

**Further Information Response – Aston le Walls WRP 5/12/22**

Ref.	Environment Agency Query	Operator Response
1	<p>The cost of using non waste and waste appears to be the same cost and material? A detailed breakdown for the cost of using non-waste/virgin material with a quote for that work is needed – I can only see a quote from Clark Contracting Limited for the Class1/2 material at £7.50 per m<sup>3</sup>. Please provide evidence of the cost breakdown of using non-waste to construct the bund.</p>	<p>The cost presented using non-waste is presented within the earthwork's figures of £1,645,000. The cost of the working using waste would be over £1.5 million cheaper and more sustainable.</p>
2	<p>The amount of waste to be used in the bund construction and the all-weather track and ancillary landscaping mounds need to be separated in order to demonstrate that the minimum amount of waste is being used to construct the attenuation bund, there is detailed information of the overall volume in the WRP, but not volumes for the all-weather track/ancillary landscaping mounds.</p>	<p><u>Bund construction and all-weather track areas:</u>  The bund volume is 181,931 m<sup>3</sup>. Please refer to drawing 193224/WRP/D/001, 002 and 003 showing line of sight and bund providing screening between HS2 train and horse/rider. The bund cannot be made any smaller in height otherwise line of sight is not broken. The height is approved within the Planning Permission. The landscape planting will provide additional visual screen albeit does not technically provide any reduction in noise.</p> <p>The critical factor for the design is ensuring the users cannot see or hear the noise of a sudden train passing. The bund provides a varied topography mimicking the steep slopes that international cross country courses can present. The height of the bund has been carefully designed to ensure whilst on the bund breaks line of sight for both the rider and horse whilst completing the jumps on the bund.</p> <p>The bund slope, facing the HS2 development, is at 1:3. This will provide sufficient slope stability to the adjacent development. The inside slope, facing into the equestrian centre, is far gentler to incorporate the lake feature and circuit track. The average slope gradient is 1:5. The slopes promote good drainage routes and feed into the wider detailed drainage design in line with the Flood Risk Assessment (approved at Planning).</p> <p>The all-weather track and four of the jumps (including a water jump) are incorporated into the side slope of the attenuation bund. This provides the horse and rider with an improved circuit experience, which is far more challenging and dramatic to all users/viewers. The undulations, provided by the side slope use and the ancillary mounds, improve this current flat facility in to a national and world-class cross-country circuit which can be used in all weathers.</p>

		<p><b>Ancillary landscaping mounds:</b>  The landscape mounds volume is 25,562 m<sup>3</sup>. Please refer to drawing 193224/WRP/D/001 and 003. The mounds range from 0 – 3 m high providing challenging undulations for horses and clear line of sight to event audiences. It is known that the land is relatively flat and does not drain well. With the introduction of the all-weather surface of the track, along with the higher mounding, this will provide a better facility and less interaction with the existing surface water drainage catchment, ultimately draining to the Highfurlong Brook.</p> <p>The all-weather track and jumps situated along the cross-country circuit make use of six of the ancillary mounds providing an improved and more challenging experience. The other three mounds provide 360° viewing to adjudicate and view the show jumping and cross-country events.</p>
3	Additional cross sections through the ancillary landscaping mounds will be required if they're to be constructed with waste as well as evidence demonstrating that the minimum amount of waste is being used in their construction. Also, please provide a cross section through the length of the attenuation bund.	Please find drawings 193224/WRP/D/001 to 003 showing cross-sections for attenuation bund and ancillary mounds.
4	The WRP states: "The proposed landform agreed by the planning authority runs at a maximum height of 12 m above ground level to ensure that HS2 noise emissions and sudden visual impact can be fully mitigated. Lower levels will result in an impact. The formation of this structure will require circa 207,000 m <sup>3</sup> of engineering fill." 12 m is a maximum height agreed with the planning authority although volumes and heights are not specified in the planning document. Please provide evidence to support that the amount of waste that you propose to use is no more than needed to achieve the function.	Please refer to query response 2.