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5th August 2016

Dear Mr Hendry

**Review of Tidal Lagoons: Call for Evidence**

The Mineral Products Association (MPA) is the trade association for the aggregates, asphalt, cement, concrete, dimension stone, lime, mortar and silica sand industries. With the recent addition of British Precast and the British Association of Reinforcement (BAR), it has a growing membership of 480 companies and is the sectoral voice for mineral products. MPA membership is made up of the vast majority of independent SME quarrying companies throughout the UK, as well as the 9 major international and global companies. It covers 100% of GB cement production, 90% of aggregates production, 95% of asphalt and over 70% of ready-mixed concrete and precast concrete production. Each year the industry supplies £20 billion worth of materials and services to the Economy and is the largest supplier to the construction industry, which has annual output valued at £144 billion. Industry production represents the largest materials flow in the UK economy and is also one of the largest manufacturing sectors.

UK infrastructure ambitions, such as tidal lagoon projects, have the potential to offer significant opportunities for the UK mineral products sector - with indigenous resources being used to support national infrastructure development. However, in order to realise this potential, these essential resources have to be properly factored in to the life-cycle planning for individual projects, so the needs and opportunities pre- and post- construction are fully considered alongside the development itself.
Cardiff Bay Barrage is a good example of this, with the original investment of £200m for the infrastructure to be built, then leveraging a further £2.3 billion of public/private investment to redevelop and regenerate the Cardiff Bay area over the next 10 years or so. Scaled up (to say one of the larger Tidal Lagoons in the Bristol Channel), the long term demands placed on resources and skills could be considerable. However, the opportunities to unlock and compound the growth potential realised by national infrastructure projects will only be realised if they are fully accounted for in the wider policy and planning processes.

Against this background, it is therefore important that tidal lagoon developments are not considered in their own ‘bubble’, dislocated from the other activities that may influence their delivery. The current review presents an opportunity to recognise the benefits and opportunities that may be realised by adopting a more integrated approach between the policies supporting tidal lagoon infrastructure, and the wider policies for other activities (such as minerals and construction products) needed to enable the delivery of the projects in the most cost effective and sustainable way. To ensure that tidal lagoon projects can be delivered effectively, it is essential that the activities required to support them are identified up front, for example construction aggregate supply. These activities then need to be given proper consideration so that the potential needs and opportunities can be fully considered in advance, along with any risks or gaps that may have to be addressed.

At present the unwritten assumption for UK infrastructure appears to be that if you create a demand for construction materials, it will be met. While the UK undoubtedly has a rich and varied resource of indigenous construction minerals, in order for these to be realised in practice both the mineral products industry and the wider mineral planning system require certainty around the scale of additional demand likely to be created by such projects to ensure suitable provisions can be made, alongside the ongoing base demands that exist in the market and other competing demands from other major infrastructure projects.

For the mineral products industry, certainty in a project will give companies the confidence to invest in new production capacity and the necessary transport infrastructure required to support such projects. For the planning system, certainty will allow the additional demands that will be created by infrastructure projects to be properly factored into the reserve and capacity provisions that have to be made. In both cases, these will inevitably take time to deliver the outcomes that may be
required. However, the clarity and certainty around the timing of the individual project and the resource demands that it creates will ensure that the most cost-effective and sustainable solutions can be put in place to support their delivery.

Mineral product resources are not evenly distributed around the country, and a considerable amount of inter-regional trade in materials already takes place to meet the base load demand for construction aggregates that exists in the market. Consequently, it is likely that many areas of primary mineral supply will be required to support the demands from multiple infrastructure projects, including tidal lagoons. The timings of the material demand created by individual infrastructure projects will need to be mapped out to ensure sufficient production capacity and associated transport/delivery infrastructure can be put in place, accounting for both the anticipated total cumulative and annual peak demands likely to occur in the market.

Our analysis, presented as an annex to this response, suggests that the market for mineral products remains depressed as the country continues to emerge from recession. While nationally there are signs of growth, the overall levels of demand remain below pre-recession levels, particularly at a regional scale in Wales and North West England. Coupled with the resource potential present in these regions, we would suggest that there would certainly appear to be both the market capacity and the resource potential to support major infrastructure projects, such as tidal lagoons.

In the case of tidal lagoon development, the uncertainties around Government commitment and support for such projects have hampered both the ability and the willingness of industry and the wider mineral planning system to put in place specific measures to support their delivery. Without clear statements of commitment and support from Government it is unlikely that this situation will change. Furthermore, as the proposals for other major infrastructure commitments harden, the capacity and capability to support prospective tidal lagoon projects is likely to reduce.

That being said, historic experience with other large infrastructure projects, for example Crossrail, Thames Tideway and the Channel Tunnel Rail Link, have demonstrated that where clear policy commitments are made, both the mineral products industry and the mineral planning system are able to respond to ensure the supply chain is in place to support the demand that is created, given sufficient time to do so.
In conclusion, the current pipeline of infrastructure work, including tidal lagoons, represent a significant opportunity for the UK mineral products industry, but a confirmation of Government’s commitment to these projects is urgently needed to reinforce business confidence and encourage continuing investment. Clear and continued Government support in these areas and measures to encourage private investment will be necessary to help counter any potential adverse economic effects of the Brexit vote. This is needed to ensure the adequate supply of essential materials to the UK economy and support growth.

Yours sincerely

Mark Russell
Executive Director - Planning, Mineral Resources & BMAPA
Annex to the response from the Mineral Products Association

1. Construction aggregate demand - GB

To understand the potential of the mineral products sector to support the demands for large scale infrastructure, it is helpful to consider some background context. GB emerged from one of the largest economic recessions for a generation. Consequently, the state of demand for construction materials has been significantly depressed as a consequence of reduced public and private investment in construction.

The Mineral Products Association produces trends in sales volumes based on the sales of primary aggregates (crushed rock/sand & gravel) and the principal value added products these supply (ready-mixed concrete and asphalt) reported by member companies. Collectively, these provide an insight into the trends occurring across the wider market for construction products.

The data for GB clearly shows a significant decline in sales across all products at the end of 2007, reflecting reduced market demand. However, from mid-2013, in line with the recovery in construction activity, the trends in material sales suggest growth across all the product types - although in level, volumes continue to be significantly below pre-recession peaks.

<table>
<thead>
<tr>
<th>Seasonally adjusted MPA sales volumes in GB, thousand tonnes or cubic metres</th>
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<tbody>
<tr>
<td><strong>Crushed rock</strong></td>
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<tr>
<td>S&amp;G &amp; Crushed Rock</td>
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<tr>
<td>Asphalt &amp; RMC</td>
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</tbody>
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Source: MPA.
* Sum of fixed & site plants.
2. Construction aggregate demand - Wales & North West

The sales data collected by the Mineral Products Association can also be broken down by region to show the trends occurring at a more local scale. In the case of the data for Wales and the North West, these show the same significant decline in sales across all products at the end of 2007, reflecting reduced market demand.

Aggregates demand in the North West has seen substantial growth (+19%) along with the national recovery between mid-2013 and mid-2016, but in levels, sales in the region remain a third down compared to 2007.

In Wales, demand also remains significantly depressed with no evidence of the recovery shown in GB. In a sense this is not surprising, as construction activity has mostly been driven by new house building and general construction in and around London. ONS data shows that the value of total construction output in Wales in the year to March 2016 was 3% below levels seen in 2007, whilst being 53% up in London. In the North West, the value of construction output was 2% over the period.

This background provides some important context when considering the potential future demand for construction aggregates in Wales and the North West - both in terms of base load and new demands arising as a consequence of new infrastructure projects.

Firstly, that the current levels of demand for construction aggregates and their associated products remain significantly depressed at present.

Secondly, there are likely to be significant variations in the demand that the mineral products sector will need to meet over time, reflecting population and infrastructure needs. The magnitude and timing of any demand is entirely outside of the mineral product sectors control, and is wholly influenced by the public and private investment that is available.

The sector and the planning/regulatory regimes that control it, need to build in sufficient flexibility to react to these variations to ensure that the most cost effective and sustainable options for mineral product supply can be delivered in a timely manner. To do this, it is important that the scale and timing of the additional demand for mineral product materials that will arise from large scale infrastructure projects can be effectively built into the planning system so that the necessary capacity required to enable their delivery can be secured. It needs to take into account the entire potential competing infrastructure demands that may arise, so that the cumulative effect of each individual projects demand can be properly considered and accounted for.
Seasonally adjusted MPA sales volumes in the North West, thousand tonnes or cubic metres

Source: MPA.
* Sum of fixed & site plants.

Seasonally adjusted MPA sales volumes in Wales, thousand tonnes or cubic metres

Source: MPA.
* Sum of fixed & site plants.
3. Construction aggregate reserve background

Across Wales and North West England, there are significant indigenous mineral resources on land and offshore that currently support local, regional and national demands for construction aggregates.

The table below provides an overview of the reserve positions that exists across these regions. In terms of the ability to support coastal projects, it is important to recognise the geographical extent of the regions and the geological imbalances that occur within them. For example, a large proportion of the sand and gravel in the North West region is produced in Cheshire, which supplies construction aggregate demands in the Manchester and Merseyside conurbations. Conversely, there is no hard rock production in Cheshire, with limestone produced in north Lancashire and south Cumbria, whilst granite is produced in east Cumbria. It is important to note that while the marine figures relate to permitted reserves, the terrestrial figures include both active and non-active sites, the latter of which may include dormant sites which cannot be recommenced without undertaking full Environmental Impact Assessments and operational consents & permits.

While the nominal figures contained within this overview would suggest that significant reserves of construction aggregate resources may be available to support tidal lagoon developments, we would caution that the capacity and capability of these to supply the additional demands that would be created by these projects will need to be determined, over and above the base load demand for construction aggregates that already exists. This includes the logistical arrangements required to support delivery either by road, rail or sea, including the infrastructure capacity and appropriate depot facilities to support supply.

Should the resource capacity/capability not be immediately available, it will take industry and the planning/permitting processes time to respond to address any gaps that may exist.

<table>
<thead>
<tr>
<th></th>
<th>Marine sand &amp; gravel (1)</th>
<th>Terrestrial sand &amp; gravel (3)</th>
<th>Terrestrial crushed rock (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Wales</td>
<td>10mt</td>
<td>3mt</td>
<td>500mt</td>
</tr>
<tr>
<td>North Wales</td>
<td>19mt (2)</td>
<td>25mt</td>
<td>150mt</td>
</tr>
<tr>
<td>North West England</td>
<td></td>
<td>20mt</td>
<td>250mt</td>
</tr>
</tbody>
</table>

(1) Marine sand and gravel figures relate to permitted licensed reserves of primary construction quality aggregate. Licences will have a maximum term of 15 years, so reserves will be limited by the permission term rather than the resource availability. Significant volumes of both primary and secondary quality resources suitable for fill or beach replenishment are present within existing licence areas, but these potential tonnages are not reflected here.

(2) The marine figures for North Wales and North West England are combined as the Irish Sea is taken to be one geographical region.

(3) Terrestrial figures represent provisional reserve totals for all sites, but include both active sites and also non-active sites. Unlike the figures for marine, which relate to permitted reserves, some of the terrestrial total will only be able to be extracted once the necessary planning permission & associated operational consents have been secured.