

HS2 safeguarding maps (Fradley to Crewe): general notes on draft safeguarded area

Introduction

HS2 Ltd has taken a number of steps to refine the route following the end of the Phase Two consultation in January 2014. These refinements were informed by:

- feedback from consultation;
- further exploration and updated design standards to reduce the impacts of necessary changes; and
- design development (where HS2 Ltd has anticipated later design development work and learned lessons from Phase One).

The proposed safeguarded zone for Fradley to Crewe has been informed by this work.

Please note that the inclusion of land within safeguarding does not necessarily mean that it will be used by the project; fundamentally, safeguarding is a precautionary measure. For a fuller explanation of what safeguarding is and what its implications are, please refer to the main HS2 Ltd safeguarding consultation document.

1 Overall approach to safeguarding

Description of approach

The 'standard' width of the safeguarding corridor is 60m either side of the centreline where there is standard track separation. This distance is varied, where appropriate, to reflect the needs of the railway in that particular location (including in the instances described below).

Explanation of approach

Our approach to the proposed safeguarded area from Fradley to Crewe is broadly similar to that originally adopted for Phase One in July 2013. As with Phase One, the approach has been applied consistently across the route.

At the current level of design, any safeguarding is by necessity, an estimation of likely future requirements. As such, at this stage in the development of the project, the proposed 'standard' distance reflects HS2 Ltd's judgement of our typical engineering and planning need for land to build and operate the railway. It includes the land and property which HS2 Ltd currently believes will need to be acquired for the scheme. HS2 Ltd considers that the proposed standard distance offers the best balance between the need to protect land and property for construction and operational purposes, and the legitimate entitlement of land owners not to have their right to develop infringed upon unnecessarily.

A narrower corridor would run a significantly higher risk that some subsequent developments would interfere with HS2 Ltd's needs. A wider corridor would place greater restrictions on development on the land adjacent to HS2, without significantly reducing the risks to the project.

2 Maintenance loops

Description of approach

A wider safeguarding corridor of 60m either side of the centreline has been allowed in order to accommodate the maintenance loops.

Explanation of approach

Maintenance loops are a series of sidings used to provide stabling for maintenance trains that are required for operational maintenance work, and for failed trains that cannot be pushed through to the next station, thereby allowing the line to be cleared with limited delay.

These maintenance loops have now been incorporated into the alignment and have therefore been included as part of the safeguarding process.

3 Cuttings and embankments

Description of approach

A wider safeguarding corridor of 70m either side of the centreline has been allowed for cuttings deeper than 16m and embankments higher than 16m.

Explanation of approach

At this level of design, it is estimated that cuttings deeper than 16m and embankments higher than 16m will require a wider corridor than the standard 60m either side of the centreline to accommodate the railway plus earthworks slopes (currently assumed to be 1:2.5). Additional space over and above the standard corridor has been included to accommodate the additional earthworks.

4 Bored tunnels

Description of approach

Where the route is in bored tunnel, the standard width of the safeguarding corridor is 30m either side of the physical tunnel corridor and is subsurface interest only.

Explanation of approach

The 'standard' safeguarding corridor used where the route is in bored tunnel is 30m from either side of each physical bored tunnel corridor (tunnels are twin bore). The distance of 30m is proposed as being a reasonable balance between the need to protect the route alignment from conflicting developments and the aim to avoid unnecessary constraints on other developments. Safeguarding for tunnelled sections is included as 'subsurface interest only'. This means that HS2 Ltd is typically only interested in being consulted on developments that extend beneath the ground, at any depth, and could therefore impact upon its ability to construct its tunnels.

At this stage in design we do not anticipate a change in the location of tunnel portals, however we cannot be certain until aerodynamic modelling is undertaken at a later stage. Along the line of

route, therefore, the start and finish of subsurface safeguarding is approximately 100m into the bored tunnel area, such that tunnel portals would be in surface safeguarding to allow some flexibility of design.

5 Approaching bored tunnels

Description of approach

Extra land has been safeguarded where the tracks diverge on the approach to twin bored tunnels.

Explanation of approach

Where the tracks diverge on approach to twin bored tunnels, the safeguarding zone extends further away from each track, up to 70m either side of the centreline. Where the earthworks extend outside this corridor, due to the depth of cutting on approach to tunnels, a wider safeguarding area of 90m either side of the centreline has been allowed.

6 Running parallel to existing rail lines

Description of approach

Land has not been included on the other side of an existing operational railway.

Explanation of approach

When running parallel to an existing operational railway, the safeguarding corridor includes the existing railway but not any land beyond the existing railway, even if it falls within the standard distance corridor (see 1, above). However, construction requirements have not yet been factored into safeguarding. At this early stage in the design, land on the other side of the railway has not been identified for use.

A wider safeguarding corridor of 100m has been allowed from the centreline of the HS2 mainline away from the existing railway, in order to facilitate access and construction in an area constrained by existing rail infrastructure.

7 Depots

Description of approach

Depot footprints have been safeguarded.

Explanation of approach

Land required for the operational footprint of depots has been safeguarded. This may be subject to future revisions to the safeguarding directions, as the Secretary of State considers appropriate and proportionate.

8 Highways crossings, access and other works

Description of approach

No extra safeguarding area has been allowed for highways crossings, access or other works including construction requirements.

Explanation of approach

No significance should be read into the fact that the safeguarding maps have not typically been adjusted to account for potential additional works other than those already identified. Highways crossings, access and other works including construction compounds, have yet to be designed and further development work is ongoing. These requirements will be developed at the next stage of design, and future planning work will identify additional sites to those safeguarded at this stage. These are likely to be the subject of future revisions to the safeguarding directions, as the Secretary of State considers appropriate and proportionate.

HS2 Safeguarding maps (Fradley to Crewe): location-specific notes on draft safeguarded area

Key plan map

General description

Map covering the route between Fradley and Crewe, showing the areas covered by each individual map – Document number LMH-HS2-PL-MAP-210-000021. (Note that the county and local authority names at the top of the maps are not the titles for the maps)

Map SG-02-001. Connection with Phase One at Fradley

General description

Safeguarding Consultation map showing connection with Phase One at Fradley – Document number LMH-HS2-PL-MAP-210-000004.

Explanatory notes

Safeguarded corridor is essentially a continuation of Phase One safeguarding zone depicted in hatched shading. Land is included at the standard distance of 60m either side of the centreline (see general note 1, above). Surface interest only.

Map SG-02-002. King's Bromley and Pipe Ridware

General description

Safeguarding Consultation map showing King's Bromley and Pipe Ridware – Document number LMH-HS2-PL-MAP-210-000005.

Explanatory notes

Land is included at the standard distance of 60m either side of the centreline (see general note 1, above), until it reaches Pipe Ridware where it is extended to 90m on either side of the centreline to accommodate the maintenance loops. Surface interest only.

Map SG-02-003. Blithbury

General description

Safeguarding Consultation map showing Blithbury – Document number LMH-HS2-PL-MAP-210-000006.

Explanatory notes

The surface interest at the right-hand side of the map covers an extended width of 90m on either side of the centreline to accommodate the maintenance loops (see general note 2, above), until it reverts to the standard corridor on the line of route (see general note 1, above). This continues until just beyond the B5014, Uttoxeter Road, where the corridor is widened to 70m on either side of the centreline to accommodate deep cutting (see general note 3, above). The surface safeguarding zone then reverts again to the standard corridor width. Surface interest only.

Map SG-02-004. Colton and Stockwell Heath

General description

Safeguarding Consultation map showing Colton and Stockwell Heath – Document number LMH-HS2-PL-MAP-210-000007.

Explanatory notes

Land is included at the standard distance of 60m either side of the centreline (see general note 1, above). Surface interest only.

Map SG-02-005. Great Haywood

General description

Safeguarding Consultation map showing Great Haywood – Document number LMH-HS2-PL-MAP-210-000008.

Explanatory notes

The surface interest at the right hand side of the map covers the standard width (see general note 1, above) until Moreton where it is extended to a width of 70m on either side of the centreline to accommodate deep cutting (see general note 3, above). The surface interest then reverts to the standard width. Surface interest only.

Map SG-02-006. Ingestre

General description

Safeguarding Consultation map showing Ingestre – Document number LMH-HS2-PL-MAP-210-000009.

Explanatory notes

Land is included at the standard distance of 60m either side of the centreline (see general note 1, above) until just south of Hanyards Lane where it is extended to 70m either side of the centreline to accommodate deep cutting (see general note 3, above) until it reverts back to the standard width. Surface interest only.

Map SG-02-007. Hopton and Staffordshire County Showground

General description

Safeguarding Consultation map showing Hopton and Staffordshire County Showground – Document number LMH-HS2-PL-MAP-210-000010.

Explanatory notes

Land is included at the standard distance of 60m either side of the centreline (see general note 1, above). Just after the A518, Weston Road, it is extended to 70m either side of the centreline to accommodate deep cutting (see general note 3, above) until it reverts back to the standard width of 60m either side of the centreline. It then widens again to 70m either side of the centreline just before Hopton Lane to accommodate deep cutting until reverting back to the standard width. Surface interest only.

Map SG-02-008. Marston and Yarlet

General description

Safeguarding Consultation map showing Marston and Yarlet – Document number LMH-HS2-PL-MAP-210-000011.

Explanatory notes

Land is included at the standard distance of 60m either side of the centre line (see general note 1, above). Just before the A34 it is extended to 70m either side of the centre line to accommodate deep cutting (see general note 3, above) until it reverts back to the standard width. Surface interest only.

Map SG-02-009. Pirehill

General description

Safeguarding Consultation map showing Pirehill – Document number LMH-HS2-PL-MAP-210-000012.

Explanatory notes

Land is included at the standard distance of 60m either side of the centreline (see general note 1, above) extending to 70m either side of the centreline for a short distance, to the north of the A34, to accommodate deep cutting (see general note 3, above). Surface interest only.

Map SG-02-010. Yarnfield Lane and M6 crossing

General description

Safeguarding Consultation map showing Yarnfield Lane and M6 crossing – Document number LMH-HS2-PL-MAP-210-000013

Explanatory notes

Land is included at the standard distance of 60m either side of the centreline (see general note 1, above). Surface interest only.

Map SG-02-011. Swynnerton

General description

Safeguarding Consultation map showing Swynnerton – Document number LMH-HS2-PL-MAP-210-000014.

Explanatory notes

Land is included at the standard distance of 60m either side of the centreline (see general note 1, above). Just before the A51 it is extended to 70m either side of the centreline to accommodate deep cutting (see general note 3, above) until it reverts back to the standard width just before the A519. Surface interest only.

Map SG-02-012. From Swynnerton to Whitmore

General description

Safeguarding Consultation map showing route from Swynnerton to Whitmore – Document number LMH-HS2-PL-MAP-210-000015.

Explanatory notes

Land is included at the standard distance of 60m either side of the centreline (see general note 1, above). Surface interest only.

Map SG-02-013. Whitmore and Baldwin's Gate

General description

Safeguarding Consultation map showing Whitmore and Baldwin's Gate – Document number LMH-HS2-PL-MAP-210-000016.

Explanatory notes

Surface interest: Land is included within a diverging corridor on approach to the bored tunnel, up to a maximum distance of 70m either side of the centreline just before Whitmore Heath. At this point it is extended to 90m either side of the centreline to accommodate earthworks for deep cuttings at the tunnel portal (see general note 5, above). This widened corridor is reinstated just after Birch Tree Lane to accommodate the portal at the northern end of the bored tunnel, after which it reverts back to a distance of 70m either side of the centreline, recognising the additional track spacing required to accommodate the bored tunnel (see general note 5 above). This wider track spacing is maintained northwards to the tunnel at Madeley.

Sub-surface interest: The route of the proposed HS2 twin bored tunnel under Whitmore Heath is included as subsurface interest only at a standard distance of 30m either side of each bore (see general note 4, above).

Map SG-02-014. Madeley

General description

Safeguarding Consultation map showing Madeley – Document number LMH-HS2-PL-MAP-210-000017

Explanatory notes

Surface interest: Land is included at a distance of up to 70m either side of the centreline to accommodate slightly wider track spacing between the twin bored tunnels at Whitmore Heath and Madeley. This distance of 70m either side of the centreline continues to the north of the A525, Bar Hill, and includes 100m into the tunnel at Madeley so that the southern tunnel portal would be in surface safeguarding (see general point 4, above).

A wider distance of 90m either side of the centreline is included to the north of Bower End Lane to accommodate earthworks for deep cuttings on approach to the northern tunnel portal and for the portal itself (see general note 5, above). The safeguarding corridor then reverts back to a distance of 70m either side of the centreline, recognising the additional track spacing required to accommodate the bored tunnel, before beginning to narrow as the tracks converge to the north, away from the tunnel (see general note 5, above).

Sub-surface interest: The route of the proposed HS2 twin bored tunnel near Madeley is included as subsurface interest only at a standard distance of 30m either side of each bore (see general note 4, above).

Map SG-02-015. North of Madeley

General description

Safeguarding Consultation map showing north of Madeley – Document number LMH-HS2-PL-MAP-210-000018.

Explanatory notes

Land is included within a converging corridor moving away from the twin bored tunnel at Madeley (see general note 5, above), narrowing from a distance of 70m either side of the centreline to the standard distance of 60m either side of the centreline (see general note 1, above). Surface interest only.

Map SG-02-016. Hough and Chorlton

General description

Safeguarding Consultation map showing Hough and Chorlton – Document number LMH-HS2-PL-MAP-210-000019.

Explanatory notes

Land is included at the standard distance of 60m either side of the centreline (see general note 1, above) until the safeguarding corridor meets the existing West Coast Main Line. From this point north, the corridor extends 100m to the west of the HS2 centreline and follows the West Coast Main Line to the east, including existing railway land (see note 6, above). Surface interest only.

Map SG-02-017. Weston and Basford

General description

Safeguarding Consultation map showing Weston and Basford – Document number LMH-HS2-PL-MAP-210-000020.

Explanatory notes

Land is included 100m to the west of the HS2 centreline and follows the West Coast Main Line to the east (see note 6, above), finishing where the HS2 mainline cutting would end (before the route would continue in tunnel, north towards Manchester, to complete the western leg of Phase Two).

The footprint of the Infrastructure Maintenance Depot is also included (see note 7, above). Surface interest only.