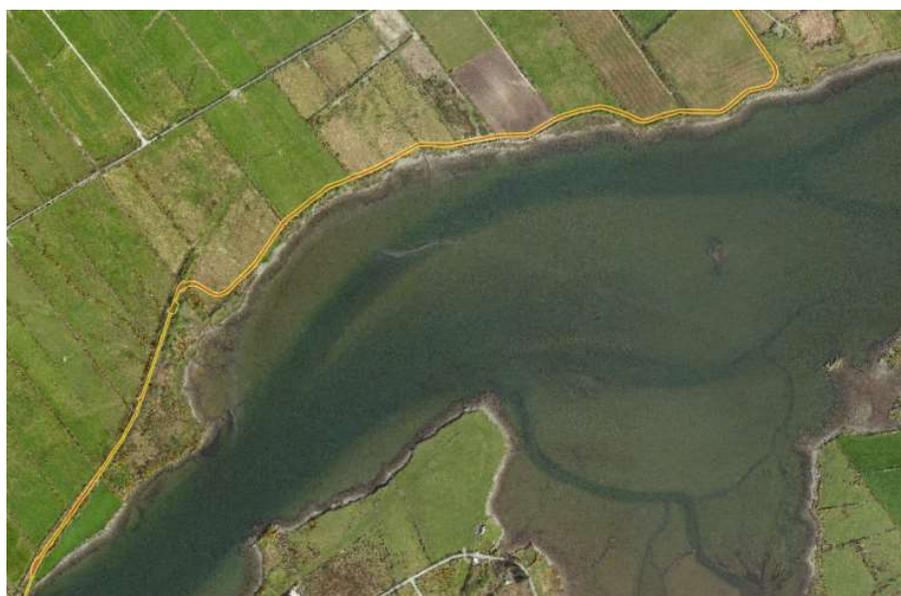
Those locations where the edge of the Greenway pavement is in close proximity to the shoreline are outlined in the table below:

Chainage	Distance from edge of greenway pavement (shore side) to the shoreline (m)	Distance to from the edge of the verge (shoreside) to the shoreline (m)
6,110	4.0	3.0
6,420	4.5	3.5
6,675	5.0	4.0
7,000	4.5	3.5
7,040 -7100	5.0	4.0

**Table 1**

It is our opinion that coastal erosion processes will not have a significant impact on the proposed infrastructure over the 50 year design life of the project and the measures proposed in the application are adequate at these locations.

With regard to the influence of tidal flows on erosion rates we highlight the following:



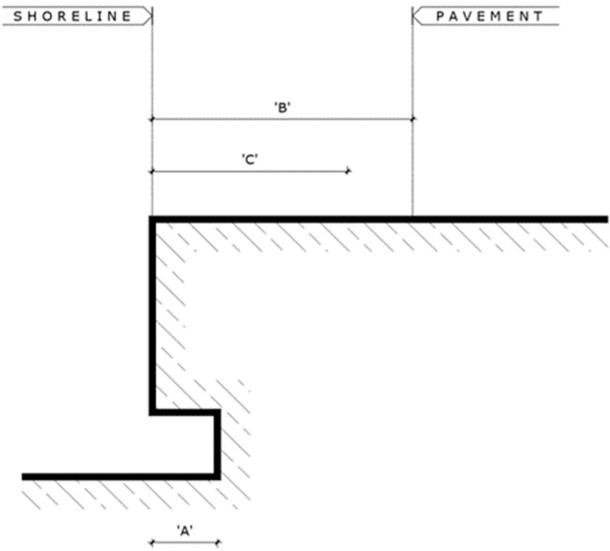
2. What are the distances from the edge of the greenway pavement and corridor to the shoreline between Chainage 6,050 and 7,050?

In estuaries, tidal flows move fastest in the deeper channels, the darker areas in the aerial photo shown above. Flow in shallower areas will radiate out from the channel flow at a lower velocity than the tidal stream in the channels. Tidal flow is strongest at mid tide. The coastline in Cloghanelinaghan is above the high tide mark and set back 40m from the closest tidal channel therefore subject to radial tidal flow and thus will not have a significant impact on erosion rates.

There are however a number of locations where specific on-site conditions such as drainage outfalls and landowner access points have increased the susceptibility of the shoreline to singular storm events. It is the opinion of the council that notwithstanding this increased susceptibility that at these locations there is no risk to the proposed infrastructure. At these locations, should the board request, localised protective measures can be provided.

However, between chainage 7040 and 7100 there are areas where the bank has been undermined. (Refer to attached Photograph No. 1 & No 2). This is not as a result of coastal erosion. The reason for this has been determined as resulting from the presence of land drains installed by the owner of the adjoining lands. This has resulted in the weakening of the soils surrounding the pipes resulting in progressive collapse thereby forming the pockets visible. (Refer to attached Photograph No. 3, No.4 & No 5).

*Appropriate*

Ref.	Question	Response																								
		<p>The extent of the undermining of the existing bank is outlined in the table below:</p> <table border="1"> <thead> <tr> <th>Chainage</th> <th>Depth of undermining from Shoreline (A)</th> <th>Distance to the edge of pavement from Shoreline (B)</th> <th>Distance to the edge of verge from Shoreline (C)</th> </tr> </thead> <tbody> <tr> <td>7047</td> <td>0.6m</td> <td>5.0m</td> <td>4.0m</td> </tr> <tr> <td>7060</td> <td>0.3m</td> <td>5.0m</td> <td>4.0m</td> </tr> <tr> <td>7070</td> <td>2.0m</td> <td>4.5m</td> <td>3.5m</td> </tr> <tr> <td>7090</td> <td>1.0m</td> <td>14.0m</td> <td>13.0m</td> </tr> <tr> <td>7100</td> <td>1.4m</td> <td>17.5m</td> <td>16.5m</td> </tr> </tbody> </table> <p><b>Table 2 (Refer to Diagram 1)</b></p>  <p><b>Diagram 1</b></p> <p>It is the proposal of the council that in installing the drainage to the North of the Greenway that this drainage will now be deepened to intercept these land drains between chainage 6950 to chainage 7100, and thereby divert the flow to the existing proposed outfall locations. These outfalls will incorporate cast-in-situ headwalls.</p> <p>It is also intended that the current areas where undermining has occurred will be strengthened by the provision of sandbagged material compacted into the existing cavities where they occur. These measures will ensure that the current process of undermining the shoreline will be halted and the bank stabilised.</p>	Chainage	Depth of undermining from Shoreline (A)	Distance to the edge of pavement from Shoreline (B)	Distance to the edge of verge from Shoreline (C)	7047	0.6m	5.0m	4.0m	7060	0.3m	5.0m	4.0m	7070	2.0m	4.5m	3.5m	7090	1.0m	14.0m	13.0m	7100	1.4m	17.5m	16.5m
Chainage	Depth of undermining from Shoreline (A)	Distance to the edge of pavement from Shoreline (B)	Distance to the edge of verge from Shoreline (C)																							
7047	0.6m	5.0m	4.0m																							
7060	0.3m	5.0m	4.0m																							
7070	2.0m	4.5m	3.5m																							
7090	1.0m	14.0m	13.0m																							
7100	1.4m	17.5m	16.5m																							
3.	<p>In the townland of Cloghanelinaghan, how were ecological options considered relative to the loss of scrub habitat?</p>	<p>The alignment between Chainage 7,550 and 7,750 is on the railway alignment and no alternative options were considered here. Beyond here, at Chainage 7,750 to 7,900, two route options were considered. The value of the habitats traversed by both were similar, however, the alternative option to the north shown there would be a slightly greater loss of the heath component of the habitat.</p>																								

Ref.	Question	Response
4.	In the townland of Coolnaharragill Lower, confirm extent of scrub clearance.	For much of this section, the route is on the railway alignment. There will be a loss of approximately 0.1ha of scrub habitat.
5.		There are previous records of Freshwater pearl mussel in the Behy River as stated in the aquatic ecology surveys report, Appendix 11.1 of the EIAR. For clarification, there are no other known records of Freshwater pearl mussel from other catchments along the greenway route.