

East Riding & Hull Joint Minerals Local Plan

Aggregates Apportionment Background Paper (Update)

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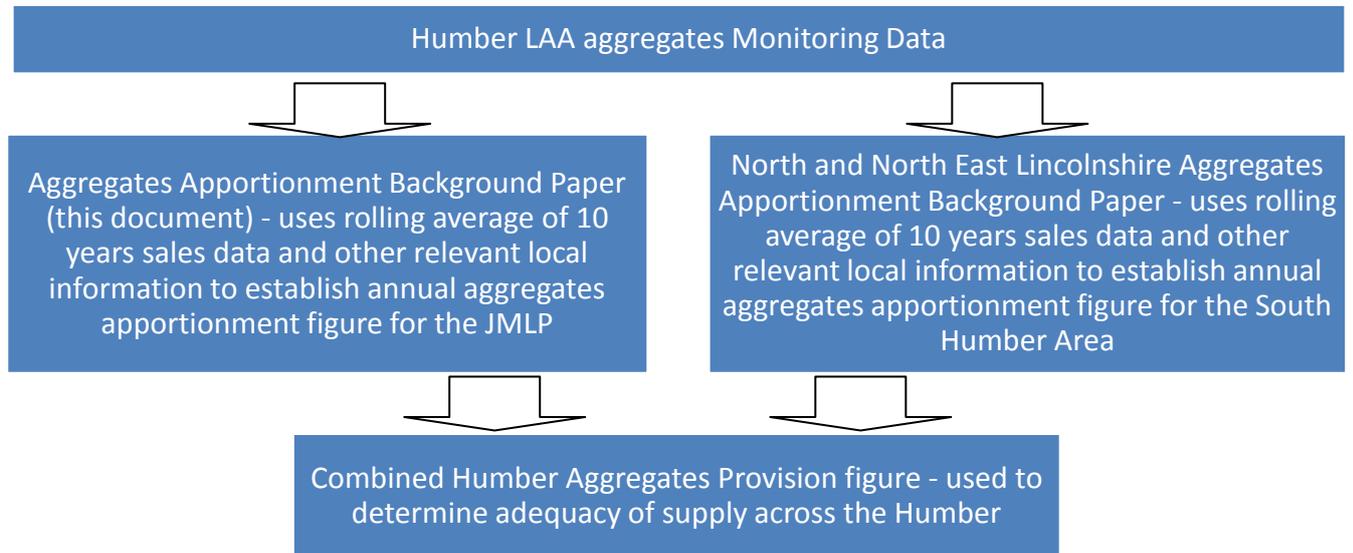
Table of Contents

1. Introduction	1
2. Response to the previous aggregates apportionment background paper	2
3. National policy and guidance on aggregates demand assessment	3
4. Projecting future aggregates requirements - Discussion	3
Links to economic trends	5
Links to housing delivery.....	6
The types of aggregates present in the East Riding and their likely uses.....	6
Cross boundary movement of aggregates.....	7
Potential scarcity of aggregates in neighbouring areas.....	9
The proportion of aggregates likely to be used in housebuilding	10
The likely draw on aggregates from other major construction and infrastructure projects.....	11
Secondary, recycled, and marine sources of aggregate	12
5. Projecting future requirements- preferred approach	12
6. Conclusion	14
Appendix A: North Yorkshire methodology ‘Uplift’ in aggregate demand calculation	15
Appendix B: YHAWP Consultation responses to a draft version of this Background Paper and the Draft Humber Area Local Aggregate Assessment July 2017 (data up to 2015), the Councils’ response, and any amendments to the documents as a result.	17

1. Introduction

- 1.1 East Riding of Yorkshire Council and Hull City Council (the Authorities) are in the process of producing a Joint Minerals Local Plan (JMLP) covering their joint Plan area. The next stage in this process will be consultation on a Proposed Submission version of the Plan.
- 1.2 To comply with the National Planning Policy Framework (NPPF), the Authorities need to make provision for a steady and adequate supply of aggregates. More specifically this means providing for land banks of at least 10 years for crushed rock and 7 years for sand and gravel over the plan period to 2033.
- 1.3 The Authorities work with North Lincolnshire Council and North East Lincolnshire Council to produce a Local Aggregates Assessment (LAA) for the Humber area. This feeds into the monitoring arrangements of the Yorkshire and Humber Aggregates Working Party (YHAWP), alongside LAAs produced by other Mineral Planning Authorities (MPA) in Yorkshire and Humber.
- 1.4 The LAA (October 2017) calculates a 10 year average of sales data for crushed rock and sand and gravel sales in line with the NPPF. It then monitors whether permitted reserves amount to a land bank of 10 years for crushed rock and 7 years for sand and gravel. The LAA neither breaks down the average sales figures nor the number of years of permitted aggregate reserves (based on average sales) down to the MPA level.
- 1.5 In order for the Joint Authorities to progress the JMLP, it is necessary to establish the average amount, or apportionment, of aggregates the joint plan area needs to provide for annually. The Humber MPAs have agreed that this is based upon separate approaches for the East Riding/Hull and North Lincolnshire/North East Lincolnshire areas. This recognises:
 - The largely separate aggregate markets with varying characteristics (such as aggregate export destinations) north and south of the Humber, due to the cost of a lorry making a round trip across the Humber Bridge; and
 - Joint working between the Joint Authorities' on the JMLP covering their combined area.
- 1.6 The approaches established by this background paper and a similar paper for the south Humber area will then be aggregated to form single 'Humber' apportionments for both sand and gravel and crushed rock aggregates for the Humber's LAA. This background paper therefore both informs and is informed by the LAA, as shown in figure 1 below.

Figure 1: Relationship of Aggregates Apportionment Background Paper with the Humber LAA



1.7 This paper updates a previous version, which accompanied the Revised Preferred Approach Version of the JMLP in May 2016. It was based on:

- A rolling 10 year sales average for the Humber area in the LAA;
- The proportion of those sales originating in Hull and East Riding;
- Rolling three year sales trends, which were lower than the average ten year sales trend;
- Engagement with North and North East Lincolnshire Councils; and
- The largely separate aggregates markets north and south of the Humber

1.8 It established annual apportionments of aggregate for the JMLP of 0.7 million tonnes per annum for sand and gravel, and 0.19 million tonnes per annum for crushed rock.

2. Response to the previous aggregates apportionment background paper

2.1 Consultation took place on the previous version of this background paper both through the YHAWP in July/August 2015 and also during consultation on the Revised Preferred Approach Joint Minerals Local Plan in May to July 2016. The main feedback arising from this was:

- Greater clarity needed on how the aggregates apportionments have been calculated;
- Uplifts to the aggregates apportionments over and above the 10 year sales averages should be considered by utilising 'other relevant information' as other authorities in Yorkshire and Humber have done. This includes considering increased demands as a result of planned increases in housebuilding; and
- It would be useful to include the value of marine dredged sources of sand and gravel given the presence of ports in the area.

2.2 Consultation on a draft version of this Revised Background Paper alongside the draft Humber Area LAA took place with the YHAWP in July/August 2017. The full text of responses from this exercise alongside the Council's response and any amendments to this background paper and the LAA as a result can be found in appendix B. The main feedback arising from this was :

- There is undue confidence placed on supply of aggregates from the Yorkshire Dales National Park.
- View that there is no accepted methodology for linking sand and gravel consumption with housing completions is incorrect. North Yorkshire's methodology should be used to forecast future aggregates need.
- It would be easier to apply a 25% uplift to the total sales figures on the reasonable assumption that planned growth in importing areas is also set to rise by at least as much as it is in the East Riding.
- Marine aggregates should be factored into aggregates sales trends used to inform calculations of future aggregates demand.

2.3 This paper seeks to address this feedback, and was tabled at the YHAWP meeting of the 18th October, 2017 for approval. All members were happy with the document with the exception of W Clifford Watts Ltd and the Mineral Products Association. Malcolm Ratcliff requested the YHAWP record that the Authorities and Industry have given different opinions and do not agree.

3. National policy and guidance on aggregates demand assessment

3.1 The NPPF requires MPAs to assess the projected demand for minerals use, taking full account of opportunities to use materials from secondary and other sources which could provide suitable alternatives to primary materials. MPAs should plan for a steady and adequate supply of aggregates by preparing an LAA based on a rolling average of 10 years sales data and other relevant local information, and an assessment of all supply options (including marine dredged, secondary and recycled sources).

3.2 National Planning Practice Guidance (NPPG) emphasises that LAAs must consider other relevant local information in addition to the 10 year rolling supply, which seeks to look ahead at possible future demand. This includes, for example, levels of planned construction and housebuilding in their area and throughout the country. Average sales over the last three years in particular should be examined to identify the general trend of demand as part of the consideration of whether it might be appropriate to increase supply.

3.3 The Planning Officers Society and Mineral Products Association have also produced practice guidance on producing LAAs, which provides further guidance on what other relevant local information should be considered.

4. Projecting future aggregates requirements - Discussion

4.1 A range of methods could potentially be used to help identify the scale of future requirements for aggregates. Any method used should be compatible with national policy and guidance, be relatively straightforward to calculate and lead to a realistic forecast capable of being monitored.

4.2 Use of historic average sales over the previous 10 year period as an indicator of future requirements has advantages in terms of simplicity and transparency. However, it does not:

- Anticipate future changes in aggregates supply patterns or economic trends.
- Take into account any emerging environmental issues or constraints that might limit supply.
- Reflect current national and local aspirations for growth, particularly expected growth in house building, which creates an additional requirement for aggregates.

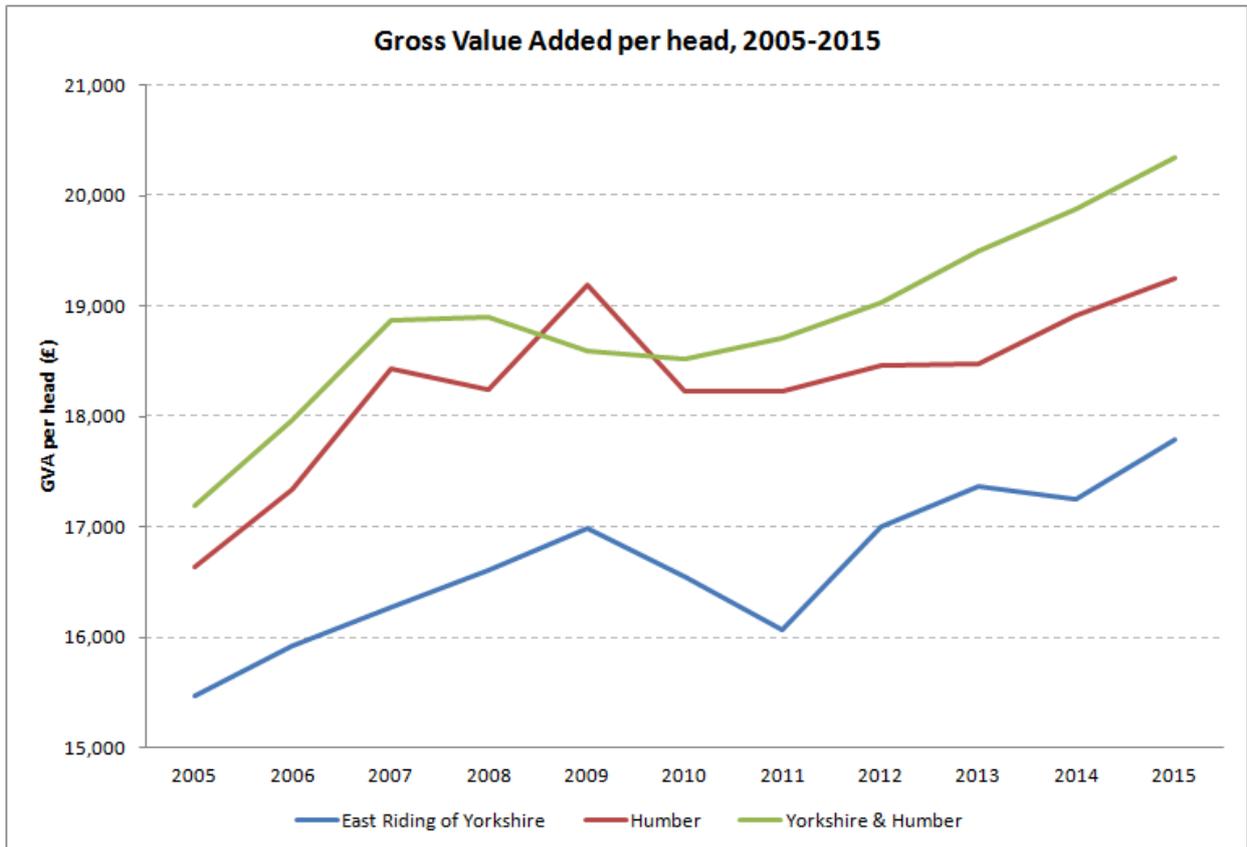
Table 1: Sales of Primary Aggregate from East Riding of Yorkshire[#]			
Primary Aggregate (million tonnes)	10 year (2007 to 2016) sales average	3 year (2014 to 2016) sales average	Pre-recession (2002 to 2007*) sales average
Sand & Gravel	0.74	0.81	0.76
Crushed Rock (Chalk)	0.13	0.14	0.33
*Does not factor in data for 2004, which is unavailable			
[#] Hull does not have any primary aggregate reserves			

- 4.3 The table above presents the latest average 10 year and three year average sales data for the Joint Plan area. Pre-recession averages for a period of six years is also included for comparison. Specific year by year data on primary aggregate production cannot be presented separately from the Humber area data for the Joint Plan area. There are data returns from less than three operators for one of the two areas north and south of the Humber for certain years, which would lead to potential commercial confidentiality issues if presented separately.
- 4.4 The most recent three year average for primary sand and gravel production is a little higher than both the 10 year average and pre-recession average. This suggests that some adjustment is needed to any apportionment from the 10 year average to factor in recent sales trends.
- 4.5 For primary crushed rock the three year sales average is also slightly higher than the 10 year average, suggesting that some adjustment is needed to any apportionment from the 10 year average to factor in recent sales trends.
- 4.6 National guidance requires account to be taken of other local information, although the 10 year average sales data provides a useful benchmark against which the implications of local factors can be assessed. Sales over the last 3 years in particular should be looked at to identify the general trend of demand as part of the consideration of whether it might be appropriate to increase supply. As set out in Table 1, when compared to the 10 year sales average, the sales data for the last three years would suggest a small increase for both sand and gravel, and crushed rock.

Links to economic trends

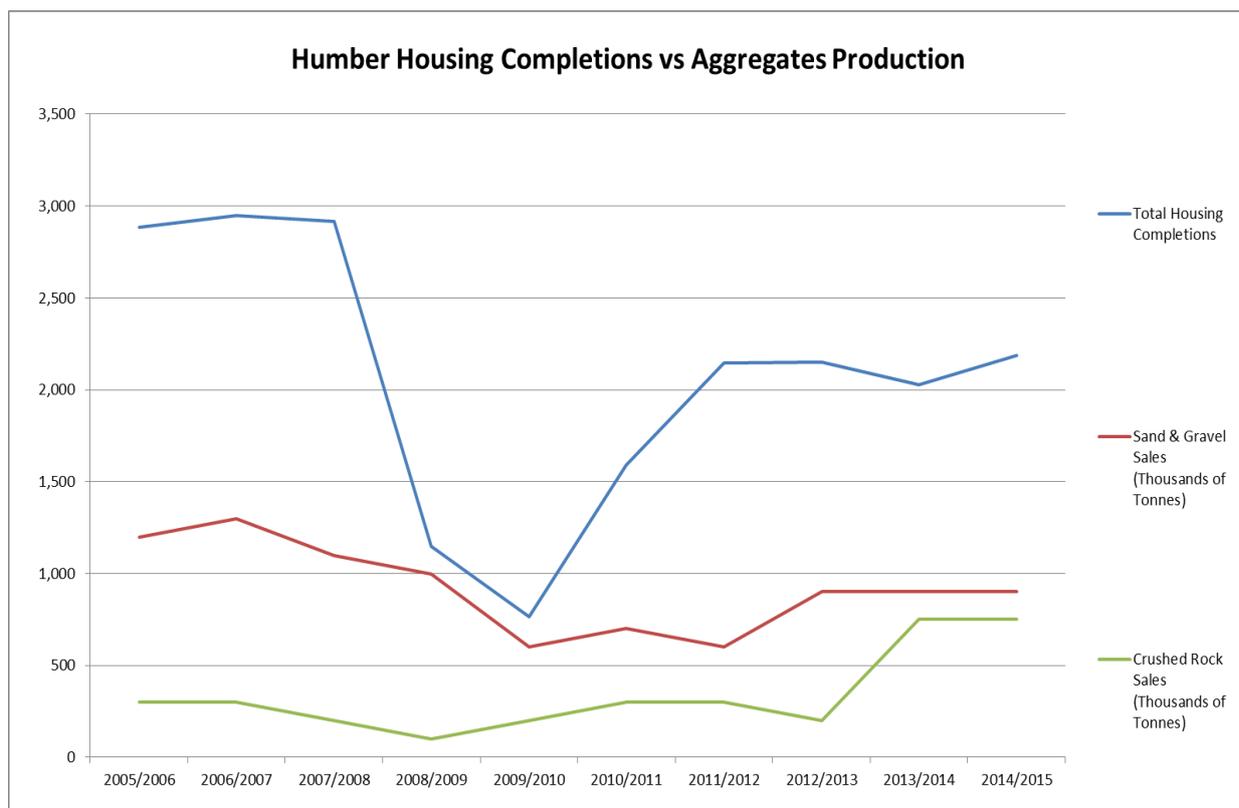
- 4.7 The graph below shows the performance of the Humber's economy has fluctuated over the period from 2005 with a dip due to the recession. There is a corresponding drop in the Humber's¹ sand and gravel aggregate sales following on from this (see subsequent graph).
- 4.8 This appears to suggest there are links between the performance of the local economy and sand and gravel aggregate sales in the Humber area. There doesn't appear to be a similar link in terms of the crushed rock sales.

Figure 2: Performance of the Humber's Economy



¹Data for the whole Humber area is presented as specific year by year data on primary aggregate production cannot be presented separately for the Joint Plan area. There are data returns from less than three operators in one of the two areas north and south of the Humber for certain years, which would lead to potential commercial confidentiality issues if presented separately. Local variations in aggregates production or housebuilding is also less likely to distort the figures where the data covers a wider area.

Figure 3: Housing Completions and Aggregates Production



Links to housing delivery

- 4.9 A degree of consistency between sand and gravel aggregate sales and the level of housing delivery across the Humber area is shown in the graph above, indicating a link between demand for aggregates and housebuilding in the area. For example, the fall in house completions over 2007-10 was also reflected in a decrease in total sand and gravel sales. Similar to economic trends, there doesn't appear to be a link in terms of the crushed rock sales and housing completions.

The types of aggregates present in the East Riding and their likely uses

- 4.10 The only crushed rock currently worked in the area is chalk, which lies close to the surface as the underlying bedrock of the Yorkshire Wolds. The Chalk in East Yorkshire is harder and contains less moisture than the Chalk in southern England and can therefore be used for aggregate purposes, but only for less demanding applications such as fill and sub-base roadstone. Most is of a lower quality, which can be used in bulk fill for major infrastructure or residential building projects, capping, pipe bedding, trench fill, cement manufacture, road aggregate, haul roads, piling platforms, raw material for manufacture of quicklime and slaked lime, and lay-down areas and hard standings. The area's higher quality chalk deposits can be applied in industrial uses such as paper manufacture, coatings (including paints), polymers, and sealants. It is anticipated that the area's chalk deposits will continue to be required for these uses into the future.
- 4.11 The area also has a limestone deposit, which occurs as a relatively thin deposit stretching along the western escarpment of the Yorkshire Wolds between Market Weighton and Brough.

This deposit is not currently being worked. In future, it could be a source of building stone and crushed rock aggregate. Crushed rock uses could provide aggregates that are of relatively low strength and with poor resistance to frost damage (they have moderate or high values of water absorption). They are, therefore, generally only suitable for use as constructional fill or as a sub-base roadstone material .

- 4.12 There is no shortage of supply of chalk in the East Riding, with a vast deposit, and land bank of around 50 years. Only 1-10% of the Humber's crushed rock supply was sourced from the East Riding amounting to 7,240 to 72,400 tonnes in 2014 according to the 2014 Aggregate Minerals survey for England and Wales² (AM2014)³. This almost accounts for the entire production of primary crushed rock in the East Riding, as very little is exported outside of the area according to AM2014. As evidenced in paragraph 4.9 and figure 3 above, it is of limited importance as a material for new housing developments due to most being of a lower quality.
- 4.13 Historically, sand and gravel has been the most important aggregate resource found in the Humber area. It is used as a source of aggregate for a variety of building purposes including asphalt, concrete and mortar. It principally occurs in the lower lying ground to east and west of the Yorkshire Wolds. The area to the east of the Wolds contains mainly glaciofluvial deposits, which are sourced from melting ice sheets at the end of the last ice age. The deposits are fairly dispersed, with the most extensive deposits being in the Catwick - Brandesburton area, and stretching south from Bridlington. West of the Yorkshire Wolds there is a larger deposit of glaciolacustrine sand and gravel, which is sourced from sediments from glaciers deposited in lakes. This is at Pocklington, with smaller patches further south.

Cross boundary movement of aggregates

- 4.14 The key source of information on the movement of aggregates between different Minerals Planning Authority Areas and Sub-Regions is AM2014. Relevant LAAs also contain some information on cross boundary movements. Data has been analysed at the Humber sub-region level as much of the data does not go down to a smaller geography.

South Yorkshire

- 4.15 Doncaster's LAA (2016) considers that to meet Doncaster's aggregates demand, material will need to continue to be imported from the East Riding. Material from certain sites in the East Riding could potentially assist in meeting supply to the Doncaster area.
- 4.16 AM2014 shows that 20% to 30% of South Yorkshire's sand and gravel consumption (amounting to 152,000 to 228,000 tonnes) came from the Humber in 2014 and all of this was from the East Riding. This amounts to between 36% and 54% of the Humber's primary aggregate sand and gravel sales, which is a very significant proportion. AM2014 shows that less than 1%, (amounting to less than 4,240 tonnes in 2014), of the sand and gravel consumed within the Humber area was from Doncaster.

² Collation of the results of the 2014 Aggregate Minerals survey for England and Wales (March 2016), British Geological Survey

³ It is important to bear in mind that the four yearly national surveys are separate to the annual YHAWP surveys. Data from the two are not directly comparable due to differences between the overall number and individual operators responding to each.

- 4.17 In terms of crushed rock, AM2014 shows that none of South Yorkshire's crushed rock consumption was met from the Humber area, however 1% to 10% of the Humber area's consumption of crushed rock, amounting to 7,240 to 72,400 tonnes, was supplied from Doncaster Metropolitan Borough Council's area.

Nottinghamshire

- 4.18 Nottingham & Nottinghamshire's LAA (2016) highlights that the sand and gravel from the Nottinghamshire area has traditionally been supplied into the Yorkshire and Humber region, in particular to the Doncaster and Rotherham area. However, no mention has been made about imports and exports to/from the Humber area.
- 4.19 AM2014 does not record any contribution from the Humber to Nottinghamshire's sand and gravel supply. However, it shows that between 30% and 40% of the sand and gravel consumed within the Humber area was from Nottinghamshire in 2014. This amounts to between 127,200 and 169,600 tonnes. It is likely to be associated with Northern Lincolnshire, rather than Hull and East Yorkshire, due to the geography of the area.
- 4.20 AM2014 shows that 1% to 10% of Nottinghamshire's crushed rock consumption (amounting to 12,640 to 126,400 tonnes) came from the Humber in 2014 and all of this was from North Lincolnshire's area. None of the crushed rock consumed within the Humber area was sourced from Nottinghamshire.

Lincolnshire

- 4.21 The Draft Lincolnshire LAA (2017) notes that 8.8% of sand and gravel exported from the county goes to the Yorkshire & Humber region. However, no particular destinations are mentioned.
- 4.22 AM2014 shows that 1% to 10% of Lincolnshire's sand and gravel consumption (amounting to 9,890 to 98,900 tonnes) came from the Humber in 2014 and all of this was from North Lincolnshire's area. Between 10% and 20% of the sand and gravel consumed within the Humber area was from Lincolnshire in 2014. This amounts to between 42,400 and 84,800 tonnes. It is likely to be associated with Northern Lincolnshire rather than Hull and East Yorkshire due to the geography of the area.
- 4.23 AM2014 shows that 1% to 10% of Lincolnshire's crushed rock consumption (amounting to 8,190 to 81,900 tonnes) came from the Humber in 2014 and all of this was from North Lincolnshire's area. None of the crushed rock consumed within the Humber area was sourced from Lincolnshire.

West Yorkshire

- 4.24 The West Yorkshire LAA (2016) recognises that significant amount of sand and gravel is exported into West Yorkshire from the East Riding. It acknowledges that continuity of the area's supply is far more dependent on cooperating with neighbouring MPAs than managing supply in West Yorkshire itself. It notes that under the Duty to Corporate, the West Yorkshire authorities will need to seek agreement with East Riding of Yorkshire Council to ensure that it is continuing to include in its plan, the exportation of aggregates to West Yorkshire. A draft updated West Yorkshire LAA (2017) reaffirms this approach.

- 4.25 AM2014 shows that 20% to 30% of West Yorkshire's sand and gravel consumption (amounting to 140,400 to 210,600 tonnes) came from the Humber in 2014 and all of this was from East Riding of Yorkshire's area. It amounts to between 22% and 33% of the Humber's primary aggregate sand and gravel sales, which is a very significant proportion. West Yorkshire made no contribution to the Humber's sand and gravel consumption.
- 4.26 None of the crushed rock consumed within the West Yorkshire area was sourced from the Humber. Under 1% (under 7,240 tonnes) of the Humber's crushed rock consumption was supplied from West Yorkshire, and all of this was from Leeds City Council's area.

North Yorkshire

- 4.27 The North Yorkshire LAA (2016) recognises that sand and gravel is imported to the North Yorkshire area from East Riding of Yorkshire. It represents between 5% and 7% of the sand and gravel consumed within the area.
- 4.28 AM2014 shows between 84,800 tonnes and 127,200 tonnes (20% and 30% of the Humber's consumption) of sand and gravel was supplied from North Yorkshire in 2014. It shows that 1% to 10% of North Yorkshire's sand and gravel consumption (amounting to 11,250 to 112,500 tonnes) came from the Humber in 2014 and all of this was from East Riding of Yorkshire's area.
- 4.29 None of the crushed rock consumed within the North Yorkshire area was sourced from the Humber. Between 40% and 60% of the Humber's crushed rock consumption (amounting to between 289,600 and 434,400 tonnes) came from the North Yorkshire area in 2014 and between 10% and 20% was from the North Yorkshire County Council area and between 30% and 40% from the Yorkshire Dales National Park area
- 4.30 Engagement with the Yorkshire Dales National Park Authority has identified that a significant amount of Carboniferous Limestone comes from Swinden Quarry via rail to Hull and Immingham. The quarry has an existing planning permission till the end of 2030 and a current application to deepen the site and extend its life to 2039 has been submitted. There are therefore no reasons why there would be any issues with continuing supply from this source until at least 2030.

Potential scarcity of aggregates in neighbouring areas

- 4.31 West Yorkshire's Draft LAA (2017) indicates it has a sand and gravel land bank of 6 years and 5 months. This is insufficient to meet the national policy requirement to maintain a land bank of 7 years. The draft LAA acknowledges that although the sand and gravel landbank appears to be close to meeting the minimum level advocated within the NPPF, this primarily reflects the sustained low level of sand and gravel extraction in West Yorkshire. The sand and gravel landbank figure should not be taken to imply in any way that supplies of the sand and gravel consumed within West Yorkshire (primarily from North Yorkshire) are secure. There is a more pressing need to source, where possible, sand and gravel from WY, including production of sand from hard rock quarries. It acknowledges that East Yorkshire is a significant supplier of sand and gravel to the area (see above also).
- 4.32 Doncaster and Rotherham's LAA (2016) indicates it has a sand and gravel land bank of 14.5 years. Although this is sufficient to meet the national policy requirement to maintain a land

bank of 7 years, the LAA acknowledges that all the sand and gravel resources are in Doncaster and previous monitoring shows that the sand and gravel resource available is currently 99% soft sand. The sand and gravel land bank may not therefore be sustained beyond the proposed 17 year plan period for Doncaster or 15 year plan period for Rotherham. It acknowledges that East Yorkshire is a significant supplier of sand and gravel to the area (see above also).

- 4.33 It is necessary to consider the potential that the export of aggregates to some authorities in both West and South Yorkshire might continue. There is no evidence to suggest a potential scarcity of sand and gravel aggregates in other neighbouring areas.

The proportion of aggregates likely to be used in housebuilding

- 4.34 Through consultation on the previous iteration of this background paper, it was suggested that a 25% uplift should be applied to the apportionment of sand and gravel, and crushed rock to cater for expected increases in housebuilding. A response was also received from the Minerals Product Association advocating the North Yorkshire methodology as an appropriate basis for determining an uplift. Similar responses were received during consultation with the YHAWP on this revised Background Paper.
- 4.35 As part of their work in forecasting demand for aggregate Minerals⁴, the North Yorkshire Authorities produced a number of discussion papers and engaged with the Mineral Products Association and other stakeholders.
- 4.36 Recognising the need to identify a relatively straightforward method for predicting aggregate demand, an approach was developed based on an assumption that house building is a proxy for 50% of total demand for sand and gravel. This in effect allows an additional element of demand related to house building, including associated infrastructure and employment development, whilst recognising that there is also uncertainty about the exact nature of the link between house building and demand.
- 4.37 Working with this theory, the percentage 'uplift' in housebuilding needed to cater for future net housing provision figures in the latest Local Plans compared to the latest 10 year net average annual housing delivery figures as provided by the relevant Local Planning Authorities has been calculated for the Humber, South and West Yorkshire.
- For South Yorkshire, this is on the basis of Doncaster Metropolitan District Council's housing requirement and completion figures as it is unlikely the East Riding's sand and gravel is being exported beyond here as a high volume low value commodity. This was confirmed by relevant operators exporting sand and gravel to South Yorkshire. The Doncaster and Rotherham LAA (2016) also notes that East Riding sources of sand and gravel are not a practical solution for Rotherham's sand and gravel requirement.
 - For West Yorkshire, this is on the basis of Wakefield Metropolitan District Council and Leeds City Council's housing requirement and completion figures combined. Again it is unlikely the East Riding's sand and gravel is being exported beyond here. This was confirmed by relevant operators exporting sand and gravel to West Yorkshire.

⁴ Local Aggregates Assessment for the North Yorkshire Sub-region Second Review (July 2016) Appendix 3, North Yorkshire County Council, City of York Council, Yorkshire Dales National Park Authority, and North York Moors National Park Authority

- For the Humber this is on the basis of East Riding of Yorkshire and Hull City Council's housing requirement and completion figures combined. As noted above, there are largely separate aggregate markets with varying characteristics north and south of the Humber, due to the cost of a lorry making a round trip across the Humber Bridge.
- 4.38 The number of tonnes of sand and gravel according to AM2014 exported to each of these areas⁵ from the East Riding has then been 'uplifted' by these percentages and the additional tonnage noted. Based on house building and associated activity being a proxy for 50% of total demand for sand and gravel, this additional tonnage has been reduced by 50%. This leaves a theoretical tonnage of sand and gravel, sourced from the East Riding, to cater for uplifts in housing growth needed compared to past delivery to meet Local Plan housing growth aspirations. This tonnage works out as the following:
- South Yorkshire- 100,700 tonnes
 - West Yorkshire- 48,263 tonnes
 - Humber- 25,440 tonnes.
- 4.39 The calculations used to establish these figures are shown in appendix A
- 4.40 Discussions have taken place with North Yorkshire County Council, which is leading on a Joint Minerals and Waste Local Plan covering the County as well as the North York Moors National Park and City of York Council's areas. These confirmed that based on the approach of the emerging North Yorkshire Minerals Local Plan, there is not expected to be any increased draw on East Yorkshire's sand and gravel resources from North Yorkshire.
- 4.41 According to AM2004 no other areas act as a significant consumer of sand and gravel aggregate from East Yorkshire.

The likely draw on aggregates from other major construction and infrastructure projects

- 4.42 The Humber Area LAA discusses major development and infrastructure projects, which may require a significant amount of aggregates to complete.
- 4.43 Within East Yorkshire and Hull there have been a steady stream of infrastructure projects in the past few years, including:
- Beverley Integrated Transport Plan including new Southern Relief Road;
 - A164 Humber Bridge to Beverley major improvements;
 - Siemens Greenport Development; and
 - Willerby and Derringham Flood Alleviation Scheme.
- 4.44 In the future there are likely be a number of further major construction and infrastructure projects, including:
- A63 Castle Street Grade Separation (completion by 2021/22);
 - Cottingham and Orchard Park Flood Alleviation Scheme (completion by 2019/20); and
 - Anlaby and East Ella Flood Alleviation Scheme (completion by 2019/20).

⁵ Recent aggregate monitoring survey data was also checked to see that the tonnage of sand and gravel reported to be exported to South and West Yorkshire in AM2014 was consistent with survey responses.

4.45 It is very difficult to determine whether or not such large projects, would have a significant additional draw on aggregates within the area as materials may be sourced from neighbouring areas or from elsewhere. There isn't a significantly greater number of major construction and infrastructure projects projected to occur in future compared to the past and such projects have not historically not caused any significant peaks in demand for aggregates within the East Riding/Hull area.

Secondary, recycled, and marine sources of aggregate

4.46 The Humber Area LAA examines the available information on secondary and recycled sources of aggregate. The information is variable and not considered to be completely reliable. Therefore, it is difficult to accurately assess the role that they play in aggregate supply and demand. For example, in many cases Construction and Demolition Waste (a form of Recycled Aggregate) is processed on redevelopment sites using mobile plant and then either reused on site or taken direct to other construction sites for use. Collecting information from these sites is extremely difficult because of their temporary nature.

4.47 There are no known major sources of secondary aggregates in the East Riding and Hull area. The nearest source is British Steel at Scunthorpe.

4.48 The Humber LAA notes the findings of the Crown Estate Marine Aggregate capability portfolio 2016, including that current estimates suggest there are 25 years of primary marine aggregate production permitted in areas of the North Sea off the Humber. YHAWP commissioned a Marine Aggregates Study⁶ to assess the potential deliverability of a substantially greater supply of marine aggregate into the Yorkshire and Humber region, in substitution for an element of supply currently provided by land-won resources.

4.49 During the Study, stakeholders considered the move towards a greater utilisation of marine aggregates will most likely take place beyond 5 years and thereafter increase with time. Economically, operators did not think the marine option was viable at this point of time but the viability gap against land won aggregate was narrowing.

4.50 It is important to note, however, that the tonnage of recycled, secondary, and marine aggregate sales will influence the primary aggregate sales. For example the greater the sales tonnage of these aggregates in the area, the less need there will be for primary aggregates and vice versa.

5. Projecting future requirements- preferred approach

5.1 Other than considering past sales data, there is no robust and accepted methodology for directly linking demand for aggregates with housebuilding or the economy of the area as a means of projecting aggregate demand into the future. This is because there are far more issues to consider, such as cross boundary movements of aggregates and the particular uses to which aggregates in the East Riding are put to. Applying either a 25% uplift to the 10 year annual average sales, or the proposed North Yorkshire methodology, would not appear to be supported by existing evidence set out in this background paper.

5.2 The preferred approach for **crushed rock** is to take the past ten year average annual sales rate and project that forward as the future annual apportionment for the East Riding's primary

⁶ Marine Aggregates Study – Final Report (January 2014), URS

crushed rock supply. No 'uplift' in addition to the 10 year annual average sales rate of 0.13 million tonnes per annum is proposed. Almost all of this material is used in the Humber area (most likely entirely within the East Riding and Hull). The East Riding's chalk is of limited importance as a material for new housing developments due to it being mostly of a lower quality. There aren't as yet any quarries in the area exploiting limestone resources for aggregate use.

- 5.3 There is a very significant resource of chalk in the East Riding. Permitted reserves are extensive and will last beyond the end of the JMLP period. Proposed areas of search allocations will ensure the Plan can, subject to ongoing monitoring through future LAAs, be responsive in ensuring that future supply will meet demand.
- 5.4 The preferred approach for **sand and gravel** takes the three year annual average sales of sand and gravel of 0.81 million tonnes as reported in table 1 above as the future annual apportionment. This is because:
- The use of average three years sales data is advocated by the Government's planning practice guidance as a sensitivity test when considering potential future demand.
 - It is based on real past data on aggregate sales. Whereas alternative forecasts (such as the North Yorkshire Methodology outlined above) speculate on what future aggregate sales might be based on estimating future linkages of aggregate production to housing growth and associated development. Alternative forecasts suggest apportionment levels of between 0.91 and 0.93 million tonnes, which seem high, compared to both pre and post-recession average trends.
 - The resulting apportionment is considerably higher than average pre-recession sand and gravel sales figures when housebuilding was much higher (see table 1). Therefore, a further uplift to reflect increased housebuilding would not appear to be appropriate.
 - The Council has engaged with main operators exporting to West and South Yorkshire where there is evidence to suggest a potential scarcity of sand and gravel aggregates in future. Information from this suggests there is likely to become less of a reliance on East Yorkshire's sand and gravel in these areas due to increasing production of competing operators outside of East Yorkshire exporting to these areas. This trend has yet to feed through into monitoring of the sand and gravel sales figures.
 - There is the potential for future increases in marine aggregate landings, as indicated in paragraph 4.49, which would reduce the need for land won aggregates.
 - The application of alternative methodologies, which are based on future housing development, would need to better relate to the gross new build housing requirement. However, as Local Plan housing requirements are only expressed as a 'net' figure it is not possible to filter out the changes in future housing supply that would be generated by the change of use of existing buildings or bringing vacant homes back into use. These are unlikely to result in a demand for land won aggregates.

6. Conclusion

- 6.1 To examine what appropriate annual aggregate apportionments might be for the JMLP, this paper calculates the annual average sales rate for both crushed rock and sand and gravel aggregates over a 10 year period within the JMLP area in line with the NPPF. More recent sales data for the last three years, as well as rates experienced during the pre-recession period which supported higher levels of housebuilding have also been considered.
- 6.2 A range of other information relevant to establishing these apportionments has been examined in this paper. This includes
- Aggregates sales trends over the past three years;
 - Engagement with North and North East Lincolnshire Councils;
 - Largely separate aggregates markets north and south of the Humber;
 - Cross boundary aggregate movements;
 - Links to performance of the economy;
 - Links to past and proposed future housing development; and
 - Links to major construction projects and infrastructure.
- 6.3 As a result, annual apportionments of primary aggregate have been proposed for the JMLP as follows:
- Sand and gravel 0.81 million tonnes per annum
 - Crushed rock 0.13 million tonnes per annum
- 6.4 Apportionments and progress towards meeting them will be monitored through the Councils' and Yorkshire and Humber Aggregates Working Party annual monitoring reports, annual updates to the Humber Area LAA, as well as through on-going Duty to Co-operate discussions.

Appendix A: North Yorkshire methodology 'Uplift' in aggregate demand calculation

South Yorkshire

Uplift in Doncaster's housebuilding needed to meet Local Plan target

A = Local Plan annual net housing target- 1,230 dwellings

B = Average annual net housing delivery between 2006/7 and 2015/16- 596 dwellings

$$\frac{A - B \times 100}{B} = 106\%$$

B

Uplift in sand and gravel tonnage from the East Riding to supply South Yorkshire's housebuilding needs (tonnes)

A = Halfway point of high and low range of sand and gravel consumed within South Yorkshire sourced from the East Riding in 2014, according to AM2014- 190,000 tonnes

B = Percentage uplift in Doncaster's housebuilding needed to meet Local Plan target (see calc above) as a fraction- 1.06

C = Housebuilding accounting for 50% of sand and gravel consumption factor- 0.5

$$A \times B \times C = 100,700 \text{ tonnes}$$

West Yorkshire

Uplift in Leeds and Wakefield's housebuilding needed to meet Local Plan target

A = Combined annual net housing target of both Leeds and Wakefield Local Plans - 5,975 dwellings

B = Average annual net housing delivery between 2007/8 and 2016/17- 3,844 dwellings

$$\frac{A - B \times 100}{B} = 55\%$$

B

Uplift in sand and gravel tonnage from the East Riding to supply West Yorkshire's housebuilding needs (tonnes)

A = Halfway point of high and low range of sand and gravel consumed within West Yorkshire sourced from the East Riding in 2014, according to AM2014- 175,500 tonnes

B = Percentage uplift in Leeds And Wakefield's housebuilding needed to meet combined Local Plan target (see calc above) as a fraction- 0.55

C = Housebuilding accounting for 50% of sand and gravel consumption factor- 0.5

$$A \times B \times C = 48,263 \text{ tonnes}$$

East Riding of Yorkshire and Hull

Uplift in East Riding and Hull's housebuilding needed to meet Local Plan target

A = Combined annual net housing target of both East Riding of Yorkshire and Hull's Local Plans - 2,020 dwellings

B = Average annual net housing delivery between 2007/8 and 2016/17 (Hull data) and 2006/7 and 2015/16 (East Riding data)- 1,366 dwellings

$$\frac{A - B}{A} \times 100 = 48\%$$

B

Uplift in sand and gravel tonnage from the East Riding to supply East Riding/Hull's housebuilding needs (tonnes)

A = Halfway point of high and low range of sand and gravel consumed within the Humber sourced from the East Riding in 2014, according to AM2014- 106,000 tonnes

B = Percentage uplift in East Riding and Hull's housebuilding needed to meet combined Local Plan target (see calc above) as a fraction- 0.48

C = Housebuilding accounting for 50% of sand and gravel consumption factor- 0.5

$$A \times B \times C = 25,440 \text{ tonnes}$$

Appendix B: YHAWP Consultation responses to a draft version of this Background Paper and the Draft Humber Area Local Aggregate Assessment July 2017 (data up to 2015), the Councils’ response, and any amendments to the documents as a result.

Consultation with the YHAWP took place between 10th July, 2017, and 7th August, 2017.

Respondant	Comments	Councils’ Response and Amendments
Mark North, Mineral Products Association	<p>Concerned that you may be placing undue confidence in the potential supply of aggregates from the Yorkshire Dales National Park, which appears to be declining. Additionally demand for these traditional areas of crushed rock supply is increasing in other areas as well and there is a danger on the assumption of future supply as there may be productive capacity issues. This is perhaps a matter for discussion at AWP as it is a regional issue.</p>	<p>The supply of crushed rock aggregate from Yorkshire Dales National Park to the East Riding and Hull relates to Swinden Quarry. Carboniferous Limestone travels by rail from here to Hull. Consultation as part of the LAA with the National Park Authority has established that the quarry has an existing permission lasting until the end of 2030. There is also a current application pending to deepen the quarry and extend its life to 2039. There is therefore no reason to believe there would be any issues of supply from here at least until 2030 and probably beyond.</p>
	<p>Pleased that you recognise that there is a link between housing completions and use of sand and gravel. However, your stated view that there is no accepted methodology for linking sand and gravel consumption is not correct we believe. You make reference to the North Yorkshire methodology which is yet to be examined at EiP. However, the same methodology is used in the West Yorkshire and all bar one of the North East mineral planning authorities. Our understanding is that these authorities are using this methodology in recognition that relying on recession averages for sand and gravel consumption for demand planning is an error. It is suggested that this LAA should use the North Yorkshire methodology to forecast future aggregates need.</p>	<p>Looking at the approach of the North East Planning Authorities. County Durham, Northumberland and Tyne and Wear LAA grew their 10 year aggregate sales averages by around 10%. This was based on uplifting 15% (percentage of construction activity that house building is responsible for according to the Construction Products Association) of the 10 year aggregates</p>

		<p>sales average by the percentage difference in current and planned future house building rates in the region.</p> <p>The Tees Valley (Darlington Borough, Hartlepool Borough, Middlesbrough Council, Redcar & Cleveland Borough, and Stockton-on-Tees Borough) LAA uses a similar methodology resulting in growing aggregate sales by around 6%.</p> <p>Applying the uplift methodology of the North East Planning Authorities to the East Riding/Hull results in an uplift of the sand and gravel sales average by 8.8%. This is compared to the uplift actually proposed in the Hull/East Riding Aggregates Apportionment Background Paper of 8.1%.</p> <p>Therefore if the MPA is advocating the use of such a methodology then the resulting uplift is very much similar to that already proposed for sand and gravel in the East Riding and Hull Joint Minerals Local Plan.</p> <p>It is incorrect to suggest the same North Yorkshire methodology is being used in the North East. A fundamental difference is the assumption of what percentage of sand and gravel is used in housing construction activity. North and West Yorks LAAs assume 50%. The</p>
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		<p>North East Authorities assume 15%.</p> <p>If the 50% assumption were to be applied to the East Riding/Hull then the uplift for sand and gravel would amount to around 29.4% against the 10 year sales average.</p> <p>The differing views on what percentage of sand and gravel is used in housing construction activity is symptomatic of uncertainty and doubt over the accuracy of such an assumption. However the 15% figure does have some basis as it was cited in a Construction Products Association Press Release of Monday 14 April 2014, which suggests it would be the more appropriate figure to use.</p> <p>As the Aggregates Apportionment Background Paper already suggests. There is no robust and accepted methodology for directly linking demand for aggregates with house building or the economy of the area as a means of projecting aggregate demand into the future. An approach of using a past average trend in aggregate sales as an apportionment remains a appropriate and has been tested at various Minerals Plan examinations.</p>
	<p>Also attach separate comments from MPA member W Clifford Watts Ltd. Who have done an analysis of the numbers presented part based on local knowledge.</p>	<p>These comments as well as the Councils' response and any resulting changes to the Background Paper and LAA can be found</p>

		below.																																																																																					
<p>Malcolm Ratcliff, Charis Consultancy Ltd on behalf of W C Watts Ltd</p>	<p>We have carried out an analysis on the sales and consumption figures in the LAA and have found some discrepancies. Some of these may be due to rounding errors or variations between local and national surveys, but we present our interpretation below for comparison with the LAA and AM figures.</p> <table border="1" data-bbox="379 477 1018 1272"> <thead> <tr> <th colspan="2">Aggregates use in Humber Area</th> <th>2005</th> <th>2009</th> <th>2014</th> </tr> </thead> <tbody> <tr> <td colspan="2">Sand & Gravel ktpa</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sales (LAA)</td> <td></td> <td>1100</td> <td>1000</td> <td>900</td> </tr> <tr> <td>Imports (AM)</td> <td></td> <td>908</td> <td>287</td> <td>305</td> </tr> <tr> <td>Exports (AM)</td> <td></td> <td>607</td> <td>500</td> <td>520</td> </tr> <tr> <td>Marine (AWP)</td> <td></td> <td>300</td> <td>92</td> <td>0</td> </tr> <tr> <td>Consumption LAA & AM</td> <td></td> <td>1683</td> <td>743</td> <td>424</td> </tr> <tr> <td>Consumption Watts</td> <td></td> <td>1701</td> <td>902</td> <td>685</td> </tr> <tr> <td colspan="2">Crushed Rock ktpa</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sales (LAA)</td> <td></td> <td>400</td> <td>100</td> <td>750</td> </tr> <tr> <td>Imports (AM)</td> <td></td> <td>594</td> <td>592</td> <td>700</td> </tr> <tr> <td>Exports (AM)</td> <td></td> <td>106</td> <td>0</td> <td>0</td> </tr> <tr> <td>Consumption LAA & AM</td> <td></td> <td>857</td> <td>789</td> <td>724</td> </tr> <tr> <td>Consumption Watts</td> <td></td> <td>888</td> <td>692</td> <td>1450</td> </tr> <tr> <td colspan="2"></td> <td></td> <td></td> <td></td> </tr> <tr> <td>LAA /AM total</td> <td></td> <td>2540</td> <td>1532</td> <td>1148</td> </tr> <tr> <td>Watts total</td> <td></td> <td>2589</td> <td>1594</td> <td>2135</td> </tr> </tbody> </table> <p>The Watts' figures were derived by taking sales figures adding imports and marine and subtracting exports to arrive at consumption (e.g. 1100+908+300-607=1701).</p> <p>There are discrepancies in all three years but the largest ones are for 2014. For crushed rock we cannot reconcile the figures for consumption in Table 7 with the data on sales of crushed rock in Table 4. Although we realise that you cannot change the AM figures we ask that you caveat the information presented to mention the anomaly and to provide the correct figure.</p> <p>Similarly, for sand and gravel in 2014, the AM survey has a sales figure of 639 ktpa compared with the LAA figure of 900 ktpa which is responsible for the difference of 261 ktpa in the consumption figures. We therefore think you should treat the AM14 consumption figures with caution as we do not believe they are correct.</p>	Aggregates use in Humber Area		2005	2009	2014	Sand & Gravel ktpa					Sales (LAA)		1100	1000	900	Imports (AM)		908	287	305	Exports (AM)		607	500	520	Marine (AWP)		300	92	0	Consumption LAA & AM		1683	743	424	Consumption Watts		1701	902	685	Crushed Rock ktpa					Sales (LAA)		400	100	750	Imports (AM)		594	592	700	Exports (AM)		106	0	0	Consumption LAA & AM		857	789	724	Consumption Watts		888	692	1450						LAA /AM total		2540	1532	1148	Watts total		2589	1594	2135	<p>The discrepancies highlighted within the table are a product of differences between the overall number and individual operators responding to each different survey. These differences mean that aggregates working party data (which informs the both the LAA and Aggregates Apportionment Background Paper) cannot be directly compared with National Aggregates Survey data. This will be highlighted in both the LAA and the Aggregates Apportionment Background paper.</p> <p>The LAA and Background Paper do not establish their own consumption, import, and export figures for the Humber and so quotes figures within National Aggregates Survey instead.</p>
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	<p>Moreover, we are also unclear whether these figures include marine sand and gravel. RAWP figures would</p>	<p>The Humber sand and gravel consumption</p>																																																																																					

	<p>suggest that in 2005 300ktpa of marine aggs were landed in the Humber, and in 2009 this was 115 ktpa. In 2014 no landings were recorded. If these figures are added in above, they increase consumption for the earlier years significantly.</p> <p>We believe this is important since the alternative figures show clearly a distinct fall in the consumption of sand and gravel between 2005 and 2014 mirrored by an increase in the consumption of crushed rock. We believe that the fall in sand and gravel consumption is not just an aspect of the recession, but also of the fact that the resources are becoming constrained and there are more calls on exporting local material. This is evidenced in the composition of concrete produced in the area (at least north of the Humber). The majority of concrete plants use a mixture of sand and crushed rock (e.g. Goole, Hull, and Driffield). We believe this may be true of plants south of the river as well. Sand and gravel however, is used by this company at its plants, and by Hanson at Bridlington (imported from North Yorkshire). It may also apply at the plant at Elsham too.</p>	<p>figures in table 7 of the LAA are taken from National Minerals Survey data and does include marine sand and gravel. No aggregate sand and gravel was landed at Hull in 2014 (due to the redevelopment of Alexandra Dock for the Greenport development). It would therefore be misleading to interpret the 2014 consumption figure for the Humber as being a downward trend.</p> <p>Sales of crushed rock have remained relatively constant in the Humber area up to 2014 (and in the East Riding area up to 2016). This was followed by a dramatic increase in sales from North Lincolnshire from 2014 and a more moderate rise in sales from the East Riding in 2016. It is too early to say what has caused these rises in sales (particularly for the East Riding). It is not necessarily indicative of a shortage of sand and gravel in the area. Sales of primary sand and gravel across the Humber have remained relatively constant throughout the same period. If supplies were increasingly constrained, one would expect to see a fall in sales.</p>
	<p>We agree with the LAA analysis of reserves and landbanks.</p>	<p>Comments noted.</p>
	<p>The Humber Area clearly suffers from resource issues for the highest quality of sand and gravel and we recognise that it may not be possible to increase the supply of the highest quality materials in the future due to the difficulty in finding new sites. W Clifford Watts controls the best</p>	<p>There is insufficient evidence available to make that assertion within the LAA. Especially without further</p>

	<p>quality reserves within East Riding, which we believe the LAA needs to acknowledge along with the limited potential for future supplies of this material.</p>	<p>engagement with other operators.</p>
	<p>We do not agree with your assessment of future demand for sand and gravel, or your assessment of supply of crushed rock.</p> <p>Dealing with crushed rock first, we believe you have over-estimated the potential supply of aggregates from the Yorks Dales National Park, which is declining fast and Swinden will close by 2026. There is potential to replace this material in North Yorkshire, but further caution is required because demand for crushed rock from these large sites is increasing everywhere. If growth in the use of rock continues as it has recently it is likely that at some stage there will be a capacity limitation. This should be discussed regionally since if all mpas are relying on crushed rock to substitute for sand and gravel then the supply may not be sufficient for all. Furthermore, we believe you are wrong about statements relating to marine aggregates. These are more expensive to use than crushed rock and it is likely that if the supply pattern remains the same, then there will be further substitution of crushed rock for sand and gravel, not less. Marine sources are likely to be more competitive in the long term, but we do not see this happening in the short term.</p>	<p>Consultation as part of the LAA with the National Park Authority has established that Swinden Quarry has an existing permission lasting until the end of 2030. There is also a current application pending to deepen the quarry and extend its life to 2039. There is therefore no reason to believe there would be any issues of supply from here at least until 2030 and probably beyond.</p> <p>As stated above. Sales of crushed rock have remained relatively constant in the Humber area up to 2014. It is too early to say what has caused recent rises in sales (particularly for the East Riding). It is not necessarily indicative of substitution of sand and gravel with crushed rock in the area. Sales of primary sand and gravel across the Humber have remained relatively constant throughout the same period, when supplies are relatively unconstrained. One would expect to see a fall in sales if existing supplies were not suitable and crushed rock was increasingly being used in substitution.</p> <p>The statements relating to marine aggregates were informed by a specific marine aggregates study</p>

		<p>commissioned by Leeds City Council on behalf of the YHAWP. A broad range of stakeholders, including industry representatives contributed towards the study.</p>
	<p>You say there is a link between housing completions and use of sand and gravel and we would agree. The situation is complicated by the use of crushed rock in concrete and cross boundary movements as you say, but there is still a 0.70 correlation coefficient between sand and gravel use and housing completions, which is significant at the 95% confidence level. This can be easily checked by use of the CORREL function in Excel. This correlation strengthens when marine aggregates are included. This means that you have been overcautious in your assessment and that you may project future sand and gravel use in line with movements in housing completion trends, with confidence. Thus you are wrong that there is no ‘...robust and accepted methodology for directly linking demand for aggregates with housebuilding...’ You mention the North Yorkshire methodology and although this has yet to be examined, it has to our knowledge not attracted any objections. The same methodology is also used by the whole of the North East mpas bar Teesside, and by the five West Yorkshire mpas, so it cannot be described as anomalous. It has been specifically adopted by those authorities to reflect aspirations for growth and in acknowledgment that relying on recessionary averages to project future demand is dangerously flawed.</p> <p>We believe you should use either the North Yorkshire methodology or one of your own to forecast future aggregate needs.</p>	<p>The link between housing completions and use of sand and gravel is acknowledged and discussed in the paper.</p> <p>Looking at the approach of the North East Planning Authorities. County Durham, Northumberland and Tyne and Wear LAA growthed their 10 year aggregate sales averages by around 10%.</p> <p>This was based on calculating what 15% of the 10 year annual aggregates sales average tonnage is. 15% is the percentage of construction activity that house building is responsible for according to the Construction Products Association. The percentage difference in current and planned future house building rates in the region was then established. This was then used to growth 15% of the 10 year average sales. The resulting figure was then added back onto 85% of the 10 year average sales.</p> <p>The Tees Valley (Darlington Borough, Hartlepool Borough, Middlesbrough Council,</p>

		<p>Redcar & Cleveland Borough, and Stockton-on-Tees Borough) LAA uses a similar methodology resulting in growing aggregate sales by around 6%.</p> <p>Applying the uplift methodology of the North East Planning Authorities to the East Riding/Hull results in an uplift of the sand and gravel sales average by 8.8%. This is compared to the uplift actually proposed in the Hull/East Riding Aggregates Apportionment Background Paper of 8.1%.</p> <p>Therefore if W C Watts Ltd is advocating the use of such a methodology then the resulting uplift (of the 10 year sales average) is very much similar to that already proposed for sand and gravel in the East Riding and Hull Joint Minerals Local Plan.</p> <p>It is incorrect to suggest the same North Yorkshire methodology is being used in the North East. A fundamental difference is the assumption of what percentage of sand and gravel is used in housing construction activity. North and West Yorks LAAs assume 50%. The North East Authorities assume 15%.</p> <p>If the 50% assumption were to be applied to the East Riding/Hull then the uplift for sand and gravel would amount to around</p>
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		<p>29.4% against the 10 year sales average.</p> <p>The differing views on what percentage of sand and gravel is used in housing construction activity is symptomatic of uncertainty and doubt over the accuracy of such an assumption. However the 15% figure does have some basis as it was cited in a Construction Products Association Press Release of Monday 14 April 2014, which suggests it would be the more appropriate figure to use out of the two.</p> <p>As the Aggregates Apportionment Background Paper already suggests. There is no robust and accepted methodology for directly linking demand for aggregates with house building or the economy of the area as a means of projecting aggregate demand into the future. An approach of using a past average trend in aggregate sales as an apportionment remains a robust approach and has been tested as such at various Minerals Plan examinations.</p> <p>Far from relying on recessionary averages to project future demand, the background paper proposes an annual sand and gravel apportionment figure which is higher than pre-recession levels.</p> <p>The latest evidence of linkages between housing</p>
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		<p>growth and demand for aggregates will be kept under review as part of ongoing development of Local Plans and further reviews of the LAA.</p>																																
	<p>We also struggle to accept your analysis in para 5.4 of the Apportionment Paper which asserts that the best figure to use is the 3 year average. This is not the advice of NPPF or PPG which was specifically worded to stop esoteric experiments in averages. You should start with the 10 year average and then use other local information to adjust it, not arbitrarily pick an average that you feel comfortable with. The three year average is an indicator of recent trends which might suggest a review of local plan allocations. It is not meant to be used as a predictor of future demand.</p> <p>We find the information given in Table 1 to be opaque in that the base data is not shown so the calculations cannot be checked. However, we have compared the figures presented with the figures for the six years cited obtained from the RAWP Annual Reports for 2004 and 2008 for the sub-region.</p> <p>EXTRACTED FROM Y&H AMR TABLE 3 - SAND AND GRAVEL AGGREGATE AND NON-AGGREGATE SALES 2002-2007 (million tonnes)</p> <table border="1" data-bbox="368 1182 1066 1547"> <thead> <tr> <th></th> <th>2002</th> <th>2003</th> <th>2004</th> <th>2005</th> <th>2006</th> <th>2007</th> <th>Average</th> </tr> </thead> <tbody> <tr> <td>East Riding & North Lincs</td> <td>0.8</td> <td>1.0</td> <td>1.1</td> <td>1.1</td> <td>1.2</td> <td>1.3</td> <td>1.083</td> </tr> <tr> <td>Marine Aggs</td> <td>0.2</td> <td>0.3</td> <td>0.4</td> <td>0.3</td> <td>0.3</td> <td>0.3</td> <td>0.300</td> </tr> <tr> <td>Total</td> <td>1.0</td> <td>1.3</td> <td>1.5</td> <td>1.4</td> <td>1.5</td> <td>1.5</td> <td>1.366</td> </tr> </tbody> </table> <p>It is clear that the pre-recession average for the Humber Area was much higher than you claim if marine aggregates are included as they should be, and that it was a rising market with year on year increases. Because virtually all marine aggregates are used in concrete and in an urban setting, used within just a few miles of landing, the marine landed at Hull should be included in the figures. This means that using your figures for East Riding averages, the total use of sand and gravel from both sources was of the order of 1.05 Million tonnes pa (0.75 + 0.30).</p> <p>Thus we would profoundly disagree that applying a factor</p>		2002	2003	2004	2005	2006	2007	Average	East Riding & North Lincs	0.8	1.0	1.1	1.1	1.2	1.3	1.083	Marine Aggs	0.2	0.3	0.4	0.3	0.3	0.3	0.300	Total	1.0	1.3	1.5	1.4	1.5	1.5	1.366	<p>NPPG promotes a forecast of the demand for aggregates based on both the rolling average of 10-years sales data and other relevant local information (Paragraph: 062 Reference ID: 27-062-20140306).</p> <p>It clarifies that other relevant local information includes average sales over the last 3 years in particular to identify the general trend of demand as part of the consideration of whether it might be appropriate to increase supply (Paragraph: 064 Reference ID: 27-064-20140306).</p> <p>The use of the last three years sales average as an apportionment figure has not been arbitrarily picked. It is clear that a range of local information (such as housebuilding and the economy) and alternative methodologies have informed the use of this figure. The outcome of the aggregates apportionment background paper is consistent with national planning policy and guidance.</p> <p>Data for each individual year is not shown in the table for commercial confidentiality reasons</p>
	2002	2003	2004	2005	2006	2007	Average																											
East Riding & North Lincs	0.8	1.0	1.1	1.1	1.2	1.3	1.083																											
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	<p>to reflect future planned construction ‘...would not appear to be supported by existing evidence set out in this background paper.’</p>	<p>given it could be used to disaggregate a North Lincolnshire figure from the Humber figure for each given year.</p> <p>There was an information release of the 24/11/2016 from the YHAWP secretary to members containing details of consumption of marine sand and gravel for aggregate use in 2014 identifying for each-sub-region the principal supplying Mineral Planning Authorities.</p> <p>Whilst no marine sand and gravel was landed at Hull during 2014, it is possible to see from the data that sand and gravel landed elsewhere is not necessarily used ‘within a few miles of landing’. For example, significant proportions of marine sand and gravel landed at South Tyneside makes its way to Durham, Tyne & Wear, and North Yorks.</p> <p>It is also important to bear in mind there are no major constraints on either the permitted supply of sand and gravel or landing capacity from reserves off the Yorkshire Coast. The supply of marine aggregate can therefore fluctuate in line with demand as it has done in the past.</p> <p>Given this, and also the plan’s role in setting an annual apportionment figure for primary aggregate production it is the average primary aggregate sales figures</p>
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		<p>which is important to inform this exercise.</p>
	<p>We also wondered where you obtained the figure of sand and gravel consumed in Humber sourced from East Riding in 2014 of 106,000 tonnes. This figure seems far too low. The total official consumption in the Humber area was 424,000 tonnes, but as we have observed this appears to be under-reported (according to figures from ERYC surveys) and the correct figure should be 685,000 tonnes.</p>	<p>The figure is derived from a National Survey information release via the YHAWP of 1/8/16. The information states that 20% to 30% of the total sand and gravel consumption of the Humber is derived from East Riding. Assuming the 25% mid point gives you 106,000 tonnes.</p> <p>As highlighted above there are discrepancies between YHAWP survey information and National Aggregates Survey information. This is due to differences between the overall number and individual operators responding to each different survey. These differences mean that the two sets of data are not directly comparable.</p>
	<p>However, we believe that it would be easier to apply a 25% uplift to the total sales figures on the reasonable assumption that planned growth in importing areas is also set to rise by at least as much as it is in the East Riding. This would suggest an apportionment of 0.94 Million tonnes pa (0.75 x 1.25). We also do not agree that less material will be exported in the future. Planned growth in importing areas is also set to grow and if it takes place locally it is also likely to be a wider phenomenon.</p> <p>We believe this approach is confirmed by looking at pre-recession figures for housing completions in 2006/7 for the Humber which were about 3,000 and comparing them with current levels of completions which are about 2,000 (50% difference). Sand and gravel sales (including marine) in 2006 were 1.5 Million tonnes. Now they are 0.9 Million tonnes. If future housing completions are to rise by about 50% this would see a return to 2006/7 levels of house building and an implied sand and gravel sales figure of about 1.5 Million tonnes across the Humber area. If this were so, the ERYC provision level we have suggested might be understated (we acknowledge that some of this might be obtained from renewed imports of marine</p>	<p>As stated in the Background Paper, such an assumption suggested remains untested at examination and doesn't have a firm evidential basis. The apportionment approach suggested has a basis based upon past trends, during both pre-recession and recent trends, and in light of considering a range of other relevant local information.</p>

	aggregates into Hull).	
	We are surprised that you should speak of forecasts as 'speculation'. We observe that as professional planners forecasting should be second nature to local government officers. We also observe that even with waste forecasting where data is also notoriously absent or heavily qualified, a way has been found to forecast future waste arisings that is accepted even though this is not robustly supported by evidence either. At least with aggregates we benefit from annual surveys.	Neither the LAA nor Aggregates Apportionment Background Paper describe forecasts as speculation.
	We believe there is an unwarranted caution among mpas that refuses to see the statistical connection between housing construction and sand and gravel sales, ignores the planned growth inherent in Local Plans and is reluctant to see significant increases in sand and gravel provision but to adopt a 'wait and see' strategy. This is a recipe for a continued decline in sand and gravel provision, which when it has happened, is very difficult to reverse.	Comments noted. The reasons for the approach taken are set out both in the background paper and in the responses to other comments above.
	<p>We are very concerned as a company that the Local Plan should not under-provide even if it is difficult to find Preferred Areas. We have no doubt that business will increase substantially, which is why the company has invested in a new concrete plant in Hull to expand its coverage of the sub region and with the best quality reserves in the sub region, is looking afresh at its supply strategy.</p> <p>We believe that the evidence does suggest that a substantial increase in provision is justified, and that the local provision level for sand and gravel should rise to at least 0.93 Million tonnes. It is undesirable to keep relying on rock substitution for sand and gravel and to look for greater marine imports, although we have no doubt this will happen in the long term.</p> <p>We therefore ask you to look again at your apportionment methodology and the link between housing completions and sand and gravel consumption.</p>	Comments noted. The reasons for the approach taken are set out both in the background paper and in the responses to other comments above.
Helen McCluskie, Doncaster Metropolitan Borough Council	No comments to make on the LAA or the additional aggregates apportionment paper. The information regarding Doncaster and Rotherham's monitoring data is fairly represented in the document.	Comments noted.