

## Appendix I: Markham Vale

### Summary of Impact from HS2 on Regeneration Proposals

- 1.1** Note this is an initial assessment based on the plans and support documentation published. These have been superimposed on the development areas of Markham Vale, (see the plan in Appendix J).
- 1.2** The local authorities would wish to encourage HS2 Ltd to investigate all options available to provide the best possible mitigation for the impact on Markham Vale and other sensitive locations, including possible minor realignments.

#### **A632 Chesterfield to Bolsover Road**

- 1.3** HS2 approaches from the south on a raised embankment approximately 8m high.

##### **Issues**

- New bridge required on the A632.
- The HS2 proposals do not show the proposed cycleway trail alongside the A632 for which there is planning permission. There are key utilities within the A632 that serve businesses on Markham Vale. These along with the A632 will need protecting/diverting during the construction period.
- What impacts will there be on the A632 roundabout and the approach to the M1. This is the main route connecting Bolsover with the M1 motorway at Junction 29A.

#### **Plot 9A**

- 1.4** HS2 crosses Plot 9A and Meadow House Way on a south to north alignment.

##### **Issues**

- The 9m high embankment is directly over newly constructed and occupied High Peak Scaffolding building.
- The Meadow House Way Road serving Plot 9A is bisected by the HS2 embankment; no bridge structure or other route protection on how to access the development plots here are shown.
- A new road from Buttermilk Lane across part of the former Coalite site will be required to provide a replacement access road to the Bolsover Household Waste Recycling Centre. The remaining plots on Plot 9A are blighted until the design is confirmed. Access to these plots in the short and long term will need to be maintained.
- The HS2 route prevents the development of these plots and thereby prevents attraction of private sector investment and the creation of employment opportunities.
- The elevation of HS2 across Plot 9A is shown at approximately the same height as the current High Peak Scaffolding building.
- Utilities exist within the Meadow House Road highway corridor.

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### **Buttermilk Lane**

- 1.5** A new bridge is proposed to carry HS2 across Buttermilk Lane approximately 9m above the existing level.

#### **Issues**

- A pumped rising main serving the Council's water treatment lagoons runs parallel to Buttermilk Lane. This would either need diverting or be accommodated within wider span bridge.
- The Council have a maintenance track running along the toe of the slope to the south tip parallel to Buttermilk Lane. This is at a higher elevation to the levels at Buttermilk Lane. There may not be sufficient headroom to allow continued use of the track.
- This road is the main highway route connecting Shuttlewood and the proposed new housing and commercial centre being developed on the former Coalite site, with the M1 Motorway at Junction 29A.

### **South Tip**

- 1.6** The line of HS2 enters the south tip immediately off Buttermilk Lane at approximately one third of the current tip height. The proposals show a railway cutting up to 18m in depth.

#### **Issues**

- The design does not appear to recognise that this is a former colliery tip and therefore not as stable as natural ground. Compaction may be required below the route of the HS2, whilst shallower gradients in the cutting slopes may be required.
- The proposals do not acknowledge the changes in ground level resulting from the Council's restoration works. Added soil has raised the levels by up to 4m in height.
- The proposals do not acknowledge the extent of landscaping and other planting that has already taken place on this site which acts as a screen to development on Markham Vale from views from Bolsover Castle.
- No acknowledgement of the work already completed and further proposed to extend the South Tip northwards to act as a screen to the Green Giant site (Plot 1).
- This improved landscape undertaken at considerable public costs is part of our "offer" to potential new occupiers. Undoing this could hamper efforts to attract new private sector investment and create new employment opportunities.
- Requirement for shallower gradients and any increased depth will result in a much greater width of cutting.
- The HS2 proposals do not acknowledge the heavily contaminated nature of the material in the South Tip and how/where this large volume will be treated/disposed of. A plan of the "Location of Buried Lagoons within the South Tip" is available on request.
- A large cutting through the South Tip will interrupt the drainage paths of contaminated water which is collected and treated at the lagoons on Buttermilk Lane.
- The cutting through the South Tip splits the Council's land ownership in two thereby creating a new liability for the council.

**Plot 1 Green Giant**

- 1.7 The HS2 route runs along the eastern boundary of the Green Giant plot on an embankment at up to 18m high. See <http://www.markhamvale.co.uk/greengiant.php>.

**Issues**

- The footprint of the HS2 route has a width of up to 100m. Part of this is within the South Tip extension and some of it encroaches across a maintenance and drainage corridor and on to the Green Giant site. This encroachment varies between 50m wide at the south of the plot and 100m at its northern end. This will prevent the development of a 585,000 sq ft building that has planning approval and also precludes pursuing the development of a larger building, which has been the subject of a recent design review.
- See <http://www.sheffieldenterprisezone.co.uk/markham-vale> This plot benefits from Enterprise Zone status with Enhanced Capital Allowances for new private sector occupiers. The Green Giant plot was anticipated to create some 750 new employment opportunities and created at considerable public expense as the flagship plot for Markham Vale. Until the HS2 route is fixed, this plot cannot be effectively marketed, (entirety or in part). If the route is fixed on its current alignment the effect on this plot alone significantly reduces the development opportunities and at least 200 employment creating opportunities will be lost.
- Until detailed design of the embankment through this area has been completed, the actual width of land taken required cannot be accurately predicted thereby blighting the use of the Green Giant site for anything other than small units.
- A prospective employer was recently identified for this Plot. Outline proposals were submitted for an area approximately a third of its size, avoiding the land identified for the HS2 route. The occupier declined to invest and chose not to give feedback on his decision. It is suspected that the presence of the HS2 route and its anticipated construction had a negative impact, as well as the uncertainty of the actual boundary line of the HS2 route not being fixed. A slight movement in the boundary through this area would not have directly affected the building but would have had serious impacts on the yard area. There was therefore significant potential to hinder the economic activities of the distribution business.

**North Tip and Surface Water Storage Facility**

- 1.8 The HS2 route continues to run north on an embankment up to 19m in height.

**Issues**

- The proposed route makes no allowance for access to the North Tip. The only access that exists between the Council's landowning at Markham Vale between the main site and the North tip is across an existing route over the River Doe Lea and the Bolsover Branch Line at this location. Either an underpass will need to be provided or an alternative route secured.
- The Council is obliged to invest in Public Art at Markham Vale; one of the projects which have been widely consulted on is the Markham Horse. See item 1.18 below.
- Surface Water storage ponds, essential to the drainage of Markham Vale (East and West of the M1), are totally obliterated by proposed HS2 embankments. The ponds are located at the lowest point and collect all the surface water from both the Eastern and Western sides of Markham Vale prior to its discharge to the Doe Lea. There is no alternative location for this facility. One solution would be to replace the embankment with a viaduct, ie extending the proposed bridge over the M1 southwards by creating a 600m long viaduct.

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### **Plot 1 North**

- 1.9** The HS2 route runs immediately to the east on an embankment up to 19m in height as it approaches the M1 motorway.

#### **Issues**

- An occupier was recently identified for this development plot and negotiations are at an advanced stage. It is hoped that disruption caused by HS2 construction and the current uncertainties in route alignment will not dissuade them from relocating their business here and allow them to expand and create the employment opportunities required by central government.
- The route obliterates the planned rail sidings adjacent to this plot for use by occupiers on the Markham Site and already confirmed for use by Viridor who operate the existing and adjoining major waste management site.
- The HS2 route blocks off the Bolsover branch line thereby precluding rail use at Coalite.
- It is presumed that HS2 propose to use material excavated from the south tip as a balance fill for the embankment. However this material is unsuitable as engineering fill.
- The proposed embankment blocks the road to Viridor waste management facility at Erin landfill site on the opposite side of the M1. This road passes under the M1 and is the only access from the public highway network. Viridor will not be able to operate their business unless alternative access arrangements are provided.
- The bridge/viaduct extension option suggested above would address a number of issues identified in this locality.

### **Plot 2 North**

- 1.10** The HS2 route runs immediately to the north east on an embankment up to 19m in height as it approaches the M1 motorway.

#### **Issues**

- 1.11** An occupier was identified for this development plot and negotiations are at a detailed stage. The design includes a new access off Markham Lane to the plot. However, this access is quite close to the proposed HS2 line (embankment) and therefore HS2 Ltd will need to address access arrangements if the existing access point is disrupted.

### **M1 Motorway**

- 1.12** The proposals include a bridge over the motorway just north of the existing rail underpass. The bridge will be built approximately 9.5m above the motorway.

#### **Issues**

- It is not clear how the construction programme will be managed to mitigate delays on the M1 corridor and the negative impacts not just for businesses on Markham vale but also the wider area.

### **Markham Vale Reservoir**

- 1.13** The Markham Vale Reservoir is used to store rain and flood water when the River Doe Lea floods. It is required to reduce the chances of flooding further downstream. HS2 will need to seek the views of the Environment Agency which is responsible for the reservoir.

**Seymour Link Road**

- 1.14** From the motorway bridge, the HS2 route continues northwards towards the western side of Woodthorpe initially on a viaduct at 19.4m height as it leaves the M1 corridor reducing to a height of 12m.

**Issues**

- The HS2 viaduct crosses the route of the planned Seymour Link Road at approximately 8m high. This may provide sufficient clearance to accommodate the Western Link Road as the design currently stands. The HS2 route is only 5% designed so there is no guarantee that the current link design can be accommodated below HS2. These uncertainties are expected to continue for the next few years.
- The closure of the Bolsover branch line has been confirmed; but with protection of private rail sidings at Markham and Coalite. The HS2 proposals now preclude rail sidings at Markham as well as continued use of the branch line through and beyond the west side of Markham Vale to Bolsover. This together with the uncertainty of clearance below the HS2 route has forced the Council to redesign the Seymour Link Road; this is now underway and a revised planning application will be submitted. All this is needed to remove uncertainty of access to the Seymour phase of the Markham Vale regeneration project and enable the creation of employment opportunities.

**Seymour**

- 1.15** HS2 crosses the Doe Lea Valley and Seymour (Clowne) Branch Line with the continuation of the viaduct and then a short length of embankment approximately 13m high. It then leaves the Seymour site via a cutting between Woodthorpe Grange and close to the residential area of Woodthorpe.

**Issues**

- A corridor of between 25m and 100m wide is shaved off plot 13 reducing the size of available development land.
- HS2 Ltd has indicated that the proposed HS2 access to the Staveley Maintenance Depot will sever the branch line connectivity south of Staveley. This therefore prevents the development of a rail freight terminal at Seymour for which the Council has planning approval. This is in addition to the loss of the rail freight facility on the Markham East phase adjacent to Plot 1.

**Staveley**

- 1.16** The proposals include an Infrastructure Maintenance Depot at Staveley based on part of the Staveley Works area. Few details are provided on how this connects with the HS2 line other than a new junction and branch line shown heading towards the route of the existing branch line where it passes under Eckington Road at Hartington. The road over rail bridge at Eckington Road was recently constructed as part of the Staveley Northern Loop Road.

**Issues**

- No information on levels are provided so there is uncertainty if the existing branch line that serves Seymour and beyond to Oxcroft will remain open. If closed then the opportunity for rail sidings at Seymour are removed.
- The MEGZ planning application boundary includes the Eckington Road Bridge, the Staveley Northern Loop and the Chesterfield Canal in this area. One of the Planning Conditions stipulates that the Chesterfield Canal is restored to navigable standards. In addition to the Staveley Town Basin, bridge structures and a channel have been built to accommodate a restored navigable canal. The Council have incurred considerable costs and staff resources in developing detailed proposals for a new structure to pass under the existing branch line; which if completed will fulfil the MEGZ planning conditions.

**Markham Horse**

- [http://www.derbyshire.gov.uk/business/economic/markham/markham\\_horse/default.asp](http://www.derbyshire.gov.uk/business/economic/markham/markham_horse/default.asp);
- and <http://www.jofairfaxstudio.com/about>.

- 1.17** The design of the installation, by the internationally renowned artist Jo Fairfax is complete, as is the Marketing Plan for the installation. The Markham Horse was selected after a design competition partly for its marketing qualities in order to attract on-going investment to the Markham Vale site. The location was selected to be highly visible to users of the adjoining M1 motorway. In excess of 100,000 vehicles pass Markham Vale along the M1 thereby providing a massive audience.

**Issues**

- The 18m high embankment for HS2 is located directly in front of the Markham Horse and will totally eliminate the view of the horse from the M1 motorway.
- Considerable resources, time and costs have been incurred to date, in selecting and designing this installation to the point where installation was due to start.
- This marketing opportunity to put Markham Vale on the national and international map to aid regeneration has been lost as a result of the HS2 route passing between the M1 motorway and the location of the proposed artwork.

**Reduced Freight Developments**

- 1.18** The Council invested in a new road over rail bridge at Eckington Road, Staveley in 2010 in order to safeguard a rail freight route between the approved rail sidings at Markham Vale connecting to the wider rail network. These facilities comprise new sidings at Markham (Plot 1) and at Seymour to supplement existing facilities at Coalite and Oxcroft. Land has been acquired for both the Seymour and Markham Sidings and the first phases of work on the Markham sidings area has been completed. The Markham Sidings have been designed to provide rail freight options to Viridor (owner operators of Erin Landfill) and to new occupiers on Plot 1.
- 1.19** HS2 proposals to sever the branch line network south of Staveley where the HS2 route connects to the Staveley maintenance Depot, totally preclude the development of the planned rail freight facilities at Markham and Seymour – these facilities both have full planning approval.
- 1.20** Furthermore, the HS2 route through Markham Plot 1 North obliterate fully the planned sidings area by the construction of an embankment up to 20 metres high to the east of the M1 where it crosses the motorway. The Council request that HS2 consider the option to extend the viaduct crossing the M1 motorway southwards to enable the Markham rail freight siding to be developed as planned. This will also allow onward rail connection to proposed rail freight facilities at Coalite.