

Minerals and Waste Joint Plan

Assessment of sand and gravel resource areas within the City of York area

In 2013 British Geological Survey carried out an updated assessment of sand and gravel resources within the City of York Council (CYC) area (*City of York sand and gravel assessment*, British Geological Survey commissioned report, 2013). The work was commissioned by CYC in the context of its involvement in preparation of the Minerals and Waste Joint Plan for North Yorkshire, York and the North York Moors National Park and forms part of the evidence base for the Minerals and Waste Joint Plan. It can be viewed here: northyorks.gov.uk/media/27271/City-of-York-Sand-and-Gravel-Assessment-2013/pdf/City_of_York_Sand_And_Gravel_Assessment_final.pdf. A comparable study was undertaken for the North Yorkshire County Council area.

The context to the study is that there is no recent history of sand and gravel working, and no known recent interest from the minerals industry, in working sand and gravel in the City of York area, despite the known presence of a range of superficial mineral deposits.

The study concludes that, although large volumes of sand and gravel are present within York, the majority of these are lower quality, heterogeneous resources in heavily developed areas. Glaciofluvial sediments, which are the most heavily worked sand and gravel resource within the North Yorkshire sub-region, are not as common in the York area and, where present, are generally of lower quality, with a low proportion of coarse material which limits their use for concreting aggregate.

Three areas are identified in the study as being most prospective for concreting sand and gravel. These are:

- Between Upper Poppleton and Knapton - although clean sands and some gravel are proved here the resources are largely sterilised by existing development.
- East of Bishopthorpe - these sediments contain fine to medium sand overlying gravels. They are less constrained by existing development than those closer to York but sterilisation is still an issue.
- East of Grimston - these comprise some of the most heterogeneous resources comprising up to 3m of sand and gravel overlying till.

In addition to deposits with potential for concreting sand and gravel the study has identified significant tonnages of fine, wind-blown sands. Although unsuitable for use as concreting aggregate they may be suited to applications such as building sand, which are also worked elsewhere in the North Yorkshire sub-region. These deposits are located to the north of York and are best identified as a resource to the east of Earswick and Strensall, with an outlying area to the north east of Stockton on Forest.

The areas in question are identified on maps included within the BGS 2013 report.

A further review of the above locations has taken place in August 2014 to help understand the potential, if any for development of sand and gravel resources in the CYC area. This is necessary as national planning policy for minerals indicates that all areas with resources should make a contribution to meeting requirements for minerals.

The review was undertaken via visits to the locations identified above on 11 August 2014 and via a GIS based review of key constraints. The main findings are summarised below

Area between Upper Poppleton and Knapton.

This resource area lies mainly along or immediately to the east of the York outer ring road, with a small outlying area to the north west of Nether Poppleton.

The small area to the north west of Nether Poppleton is significantly constrained by the proximity of public rights of way, poor road access and proximity to residential development. A number of listed buildings are in relatively close proximity. Total estimated resource in this area (minus urban areas) is 2.1mt. The larger area along and to the east of the ring road is significantly constrained by surface development (mainly residential, commercial and infrastructure) and proximity to residential development. Although the total potential resource (minus urban areas) in this area is quite large (estimated at 27.7mt), it is highly fragmented.

East of Bishopthorpe

This resource area lies mainly to the west of the A19 and south of the A64 and is crossed by the latter road. The total estimated resource (minus urban areas) is 16.0mt. The northern part of the area is substantially sterilised by existing surface development including retail and recreational uses and farm buildings. An overhead power transmission line also crosses the southern part of the area. The resource is significantly fragmented. A site of special scientific interest lies adjacent to the western most part of the area.

East of Grimston

This resource straddles the A1079 and A166 road junction within the A64(T) and adjacent land to the east and west. It is highly constrained by existing surface development and infrastructure, proximity to residential property and other uses and is very highly fragmented. A number of listed buildings are in close proximity.

East of Earswick and Strensall

The main part of this area is a large area (c.348ha) containing an estimated resource of 6.3mt. Substantial parts of it (particularly in the west and north) are highly constrained by existing surface development, including residential, agricultural buildings MoD training and firing ranges and overhead transmission cables. A substantial part of the northern part of the area falls within the

Strensall Common Site of Special Scientific Interest. The south eastern part, south of the road between Towthorpe and the A64(T) near Stockton on Forest is less constrained, comprising mainly agricultural land and woodland, with isolated farm buildings. Access could be a constraint, probably necessitating travel through residential areas or via a junction on to the A64 trunk road. The outlying area to the north east is very small (estimated resource of 0.4mt) and lies mainly within woodland within Stockton Common. A listed building is in close proximity. The area is directly adjacent to the A64(T) and a new access would be required.

Summary and conclusion

This brief assessment suggests that resource areas identified through the BGS work have, in practice, only very limited potential for deliverability, primarily as a result of surface sterilisation, environmental constraints and access considerations. In particular it is considered that there is unlikely to be any realistic potential for delivery of a contribution to concreting sand and gravel requirements from within the City of York area.

Areas of resource with potential for use as building sand are geographically extensive to the north of the City of York (in addition to the area east of Earswick and Strensall discussed above) although sufficient geological information is not available for these. Some parts of these areas are generally less constrained than areas closer to the City. This suggests there may therefore be potential for delivery of an element of building sand supply from within the York area. However, the lack of detailed geological information relating to substantial parts of this resource and the current absence of any apparent interest by the minerals industry in bringing forward proposed allocations in these areas, suggests that the national policy requirement for all areas with resources to contribute to supply could best be addressed through inclusion of a criteria based policy in the Minerals and Waste Joint Plan. Such a policy could provide support in principle for development of building sand resources in the York are, subject to suitable proposals coming forward which meet identified criteria to ensure that any development would be sustainable.