

Resources and Fire & Rescue Overview and Scrutiny Committee

16 September 2020

HS2: Operational Considerations for Early Stage Construction

Recommendations

That the Resources and Fire & Rescue Overview and Scrutiny Committee:

1. Note the content of the report and agree the Service approach to operational planning for HS2 construction or advise an alternative course of action.
2. Acknowledge and build into their future considerations possible changes in the Service's response arrangements which may be necessitated by HS2 construction.

1.0 Purpose of the Report

- 1.1 To update Resources and Fire & Rescue OSC on the Service's approach to operational planning for HS2 construction.
- 1.2 To identify decisions that will be required as HS2 construction activity increases.

2.0 Options and Proposal

- 2.1 HS2 enters Warwickshire at Stoneton, travelling roughly North West through the County before leaving at Middleton, a more detailed account of the route is included in Section 6 of this report.
- 2.2 The route will require the realignment of existing roads, the construction of several tunnels through both boring and cut and cover techniques, the latter being also known as green tunnels, and the construction of a number of viaducts.
- 2.3 WFRS has been actively engaging with the HS2 project since 2016 with the Station Manager in Operational Planning as the nominated single point of contact (SPOC) for all areas relating to HS2. This has ensured a consistent approach and enabled WFRS participation in several HS2 project development groups such as Open Route, Tunnels, and Shafts & Portal buildings Quality, Design and Review (QDR) meetings on both regional and national levels.

- 2.4 The initial stages of HS2 site surveying and enabling works have had very little impact upon WFRS and, with ongoing uncertainty around the project's future, it has not been possible to carry out a detailed review and analysis of the Service's capacity to respond once construction begins in earnest.
- 2.5 Now that full approval has been given by the government a more stable approach to forward planning, engagement and particularly identification of training needs will be possible.
- 2.6 Positive engagement with the three HS2 contractors working in the area: Balfour Beatty VINCI, Laing Murphy and Cadent is well established with regards to works at their current sites and this is expected to continue as future sites and compounds are created along the route.

Effects on the Road Network and Response Times

- 2.7 At a local level, very good relationships with the WCC HS2 Traffic Liaison Group (TLG) have been established with both parties gaining a better understanding and appreciation of their respective priorities and perspectives. A coincidental benefit of working with TLG has been improved communications of road works and closure notifications from around the County which can impact directly on response times for WFRS.
- 2.8 In partnership with TLG we have identified a potential problem congestion due to HS2 construction traffic on the A5 leading to the M42. For WFRS this could have a considerable effect on responding from stations at Polesworth, Atherstone and Coleshill. Specific performance data is currently being collated and will be analysed against the predicted delays caused by the HS2 haulage route. A review of response options will be carried out by Service Control and Operational Planning and any amendments to mobilising processes will be put in place in advance of construction starting in this area.
- 2.9 The results of this piece of modelling and resultant changes to mobilising arrangements will be kept under constant review and adjusted as necessary. This will then be used as a pilot scheme to inform response modelling around HS2 construction sites across the County.
- 2.10 NB. It may be the case that current response standards cannot be maintained from existing WFRS fire stations during some phases of construction. Depending on the forecast severity of the effects temporary accommodation arrangements may have to be made for some crews. Details will be forthcoming if and when applicable.

Firefighting and Rescue Considerations

- 2.11 Attendance at regional, and national level meetings has allowed WFRS to influence development and design of firefighting features at the portal buildings (located at one end of a tunnel to support an emergency response) of which there are two proposed sites in Warwickshire.

- 2.12 To support an emergency response at a tunnel or viaduct (Coleshill area) WFRS are actively involved with development, by HS2, of an electrically operated trolley specifically for support emergency teams at the scene. This is still ongoing, and the final design will be then implemented across the entire HS2 route. Once details are finalised a training needs analysis will need to be carried out to ensure that crews, particularly local on call units, have appropriate time and access to maintain familiarity with emergency procedures for a variety of incident types.
- 2.13 One of the initial sites where work has been well underway for some time now in preparation for HS2, is the movement of main gas pipelines in the Coleshill area which has required 5 redirections of gas lines. Meetings and site visits having already taken place with officers and local crews, as well as confined space rescue exercises. This level of local engagement will be maintained and WFRS's intention is that it will be replicated at all significant HS2 sites within the County.
- 2.14 Of particular interest will be sites where work will be taking place below ground, notably the Long Itchington Wood tunnel where a Tunnel Boring Machine (TBM) will be in operation, and where significant structural work occurs high above ground for the construction of viaducts, particularly in the Coleshill / Kingsbury area. Regular operational response reviews will be made of such sites to enable early identification of any specific hazards or scenarios that may require specialised skills or equipment.
- 2.15 In addition to the operational reviews, site specific risk inspections (SSRI) will be taking place by operational crews. This will enable site familiarisation as well as recording site/building plans, production and processes that may be present and any risks or hazards that could be influential to an emergency response. The information captured will be recorded and made available to all WFRS crews through the appliance mobile data terminals (MDTs).
- 2.16 HS2 has been the focus of a number of direct-action protest groups, with individuals seeking to obstruct heavy plant by their presence. So far these occurrences within Warwickshire have been dealt with by HS2's on site security staff, with the incidents being treated as protester removal. With increasing levels of activity by both contractors and protestors it has to be considered likely that WFRS will be called to carry out a rescue in conditions which will be both physically and mentally challenging.

National and Regional

- 2.17 ACFO Barnaby Briggs is the National Fire Chiefs Council (NFCC) liaison officer with HS2, making regular reports into the national operations coordination committee and attending meetings as required.
- 2.18 Warwickshire FRS has also attended meetings to support our neighbouring services in preparation of the previously proposed Phase 2 plans for HS2. The Consequence Management Liaison Group meetings held in Derbyshire is attended by a number of key stake holder and partners including Police, Fire

and their LFR members to help identify and reduce future impacts and to share our experiences so far with Phase 1.

3.0 Financial Implications

- 3.1 This increased training requirement for on call staff will increase salary costs but until a training needs analysis (which itself requires more site-specific information) has been carried out it is not yet possible to quantify this. Work will be undertaken to estimate the impact and the timing of when any additional costs are likely to be incurred; and how costs in excess of budget will be met.
- 3.2 Similarly the need for any specialist rescue equipment has yet to be identified beyond the electric trollies mentioned above and so far, HS2 has shown a willingness to fund that equipment and the ongoing maintenance of it.
- 3.3 Temporary accommodation costs may be incurred if response times are unacceptably affected and it becomes necessary to relocate crews to mitigate the effects on the road network. This will need to be considered as part of the estimation of costs noted above.
- 3.4 An increase in the capacity of the operational planning department will be required as the construction work gathers pace if other areas of work are not to suffer. The likelihood is that this additional capacity will be required for a period of several years. The post holder will need to be operationally competent and experienced at incident command level 2 which would suggest either a current or recently retired Station Manager. This will also need to be considered as part of the estimation of costs noted above.

4.0 Analysis

- 4.1 Strengths – Good, strong relationships and communications with all key partners and agencies.
- 4.2 Weaknesses – Capacity to recourse the workloads involved with HS2 as it develops. This will need to be reviewed as the project gathers momentum.
- 4.3 Opportunities – Involvement to support national guidance towards operational tactics when dealing with rail incidents. - Training with teams and operators outside that of the emergency services.
- 4.4 Threats:
 - Road closures and additional road traffic adversely affecting response times.
 - Reputation; the Service being seen or represented as either supporting or opposing HS2, which will remain contentious for some years to come,

because its planning and exercising activities (against a “reasonable worst case scenario”) are not understood or are misrepresented.

5.0 Environmental Implications

- 5.1 There are no significant environmental implications of WFRS’s operational response to HS2, any other considerations are beyond the scope of this report.

6.0 Appendix: HS2 Route in more detail

- 6.1 HS2 enters Warwickshire at Stoneton, requiring the realignment of Banbury Road and building of the Oxford Canal viaduct. The next section, Radbourne, includes two viaducts before the line passes the south east outskirts of Southam, enters the Long Itchington Wood Green Tunnel and crosses the River Itchen viaduct.
- 6.2 The line then runs in a north westerly direction to the east of Offchurch and Cubbington, through Stoneleigh Business Park, before moving west between Kenilworth and Coventry. The route then passes through Burton Green, in a green tunnel, towards the Interchange Station in Solihull.
- 6.3 The North Warwickshire section passes to the west of Coleshill, as it crosses the M6 and M42 motorways, towards the Delta Junction and through Water Orton. The Delta Junction area of the route, to the North west of Coleshill, consists of three spurs: Main line, which runs south to north, the ‘Birmingham Spur’ which runs south to west and continues into the new Curzon Street Station in Birmingham, and the ‘North Cord’ joins the Birmingham Spur to the Main Line travelling north. The route north passes through Lea Marston where it splits to join the Phase 2b Leeds route in a north- easterly direction past Kingsbury. It continues north, past Middleton, where it leaves North Warwickshire.
- 6.4 Now construction is fully underway HS2 will become an increasingly significant operational consideration for WFRS. The steps we will take over the next 12 months as activity increases are set out below:
- Site Specific Risk Checks -The operational planning department will manage and plan future SSRC visits to HS2 Site/compounds as they are created. Ensuring all potential hazards and risks are identified, recorded and processed to support an emergency response.
 - Monitoring of traffic loads – Continue to work closely with TLG to create a process to identify high road traffic levels and to then pre-plan possible solutions to minimise the effect to emergency response times.

- Exercises – Liaise and Engage with contractors and blue lights partners to help identify operational response needs and gaps which can then be supported by additional training.
- Continue support to Local, regional, and National level groups and meetings

Background papers

None

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The report was circulated to the following members prior to publication:

Local Member(s): None

Other members:

Councillors Boad, Crump, Falp, O'Rourke, Singh Birdi and Warwick.