

M54/M6 Link Road

Local Impact Report

Prepared by

Staffordshire County Council



October 2020

M54/M6 – Link Road Local Impact Report

1. Purpose of the Report

- 1.1 This report is prepared by Staffordshire County Council and provides an evaluation of the local impacts of the M54/M6 Link Road Development Consent Order for the construction, operation and maintenance of a link road connecting the M54 at Junction 1 to the M6 at Junction 11. The report has been prepared in accordance with the Planning Inspectorate Advice Note on Local Impact Reports and the published guidance of the Planning Officers Society.

2. Site Description and surroundings

- 2.1 The scheme is located within the district of South Staffordshire in the County of Staffordshire with a very small area of the Order limits within the City of Wolverhampton Council.
- 2.2 It sits to the East of the villages for Featherstone, Shareshill, Little Saredon and Great Saredon between the M54, M6 and the existing A460.
- 2.3 The scheme is within the West Midlands Green Belt, in a predominantly rural area consisting mainly of mixed agricultural land and scattered woodland.
- 2.4 The proposed DCO boundary encompasses sections of the M54, M6, A460, A462, and local roads: including Hilton Lane and Dark Lane which are both crossed by the proposed link road. Hilton Cross Business Park and an Industrial Estate lie to the immediate north of the M54 Junction 1 and just fall outside of the site area, that said areas of Dark Lane, Hilton Lane, along with the Historic Park land in association with Hilton Hall fall within.
- 2.5 A detailed description of the site and its surroundings is set out in the application documents.

3. Details of the Proposal

- 3.1 The scheme put forward by Highways England is to address the issues created by the fact that there is no direct strategic route from the M54 to the M6 North. Road users wanting to access the M6 north or M6 Toll have to use local roads such as the A460 and other nearby roads. This results in a large volume of long-distance traffic using the A460, which is a local road and operating at capacity.
- 3.2 The A460 is a single lane carriageway with numerous junctions and stretches of road with a 30mph speed limit. This road was not designed for the amount and type of traffic currently using it and results in delays, congestion and accident rates above the national average. It is therefore proposed that the new link road will alleviate these capacity issues and improve connectivity. It is anticipated that

investment in additional capacity will support local economic growth for South Staffordshire and surrounding areas being Telford, Shrewsbury, Wolverhampton, Cannock and Tamworth

- 3.3 The precise details are set out in the application documents and the numbered works within the Development Consent Order.

4. Relevant County Planning History and Proposals Under Consideration

- 4.1 The following planning applications related to minerals are considered to be relevant material considerations:

- SS.12/05/6002 W dated 17 August 2012 for Installation of 1 No. control cabinet; 3 bollards; bauer connection and access track at Shareshill Sewage Pumping Station (SPS), Cannock Road; and
- Land at Hilton Park Quarry, Hilton

5. Relevant County Planning Policy

- 5.1 Minerals Local Plan for Staffordshire (2015 -2030)
- Policy 1: Provision for Sand and Gravel
 - Policy 3: Safeguarding Minerals of Local and National Importance and Important Infrastructure
 - Policy 6: Restoration of Mineral Sites
- 5.2 The Staffordshire and Stoke-on-Trent Joint Waste Local Plan (2010 -2026)
- Policy 1: Waste as a resource
 - Policy 4: Sustainable design and protection and improvement of environmental quality

Assessment of prospective impact of the project

6. Highways and Transportation - Impacts on the Local Highway Network

- 6.1 The proposed new link road is strongly supported by the county council and it is understood that it will take considerable pressure off the existing strategic and local highway network in the vicinity of Featherstone and Shareshill as well as potentially reducing traffic effects on other local communities at Cheslyn Hay and Great Wyrley. The county council has worked closely with Highways England on developing this scheme since 2015 when the council responded to the route options consultation.
- 6.2 The new link will provide a significant strategic connectivity improvement between the M54 and M6 south of Cannock, taking traffic pressures off the local highway network serving communities at Featherstone and Shareshill. The county council is aware of the historic issues and proposals relating to the A460 including

previous consideration of carriageway widening to increase traffic capacity and has been seeking improvements for many years.

- 6.3 The county council is also aware of the issues caused by the current volume and composition of traffic on the A460 which cause significant concerns for local communities. The new route should alleviate some of these local pressures as well as supporting economic growth. Retaining the existing A460 as a parallel route will enable connectivity to local communities and access to properties for local traffic to be maintained.
- 6.4 Transport issues raised by local communities via the Strategic Community Infrastructure Manager include:
- Access for residents of Shreshill onto the A460, specifically from Church Road and Old Cannock Road. Drivers turning onto the A460 from side road junctions often experience long delays and difficulties in making these movements, especially during peak traffic flow periods and when they are attempting to turn right out of side road junctions. This leads to journey time delays and can lead to safety issues as drivers become impatient waiting for a gap to access the A460 during periods of heavy traffic flow.
 - Road safety issues on the A460 between Featherstone and Shreshill. Local communities have raised safety concerns for pedestrians and cycling using this corridor especially when crossing the carriageway. There are also some incidents of vehicular collisions at side road junctions where drivers are attempting to enter the main carriageway. Local residents have also raised safety concerns associated with the number of Heavy Goods Vehicles using the route making walking and cycling much less attractive.
 - Access onto the A460 from The Avenue at Featherstone. Local residents have raised the issue of vehicle delays and safety concerns when trying to turn onto the A460 from the The Avenue. The proximity of the side road junction to the M54 roundabout junction has been mentioned as it is considered vehicles from the M54 junction tend to travel at excess speed, making access from The Avenue even more difficult, especially at peak periods.
 - Heavy Goods Vehicles (HGVs) using unsuitable routes. Local residents have raised concerns that HGVs are frequently using less appropriate routes away from the main carriageway and that HGV volumes on the A460 are significant. They are considered to cause severance issues and make the corridor unattractive to walkers and cyclists. To reduce this issue a zonal weight restriction was introduced in 2012.
 - Excessive vehicle speeds along the A460. Vehicles entering Featherstone from the M54 junction were considered to be travelling at inappropriate speeds, causing safety concerns especially for drivers accessing the A460 from side roads such as The Avenue. A new 30mph speed limit was introduced at Featherstone to alleviate this issue.
 - Congestion issues at M54 junction 1, especially at periods of peak vehicle flow. These cause traffic delays and make journey times less reliable. Local

residents specially mentioned issues with unreliable commuting times when travelling to and from work.

- Severance issues for pedestrians and cyclists experienced particularly around the Dark Lane junction. These were felt to be caused by traffic levels and number of HGVs using the A460. The A460/Dark Lane/New Road junction does have some pedestrian crossing facilities but these are limited to the New Road and A460 (N) arms of the junction. Pedestrians also felt it was undesirable to wait on the refuge in the centre of the A460 as they have to cross in two stages. Pedestrians and cyclists not only find it difficult to cross the A460 but also unattractive to travel along or adjacent to it due to high traffic levels and the proportion of heavy vehicles using the route.
- Traffic congestion at A460/New Road junction. At peak times of traffic demand this junction experiences significant delays and congestion making journey times unreliable and causing traffic queues on both New Road and the A460 main carriageway. Idling vehicles are also considered to reduce air quality around the junction for local residents.
- Inadequate footway provisions and unattractive environment for walking and cycling caused by high traffic volumes and HGV flows. Although there are some footway provisions on this section of the A460 for the majority of its length they vary in quality and width. They are not present on both sides of the carriageway for the full length of the corridor and widths tend to vary significantly. In places where footways run closer to the edge of carriageway they are considered particularly unattractive for pedestrians.
- Anti-social behaviour at existing laybys. The presence of the laybys on the A460 in the vicinity of Shareshill tends to attract some anti-social behaviour such as littering and overnight HGV parking, with residents mentioning that some drivers leave engines running into the night. The proposed new link road and associated re-classification of the A460 provides the opportunity to remove the layby as its use by pass by traffic will diminish. The submitted plan do not provide for this which is a negative impact and should be re-considered.
- Access difficulties emerging from Hilton Lane, Shareshill onto A460. Residents have mentioned safety concerns when turning onto the A460 from Hilton Lane. The junction is considered to have some visibility issues and vehicles on the A460 at this location are often considered to be travelling at inappropriate speeds creating a safety issue. During peak traffic flow periods residents have mentioned that it is extremely difficult to turn onto the A460 from Hilton Lane.
- Safety concerns over HGV turning movements when accessing/egressing M6 Diesel fuel stop. Large vehicle turning onto the A460 after using the M6 Diesel filling station are considered to frequently cause safety problems as they sometimes block the carriageway whilst turning and make these manoeuvres very slowly causing vehicles to brake hard to avoid collisions.
- Traffic congestion on approach to M6 junction 11 and on the gyratory. At peak periods of traffic flow this junction becomes congested both on the approach from the A460 but also on the circulatory carriageway of the junction. This

causes journey delays and makes journey times less reliable, particularly relevant to local residents making commuter trips.

- 6.5 The proposed new link road would have significant effects on the pattern of vehicle movements in relation to the local highway network. The new junction layouts at M6 junction 11 and M54 junction 1 in combination of the new link road are intended to alleviate congestion and reduce delay. The scheme has been modelled to assess likely changes in traffic flow and network performance.
- 6.6 Two future scenarios were modelled, do-minimum – no improvements delivered and do-something – junction improvements and new link road built. The county council notes that the modelling has been undertaken in accordance with the guidance for major schemes and have the following specific comments on the findings of the transport modelling work:
- The A41 near Perton is identified as experiencing an increase in traffic flow as a result of the scheme, although clarity is required as to the level of impact during the morning and afternoon peak hours. This route, and particularly the junction with A41 / Wrottesley Park Road / Heath House Lane, currently suffers from capacity issues in the peak hours and recent work has been undertaken to develop a scheme capable of accommodating additional traffic from new developments proposed during the adopted Local Plan period. Both the existing junction and the proposed improvement scheme have little, if any, spare capacity for additional traffic so any increase in traffic associated with Highways England's scheme could have a negative effect on this junction.
 - The A460 north of Hednesford is identified as experiencing an increase in average daily traffic of 660 vehicles although there are no identified significant capacity issues at this location at this time. The impacts on the A460 north of Hednesford are therefore considered neutral.
 - The A5 west of Tamworth is identified as experiencing an increase in traffic as a result of the scheme, although the level of impact at peak times needs to be clarified. This additional traffic pressure is in the vicinity of the already congested M42 junction 10. It is likely that the results of the additional traffic on this section of the A5 will be negative and require assessment.
 - Significant increases in daily vehicle flow have been identified on the A4601 and A460 between the A5 and M6 junction 11, and these are very likely to have negative effects on the local road network in terms of vehicle queues and delays which may lead to a need for highway improvements.
 - The A460 Lodge Lane Link experiences a large increase in daily traffic but this does not match the volumes identified for the Churchbridge interchange at Cannock in the Highways England report. The Churchbridge interchange is very sensitive to increases in traffic due to existing traffic capacity issues and the increases reported on Lodge Lane Link could lead to a negative impact at this location in terms of vehicle queues and delays.
 - The A460 west of Cannock experiences an increase in average daily traffic 1300 vehicles although no peak hour impact is identified. This section of the A460 serves the MacArthur Glen retail outlet at Cannock which is currently under construction. The impacts of both the new outlet and the additional traffic as a result of the scheme are considered likely to have some negative effects

on traffic capacity of the A460 west of Cannock which may lead to unreliable journey times and delays.

- Significant increases in daily traffic are reported from the Highways England modelling work on Hilton Lane, as well as smaller increases at Shareshill. This may have significant negative effects on the operation of the local highway network leading to vehicle delays and queuing.

6.7 The county council has a number of comments regarding the transport assessment and has identified some key local issues as follows:

- The presence of the M6 Diesel filling station may mean HGVs continue to use the A460 along its entire length between the M6 and M54 for access to this facility which will reduce the effectiveness of the new link road in taking traffic, especially larger vehicles off the existing route. This is considered a negative impact.
- The opportunity to enhance facilities for pedestrians and cyclists along the A460, providing connectivity benefits for the communities of Featherstone and Shareshill should be taken in order to deliver optimum benefits.
- An understanding of the potential knock-on effects of the new link in terms of traffic pressures at Churchbridge interchange, Cannock and on the A4601 in the vicinity of Wedges Mills would be beneficial as no detailed modelling work has been completed and no mitigation measures are currently proposed.

6.8 Whilst, the county council acknowledges the proposals for NMU facilities at the M54 junction 1 it is noted that these extend the current pedestrian/cycle distance between Featherstone and Hilton Cross as set out in the TA paragraphs 6.2.3-6.2.6. this will have a negative impact over the current situation. It is suggested that consideration should be given to incorporation of the more direct route (following the original alignment of the A460) within the junction design to shorten the walking distance between Featherstone and the employment offer at Hilton Cross.

6.9 Provision for pedestrians and cyclists at M6 junction 11 as well as improved links to Cheslyn Hay are supported. However, given that there are no proposals to provide pedestrian or cycle facilities along the new link it would seem most appropriate to also consider provision of shared use facilities along the existing A460 where traffic levels are forecast to be significantly reduced and the environment more pleasant for sustainable travel, as well as offering greater connectivity to local communities. Such a route would also need to consider safe crossing facilities for users and links to the National Cycle Network. These facilities could be located near the junctions of Hilton Lane, Church Road, New Road and The Avenue although further investigations would be required to define exact locations.

6.10 In terms of public transport it is noted that no significant long term effects to services are identified although there will be a requirement to provide adequate new waiting facilities at specific locations. The reduction in traffic pressure on the existing A460 is hoped to offer significant benefits for public transport reliability and encourage sustainable travel.

- 6.11 Whilst the scheme provides welcome relief to the existing A460 between M54 junction 1 and M6 junction 11, a number of knock-on effects and local impacts have been identified. It is suggested that future strategic assessments and interventions are undertaken within planned Highways England Road Investment Strategies to identify and develop appropriate mitigation packages.

7. Ecology

- 7.1 The construction of the M6 / M54 link road will have an impact on the biodiversity of the area. There are two designated biodiversity sites which will be directly impacted by the proposed scheme. 0.364 ha of Ancient Woodland (considered irreplaceable habitat) will be lost. Other features present which will be affected include grassland, arable land, watercourses, pools, mature trees and hedges.

Description

- 7.2 The area comprises farmland and parkland, with woodland pools and small watercourses. Some field and lane boundaries are marked by hedges and there are also mature and veteran trees. Designated sites within the development boundary include Brookfield Farm (north-east of) and Lower Pool (Local Wildlife Sites) which are of importance for open water and woodland habitats. Species of note recorded from the site or immediately adjacent include otter and water vole (Latherford Brook), lapwing, skylark, native bluebell, great crested newt, bats and badger.
- 7.3 Ecological surveys have noted that the following habitats are present (summary data, figures rounded to one d.p.):

	<i>Habitat to be retained (ha)</i>	<i>Habitat to be lost (ha)</i>
<i>Broad-leaved semi-natural woodland</i>	3.8	1.2
<i>Broad-leaved plantation</i>	44.4	16.6
<i>Mixed plantation</i>	0.5	2.6
<i>Improved grassland</i>	6.7	28.4
<i>Poor semi-improved grassland</i>	5.7	2.5
<i>Standing water</i>	1	1.3
<i>Arable</i>	6.9	37.6

Linear habitats:

	Habitat to be retained (m)	Habitat to be lost (m)
Hedges: linear trees	204	0
Hedges: native species rich intact hedge	1154	1403
Hedges: intact hedge	1715	1043
Hedges: defunct hedge	887	819
Running water	1120	350

- 7.4 Regarding trees, of 362 individual trees recorded, 151 will be lost. However, seven veteran trees will be retained and protected.
- 7.5 Of 146 groups of trees, 62 groups and 17 partial groups will be lost. 12 woodland groups were recorded, of which 3 groups and 4 partial groups will be lost (covered also under habitats table above.)
- 7.6 The major group of species found on site is bats. Ten of the county's 12 species were recorded from the site, including feeding and commuting activity and 3 species in on-site roosts. Direct impacts on roosts and on feeding activity are expected. Feeding activity of bats is also likely to be disrupted, however the scheme will remain unlit, except around junctions.
- 7.7 Otters and water vole are confined to the Latherford Brook. No otter holts were found during the survey. Water vole is of importance in the county as it is now very rare.
- 7.8 Amphibians found within the site and will be affected include a small population of great crested newt. No reptiles were recorded on site. Bullhead was found in some watercourses, with brown trout also present in the Latherford Brook. Bullhead is listed on Annex II of the EC Habitats Directive, and brown trout is a species of principal importance
- 7.9 Breeding and wintering species of farmland are the most prominent group of birds, with other species associated with woodland and hedges.
- 7.10 Invertebrate species recorded included several rare/scarce and specialist species from habitats that included decaying wood, open short sward grassland and stream margin. These were mainly associated with the ancient woodland and designated sites. Four ponds were noted as being of high quality for its aquatic invertebrates, while a further four ponds and two watercourses were noted as being of moderate quality. In a south Staffordshire context this is worth noting since many pools are heavily stocked with fish and poor in invertebrates, while watercourses tend to arise in the urban areas and are consequently of poorer quality than those arising in less populated areas.

- 7.11 Invasive species were found including Japanese knotweed, Himalayan balsam, rhododendron, Canadian waterweed and Montbretia. If any of these are to be disturbed during construction, method statements should be provided for how they will be dealt with via the CEMP.

Mitigation

- 7.12 Since 2018, the Staffordshire County Council Ecologist has been actively involved in ensuring that adequate species and habitat surveys are carried out on the site. It is important to ensure that good survey data is obtained to correctly assess impacts and work out what mitigation is necessary. Existing data from Staffordshire Ecological Record (the Local Environmental Records Centre) was used by SCC and by M54/M6 link consultants to inform this process.
- 7.13 The following species / groups of species have been covered by detailed surveys on site (and in nearby habitats where appropriate): birds, invertebrates, white-clawed crayfish, reptiles and amphibians, bats, otter, water vole, badgers.
- 7.14 The following mitigation measures have been identified:
- Bat roosts – subject to Natural England licence, with associated mitigation work, including landscape design.
 - Landscape design and fencing to prevent harm to barn owl during operation.
 - Water vole and otter, subject to NE licence. Translocation of water vole to new habitat may be needed.
 - Mammal tunnels and otter ledges to allow safe passage of mammals once scheme is operational. Single span bridge over the Latherford Brook will encourage use by otter etc..
 - Species protection during construction – to be dealt with through reasonable avoidance measures in CEMP (except where additional measure for licences are required)
 - An on-site ecologist will be employed (Ecological Clerk of Works.)
 - Habitat loss – new ponds to be created for wildlife.
 - Habitat loss – grassland and woodland to be planted
 - Habitat loss – hedges – where possible hedges are to be retained in situ and new ones created
 - Offsite mitigation for habitat loss may also be required.
- 7.15 Effects on nearby European designated sites have been considered and are not expected to be significant (see submitted No Significant Effects Report)

8. Landscape

- 8.1 In relation to the impact on landscape we refer to and support the position of South Staffordshire Council.

9. Public Rights of Way

9.1 This scheme will directly affect seven public rights of way and several other roads and lanes which are regularly used for connectivity by cyclists, horse riders and walkers. In relation to public rights of way the affected routes are:

- Public Bridleway No 1 Shareshill
- Public Footpath No 4 Shareshill
- Public Footpath No 5 Shareshill
- Public Footpath No 8 Saredon
- Public Footpath No 1R/2214 Saredon
- Public Bridleway No 13 Saredon
- Public Bridleway No 3 Featherstone

Other Potentially Affected Routes:

- Public Footpath No 3 Shareshill
- Public Bridleway No 8 Featherstone
- Application to add footpaths to the Definitive Map under section 53 of the Wildlife and Countryside Act 1981. These are in the vicinity of J1 of the M54 but are not recognised in the strategy (reference number LM645G).

9.2 The affected routes are predominantly in a rural area, albeit one already affected by a number of major roads and other development. There are no special landscape features e.g. National Park, SAC, etc in the area through which the paths run although several the paths are popular means of access into the countryside for local path users. The appeal of walking, cycling and horse riding in this area may reduce if the new road is approved because it will cut through the rural landscape. However, the scheme also represents an opportunity to improve parts of the existing path network.

9.3 The Strategy recognises the need to minimise the impact on the path network and, where possible, the need to avoid diverting paths adjacent to the new road which is welcomed. All the routes, bar Bridleway No 1 Shareshill, require minimal change in length which is positive.

9.4 Public rights of way affected by the Proposed Link Road include:

- Public Bridleway No 1 Shareshill

NMU Proposed Paths Sheet 6 of 10.

This bridleway provides the predominant arterial route into the countryside to the east of Shareshill. The route is an important local link to allow path users to access a network of paths in an attractive rural landscape and a few years ago the County Council worked closely with Shareshill Parish Council to improve this and other routes for the benefits of path users. Whilst the route is a bridleway it is, unfortunately, a cul-de-sac route meaning that for equestrians and cyclists it does not connect to another bridleway. Walkers are able to connect to a number of other footpaths and if Public Footpath No 17 Shareshill

were upgraded to public bridleway then horse riders and equestrians would be able to do so too. There is no mention of doing so within this scheme, but this represents a possible opportunity for Highways England to consider such an improvement.

The proposed diversion of the bridleway to cross an accommodation bridge south of Brookfield Farm will allow path users to maintain the links with the network to the east although it's likely that the appeal of recreation in this area may reduce as a result of the proposed road. The diversion is longer than the existing route, which is unfortunate but understood such that the network links are maintained. Proposed Paths Sheet 6 of 10 indicates that the proposed diversion will cross Public Footpath No 3 Shareshill before connecting with the original line of Public Bridleway No 1 Shareshill. It would make sense to upgrade the short section of Footpath No 3 to a bridleway then divert Public Bridleway No 1 along this to maintain a close link with Footpath No 4 Shareshill which heads north and the original alignment of Bridleway No 1.

Within the main body of the Report Note 1 on page 6 suggests that there is another alternative by using Footpath No 5 Shareshill and the realigned Hilton Lane bridge. It's not entirely clear why this is considered a viable alternative as it is considerably further south and only available to pedestrians, not equestrians or cyclists.

- Public Footpath No 4 Shareshill
This route is due to be slightly affected by the changes at J11, but the information provided is not accurate enough to enable comments to be submitted at this time.
- Public Footpath No 5 Shareshill
NMU Proposed Paths Sheets 5 and 6 of 10.
This route will be severed by the proposed new road and its western section extinguished. The path will be diverted along an existing farm track to meet Hilton Lane then cross the new road via the Hilton Lane road bridge. There are no significant concerns about this diversion and access north-west towards Shareshill will be maintained through the new footway. We also welcome the proposed new shared footway/cycleway that provides a link to Dark Lane which is a vital route for pedestrians, runners, cyclists and equestrians.
- Public Footpath No 8 Saredon
NMU Proposed Paths Sheet 7 of 10.
This route provides a link between the J11 M6 island (via Public Footpath No 1R/2214 Saredon) and the wider path network to the east of Shareshill. These proposals will require a short section of Footpath No 8 to be diverted to link to the amended road layout at J11. Whilst, in principle, there are no particular concerns about this amendment further details are required about the layout of the new J11 island and whether this route will meet a footway.
- Public Footpath No 1R/2214 Saredon

NMU Proposed Paths Sheet 7 of 10.

This route provides a link between the J11 M6 island and Public Footpath No 8 Saredon. The proposals to amend the J11 island will mean this route will need to be extinguished. The link between Footpath No 8 Saredon and the J11 island will be maintained by the slight diversion of Footpath No 8 meaning the loss of this route will have minimal impact.

- Public Bridleway No 13 Saredon

NMU Proposed Paths Sheet 7 of 10.

In an area of limited bridleway provision this route provides an important off-road access between Saredon Road and the A460. Whilst potential changes to this route are mentioned in the strategy (p. 5) it is not yet clear what impact the realignment of the northbound A460 will have on this route. At present the bridleway is used predominantly by equestrians as an out and back route from Saredon Road because of the poor access at its southern end onto the A460. If there is an opportunity to improve this access and ensure this route can be used between both roads that would be a real improvement.

- Public Bridleway No 3 Featherstone

NMU Proposed Paths Sheets 2 and 3 of 10.

This route provides a link between the old A460 Cannock Road and Public Bridleway No 8 Featherstone. The proposals to amend the M54 J1 island will mean this route will need to be slightly diverted and, according to plan 3, extended to link with Cannock Road. The alterations appear to be relatively minor meaning the diversion of this route will have minimal impact.

There are several other Routes that are potentially affected by the scheme. These include:

- Public Footpath No 3 Shareshill

This route runs very close to the scheme although the General Arrangement Scheme plan suggests it is not directly affected clarification is required. It will be affected by the proposed diversion of Public Bridleway No 1 Shareshill – see comments in Public Bridleway No 1 Shareshill section.

- Public Bridleway No 8 Featherstone

This route runs very close to the scheme although the General Arrangement Scheme plan suggests it is not directly affected but given it joins into Featherston 3 it should be considered.

- There has been an application to add footpaths to the Definitive Map under section 53 of the Wildlife and Countryside Act 1981. These are in the vicinity of J1 of the M54 but are not recognised in the strategy (reference number LM645G) This application runs very close to the scheme although the General Arrangement Scheme plan suggests it will not directly be affected it should be considered as part of the Environmental Statement.

10. The Historic Environment

- 10.1 The construction of the M54 to M6 Toll Link Road will have an impact on the historic environment of the area. No designated heritage assets (e.g. scheduled monuments, listed buildings, conservation areas, and registered parks and gardens) will be directly impacted by the proposed scheme, although the setting of a number of these will be affected, including the Grade I listed Hilton Hall and associated buildings within its grounds (remnant historic parkland associated with Humphry Repton), such as the Grade I listed Conservatory and the Grade II listed Portobello Tower, and the National-Trust-owned Grade II* Moseley Old Hall. There are also a range of undesignated heritage assets which will be impacted directly or indirectly by the proposed scheme. Below, the impact of the scheme on the Historic Environment has been sub-divided into three main areas- below ground archaeological remains; the historic landscape; and the historic built environment. A final section outlining the mitigation methodology is included in the Historic Environment element of this Local Impact Report.

Below Ground Archaeological Remains

- 10.2 There is some archaeological interest within the application boundary. The Staffordshire Historic Environment Record (HER) identifies a number of known archaeological features within the site, these undesignated heritage assets include cropmark evidence identified from aerial photographs of former field boundaries, ditched enclosures, and a complex of pits and other negative features. These remains are likely to be fragile and would be substantively impacted during the construction of the current scheme. Whilst the exact character and date of the above features is currently unknown, another feature identified by the HER is much better understood. This, the line of the Streetway and Wordsley Green Turnpike Road, a mid 18th-century highway connecting Stourbridge with Cannock, runs through part of the site, and forms part of the current A460 Cannock Road. A geophysical survey carried out across much of the site concluded that the majority of the anomalies identified by the survey related to modern material, objects related to agricultural activity, or geological variations.
- 10.3 In addition to the above, evidence from the wider landscape (including a number of prehistoric and Romano-British find spots, a possible Bronze Age burnt mount, a Roman Road, and a Roman settlement near Penkridge) suggests that there is some potential for previously unknown buried archaeological remains, particularly relating to the prehistoric, and Romano British periods, to be encountered during groundworks within the scheme boundary. The HER also suggests that remains associated with the medieval (there are moated sites and a deserted settlement in the wider landscape) and post medieval landscapes have the potential to be encountered within scheme boundary. Again, such archaeological remains are likely to be fragile and would be substantively impacted during the construction of the current scheme.
- 10.4 In summary, as can be seen from above, there will be impacts to buried archaeological remains within the M54 to M6 Link site, both to known sites recorded on the Staffordshire Historic Environment Record/ identified as part of

pre-DCO application assessment, or to previously unrecorded remains identified during the construction process. It should also be recognised that, given the geology of the application site (mainly glacial till with some alluvial deposits) there is some potential for archaeoenvironmental deposits to be encountered during archaeological works.

Historic Landscape

- 10.5 Much of the land within the scheme boundary has remained rural in character and is predominantly used for agricultural activity. Much of the northern portion of the scheme falls within the Fieldscapes, Large Irregular Fields HLC type, whilst the southern section is dominated by Ornamental, Parkland and Recreational and within the grounds of Hilton Hall, i.e. Hilton Park. The scheme will have a direct impact upon Hilton Park, which although is not a Registered Park and Garden, has been locally designated by South Staffordshire District Council in their Core Strategy. The HER records that Hilton Park is a landscape park probably established in the mid to late 18th century, with some landscaping work by Repton. It was laid out around the Grade I listed Hilton Hall, and encompasses five listed buildings, including the Grade I listed conservatory and the Grade II listed Portobello Tower. The proposed link road will sever the western portion of the park from the rest of it to the east, and a number of landscape features, including the Lower Belt, The Shrubbery, the Lower Pool and surrounding woodland, would be affected, although not lost completely. The remaining part of the park would continue to be understood and appreciated and provide an attractive setting to Hilton Hall and associated buildings.
- 10.6 Views outside of the park are unlikely to be impacted due to existing tree screening along its boundaries, whilst remaining trees would provide screening to the scheme from the eastern portion of the park and the designated historic buildings within it, although the Environmental Statement does note that lighting columns would be visible from the second floor of Hilton Hall.
- 10.7 In summation, the northern part of the site and the surrounding landscape is largely agricultural in nature, whilst the southern part forms part of Hilton Park, the landscape garden surrounding Hilton Hall. The proposed M54 M6 Link would alter the character of the western portion of Hilton Park, including some loss to key landscape features. However, this would not constitute an appreciable loss to the character of wider historic landscape.

Historic Built Environment

- 10.8 There are no designated or non-designated historic buildings within the proposal site. The proposed motorway link will impact upon the setting of a number of listed buildings in the wider landscape, including Hilton Hall (Grade I) and Moseley Old Hall. This impact has been assessed as part of the Environmental Statement and it is noted that South Staffordshire District Council's Conservation Officer has not raised any conservation objections with the proposed scheme. This position is supported, and I am happy to defer to their (and Historic England's) knowledge and experience in these matters.

Mitigation Strategy

- 10.9 Liaison between Staffordshire County Council's Historic Environment Team, Historic England, Highways England, and their appointed Historic Environment consultants have informed the work to date (the preparation of an Archaeological Desk-Based Assessment/ Cultural Heritage chapters of the Environmental Statement, ground investigation archaeological monitoring, and a Geophysical Survey), and indeed embedded mitigation with regards to the design of the scheme. This liaison highlighted the need for the development of an Archaeological Management Plan (AMP) based on an Archaeological Mitigation Strategy (AMS) and an accompanying Outline Written Scheme of Investigation (OWSI) to be produced to support the DCO application. This OWSI outlines the mitigation techniques/interventions and methodologies which are likely to be employed in advance of and during construction. This OWSI specifies a three-step process:
- Step 1 involves evaluation trenching (it was agreed that these should be undertaken after the submission of the DCO once the detailed design had progressed)
 - Step 2 is pre-construction archaeological mitigation works identified as a result of Step 1
 - Step 3 relates to archaeological monitoring during the construction phase
- 10.10 This OWSI also outlines the process of liaison between all interested parties, including the Staffordshire County Archaeologist, the Local Planning Authority, and Historic England.
- 10.11 This OWSI is outline in nature and will be complemented by more detailed Site Specific Written Schemes of Investigation (SSWSI), including pre-construction mitigation strategies which will seek to determine the presence and significance of any archaeological remains present and determine the level of any further mitigation, which could include preservation in situ and further pre-construction investigation where appropriate. All individual elements of work covered by the detailed WSI's will be undertaken by organisations following the Chartered Institute for Archaeologists (CIfA) Code of Conduct and all relevant CIfA standards and guidance, including the appropriate archiving of all material. The OWSI identifies the reporting strategy and will ensure that appropriate levels of dissemination occur commensurate to the significance of discoveries made during the scheme as advised in the National Planning Policy Framework.
- 10.12 In addition, a Historic Environment Statement of Common Ground will be prepared and will detail the above approach and the works required to satisfy the DCO.
- 10.13 The Staffordshire County Council Historic Environment Team have been consulted during the preliminary stages of the project and will continue to liaise with the appointed Historic Environment Consultants/Appointed Archaeological Contractors during the development and construction phases of the project and will also advise

the Local Planning Authority on the provision of archaeological considerations in the Construction Environment Management Plan (CEMP) process. This will ensure that the necessary Historic Environment mitigation strategies are in place prior to the commencement of construction works. An outline CEMP (i.e. the OEMP) has been produced and provides a framework for management controls, inspection, monitoring, and documentation that will be put in place in respect of the archaeological resource.

- 10.14 Other Historic Environment mitigation measures agreed include the protection of built heritage assets during construction and the control of light spillage, noise and dust to minimise impacts on the setting of the historic built environment.
- 10.15 In conclusion, the Historic Environment work completed to date, the iterative approach to developing the Historic Environment mitigation strategy, continuing liaison between Highways England/their appointed historic environment consultants/contractors and the Staffordshire County Archaeologist, Historic England, and the provision of advice to the Local Planning Authority on the efficacy of the provision of archaeological considerations in the Construction Environment Management Plan (CEMP) process, represent a satisfactory approach to securing appropriate levels of historic environment mitigation throughout the lifespan of this large highways scheme.

11. Flood Risk

- 11.1 The main aspects of the Scheme that have the potential to impact flood risk are the crossing of watercourses and the discharge of surface water runoff from the site. These have been considered in the Flood Risk Assessment (ES Appendix 13.1) and Drainage Strategy (ES Appendix 13.2).
- 11.2 The Flood Risk Assessment (FRA) identifies six ordinary watercourses that intersect the route alignment. Of these, five have upstream catchments of less than 3km² so have no associated modelled Flood Zones. Latherford Brook (watercourse 5) has an upstream catchment greater than 3km², so has associated Flood Zones for which the Environment Agency is responsible.
- 11.3 The FRA includes modelling of the watercourses in the current baseline state, and with any impacts of the Scheme such as diversion or culverting. A summary of the scheme impacts on flooding is provided in Figure 6.1 of the modelling report.
- 11.4 The scheme was found to have no impact on watercourses 1 and 6, and to produce negligible changes in flood extents and depths at watercourse 4.
- 11.5 Watercourse 2 was found to pose an existing risk to the A460, which the Scheme would not increase. The potential to reduce the risk here would be beneficial, but was deemed not significant enough to include in the detailed design:
“Different alignments of the watercourse were tested as part of the development of the design. Iterations of this have included the testing of a pond storage area between the main and minor culvert. Whilst this did have a minor impact on water

levels at the existing A460 culvert, it was not deemed significant enough to include in the design given the increase in Scheme costs.”

- 11.6 At watercourse 3, it was found that Lower Pool has a significant impact on the flood risk downstream at the Dark Lane culvert and A460 culvert. The Scheme would reshape and reduce the area of Lower Pool, but it was found that the Scheme would not impact the fluvial flood risk provided that the pool is retained as an online pond.
- 11.7 It is recommended that Lower Pool is retained as an online feature, as it provides flood protection downstream, and that further sensitivity testing concerning the pond size and weir design should be considered at the detailed design stage.
- 11.8 The detailed design should ensure that flood risk downstream is not increased, and preferably include measures to reduce it. The detailed design of Lower Pool and weir could provide an opportunity for improvement.
- 11.9 The risk of blockage or build-up of sediment is highlighted as a residual risk. A maintenance plan will need to be developed at detailed design stage to describe the ownership, frequency of and techniques for site drainage maintenance. In the event of failure through either blockage or exceedance, the detailed design is to include landscaping of the topography to ensure no flooding to third party land and reducing flood risk to the road.

Drainage Strategy

- 11.10 A sustainable drainage strategy is required to ensure that surface water discharge from the site is attenuated to greenfield runoff rates, and that adequate water quality treatment is provided to protect downstream watercourses from increased pollution.
- 11.11 The submitted Drainage Strategy outlines the key parameters and standards to be followed in the detailed drainage design to achieve these requirements:
 - Attenuation within SuD features to be provided to ensure no flooding in a 1 in 100 year + 40% return period event, with a 300mm freeboard included in the proposed design.
 - Discharge of surface water runoff to be restricted to a greenfield rate of 5l/s/ha for all events up to the 1 in 100 year + 40% return period event.
 - Drainage design to be in accordance with the SuDS Manual 2015, CIRIA C753, with water quality treatment in accordance with DMRB LA113, to be assessed using the Highways England Water Risk Assessment Tool (HEWRAT).
- 11.12 Preliminary hydraulic modelling has been undertaken to establish approximate attenuation volumes required, but detailed modelling will be required for the detailed design of the network and structures, and to demonstrate compliance with the design standards for the full range of critical storm events.
- 11.13 Ongoing maintenance will be key to managing flood risk for the lifetime of the development. 5.1.2 states:

“A maintenance plan will need to be developed at detailed design stage to describe the ownership, frequency of and techniques for site drainage maintenance.”

- 11.14 Another potential source of flood risk is where surface water is discharged via existing systems, and it is vital that replacements or upgrades identified at the detailed design stage are fully implemented. The drainage strategy (3.1.3) states:

“The Scheme drainage survey commenced w/c 17th June 2019 to further understand the existing drainage infrastructure. The initial results of the received indicative drainage survey indicate the existing drainage is in poor condition and would need replacement / upgrade. A full detailed review of the survey will be undertaken as part of detailed design. Nothing has been identified from the initial survey results that would change the approach in the drainage strategy.”

12. Minerals and Waste

- 12.1 The proposal would affect a mineral safeguarding area for sand and gravel as well as for clay resources (refer to policy 3.3 of the MLP). The application also affects a mineral infrastructure site [Hilton Park Quarry] (refer to policy 3.2 (b) and 3.5 of the MLP).
- 12.2 There would be additional demand placed on the provision of construction aggregates and it is difficult to assess the impact on available permitted reserves. It is recommended that a materials audit is provided by the applicant whereby the estimated requirements for aggregates during construction works can be assessed.
- 12.3 Details for the earthworks in terms of demonstrating a balanced cut and fill have not been seen although previously, it was estimated that there would be 90,000m³ deficit of fill material. The supply of minerals or disposal of waste could create additional traffic on local roads and that would be a negative impact.

13. Proposed Changes to the Scheme

- 13.1 Highways England recently submitted 7 proposed changes to the scheme that we have been consulted on. We have reviewed the changes and consider them to be mostly minor in nature that will see improvements to the scheme. With regards to change 4 and the traffic management on the M54, we see this shorter period as a positive change, however, it will be necessary in the detailed Traffic Management Plan to engage with and take on the views of the local community and business on the precise details of the Plan, in particular how access for residents and business will be maintained during the closure period.