

Appendix K: Chesterfield Canal and HS2

- 1.1 Derbyshire County Council owns and manages a 5 mile navigable stretch of the Chesterfield Canal in Derbyshire which runs north and east from Chesterfield to Staveley. This waterway forms part of an on-going canal restoration programme which has been predominantly active since the early 1990's, largely driven by the county council in co-ordination with other member organisations of the Chesterfield Canal Partnership. Derbyshire County Council is the Navigation Authority for the Chesterfield Canal in Derbyshire.
- 1.2 The partnership's present objective is to restore the remaining 9 miles of derelict canal between Staveley and Kiveton with a view to making a re-connection to the Canal & Rivers Trust network. This will be the final link in restoring the canal to navigation between Chesterfield and West Stockwith, a total length of 46 miles. Once achieved, this will provide a long term, but significant regeneration opportunity for the north of the County. This forms the basis of a long term project to uplift the environmental quality of the area. It provides recreational opportunities on the water and towpath and economic development opportunities from water-based and water-side business.
- 1.3 To date 5 miles of continuous waterway have been restored to navigation, with the most recent addition being the construction of a small marina at the Staveley Town Basin site in 2012 (adjacent to the proposed HS2 IMD). This public grant funded work is being undertaken as part of the Markham Vale regeneration project. Work is presently underway to construct a new lock structure at the basin site using a combination of contractors and work party volunteers of the Chesterfield Canal Trust under the supervision of engineers from Derbyshire County Council. The council owns and manages the existing canal in water and is envisaged to do likewise for the continued restoration northwards within Derbyshire.
- 1.4 Restoration of a further separate length of the Chesterfield Canal at Renishaw was started in 2008 using a combination of European and UK grant funding and is an example of the on-going programme of restoration. Delivery of restoration is driven by land ownership and funding opportunities, and is guided by strategic and technical documents.
- 1.5 The Derbyshire Waterways Strategy (proposed for adoption in the Spring of 2014), provides the strategic overview and detail of the restoration is provided in Next Navigation West (Chesterfield Canal Partnership 2013). The indicative line of the route is recorded in the Local Plan.
- 1.6 The HS2 parallels the identified line for the restored Chesterfield Canal for much of the route from Staveley to Killamarsh. More specifically it crosses it in five places and in so doing potentially blocks the continuation of any restoration plans. Specific interaction is currently identified at:
 - Staveley where the IMD's spur overlies the line of the canal. SK43307506
 - Doe Lea Crossing of the Chesterfield Canal (Puddle Bank) Two crossings at SK43697533 and SK43877533
 - Renishaw, Hague Lane to Main Road, Renishaw SK44367731 to 44467811, length 0.81km
 - Birley Farm to Boiley Farm – severing a promoted walking route and line of the original canal SK44577874 to 44627979, length 1.05km
 - Old Boiley Bridge to Forge Lane, Killamarsh. SK44638010 to 44768083, length 0.74km
- 1.7 Severing the line of the canal restoration route at any point will negate the benefits highlighted above, preventing the development of an economically viable length of navigable waterway.

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- 1.8** We note that the base evidence produced in January 2013 contained numerous factual errors including:
- Maps accompanying the initial route did not show Staveley Town Basin;
 - Sections of Canal that were shown disused had been restored.
- Proposed way forward**
- 1.9** It is vital that continuity of the linear route of the Chesterfield Canal is retained or protected. Derbyshire County Council would not object to some realignment but the new route would need to facilitate navigation through curvature, continuity of level and headroom. It is essential that the HS2 line does not create a physical or financial barrier to this on-going programme and that consideration is given to its on-going restoration.
- 1.10** At the positions indicated, the line and level of HS2 and the developing Chesterfield Canal are in conflict. Due to their very nature, both the canal and HS2 have limiting criteria that influence their design. In terms of the canal, its operational water level is fixed along a single pound stretching between Staveley and Killamarsh. This is determined by re-utilising the original protected canal route which is fed solely from the River Rother at the upstream end of the canal.
- 1.11** An engineering solution needs to be sought whereby construction of the railway and the canal can be accommodated without any significant detriment to their operation. Any option that involves additional canal structures, water pumping facilities or other related infrastructure resulting from HS2 will need to be included as part of the project in addition to providing long term funding for running and maintenance costs. What is critical is continuity of navigable route, this with a minimum radius of curvature of 100m on the centre line of the canal and an absolute minimum of 3m clear headroom between water level and the underside of any HS2 structure over-spanning the canal at any intersect or crossing location. Similarly any crossing by HS2 under the canal would require a retained water depth of 1.5m within any structure.
- 1.12** Close to Staveley, the water level in the canal can be assumed at 54.1mOD, however east of the River Doe Lea and similarly alongside but east of the River Rother, the water level in the canal is fixed by current canal formation levels at 55.8mOD. It retains this pound level from Huggaster Farm, north east of Staveley right through to Killamarsh.
- 1.13** Also, where it is intended that the canal and HS2 run alongside one another ie at Renishaw and Killamarsh, then careful consideration must be given to providing a separating buffer zone (corridor) to eliminate or minimise the visual impact and noise resulting from HS2 on the scenic and tranquil setting of the canal and the Trans Pennine Way. Derbyshire County Council suggested an alternative route for HS2 at this location in advance of the consultation.
- 1.14** Maintaining continuity of the canal is essential, but equally, associated watercourses and rainwater run-off that would normally supply the canal along its length with water must also be considered and protected.
- 1.15** It is requested that HS2 engineers engage on an on-going basis with the relevant local authority officers throughout the duration of the project, to develop suitable mitigation measures to ensure that a mutually beneficial outcome can be effectively achieved.

Principles for HS2 to work alongside long term strategic projects

- 1.16** A number of principles have been adapted with reference to the Chesterfield Canal Trust. These principles are consistent with those for Greenways, (safe off-road routes for local people and visitors). It is requested that these be adopted in refining route options for HS2:-
- *Protection of existing and proposed routes* – the same protection that HS2 affords to rights of way and highways schemes should be afforded to the developing Greenways/ Waterways network and to planned Greenways creation/ Canal restoration. A continuous means of alternative access should be maintained during any construction.
 - *Mitigation* - there should be a presumption of betterment within the planning process as part of compensation of impacts to amenity, to environmental quality and to heritage features. Considering the HS2 project timescales, steps to secure advance mitigation should be sought, with designs appropriate to the local context.
 - *Minimum Conditions* – the minimum requirement will be to maintain a continuous through-route appropriate for the infrastructure user (Greenway, Canal etc)
 - *Heritage* - both natural and built heritage should be preserved in situ if possible and if not presumption of relocation to preserve its qualities should be secured.
 - *Blight* – by their very nature both Greenway and Waterway projects are long term with slow delivery. In terms of seeking either support or finance (grants), there should be no blight on future project development and neither Greenway nor Waterway project delivery costs should need to increase as a result of HS2.
- 1.17** Waterway development in particular is a very long term and costly process. Where there are specific interactions and mitigation is sought, then early construction of canal and structures prior to the completion of the HS2 line would be sought, in order to prevent delay. It is important that engineering and design discussions are maintained to enable both projects to proceed in parallel.
- 1.18** It is further noted that mitigation measures with a minimum number of structures and changes in level of the canal would be sought to minimise initial delivery and on-going future maintenance costs.
- 1.19** An ill-considered design could have a significant negative impact on these green infrastructure assets. This could adversely impact on the social and ecological integrity of the area and limit the economic potential of the trail and restored canal.

Other Stakeholders

- 1.20** Derbyshire County Council is a partner of the Chesterfield Canal Partnership which is a key cross-boundary stakeholder with a direct interest in the restoration of the canal.
- 1.21** The Chesterfield Canal Trust (CCT), established in 1996, acts to campaign for the restoration of the Chesterfield Canal and actively provides significant volunteer time to help manage, promote and activate the canal. Derbyshire County Council has a Memorandum of Understanding with the CCT for mutual support of activities to promote the canal.
- 1.22** It is notable that the Trans Pennine Trail and the line of the Chesterfield Canal (the Cuckoo Way promoted footpath) run in parallel for the length between Renishaw and Killamarsh. This underlines the further need to collaborate with officers on developing appropriate solutions which benefit both Greenway and Waterway assets.