Leeds City Council
Response to the HS2 Phase 2b
Working Draft Environment Statement consultation
20 December 2018
# Contents

1. Executive summary ........................................................................................................ 4
   1.1 Overview .................................................................................................................. 4
   1.2 Leeds City Region HS2 Growth Strategy .................................................................. 8
   1.3 HS2 Working Draft Environmental Proposals ......................................................... 10
   1.4 Background to the council’s HS2 WDES Response ............................................... 11
   1.5 Summary of General Issues Identified by the council in the WDES ....................... 13
   1.6 Summary of Key Issues in Leeds by Community Area ............................................. 18
2. General comments on the WDES ............................................................................... 28
   2.1 Introduction ............................................................................................................... 28
   2.2 Planning and planning context .................................................................................. 28
   2.3 Air Quality ................................................................................................................ 28
   2.4 Community ............................................................................................................... 29
   2.5 Ecology and biodiversity, landscape and public rights of way ................................. 30
   2.6 Health ...................................................................................................................... 31
   2.7 Historic Environment .............................................................................................. 33
   2.8 Land quality ............................................................................................................. 34
   2.9 Landscape and visual (including urban design) ....................................................... 35
   2.10 Socio-economics .................................................................................................... 38
   2.11 Sound, noise & vibration ....................................................................................... 40
   2.12 Traffic and Transport .............................................................................................. 42
   2.13 Water resources and flood risk ............................................................................... 45
   2.14 Draft Construction Code of Practice (CoCP) ......................................................... 47
3. Impacts in Community Area LA15: Swillington and Woodlesford ............................ 50
   3.1 Overview of proposed scheme in LA15 (Leeds sections) ....................................... 50
   3.2 Community ............................................................................................................... 51
   3.3 Ecology and biodiversity ......................................................................................... 54
   3.4 Landscape and visual ............................................................................................... 56
   3.5 Socio-economics ..................................................................................................... 57
   3.6 Traffic and Transport .............................................................................................. 57
   3.7 Sound, noise & vibration ....................................................................................... 59
4. Impacts in Community Area LA16: Garforth .................................................................. 61
   4.1 Overview of proposed scheme in LA16 (Leeds section) ....................................... 61
   4.2 Community ............................................................................................................... 61
   4.3 Ecology and biodiversity ......................................................................................... 62
EXECUTIVE SUMMARY

1.1 Overview

1.1.1 Leeds City Council ("the council") continues to welcome the principle of HS2 Phase 2b. It is recognised through the Leeds City Region Growth Strategy that HS2 can be a major contributor to the Vision for Leeds, Best City and Council Plans where its economic and investment impacts have great potential. At the same time the council is clear and committed to careful planning to ensure that greater attention is paid to all the project’s impacts on communities and the environment. The council therefore welcomes the opportunity to contribute to the preparation of the Environmental Statement (ES) that will accompany the Bill and asks for further engagement with HS2 Ltd as they develop the Phase 2b design and prepare the final ES that will accompany the Hybrid Bill. An Environmental Statement which addresses the adverse impacts identified by the council in the Working Draft Environmental Statement (WDES) should reduce the need for the council to seek changes to the Hybrid Bill by petitioning at a later date.

1.1.2 The council has previously welcomed plans for creating a domestic high speed rail network and has supported the Government’s initial proposals for the HS2 Phase 2B route from Birmingham to Leeds, which were announced in January 2013 and subsequently given in principle support at the 15 February 2013 Executive Board. The Leeds City Region Growth Strategy sets out how the Leeds City Region will work with Government, business, schools, colleges and universities to maximise the benefits of HS2 through the following key themes, reflecting the priorities in the Government’ Industrial Strategy. The council expects HS2 Ltd and DfT to take account of the Growth Strategy in developing Phase 2b further.

1.1.3 The council’s strategic aim with regard to the WDES response and wider Hybrid Bill Strategy is to secure from the government an optimum HS2 final design that delivers the benefits set out in the Leeds City Region Growth Strategy, which is as sensitive as possible to local concerns and issues - through the appropriate type, level and quality of mitigation. It is recognised that securing the best possible environmental provisions from the government and HS2 is integral to achieving a successful scheme.

HS2 delivering the benefits for inclusive growth.

1.1.4 HS2 is part of our wider ambitions for inclusive growth across the Leeds City Region. This growth is essential in order to raise living standards and tackle deprivation, boost innovation, exports and create new jobs. HS2 helps achieve our goals by strengthening business links, by opening up new markets and access to talent and by connecting people to jobs. Our HS2 Growth Strategy sets out how Leeds City Region will work with Government, business, communities, schools, colleges and universities to maximise the benefits of HS2 in transforming the city region economy. It will provide a step change in connectivity for the city region, creating a world class gateway at Leeds Station and a catalyst for regeneration.

1.1.5 The eastern leg of HS2, HS2 East, will reshape the economic geography of the UK. It will bring together the city regions centred on Leeds, Sheffield, Nottingham and
Birmingham into a coherent and integrated economic zone of over ten million people, five million jobs, and some of the UK's most significant manufacturing clusters. Maintaining the deliverability of the eastern leg is to secure the benefits of HS2 is of paramount importance to the council.

1.1.6 HS2 in combination with Northern Powerhouse Rail (NPR) is expected to help transform the economy of the North of England by significantly improving the capacity, frequency and journey time of rail links between the region's main economic centres. The proposals represent a network that will improve services across the region and provide the potential for seamless rail travel across cities in the North from Liverpool to Hull. Both NPR, and HS2 are integral parts of the North's rail network and it is essential that they are planned alongside each other as part of the wider rail network and not in isolation from it. This approach rail approach should be defined in Transport for the North's Strategic Transport Plan.

1.1.7 We need to ensure that the benefits from both HS2 and NPR are realised by utilising spare capacity on HS2 infrastructure. The council, alongside the West Yorkshire Combined Authority considers it is important that the touchpoints between the two networks are delivered in full as follows;

- **Clayton touchpoint** - improves journey times and service frequencies between Sheffield and Leeds using the HS2 eastern leg. A junction at Clayton has already been included in the scope of HS2 Phase 2b to enable future NPR and HS2 services at Sheffield Midland station to connect onto HS2 to travel towards Leeds, the North East and Scotland.

- **Stourton touchpoint** - connectivity into Leeds from the South, via a new HS2 junction at Stourton which would enable services through Leeds to the North East and Scotland.

- **Garforth touchpoint** - a junction at Garforth to enable NPR services from the West to connect onto HS2 to the east of Leeds, thereby connecting Manchester and the North West via to the North East and vice versa will be an instrumental in maximising the wider benefits of both projects.

**Key issues for the scheme design and construction in Leeds**

**Leeds Station**

1.1.8 The WDES is based on the currently published design of the scheme. The development of the design of the station and surrounding area has benefit from close partnership working. The Leeds Station Integrated Master Plan (LISM) sets a compelling vision for the major transformation of Leeds Station, already the busiest transport hub in the North of England. It works alongside the South Bank Regeneration Framework Supplementary Planning Document (SPD), which sets out our exciting proposals for the future development of the South Bank. Our response to the WDES takes the opportunity to emphasise the changes to the design of the scheme discussed so far between the council and HS2 Ltd, which it is expected should be incorporated into the final design.

1.1.9 **Rolling Stock Depot (RSD)**
The council welcomes the location of an RSD in the Aire Valley Enterprise Zone. It is expected that the depot will bring skilled jobs to the Leeds City Region and be a key part of our ambition to be an international centre of excellence in high speed rail skills, we are seeking to maximise the benefits of this investment. However, the depot configuration and land take shown in the WDES is not supported. Discussions have taken place with HS2 Ltd and it is understood that the latest designs are as per the land take set out in the Secretary of State’s announcement of July 2018. This later configuration is welcomed by the Council as it would accommodate Leeds University’s new technology campus on adjoining land the north of the site, including the Institute of High Speed Rail and Systems Integration. There will still however be a need to ensure that developments on the remaining employment land in the area brought forward prior to HS2 can still be appropriately accessed following delivery of the RSD.

HS2 line of route

Understandably local communities are greatly concerned about impacts the scheme will have. In the period leading to construction blight is their concern; and there is increasing concern about the disruption and potential dislocation to the community during construction. They are also worried about the quality of the final scheme and the legacy that will leave the communities that are on and adjoining the route, in Oulton, Woodlesford, Swillington, Rothwell, Garforth, Methley and Hunslet especially.

The council has several concerns and issues about the impacts set out in the WDES. Given the preliminary nature of the WDES, there are likely to be more as Phase 2b is refined further, but the main concerns identified so far include:

- Support for those affected by the proposals;
- Network management during construction;
- Woodlesford tunnel;
- The River Aire viaduct
- Noise mitigations; and
- Inadequate bridleway and footpath division

Supporting those affected by the HS2 infrastructure proposals is imperative in protecting communities and sustaining economic growth. Where it is necessary to relocate businesses, we recommend this should be done sensitively to minimise adverse local impact and ensure business rate growth continues and therefore the Council seeks release of resources from the Community and Environment Fund Safety Improvement Fund, Business and Local Economy Fund prior to the submission of the hybrid bill to begin properly plan support to those impacted by the scheme. The council also seeks release of highway safety monies ahead of hybrid bill submission to enable road safety improvements which will help protect pedestrians and cyclists along the route of the railway, ensuring the city is ready for HS2 construction.
The council recognises the challenges and complexities of the construction of a high speed line of route. It has considered the severance and reduced network resilience caused by the existing infrastructure constraints of the classic railway, the M621 and other parts of the strategic road network.

The council is therefore fully committed to working in partnership with HS2 Ltd to help ensure the delivery of a quality design solution for the city. It needs to achieve the optimum balance of a final design with level of mitigation deemed acceptable by the council that is also deliverable.

Given the scale, location and duration of the proposed construction works, the council recognises there is the potential for these works to have a significant impact on both the capacity and resilience of the city’s local and wider transport network. Based on the level of qualitatively assessed information presented in the WDES, and the extent of the expected road closures and diversions, the council remains concerned about the current level of risk for significant disruption to the city during the HS2 construction period. However, the Council asks to work in partnership with HS2 Ltd to quantitatively evaluate and plan for the mitigation of this. In particular, the council notes that the construction impacts and associated disruption, while potentially significant for the city, are also temporary, and should be weighed against the potential long term infrastructure legacy of a constructed scheme of this size and scale.

The council therefore fully supports the proposals for the HS2 line of route to approach the Leeds Station terminus in a cutting through the main urban area because of the environmental mitigation offered by this approach. This “Leeds cutting” is the preferred design option in principle for the Council. The level of landscape and visual mitigation provided by the WDES design option in this location is found to be largely acceptable, albeit it is recognised that further detailed resolutions may be needed.

The Woodlesford tunnel remains a crucially important issue for the local community. It is in an area with a long coal mining history which exacerbates concerns that further underground works could cause problems relative to this legacy of earlier workings below the surface. This requires continuing and sensitive engagement with the community to address their concerns and provide reassurance as to the robustness of the plans. The process for safely and efficiently delivering a modern 21st century railway tunnel needs to be outlined clearly, both in terms of construction and operation. The council remains of the opinion that further development and refinement of the design is essential to bringing it closer to an acceptable final scheme in the village.

The WDES proposal includes the River Aire Viaduct, which will be a large structure at around 2.2km in length and 28m high. It will be highly visible in long distance views across the rural landscape and from residential areas in Woodlesford and Swillington. The revised scheme as presented in HS2 Phase 2b route refinement consultation has taken on board to some extent concerns the council raised in the 2013 consultation response, however, the Main Line to the North in both this and the WDES remains on largely the same alignment both horizontally and vertically with only minor changes as it crosses the railway, canal and River Aire. This results in
associated impacts of a high viaduct and the environmental intrusion of the rail services high above the valley floor and therefore needs to be looked at again.

1.1.20 It is the council’s view that HS2 Ltd as the scheme promotor is responsible for establishing the costs and benefits vis-à-vis routing, efficiency, mitigation and their requirements for a functioning high speed railway. The alternative route report outlines a complex process under taken over many years which highlights a board range of alternatives and their associated impacts. Whilst it is acknowledged that HS2 Ltd has looked widely at alternatives during the option development stage, it remains the view in the community that not enough has been done to seek alternatives. If the Main Line remains on the current alignment as proposed it is therefore essential that mitigation is provided alongside the highest quality and sensitivity of design is provided to safeguard the environment and the communities of Woodlesford, Swillington and Garforth. The council therefore expects to see fuller alternatives considered and the details of these set out in the final ES that accompanies the Hybrid Bill.

1.1.21 Securing an acceptable level of noise mitigation for residents whose properties are impacted upon by HS2 operational noise is imperative for the council. The WDES currently proposes a combination of cutting and acoustic barriers to mitigate noise levels below absolute threshold criteria levels however there are a number of farmsteads that may require additional measures which will be informed by the baseline assessments. Without the inclusion of measured environmental baseline data, which the council understands will be provided in the ES, the council is unable to comment at present if the mitigation provided in the WDES is acceptable. The council is pressing HS2 Ltd through partnership working to agree an acceptable environmental baseline at the earliest opportunity.

1.1.22 The council is concerned that several proposed bridleway diversions, involving long accommodation overbridges where HS2 will be in a very wide and deep cutting, need significant alteration in order to be effective for equestrian and pedestrian users. In some areas, the council proposes that a cut and cover tunnel or similar design approach to create a wider “green bridge” would be necessary instead. Some proposed diversions of footpaths are unacceptably long, and the council would like to see additional crossings of HS2 for non-motorised users to avoid severance.

1.1.23 The council has further detailed concerns about the likely impacts as presented in the WDES and these are set out in sections 2 to 6 below.

1.2 Leeds City Region HS2 Growth Strategy

1.2.1 Our city region is growing and HS2 is vital to support the next step in transforming our economy. HS2 is much more than just a transport project. It will act as a catalyst for regeneration and growth around our main transport hubs, it will improve connectivity to our towns and cities across the Leeds City Region and the North, it will improve the skills and job opportunities for our workforce, it will create opportunities for our businesses and supply chains, and enhance the image and profile of our city region.
1.2.2 HS2 is part of our wider ambitions for inclusive growth across the Leeds City Region. This growth is essential in order to raise living standards and tackle deprivation, boost innovation, exports and create new jobs. HS2 helps achieve our goals by strengthening business links, by opening up new markets and access to talent and by connecting people to jobs.

1.2.3 As a major piece of national infrastructure HS2 will result in faster journey times, improved national North - South connectivity and much needed increased capacity on our rail network. Passengers will soon be able to travel across the UK at speeds of up to 250mph in new high speed trains and HS2 will offer a solution to the chronic overcrowding of the existing rail stock running along the East Coast Mainline. It will also help link the Northern Powerhouse and Midlands Engine, rebalancing the rest of the UK with the South East and unlocking the full potential of the Leeds City Region.

1.2.4 The eastern leg of HS2, HS2 East, will reshape the economic geography of the UK. It will bring together the city regions centred on Leeds, Sheffield, Nottingham and Birmingham into a coherent and integrated economic zone of over ten million people, five million jobs, and some of the UK’s most significant manufacturing clusters. Maintaining the deliverability of the eastern leg to secure the benefits of HS2 is of paramount importance to the council.

1.2.5 Across the City region the transformation and regeneration around our station hubs at Leeds, Bradford, York, Wakefield, Huddersfield, Halifax and Harrogate will change the fabric of our cities and towns. For Leeds this will mean the redevelopment of the busiest railway station in the North, fuelling our wider ambitions for regeneration of the South Bank, creating new jobs and homes, and delivering a reimagined waterfront and city park right in the heart of Leeds. HS2 is also essential to improve wider connectivity and transform the North. This includes Northern Powerhouse Rail that will connect Liverpool, Newcastle and Hull, and crucially will mean people can get from Leeds to Manchester (via Bradford) in 30 minutes, uniting the main drivers of the Northern Powerhouse.

- **Transforming the city region economy** - HS2 and other transport improvements will bring new markets within reach of our businesses, connect people to new and more productive jobs, and support the clustering of high growth firms in our urban centres. We estimate that the interventions set out in this HS2 Growth Strategy will result in the creation of around 40,000 additional jobs in Leeds City Region by 2050.

- **A step change in connectivity for the city region** - We will spread the benefits of major national transport investment through achieving a step change in connectivity within our city region. This will enable the separate towns and cities of Leeds City Region to function as a more integrated economic area, bringing significant productivity gains and enabling people to access a wider range of jobs. There will be more capacity on the rail and public transport network, faster and more frequent services, improved interchanges, better ticketing and travel information, and widespread use of new technology to improve transport.

- **Creating a world class gateway at Leeds Station** - We will transform Leeds Station, already the busiest transport hub in the north, to create a world class gateway providing seamless interchange for people changing trains, increased rail capacity, and improved concourse areas. The Leeds Integrated Station Masterplan
sets out a long term framework for the future development of Leeds Station. It has been produced through commissioning of a world class design team by Leeds City council, HS2 Ltd, Network Rail, and Communities and Local Government. The scheme will incorporate commercial development, which will contribute to the financing of the project. It will support the growth of Leeds City Centre through development adjacent to the station and enhanced public realm.

- **A catalyst for regeneration** - We will use HS2, Northern Powerhouse Rail and improvements to our city region transport network to accelerate regeneration and development in our urban Through the South Bank Leeds and the Leeds Innovation District projects we will double the size and economic contribution of Leeds City Centre.

### 1.3 HS2 Working Draft Environmental Proposals

#### 1.3.1
The HS2 route proposals in the WDES enter Leeds from the south close to M62 J31 with the line of route splitting to the south east of Oulton. The Leeds spur enters a (twin bore) tunnel under Woodlesford continuing in a cutting adjacent to the alignment of the existing Network Rail Hallam line through Stourton and Hunslet before it continues into the city centre on a viaduct to a T-shaped integrated station connected to the classic station by a common concourse. The mainline continues north between Woodlesford and Swillington, including a 2km viaduct over the River Aire, and then to the north of Garforth before continuing to Church Fenton. Much of the mainline is constructed on embankments in this area.

#### 1.3.2
A rolling stock depot (RSD) is proposed on the Temple Green development site to the north of the river immediately adjoining the western side of the M1 covering a distance of 1.6km and linked to line of route via a short viaduct over the River Aire at Stourton.

#### 1.3.3
The HS2 consultation material includes four separate community area reports and sets of maps relevant to Leeds. Each set of maps includes one showing the area taken by the construction phase of the scheme (including compounds and material storage areas) and another for the operational scheme including landscape mitigation, balancing ponds etc. Four Community Areas are wholly or partly in the Leeds District:

- LA15: Warmfield to Swillington and Woodlesford (partly in Wakefield);
- LA16: Garforth to Church Fenton (partly in North Yorkshire);
- LA17: Stourton to Hunslet; and
- LA18: Leeds Station

#### 1.3.4
HS2 Ltd as the scheme promoter are preparing an Environmental Statement for the scheme which will be submitted to Parliament in support of the Hybrid Bill, in accordance with Parliamentary Standing Orders. The Environment Statement will provide:

- A description of the environment as it is at the moment;
- An evaluation of the anticipated environmental impacts of the scheme, and
- The measures proposed to avoid or reduce these impacts.
1.3.5 The council acknowledges that the consultation on the WDES is an additional non
statutory stage of consultation and that HS2 Ltd has introduced to try to resolve as
many issues as possible prior to the Hybrid Bill being lodged with Parliament. In
addition, the council acknowledges that the WDES is based on a point in time design
of the scheme, and has been in ongoing discussions with HS2 Ltd and the DfT
particularly around the station and the depot. The council’s response to this
consultation is on the proposals presented in the WDES, and takes the opportunity
to reiterate the changes agreed with HS2 Ltd and those set out must be read in that
context.

1.3.6 Where the WDES has stated that information will be confirmed in the ES, or it is
otherwise absent from the WDES, there is a lack of materially detailed information
for the council to properly consider and provide a response. The response therefore
stresses to HS2 Ltd the need for additional detail to be provided in the final ES. This
information regarding the environmental baseline is of particular importance when
assessing the impact on traffic and transport, noise and air quality on local
communities. The council requires this to be shared at the earliest opportunity as it is
vitally important in order to provide fully detailed replies.

1.4 Background to the council’s HS2 WDES Response

1.4.1 A formal consultation on the initial proposals for the HS2 Phase 2 route from
Birmingham to Leeds and Manchester was launched on 17 July 2013 with a closing
date of 31 January 2014. In terms of the initial published proposals the council
supported the principle of a strategic station location in Leeds but recognised the
need for further development to secure a fully integrated transport interchange. As
far as the line of route is concerned the council requested HS2 Ltd revisit the detail
of the Leeds spur and proposals especially in the area of the Woodlesford junction
where the impact of the engineering would be very substantial and unacceptable to
local residents. It also identified concerns about the impacts of the Aire Valley
viaduct.

1.4.2 On 9th March 2017, the council responded to the HS2 Phase 2b route refinement
consultation. Where it was recognised that HS2 is regarded as a key strategic
intervention in the long term development of improved connectivity into Leeds and
the wider city region. As such the Government’s commitment to progressing the
development of the scheme for which safeguarding the phase 2 route is an important
step

1.4.3 With respect to the line of route in this consultation response the council recognised
the work that has been undertaken by HS2 Ltd to re-consider the line of route in the
vicinity of Oulton and Woodlesford. The amended route now proposed has
significantly mitigated the impacts of the Leeds Spur, in particular on the previous
line with extensive viaducts on the River Aire frontage, through the proposal for a
tunnelled solution beneath the village. In relation to the community, more specifically
and immediately in the absence of avoiding the community of Woodlesford
altogether, the proposed Leeds Spur tunnel is very short and effectively the minimum
length needed to pass the village with the Southern portal very close to the built up
area of the village.
1.4.4 The response also outlined that the Woodlesford tunnel was a very important issue for the local community in an area with along coal mining history exacerbating concerns that underground works could cause problems relative to this legacy of earlier underground workings. This requires sensitive engagement with the community to allay fears and provide reassurance as to the robustness of the plans and process for safely and efficiently delivering a modern 21st century railway tunnel, both in terms of construction and operation.

1.4.5 The HS2 Phase 2b route refinement consultation response identified four key areas of focus.

(a) The amended line of route at Woodlesford to place it in tunnel where the concerns were about the short length of the tunnel, the tunnelling process in relation to previous mining processes and the village environment.

(b) The impact of the Main Line route and Aire viaduct on the environment and local communities.

(c) Completing plans for the integrated Leeds Station and future proofing with a spur linking between Hs2 and the classic station.

(d) The impacts and planning of the future construction then causing uncertainty to the communities and businesses along the route and within the city centre.

1.4.6 The consultation response noted that revising the station location to integrate it with the existing classic rail Leeds station had, in bringing the two sites together, largely addressed the previous concerns. The ambition for iconic design and integration remained to be captured in the final designs and operation of the scheme. This was something we expect to be captured by the work with HS2 and DfT on the Leeds Integrated Station Masterplan and the Leeds City region Growth Strategy alongside the continuing engagement with Network Rail.

1.4.7 The consultation response stated that it continued to be of prime importance that HS2 forms an integral part of the national rail network with seamless integration with the existing and developing classic rail network. The interface with emerging plans for Northern Powerhouse Rail were therefore very important both in terms of Trans-Pennine connectivity but also those links within and between the North that should benefit from both schemes.

1.4.8 In March 2017, the council formally responded to the HS2 Phase 2b 2017 property consultation. The council outlined that our over-riding concern is to see prompt, fair and equitable treatment for property owners, especially residents, who have been, through no fault of their own, adversely affected by the uncertainty arising from HS2 Phase 2b.

1.4.9 The council remains concerned that the provisions for compensation do not seem to reflect the anxiety and uncertainty faced by homeowners on or abutting the line of route including the proposed tunnel at Woodlesford. In relation to the tunnel, the concept of a sub-soil payment does not reflect this but may be seen as being the sum-total of recognition. A thorough review of this is needed since it is very clear that
homeowners in Leeds and on the line of the tunnel do not regard a tunnel as low impact matter.

1.4.10 Alongside the appropriate type, level and quality of mitigation the council continue to press HS2 Ltd on property compensation arrangements for HS2 phase 2b, including those impacted visually or by noise more than 300 metres from the track, during the construction period and businesses impacted by the scheme.

1.5 Summary of General Issues Identified by the council in the WDES

Introduction

1.5.1 This section summarises some of the main issues identified by the council which are set out in more detail in Section 2 of this response

Construction Impacts

1.5.2 The council continues to press HS2 Ltd for the highest standards of construction planning and coordination and the development of detailed plans to minimise construction disruption and impact both for the line of route and the new station. The council recognises that the construction of a national infrastructure project the size of high speed rail will inevitably cause disruption to the transport network, and welcomes the proposed measures and standards of work put forward in the Draft Code of Construction Practice to provide effective planning, management and control during the construction period and provide mechanisms to engage with local communities.

1.5.3 As a key stakeholder the council continues to press HS2 Ltd for the highest standards of construction planning and coordination and the development of detailed plans to minimise construction disruption and impact both for the line of route and the new station with the necessary mitigation at the highest levels of quality. In particular this should have regards to

(a) Detailed and timely engagement throughout with communities and business with established and enduring points of contact which are available throughout the development and construction.

(b) Attention to landscaping and mitigation during the construction period to minimise the impacts.

(c) Clear and well defined access plans with traffic management in place and proposals which avoid construction traffic travelling through residential and local communities.

(d) Noise and environmental mitigation.

(e) Where business displacement or impacts form part of the project early action to support and ensure that such disruption is kept to a minimum and allows the uninterrupted continuation of their trading.
Early and detailed engagement with the local planning, environmental and highways authority which must go beyond statutory requirements to ensure at all stages the best possible outcomes are achieved.

The council is concerned that the proposed Code of Construction Practice could entail excessive working at unsocial hours. It also wishes to see additional controls on lighting during night-time works, and dust and emissions from works near coal seams or historical waste disposal pit.

The WDES states that the potential effects on traffic and transport have been assessed qualitatively, with no quantitative assessment undertaken at this stage. The council expects that the quantitative assessment of the network management impacts will be reported in the Environmental Statement that accompanies the Hybrid Bill. The council has put forward the following Network Management Principles for construction as a platform for our engagement with HS2 Ltd going forward;

- **Support for off line construction solutions at strategic locations on the road network where practicable** - The construction methods should focus on the delivery of off line solutions in areas which have the potential for the greatest severity on the road network, with the closure of the strategic road network main carriageway avoided where possible.

- **Planning for effective phasing of road closures** - This is particularly important for mitigating the level construction impact on the network. A partnership approach with HS2 Ltd, Highways England, West Yorkshire Combined Authority and Network Rail is needed to deliver a comprehensive network management plan.

- **Mitigation according to hierarchy of impact** - The acceptability of a proposed road closures will depend on the location, duration and severity of the impact. The sequencing of road closures should consider the hierarchy of the road network, with the impact of potential closures above an agreed threshold should be modelled in the appropriate software package.

- **Maintaining Network Resilience** - The resilience of the road network should be preserved with the closure of no more than two bridges during the same time period with sufficient separation between the locations, alongside the closure of no more than one key adjacent radial or parallel route during the same time period.

- **Managing the cumulative network impact** - Given the proposed duration of the construction period the cumulative impacts of the road closures on the local network will need to be evaluated in order to mitigate prolonged periods of disruption for local communities and businesses.

- **Maintaining public transport and local accessibility** - Where public transport routes require diversion, the alternative route should offer a comparable journey time and level of accessibility. The citywide park and ride level of service will need to be maintained, given the importance of this infrastructure in removing traffic form the city centre network.
• **Maintaining provision for walking and cycling** - Provision for non-motorised users should be maintained across all routes and should seek to minimise the length of diversions where needed.

Northern Powerhouse Rail (NPR)

1.5.6 NPR seeks to help transform the economy of the North of England by significantly improving the capacity, frequency and journey time of rail links between the region’s main economic centres. The emerging vision for the scheme in and around Leeds includes:

• Faster trans-pennine links between Manchester and Leeds, either via a new line serving Bradford, or an upgrade akin to a new line via Huddersfield.

• Leeds to Sheffield delivered through HS2 Phase 2b including a touchpoint at Stourton and upgrading the route from Sheffield.

• Leeds to Newcastle via a junction with HS2 including a touchpoint near Garforth and significant upgrades to the East Coast Mainline

• Significant upgrades to the existing line from Leeds to Hull (via Selby)

1.5.7 Combined together, the proposals would deliver a network that will improve services across the region and provide the potential for seamless rail travel across cities in the North from Liverpool to Hull. Both NPR and HS2 are integral parts of the North’s rail network and it is essential that they are planned as part of the network and not in isolation from it, within the approach to strategic rail defined in Transport for the North’s Strategic Transport Plan. Regional and local rail services extend the reach of HS2 and NPR by offering connections via hub stations to places not directly served. Taken together, HS2 and NPR will make significant direct contributions to the connectivity and capacity themes and will provide new high speed services across and from the North that better meet customer expectations. It is also likely that significantly enhanced rail services will lead to a growth in use especially in the numbers of passengers interchanging in Leeds Station.

1.5.8 To ensure that the benefits from both HS2 and NPR are realised by utilising spare capacity on HS2 infrastructure it is important that the touchpoints between the two networks are delivered in full.

• Clayton touchpoint - improves journeys times and service frequencies between Sheffield and Leeds using the HS2 eastern leg. A junction at Clayton has already been included in the scope of HS2 Phase 2b to enable future NPR and HS2 services at Sheffield Midland station to connect onto HS2 to travel towards Leeds, the North East and Scotland.

• Stourton touchpoint - connectivity into Leeds from the South, such would be provided by a new HS2 junction at Stourton which would enable services through Leeds to the North East and Scotland.
• Garforth touchpoint - a junction at Garforth to enable NPR services from the West to connect onto HS2 to the east of Leeds, thereby connecting Manchester and the North West to connect seamlessly to the East Coast main line to the North East and Scotland

Planning context

1.5.9 The WDES sets out the relevant development plan documents and policies in Leeds that should be considered in relation to environmental topics. However, emerging policies are not included in the WDES unless a document has been submitted to the Secretary of State for examination. This is not appropriate given the timescales for the proposed works, most of which will take place after the period covered by the Adopted Core Strategy. In addition to the Leeds Site Allocations Plan, the ES also needs to reference and consider the Leeds Core Strategy Selective Review.

1.5.10 It is noted that the assessment of the scheme across the environmental topics in the WDES has not considered development allocations, environmental designations or other policies set out in either the adopted development plan for Leeds or emerging documents. Nor has it considered other committed developments. As local planning authority for the city, the council expects this assessment to be undertaken for the final ES and the proposed consultation response indicates where, based on the information provided in the WDES, the council consider the HS2 scheme will potentially have an impact on allocations and designations both individually and cumulatively. The council expects to see adequate proposals for the mitigation of those impacts in the final ES.

Employment Land Review

1.5.11 The HS2 scheme described in the WDES involves the loss of committed and proposed employment land. This land will either be lost for employment purposes or will need to be addressed by provision of alternative employment land elsewhere in the district which would result in its own environment impact (an indirect effect of the scheme). This will necessitate the council having to update the existing Leeds Employment Land Review to fully understand the implications of the HS2 scheme on the employment land position up to the proposed opening date of the scheme in 2033. The council therefore recommend that a joint piece of work is commissioned, to be partly funded by HS2 Ltd, to inform the ES socio-economic assessment of cumulative effects and the employment land requirement for Leeds beyond 2028.

Relocation of businesses

1.5.12 Supporting those affected by the infrastructure proposals is important in sustaining economic growth. Relocation of businesses will be critical to ensuring business rate growth continues. Therefore the Council seeks release of the Community and Environment Fund Safety Improvement Fund, Business and Local Economy Fund prior to the submission of the hybrid bill to begin to support those impacted by the scheme. It is important that HS2 provides details of businesses affected to the council as early as possible in order for the council develop an appropriate business support strategy.

Urban design
1.5.13 The submitted WDES triggers concerns that lead to the need for both mitigation (to remedy the implied impact), and opportunities arising (that need to be taken). The council welcomes the arrival of high speed rail and the regeneration it could bring, but its design and construction leads to a number of concerns that need to be addressed by those commissioning and designing the work to ensure that it fits well into Leeds and its range of communities and character areas. It needs to provide a clear path for positive change across the full range of topics and agendas it affects in planning the city.

1.5.14 The basis for many of the urban design issues associated with what is in (and not yet in) the WDES is the range of documents, policies and programmes that the city has already embedded in its workstreams, its engagement with partners and those affecting the city's development. Key tools include: Core Strategy, South Bank Framework, Aire Valley Leeds Area Action Plan, Leeds Integrated Station Masterplan, Our Spaces (public realm strategy and implementation plan), Leeds As One (City Centre Vision), Neighbourhoods for Living (residential guidance for the city) - all these ‘tools’/policies (and others) impact on the approach HS2 should have with design and development in the city.

1.5.15 Overall the visibility of the line in viaduct and embankment form - from distant views and closer (street-type) views - will be paramount to consider. Little evidence has been provided and concerns regarding negative visual intrusion are strong. At this stage (WDES submission) the council has real reservations about loss of visual amenity to the environment and the people of Leeds. Also the potential visual impact of any necessary acoustic barriers, remain a deep concern to the visual amenity.

1.5.16 There is concern regarding the architectural quality emerging for small, ancillary buildings and accommodation (such as service areas, pumping stations, systems compounds etc) as well as the larger scale, significant buildings that will form the entrances (major and minor), car parks, drop-offs etc. There is no evidence in WDES to provide information on that designed quality and it therefore remains a real concern for the council. The design at all scales needs to be of highest quality commensurate with this intervention in the city and it also needs to respect positive local character.

1.5.17 Similarly to the above point about architectural approaches, the ‘engineering’ infrastructure requires excellent design (cuttings, embankments, viaducts etc). These meet physical conditions and communities in different ways. The ‘image’ of individual places as well as that of HS2 need to be considered as the design develops to a status where we can meaningfully understand the proposals, comment and assist progress. This comment applies throughout the line(s) in the Leeds District.

Ecology and biodiversity

1.5.18 The council requests HS2 Ltd to work with the council and its partners the Yorkshire Wildlife Trust and RSPB to create a quality landscape as part of the scheme. The first principle should be avoid unnecessary destruction of habitats, particular woodland and wetland habitats. In this respect, the council seeks more clarity to help identify how the construction land take could be minimised in more sensitive areas.

Other environmental issues
1.5.19 The council have made detailed comments on other environmental effects of the HS2 scheme, including on the historic environment, health, land quality and water resources and flood risk, which are set out in Section 2 of this response.

1.6 Summary of Key Issues in Leeds by Community Area

LA 15 - Swillington and Woodlesford

1.6.1 The WDES describes the route of the Proposed Scheme which would diverge at Scholey Hill, immediately north of the M62, to form two separate routes. The HS2 main line would continue north-east towards for onward connection with the East Coast Main Line (ECML) at Colton Junction. The Leeds spur would be 4.4km in length and would travel in a north-west direction, where it would continue to the HS2 Leeds station. The parts of the proposed scheme in this community area are:

**HS2 main line to the north**

- **River Calder embankment to Scholey Hill embankment** - To the north of Altofts the HS2 main line would continue from an embankment alongside the River Calder onto a new viaduct over the River Calder. The viaduct would cross several features, including the River Calder, the Aire and Calder Navigation and the M62. At the northern end of the viaduct, after crossing the M62, tracks to form the Leeds spur would diverge from the HS2 main line as it passes onto an embankment at Scholey Hill.

- **Scholey Hill embankment to River Aire viaduct** - The HS2 main line would exit the Scholey Hill embankment and pass under the Moss Carr Wood viaduct into Scholey Hill cutting, before transitioning onto the River Aire embankment (south of the A639 Methley Lane) to then cross the River Aire Valley on the River Aire viaduct.

- **River Aire viaduct to Carr Wood South culvert** - The HS2 main line would continue north from the River Aire viaduct onto Swillington embankment and then into Swillington cutting as it passes to the east of the M1. Following Swillington cutting, the HS2 main line would rise onto West Garforth South embankment, cross over the A63 Selby Road viaduct, and then onto West Garforth North embankment to the end of the Warmfield to Swillington and Woodlesford area.

**Leeds spur**

- **Scholey Hill embankment to Woodlesford tunnel (southern cut and cover)** - North of the M62 and adjacent to Methley Park, the Leeds spur (northbound) would exit Scholey Hill embankment into Clumpcliffe cutting. The Leeds spur (southbound) would exit Scholey Hill embankment onto Moss Carr Wood viaduct before entering Clumpcliffe cutting to join with the Leeds spur (northbound). The Leeds spur would continue onto Clumpcliffe embankment, before entering the Woodlesford cutting to the east of Oulton.
Woodlesford tunnel (southern cut and cover) to Rothwell Country Park cutting – From the Woodlesford cutting, the Leeds spur would continue into Woodlesford tunnel (twin bore) to pass under Woodlesford, where it would exit into the Woodlesford tunnel northern cut and cover section. The Leeds spur would continue in the Rothwell Country Park cutting to the end of the Warmfield to Swillington and Woodlesford area.

1.6.2 Understandably local communities are greatly concerned about impacts the scheme will have on their localities, both in the period leading to construction where blight is their concern; during construction where there is increasing concern about the disruption and potential dislocation to the community; and subsequently the quality of the final scheme and the legacy that will leave the communities on and adjoining the route, in Oulton, Woodlesford, Rothwell, Swillington and Methley especially.

1.6.3 Securing an acceptable level of noise mitigation for residents whose properties are impacted upon by HS2 operational noise is imperative. Some areas have existing low environmental noise levels with potentially affected dwellings and non-residential noise sensitive receptors in Swillington and Woodlesford. The WDES proposals through Swillington have potential to adversely affect both residential and non-residential sensitive receptors.

1.6.4 The WDES currently proposes a combination of cutting and acoustic barriers to mitigate noise levels below absolute threshold criteria levels however there are a number of farmsteads that may require additional measures which will be informed by the baseline assessments. It is important to note without the inclusion of measured environmental baseline data, which the council understands will be provided in the ES, the council is unable to state at present if the noise mitigation provided in the WDES is acceptable. The council needs to work in partnership with HS2 to agree an acceptable environmental baseline at the earliest opportunity.

1.6.5 The Woodlesford tunnel remains a crucially important issue for the local community. It is in an area with a long coal mining history which exacerbates concerns that further underground works could cause problems relative to this legacy of earlier workings. This requires continuing and sensitive engagement with the community to address their concerns and reassurance must be provided as to the robustness of the plans. The process for safely and efficiently delivering a modern 21st century railway tunnel needs to be outlined clearly, both in terms of construction and operation.

1.6.6 The council remains of the opinion that further development and refinement of the design, including the location of construction compounds, is essential to bringing it closer to an acceptable final scheme in the village and requests a timetable on this and urges HS2 Ltd to work together with the council on this.

Woodlesford tunnel southern portal and Water Haigh Woodland Park

1.6.7 There are no significant changes to the tunnel portal location in the WDES from the proposal presented in HS2 Phase 2b route refinement consultation. The council remains of the opinion that the tunnel should be significantly longer with the south eastern portal moved well away from the village and ideally to commence to the south of Oulton Beck. Setting the tunnel entrance further south would reduce impacts on
communities and the loss and severance of green space within the park. Further care and sensitive design by HS2 Ltd is required and a strong well developed landscaping scheme will be needed.

1.6.8 The land take associated with construction should be minimised and location of compounds should avoid loss of mature planting area during construction where possible. All permanent losses of parkland within the area should be compensated in full. The council suggest that land around Oulton Beck not required for the operation scheme could be incorporated within an extended park and handed over to the council to manage in the long-term.

1.6.9 The tunnel through Woodlesford will reduce impact of airborne noise but careful design is needed to effectively design out any ground-borne vibration.

**The River Aire Viaduct**

1.6.10 The WDES proposal includes the River Aire Viaduct, which will be a large structure at around 2.2km in length and 28m high and will be highly visible in long distance views across the rural landscape and from residential areas in Woodlesford and Swillington.

1.6.11 The revised scheme presented in the 2017 HS2 Phase 2b route refinement consultation took on board to some extent concerns the council raised in its 2013 consultation response. However, the Main Line to the North remains on largely the same alignment both horizontally and vertically with only minor changes as it crosses the railway, canal and River Aire with the associated impacts of a high viaduct and the environmental intrusion of the rail services high above the valley floor. Whilst it is known that HS2 Ltd has looked widely at alternatives during the option development stage, it remains the view in the community that not enough has been done to seek alternatives. If the Main Line remains as proposed it is therefore essential that mitigation is well provided and the highest quality of design is provided for the Main Line if it is to remain on the current alignment to safeguard the environment and the communities of Swillington and Garforth.

**New viaduct over the River Calder and M62**

1.6.12 The proposed River Calder viaduct over the M62, includes a narrow public right of way diversion immediately adjacent to the motorway. The council considers this proposed mitigation is unacceptable. The viaduct should be extended further over the motorway creating a wider underpass.

**Scholey Hill embankment and Moss Carr Wood viaduct**

1.6.13 The WDES proposals would severance of existing woodland. The council suggests appropriate mitigation is new woodland planting that include physical connections under and across the route using covered tunnel sections in addition to the underpass adjacent to the motorway.

**Swellington Cutting**
1.6.14 A key bridleway link between Swillington and Temple Newsam is severed. A basic farm accommodation / Bridgeway bridge, adding to the existing M1 bridge would be very off-putting for horses and riders in particular. A much wider ‘green bridge’ should be seriously considered to significantly reduce the impact on bridleway users passing over both the HS2 railway and the M1 Motorway in short succession (a length of approx. 200m).

Rothwell Country Park:

1.6.15 The council is of the view that the WDES proposed mitigation for the adverse impacts of the scheme in this location is inadequate. There is a need to mitigate for the loss of publically accessible land. The council suggest that land to the east of the Country Park is transferred to the council for public use, with a commuted sum to cover maintenance to compensate for loss of publically accessible open space in the Rothwell and Woodlesford areas.

1.6.16 The proposed underpasses on Bullough Lane beneath the existing railway line and HS2 route are too low for equestrian use and should be made higher. Improved links between Rothwell Country Park and Skelton Lake should be considered, for example a new bridge of the Aire and Calder Navigation should be delivered as part of the scheme, to link with the recently constructed bridge over the river. This would help mitigate disruption and severance cause by the construction and operation of HS2 in the wider area.

LA16 – Garforth

1.6.17 The WDES describes the route of the proposed scheme through the Garforth area running to the west and north of Garforth and the north of Micklefield which the following key features:

- **West Garforth North embankment to East Garforth cutting** - From the boundary with the LA15 area to the south, the route of the Proposed Scheme would continue north-eastwards on the West Garforth North embankment, towards East Garforth. The route of the Proposed Scheme would then continue into the West Garforth cutting before joining the existing Leeds to Selby railway line overbridge and the East Garforth cutting.

- **East Garforth Cutting to Weet Wood cut and cover tunnel** - The route of the Proposed Scheme would continue onto Micklefield embankment where it would pass under Barwick Road overbridge. The route of the Proposed Scheme would then enter Micklefield cutting before entering Weet Wood cut and cover tunnel.

- **Weet Wood cut and cover tunnel to Ringhay Wood Embankment** - The Proposed Scheme would continue east into Weet Wood cutting before passing under the Great North Road and the A1(M) in the A1(M) cutting. The Proposed Scheme would then enter Ringhay Wood Cutting before rising up onto Ringhay Wood embankment.

1.6.18 Securing an acceptable level of noise mitigation for residents whose properties are impacted upon by HS2 operational noise is imperative for the council.
Understandably local communities are greatly concerned about impacts the scheme will have on their localities, with operational noise a key issue. As the line passes over the north of Garforth, it runs parallel to the M1 motorway and towards Micklefield where the M1 meets the A1(M) there will be a level of pre-existing noise that will provide masking noise for HS2. However without the inclusion of measured environmental baseline data, which it is understood will be provided in the ES, the council is unable to state at present if the noise mitigation provided in the WDES is acceptable. The council stresses the need to work in partnership with HS2 to agree an acceptable environmental baseline at the earliest opportunity.

**North Newhold employment site**

1.6.19 North Newhold Site is allocated for employment development in the Leeds Local Plan and has outline consent for B2/B8 employment development. This is not considered in the WDES. Through the SAP, the council have reduced the estimated capacity of this site to reflect that the area occupied by the HS2 line will not be developable, and there are uncertainties regarding the deliverability of the land to the north of the HS2 line. It is expected that the area to the south of the HS2 line will continue be appropriate for development purposes following the construction of HS2. The council wishes to see HS2 minimise the impact on the developable area of the North Newhold site by relocating area of proposed woodland habitat creation south of the line to the north of the line.

**Green infrastructure**

1.6.20 The council has identified specific opportunities to address severance of green infrastructure where the adverse impacts are most severe and where there is the greatest opportunity for the scheme to provide mitigation measures, for example provision of wide ‘green bridges’, which would function as ecological linkages and public rights of way, mitigating two or more issues of severance;

- **West Garforth cutting:** The bridleway which accommodates a Leeds Core Cycle network route along the line of Barrowby Lane is severed and replaced by a narrow long diverted overbridge. The existing tree lined Avenue which is visible along the ridge line over a wide area would also be lost. The council considers that a replacement bridge would need to be at least 50m wide to allow use of the bridge by pedestrians, cyclist and equestrian users. A ‘cut and cover’ approach to create a ‘green bridge’ should be considered to mitigate severance of public rights of way and the adverse impact on landscape quality.

- **East Garforth cutting:** A long bridleway diversion is proposed over the cutting in the scheme. The council would like to see a cut and cover approach considered close to the Leeds – Selby line.

- **Hawks Nest Wood:** The council considers that there are significant and unacceptably long diversions of public rights of way and severance and fragmentation of woodland in this location. An underpass should be considered at this point.
• **Coburn Hill Woods:** the proposed 3.9 ha of woodland loss at Coburnhill Woods LWS needs to be compensated for by more than a ratio of 1:1 new woodland creation as this is currently high quality habitat and any new habitat will take years to establish. This land has full public access and the compensation land will need to be transferred to the council together with a commuted sum for an agreed number of years to cover maintenance costs. A green tunnel/bridge across the HS2 route to link the existing and new woodland areas is required to connect the two areas of habitat.

**LA 17 – Stourton to Hunslet**

1.6.21 The HS2 WDES describes the route of the Proposed Scheme which would extend westwards from the boundary with the LA15, which is located along the western side of Bullough Lane, running to the south/east of the M1 and to the west of Rothwell Country Park. The Proposed Scheme would continue west under the M1 through Stourton and then north-west on to Hunslet. The northern boundary, with the Leeds Station area (LA18), is located approximately 200m north of junction 4 of the M621. The Stourton to Hunslet area also contains the Leeds East RSD. The Proposed Scheme is described in four separate sections below.

• **Rothwell Country Park cutting to Aire & Calder embankment** - The route of the Proposed Scheme would continue from the boundary with LA15, west under the M1, just north of Junction 44, and towards the Aire & Calder Navigation embankment.

• **Aire & Calder Navigation embankment to Stourton embankment** - The route of the Proposed Scheme would continue onto and embankment close to the Aire & Calder Navigation, west of the M1, before moving onto an embankment at Stourton, which includes the section where the Proposed Scheme passes over Pontefract Road.

• **Leeds cutting** - The route of the Proposed Scheme would continue north-west to the end of the LA17 area along the full length a new cutting (“The Leeds Cutting”).

• **Leeds East rolling stock depot** - The Leeds East RSD (Volume 2: Map CT-06-623b-R1) would serve as an operational and maintenance hub

1.6.22 The council fully supports the proposals for the High Speed Rail line of route to approach the Leeds Station terminus in a cutting through the main urban area, in terms of the environmental mitigation offered by this approach. This “Leeds cutting” is the preferred design option in principle for the council, where the level of landscape and visual mitigation provided by the WDES design option in this location is found to be largely acceptable, albeit it is recognised that further detailed resolutions may be needed.

1.6.23 The council recognises the challenges and complexities of the construction of a high speed line of route on the approach to the city centre in terms of the severance and reduced network resilience caused by the existing infrastructure constraints of the classic railway and M621/ strategic road network. It is also acknowledged that the construction impacts and associated disruption, while potentially significant for the
city are temporary but important considerations which need to be balanced against the potential long term infrastructure legacy of a constructed scheme of this size and scale.

1.6.24 The council is fully committed to working in partnership with HS2 Ltd to help ensure that the delivery of a quality design solution for the city which achieves the optimum balance between a final design with level of mitigation deemed acceptable by the council, that is also deliverable. The council would wish to see the final Environmental Statement set out how any alternatives considered by HS2 in this area address all of these issues.

1.6.25 Given the scale, location and duration of the proposed construction works, the council recognises there is the potential for these works to have a significant impact on both the capacity and resilience of the city’s local and wider transport network. Given the level of qualitatively assessed information presented in the WDES, and the extent of the expected road closures and diversions, the council remains concerned with the current level of risk for significant disruption to the city during the construction in LA17 but wishes to work in partnership with HS2 Ltd to quantitatively evaluate and plan for the mitigation of these risks, as the council considers that the long-term adverse impacts of the Leeds Cutting are likely to be less significant than other potential design solutions.

1.6.26 The council’s key aim for the final high speed rail scheme and its interface with the city centre highway network is to align any proposed infrastructure delivery works with the council’s delivery plans for the City Centre Transport Strategy to mitigate risks of abortive works. The council finds the proposed scheme at this location largely acceptable in terms of the impact on the local road network and the alignment with our future delivery plans.

1.6.27 Jack Lane is however currently a part of the local road network within the South Bank providing east west connectivity and is currently a principal local access route for a significant number of businesses and as well as providing access to the South Bank for adjacent communities. Jack Lane also presently provides an element of local resilience to the adjacent strategic road network. We will continue to work with HS2 Ltd to ensure that the final design addresses local connectivity and business access and egress in this area.

1.6.28 Given the principles for future development and regeneration set out with in the South Bank SPD. As part of further phase of the City Centre package proposals to reduce the level of through traffic within the city centre and encourage greater usage of the inner ring road and M621, the council have identified aspiration to improve access from the A61 Inner Ring Road at Junction 4 to the M621 westbound.

1.6.29 Currently this move is available by means of a tightly curved slip road onto the motorway which results in joining traffic having to weave through westbound mainline traffic seeking to exit at the M621 Junction 3. Options to enable this to be improved have been shared by the council with Highways England. Although funding has not been identified and the proposals are at an early stage there is a general recognition that this scheme could offer appropriate mitigation for the closure of Jack Lane this
would align with the South Bank SPD, with benefits to both the local and Strategic Road networks from an improvement at this location

1.6.30 The council is working in partnership with Highways England and DfT to develop the appropriate funding package for this scheme. The council asks that HS2 Ltd make passive provision for the ability to widen the overbridge to two lanes at this location.

1.6.31 Securing an acceptable level of noise mitigation for residents whose properties are impacted upon by HS2 operational noise is imperative for the council. The line towards Hunslet initially runs through an industrial area at surface level where noise from HS2 is largely screened by existing buildings. The existence of major roads and motorways in this area of Leeds will provide some masking noise but we expect more detailed modelling long with the result of the baseline surveys in the final draft ES to quantify the impact on residential and non-residential noise sensitive receptors, particularly where the line is elevated on a viaduct before it reaches Leeds Station. Where the track is elevated noise levels will need to be modelled at heights representative of any residential buildings with line of sight to the track as the standard model runs are only at 4m above ground level

1.6.32 In Stourton and Hunslet, the council understands that over 30 businesses will be displaced by the scheme. It will be important that the council and HS2 Ltd to work together to develop a strategy to support businesses in relocating to new premises in appropriate locations at an early stage prior to the commencement of construction of the scheme.

1.6.33 In addition to the losses of employment land at the proposed rolling stock depot site, a number of smaller employment sites and safeguarded specialist waste and freight transport sites identified in the Leeds Local Plan would be lost to the scheme. As mitigation, additional employment sites may need to be identified in the district. The council request that HS2 help fund any studies that are required to help develop an appropriate strategy for identifying new sites.

1.6.34 The council welcomes the location of a Rolling Stock Depot in the Aire Valley Enterprise Zone, The rolling stock depot will bring new skilled jobs to the Leeds City Region and be a key part of our ambition to be an international centre of excellence in engineering and high speed rail skills as we seek to maximise the benefits of this investment. The Depot area shown in the WDES would result in the temporary loss of 35 ha of allocated/committed employment. This land would be sterilised for employment development for the duration of construction up to at least 2029. When constructed the depot will occupy 10 ha of commitment employment land although it would be classified as an employment use.

1.6.35 The land to north of site immediately to the east of the Temple Green park and ride site is proposed for Leeds University’s new technology campus at the heart of which will be the Institute of High Speed Rail and Systems Integration. This proposal would be jeopardised under the depot configuration and land take shown on the WDES scheme. Discussions have taken place with HS2 Ltd and it is understood that the latest designs are as per the land take set out in the Secretary of State’s announcement of July 2018, which accommodates the university’s campus immediately to the west of the northern most element of the depot. The council
welcome this boundary rather than earlier version that is shown in the WDES. There will still however be a need to ensure that developments on the remaining employment land in the area brought forward prior to HS2 can still be appropriately accessed following delivery of the RSD.

LA 18 – Leeds Station

1.6.36 The WDES describes the proposed scheme within the Leeds Station area as having three main components:

- **HS2 Leeds station approach** - The route of the Proposed Scheme would continue from the Stourton to Hunslet area north-west towards the existing Leeds Station. The first part of the route of the Proposed Scheme would be located on an embankment, continuing onto a viaduct.

- **HS2 Leeds station** - The HS2 Leeds station would mark the terminus of the Proposed Scheme in the Leeds Station area. It would span the River Aire and join the southern part of the existing Leeds Station forming a combined T-shaped station, broadly occupying land from Holmes Street in the south to the existing Leeds Station at its northern extent.

- **Modifications to the existing Leeds Station** - The HS2 Leeds station would be integrated into the existing Leeds Station via a new pedestrian overbridge to the north. This would create a common concourse by providing direct interchange to the existing Leeds Station platforms.

1.6.37 The WDES is based on an earlier design of scheme. The development of the design of the station and surrounding area has since benefitted from close partnership working. The Leeds Station Integrated Master Plan (LISM) and South Bank SPD set out our proposals for the future development Leeds Station and the South Bank.

1.6.38 LISM sets out a long term framework for the future development of Leeds Station. It has been produced through commissioning of a design team by council, HS2 Ltd, Network Rail, and Department of Communities and Local Government. The planned scheme will incorporate commercial development, which will contribute to the financing of the project. It will support the growth of Leeds City Centre through development adjacent to the station and enhanced public realm.

1.6.39 Redeveloping the South Bank area of Leeds aims to double the economic impact of Leeds city centre by transforming the South Bank into a distinctive global destination for investment, sustainable living, learning, creativity and leisure. The South Bank Leeds Regeneration Framework Supplementary Planning Document (SPD) has been produced to provide clear guidance for the future development of South Bank and to establish principles to drive the growth of the area through:

- An amplification of policies SP3, SP11, CC1, CC2, CC3, P10 and P11 of the Core Strategy;

- Principles about how development and growth will be delivered across the South Bank;
Details of the key interventions proposed across the area, including infrastructure requirements and transport proposals to achieve the intended growth;

Principles and guidance about how HS2 is best integrated into the city’s urban grain and economic vision. This is to help set out the detailed design of the Leeds Integrated Station and developments immediately near it, achieving a world-class gateway that projects an image befitting of Leeds’ role as an international city.

In order to comply with the South Bank SPD the changes to the design of the scheme subsequently agreed in principle between the council and HS2 Ltd should be incorporated into the final design. The main changes required are set out below:

- Physical connection of the HS2 structure to the classic station to ensure integrated station with active frontages
- A Southern Entrance to maximise regeneration and connectivity within the Southbank, including multi-modal transport connections
- North-south connectivity at platform level and street level
- Aligning with aspirations to downgrade roads in the Southbank
- Reorientation of the Pick Up and Drop Off to enhance east-west connections between the City Park and Temple Works
- Request for HS2 to not acquire land the council needs to land the Sovereign Square footbridge and provide links to the City Park
- More efficient management of plant and back office for the Central Concourse to ensure better future development and public space opportunities.
- Safeguarding of the route for two-way mass transport through Neville Street.
2 GENERAL COMMENTS ON THE WDES

2.1 Introduction

2.1.1 This section sets out the council’s general comments on the WDES and route wide issues within Leeds by environmental topic area. Specific comments on the scheme as it relates to the four community areas within Leeds are set out in Sections 3 to 6 of this response.

2.2 Planning and planning context The WDES sets out the relevant development plan documents and policies in Leeds that should be considered in relation to environmental topics in the Community Area reports (e.g. LA17 para 2.1.25). Emerging policies are not included unless a document has been submitted to the Secretary of State for examination (e.g LA17, para 2.1.26). In addition to the Leeds Site Allocations Plan, the ES also needs to reference and consider the Leeds Core Strategy Selective Review which was submitted to the Secretary of State on 9th August 2018.

2.2.2 It is noted that the assessment of the scheme across the environmental topics in the WDES has not considered development allocations, environmental designations or other policies set out in either the adopted development plan for Leeds or emerging documents. Nor has it considered other committed developments. The council would expect this assessment to be undertaken for the final ES and this consultation response indicates where, based on the information provided in the WDES, we consider the HS2 scheme will potentially have an impact on allocations and designations both individually and cumulatively. The council can provide information relating to committed developments and likely delivery timescales and assist HS2 Ltd with the interpretation of development plan allocations, designations and policies as required.

2.3 Air Quality

2.3.1 The AQ scope and Methodology should not just consider the impacts on existing AQMAs, but also look to assess any potential to cause re-exceedances of the AQ directive at relevant receptor points. Unlike the WDES, the AQ Directive does not take relevant exposure in to account. The target requires the annual average 40ug/m^3 to be achieved at a point 4m from kerb where that point is considered “typical” of the link in question and where public access exists within 15m of kerb for at least 100m.

2.3.2 This is likely to be of concern where there will be prolonged or permanent re-routing of traffic during construction or operation.

2.3.3 Short term increases in concentration levels due to construction impacts will be more tolerable however permanent increases in concentration levels resulting from permanent re-routing of traffic need to be balanced against any routes which will receive significant improvements i.e. will there be an increase in traffic movements
in locations already of high exposure but giving significant benefits to low exposure areas or vice versa?

2.3.4 It is noted that the document states the tall construction traffic will effectively be Clean Air Zone compliant. It may be of worth noting that depending on what year is being assessed, the local fleet may be abnormally influenced (ie cleaner) than the national average included within nationally proscribed emission factor toolkits – although if the study year is sufficiently after the

2.3.5 It is not clear how the criteria have been chosen to consider the impact of specific industrial sources rather than using general 1km grid background concentrations. The council requests that this is clarified in the ES.

2.3.6 The council is under direction to introduce a charging Clean Air Zone (CAZ) by the beginning of 2020 in order to bring about compliance with the European Air Quality Directive (AQD) as soon as possible. Modelling by the UK national plan and the council has identified a number of links on or within the Leeds Inner Ring Road which are at risk of not achieving compliance with the AQD without introduction of a Class B CAZ with additional complimentary measures. In addition to the usual air quality assessments undertaken for receptor with relevant exposure. The air quality assessment for HS2 should seek to identify any locations at which there is a risk of re-introducing non- during construction due to HS2.

2.4 Community

2.4.1 The community area reports (section 6.4) identify likely temporary and permanent effect on open spaces. The council has a defined network of open space (known as “green space”) set out on the Leeds Local Plan Policies Map and in the emerging Leeds Site Allocation Plan. The network has been defined in the context of Policy G3 of the Leeds Core Strategy which sets out a typology of six types of green spaces and set standards for the quantity, quality and accessibility of that green space.

2.4.2 It is not clear in the WDES whether the assessment has had regard to protected green space as defined in the development plan and shown on the Policies Map or in emerging plans. The council considers that this assessment should be undertaken as it is important to identifying the significance of the impact on local communities. For example, if the scheme results in the temporary or permanent loss of a type of green space that is assessed to be in deficiency in a local area this may have a proportionally greater impact than if there is a surplus in an area measured against the green space standards, notwithstanding any other adverse effects that may result from the loss of green space. This may also guide the type of green space that may be sought in mitigation for any losses.

2.4.3 This response provides an interim assessment of potential losses (temporary or permanent) of protected green space within the red line boundary of the HS2 scheme. The council recognises that some of the land within the construction phase may remain available for use by members of the public during some or all of the construction period so this will represent a worst case scenario. HS2 Ltd are requested to engage with the council in the assessment of the impact on protected green space as part of the preparation of the final ES.
2.5 Ecology and biodiversity, landscape and public rights of way

2.5.1 The significant effects of the scheme and mitigation measures in relation to these environmental topic areas are considered in Sections 6 (community), 7 (ecology and biodiversity), 11 (landscape and visual) and 14 (Traffic and transport) of the community area reports.

2.5.2 The council considers that the ES should assess the cumulative effects of the scheme in terms of the impact on multi-functional green infrastructure, which serves an important function across all the above environmental topic areas (and provides benefits in terms of others such as flood risk and air quality), within Leeds. A strategic network of green infrastructure in Leeds is defined in the Core Strategy (Policy 13 and shown on Map 16 and the Leeds Policies Map). The red line boundary of the HS2 scheme shown in the WDES, overlaps 520 ha of land within this defined strategic green infrastructure network in Leeds.

2.5.3 Where significant adverse effects cannot be avoided, the approach to mitigation and compensatory measures should reflect the cumulative impact on multi-functional green infrastructure, in addition to seeking to address the adverse effect noted against each environmental topic area. It is considered that the WDES is inadequate in terms of assessing cumulative effects and this results in the mitigation and compensatory measures proposed being unacceptable in some cases. Whilst the WDES provides mitigation in terms of proposed landscape mitigation planting, it does not adequately address the overall severance of green infrastructure that would be caused by the scheme.

2.5.4 The council requests that HS2 Ltd engage with the council and its partners, the Yorkshire Wildlife Trust and RSPB, to create a quality landscape as part of the scheme. The first principle should be avoid unnecessary destruction of habitats, particular woodland and wetland habitats. In this respect, we seek more clarity on the areas marked as land potential required for construction to help identify how the construction land take could be minimised in more sensitive areas.

2.5.5 In general, where habitats and green spaces are adversely affected, the council requests this is compensated with more land, helping to green up the areas between existing green spaces. Where there is unavoidable loss of individual trees/groups replacement planting is a last case scenario as new trees take decades to begin to replace existing trees. We would expect individual trees and groups to be dealt with on a 3 for 1 replacement basis (consistent with NRWLP plan policy LAND2). The default specification is for ‘Extra Heavy Standards’ replaced in the same place or as close as possible to the original. In high profile locations the loss of mature/semi mature trees may demand semi-mature tree replacements for immediate effect.

2.5.6 Where woodland areas are being lost, then compensation would be expected on a minimum area for area basis (exclusive of screening planting to fulfil other objectives. It takes generations to replace mature trees in terms of their size and contribution. To compensate for this the replacement area should generally be at a ratio of 1:1:5. Where the woodland is being replaced then the soil should be saved and reused in the compensatory woodland area to ensure the continuity of the wider biodiversity features which are often an essential ingredient of the woodland habitat. Soils require
careful handling during construction. Much of the success of any new vegetation from
trees to wold flower meadows will depend on the health of the soil. All soiling
operations must be in accordance with BS8601 2013 Subsoil & BS 3882 2015
specification Topsoil. More specialised methodologies will be required if soils are
intended for habitat creation.

2.5.7 In some areas compensatory planting for the scheme, either proposed by WDES or
suggested in this response, could involve extension of existing council owned
country parks. The council would want to be involved from the outset in consideration
of mitigation and compensatory habitat including specifying the quality and function
of habitat. Where the council could work as a partner with HS2 to take on long term
management / ownership of the land, the habitat would need to be properly funded
to a condition that is acceptable and encompasses long term management costs.

2.5.8 Sections 3 to 5 of our response identifies specific opportunities to address severance
of green infrastructure for each community area in Leeds where the adverse impacts
are most severe and where there is the greatest opportunity for the scheme to
provide mitigation measures, for example provision of wide ‘green bridges’, which
would function as ecological linkages and public rights of way, mitigating two or more
issues of severance.

2.5.9 With specific reference to ecology/biodiversity, section 7.3 of the community area
report relevant to Leeds should recognise the Leeds Habitat Network needs
recognising – this identifies land of at least District value and specifically recognises
the importance of physically connected habitats – which should then be considered
against subsequent impacts from fragmentation. It is the council’s view that the
mitigation/compensation is not of sufficient scale to result in no net loss of
biodiversity. There is a need to consider adverse impacts arising from fragmentation
of the Leeds Habitat Network, and also the impacts on mammal species (specifically
Roe Deer and Badger) and amphibians arising from fragmentation of habitats and
how they can continue to cross the rail line at specific locations.

2.6 Health

2.6.1 The council has previously written to HS2 (12th July 2018) setting out observations
on the health issues in Leeds that will need to be assessed in the final ES. The key
issues raised are summarised below (paras 2.6.2 – 2.6.4).

2.6.2 There are significant health inequalities between the residents of the poorest and
most affluent neighbourhoods which the HS2 route passes through within Leeds
which is demonstrated by a number of health indicators such as average life
expectancy.

2.6.3 The health assessment in the final ES should pay particular attention to the effect of
the following issues on the health and wellbeing of the people of Leeds:

- Air quality in relation to long-term and short-term exposure to air pollution,
particularly for the and compliance with air quality targets, including
monitoring of potential air pollution from increased traffic related to the
scheme and dust from contaminated soil from old landfill and mining sites.
- Community severance and access to services and green spaces and the potential for HS2 to act as a barrier between communities and their traditional local services

- Economic impact and the need to assess the potential impact on all sections of society and ensure its benefits are felt by all residents of Leeds in line with the council’s Leeds Inclusive Growth Strategy

- Noise impacts on communities living close to the route for both the construction and operational phases and the need for appropriate mitigation.

- Road safety during the construction phase, perceptions of safety amongst pedestrians and cyclists and the impact on physical activity.

2.6.4 The following local policies, programmes and strategies should be taken into account as part of the health assessment in the ES:

1) Leeds Health and Wellbeing Strategy

The key indicators with potential effects that need to be assessed in the final ES include:

- Educational attainment at 16 (impact of noise pollution)
- Adults in employment (community severance leading to longer more timely, costly commutes
- Physically active adults
- Infant mortality

2) Leeds Best council Plan

Key indicators:

- Percentage of physically active adults
- Children who are at a healthy weight aged 11
- Reduction in avoidable years of life lost (premature mortality)
- Suicide rates
- Social isolation and loneliness (indicator in development)
- Number of people killed or seriously injured in road traffic accidents
- Increase in city centre travel by sustainable travel (bus, train, cycle, walk)
- Carbon Emissions across the city

3) Leeds Inclusive Growth Strategy
http://www.leedsgrowthstrategy.co.uk/

4) Leeds Sport and Physical Activity Strategy
Available on request
2.6.5 The WDES shows a number of construction compounds along the line of route. The location of main and satellite construction compounds and number of construction staff working within the local areas should be considered as this has the potential to impact on the delivery of local health services in the area. The council are also concerned about the location of compounds close to homes and the potential for these to increase health risks to local residents, particularly in relation to noise, light pollution and air quality impacts from construction vehicles. These impacts should be assessed in the final ES and appropriate mitigation should be proposed, including relocating compounds further away from homes.

2.7 Historic Environment

2.7.1 The WDES provides a description of the current baseline for heritage assets in the district and the likely impacts and significant effects identified to date resulting from the construction and operation of the proposed scheme. This has considered the extent and significance of heritage assets and identified a number of potential adverse effects.

2.7.2 Paragraph 9.1.2 of the Community Area Reports (Volume 2) refers to engagement with the council and other bodies to discuss the assessment approach. The council would welcome continued engagement with HS2 through the next stages of scheme design and preparation of the ES assessment to enable us to impart our local knowledge on these issues.

2.7.3 The council specifically requests further discussion on the heritage evaluation of significant assets to establish a shared understanding of the evidence base with HS2.

2.7.4 Bridges: The council notes that there is no intent to record bridges, including those earmarked for demolition, or to prepare a Statement of Heritage Significance for them which is a concern. Some bridges date from 1840, which is regarded by Historic England as the “pioneering phase” of the railways which may immediately attract a designation of potentially “highly significant” to be evaluated further. The first position to take should be that of retention as with all heritage assets. This methodology has already come through parallel studies with Historic England and Network Rail for the electrification of the Selby-Leeds line. The way that the non-designated assets have been looked at is to consider their eligibility for listing, or their treatment if they remain undesignated. Each structure receives an in-depth analysis that contributes to a matrix of understanding for the whole line. HS2 should review the rail structures adding the outcome to the proposed gazetteer.

2.7.5 Non-designated assets: These have been named by HS2 but have not been mapped in the WDES material. The council’s understanding of the assessment of the significance of the assets would be improved if these maps were shared. The council requests that “lost assets” are included in the assessment, including those associated with local people and events, as these add to the meaning of place for those living and visiting the city. The council has identified potential “lost assets” and
other non-designated assets to be included in the final ES assessment. It is important that the council has sufficient time to contribute knowledge on these issues to ensure that non-designated buildings are treated appropriately.

2.7.6 Archaeological remains / finds: The WDES identifies a number of areas along the route in Leeds where there could be archaeological remains in the historic environment sections. The mitigation measures proposes are set out in the Draft Code of Construction Practice (CoCP) which commits to a programme of historic environment investigation and recording including archaeological to be undertaken prior to or during construction. The CoCP also refers to a separate paper on archaeology. The version of this paper for the HS2 Phase 2A scheme includes the following on archiving:

Archiving

6.11 The Promoter recognises the need to deposit the nominated undertaker’s archaeological archive and will deposit it in an appropriate repository or repositories. The nominated undertaker will be committed to working with Historic England and local authorities to identify suitable repositories (such as a museum storage facilities) to enable the deposition of the artefacts and records generated by the Proposed Scheme’s archaeological investigation works.

2.7.7 The council supports this approach for Phase 2b although reference should also be made to the repositories being publicly accessible and that this should be in accordance with their deposition guidelines. However, the resources implications for local authorities in terms of providing suitable museum storage areas is an important issue. The council therefore requests that HS2 ensure that funding is available to local authorities to ensure that suitable storage facilities are available in the event of significant finds of archaeological artifacts during the construction of the scheme within Leeds. The alternative will be valuable material being lost to the future as the council would not have capacity to take it. Long term preservation of, and access to, finds must be ensured to adequately mitigate potential impacts of the scheme.

2.8 Land quality

2.8.1 Within Section 8.9.7 of Volume 1: Introduction and Methodology, it states that “for the contaminated land assessment, a conceptual site model (CSM) and risk assessment approach has been used, in line with the Environment Agency guidance document CLR11”. This methodology has been adopted to derive the risk ratings under section 10.4.7 and summary baseline CSM under Section 10.4.10 for areas LA15, LA16, LA17 & LA18 under Volume 2. Having reviewed the CLR11 document however, the council is concerned that no reference is made to any risk assessment methodology and/or matrix which has been adopted in Sections 10.4.7 and 10.4.10. This makes assessment difficult and the council would welcome further discussion on this matter.

2.8.2 With reference to bullet point 4 (methods for the storage and handling of excavated materials (both contaminated and uncontaminated) under Section 10.4.2 for each LA Area under Volume 2, it is unclear whether any excavated materials that will be re-
used on-site will be safe and suitable for their intended use. This requires clarification.

2.8.3 With reference to Section 11.2.6 of the CoCP, the council seeks confirmation that the latest version of the British Standard documents under bullet points 2 and 3 have been adopted.

2.8.4 Should any soils and/or soil forming materials be imported for use during construction and/or development works, we would expect to see an importation methodology to ensure that any soil and/or soil forming materials that are imported will be safe and suitable for their intended use. The methodology should include information on the source of the materials, sampling frequency, testing schedules and criteria against which the analytical results will be assessed (as determined by risk assessment). If soils and/or soil forming materials are to be imported, the above need to be been taken into consideration.

2.8.5 To our knowledge, the council has not been contacted to ascertain what contaminated land information we hold. We appreciate that it is possible that some of this information may have been obtained through other means. However, it is recommended that further discussion with the council is carried out specifically to share contaminated land information.

2.9 Landscape and visual (including urban design)

2.9.1 The council welcomes the constructive workshop process and dialogue into which HS2 have engaged and look forward to continuation of this approach in the future design development of the project. General considerations relating to the construction and design of the scheme are set out in the following paragraphs of this response. Specific comments relating to the scheme including the station, rolling stock depot and proposed structures along the route are set out in the community area sections (Sections 3 to 6).

2.9.2 The submitted WDES triggers concerns that lead to the need for both mitigation (to remedy the implied impact), and opportunities arising (that need to be taken). The city welcomes the new infrastructure and the regeneration it could bring, but its design and construction lead to a number of concerns that need to be addressed by those commissioning and designing the work to ensure that it fits well into Leeds and its range of communities and character areas. It needs to provide a clear path for positive change across the full range of topics and agendas it affects in planning the city.

2.9.3 The basis for many of the urban design issues associated with what is in (and not yet in) the WDES is the range of documents, policies and programmes that the city has already embedded in its workstreams, its engagement with partners and those affecting the city’s development. Key tools include: Core Strategy, South Bank Framework, Aire Valley Leeds Area Action Plan, Leeds Integrated Station Masterplan, Our Spaces (public realm strategy and implementation plan), Leeds As One (City Centre Vision), Neighbourhoods for Living (residential guidance for the city) - all these ‘tools’/policies (and others) impact on the approach HS2 should have with design and development in the city.
2.9.4 The following apply to all the line(s) across the district:

2.9.5 Overall the visibility of the line in viaduct and embankment form - from distant views and closer (street-type) views - will be paramount to consider. Little evidence has been provided and concerns regarding negative visual intrusion are strong. At this stage (WDES submission) it is a real concern of visual amenity to the environment and the people of Leeds. Also the important visual impact of any necessary acoustic barriers remain a deep concern to the visual amenity.

2.9.6 The disconnection and visual character of the ‘cutting’ form is a concern as the line runs parallel to the existing infrastructure and creates further disconnection between and within communities of Leeds. The intent must be to mitigate this loss and deliver on opportunities for development and community regeneration to minimise the environmental and social disconnection implied by WDES along the route (HS2 team is expected to deliver specific proposals to mitigate (and take opportunities) along the route.

2.9.7 The implication of demolition of existing premises and landscape along the route requires suitable mitigation and opportunities to be clarified. The proposals set out in WDES could easily create considerable environmental damage and blight the areas affected for years to come. Businesses and people require positive momentum regarding HS2 as it joins and changes the city along the entire route(s). Environmental, economic and social damage could result unless care is taken and good design developed in some detail to provide planned connections and regeneration.

2.9.8 There is a strong general concern along the route regarding a key impact and the implications of the WDES. Community safety and negative impacts on human psychology are well documented around the use of ‘underpasses’ in urban (and rural) areas. To the extent that many cities (including Leeds) have a programme of removal of these - in order to provide safer, more attractive environments worthy of this and future generations. This work has been carried out for a number of years to remove these ‘dangerous’ structures from our towns and cities. There is considerable concern regarding the WDES in this regard, and much work needs to be done by the HS2 team in the infrastructure and related regeneration work to provide an integral solution to this. The prospect of up to 60m wide undercroft leading to the heart of Leeds and creating unsafe connection and also, sometimes, disconnection between parts of the city is not considered to be acceptable to the council. This is an environmental concern that triggers considerable human distress and challenges to day to day safety. Creating such undercroft spaces is an environmental concern throughout the line(s). There is a need to not divide the city but to create connections both east-west and north-south as the line enters the district and reaches the central area. Mitigation and opportunities are required to deal with the implication and clear realities of the design contained in the WDES. Work is being done to integrate regeneration, development with the infrastructure of HS2 - but this is a challenge that is far from resolved in the remit and design certainties being established by HS2. This needs detailed consideration by HS2 team to deal with along the entire line(s) in Leeds District.
The character and community areas that HS2 passes through in Leeds need to be considered in some detail. There is background work on the line from Woodlesford tunnel to the city centre alone that has identified some 13 character areas (4 of which are in that central area as the line passed through the regeneration area of South Bank. HS2 team have worked well with council teams to explore this, but there is no evidence or clarity in the WDES and therefore this remains a crucial concern. The council’s Design Prompts provided alongside the HS2 Independent Design Review Panel provide clarity of the council’s view and expectations with the integral work needed to design/develop HS2 to land well in this part of the city.

In more detail, contained in the WDES, there is concern regarding the architectural quality emerging for small, ancillary buildings and accommodation (such as service areas, pumping stations, systems compounds etc) as well as the larger scale, significant buildings that will form the entrances (major and minor), car parks, drop-offs etc. There is no evidence in WDES to provide information on that designed quality and it therefore remains a real concern for the council. The design at all scales needs to be of highest quality commensurate with this intervention in the city and it also needs to respect positive local character.

Similarly to the above point about architectural approaches, the ‘engineering’ infrastructure requires excellent design (cuttings, embankments, viaducts etc). These meet physical conditions and communities in different ways. The ‘image’ of individual places as well as that of HS2 need to be considered as the design develops to a status where we can meaningfully understand the proposals, comment and assist progress. This comment applies throughout the line(s) in the Leeds District.

Construction areas will have a visual impact on the area. It is important that regard is had to this, and that the impact on the surrounding area is taken into account when determining the size / location of the necessary construction areas.

It is unclear whether access roads proposed in the scheme to service structures and equipment would be publically accessible during the operational phase. The council’s preference is for public access along access roads where this would be appropriate, for example, where it could link into the adjoining pedestrian / cycle network. If land around access roads is to be protected, any fencing should be sympathetic to the urban or rural setting.

Pumping stations and tunnel portal buildings should be designed to be sympathetic to their rural or urban setting. This may require provision of suitable landscape mitigation to help screen the structures in certain locations.

In relation to balancing and ecological mitigation ponds, the council’s preference is for balancing ponds to be designed to look less engineered and for land around balancing and ecological ponds to be made publically accessible where this can be achieved in relation to existing/diverted public rights of way. Any fencing necessary should be sympathetic to the urban or rural setting.

Various areas are proposed for woodland planting during the HS2 operational phase, although future public accessibility to these areas is currently unclear. It is the council’s clear preference that the public has access to these areas, wherever
possible, so that they serve a function as publically accessible greenspace / recreational resource in the future and help to mitigate the loss of woodland / greenspace that will occur as a result of the HS2 scheme. Opportunities to link the existing / proposed diverted Public Rights Of Way (PROW) network into these features should also be taken where they exist.

2.9.17 Where footpaths are to be diverted to underbridges / overbridges, it is of great importance that the design of these features ensures that they are safe to use at all times of the day and discourage anti-social behaviour. Where overbridges are proposed, they should have architectural quality rather than being mundane structures so as to positively contribute to their setting. This will help to ensure that these footpaths continue to be attractive routes for pedestrians following HS2 construction. In other parts of this response, locations to provide wider “green bridges” to address cumulative impacts have been suggested.

2.9.18 With specific reference to rural landscapes, the council has undertaken a landscape character assessment of the district. It is noted that the HS2 scheme bisects: 5 difference landscape character areas, 5 different landscape management areas and 3 different Special Landscape Areas. The details are available to share with HS2 Ltd in detailed discussions. An appropriate design response will be required in such areas.

2.10 Socio-economics

2.10.1 The Leeds City Region is growing and HS2 is vital to support the next step in transforming our economy. HS2 is much more than just a transport project. It will act as a catalyst for regeneration and growth around our main transport hubs, it will improve connectivity to our towns and cities across the Leeds City Region and the North, it will improve the skills and job opportunities for our workforce, it will create opportunities for our businesses and supply chains, and enhance the image and profile of our city region.

2.10.2 HS2 is part of our wider ambitions for inclusive growth across the Leeds City Region. This growth is essential in order to raise living standards and tackle deprivation, boost innovation, exports and create new jobs. HS2 helps achieve our goals by strengthening business links, by opening up new markets and access to talent and by connecting people to jobs. As a major piece of national infrastructure HS2 will result in faster journey times, improved national North - South connectivity and much needed increased capacity on our rail network. Passengers will soon be able to travel across the UK at speeds of up to 250mph in new high speed trains and HS2 will offer a solution to the overcrowding of the existing rail stock running along the East Coast Mainline with associated spin off benefits to the wider network.

2.10.3 It will also help link the Northern Powerhouse and Midlands Engine, rebalancing the rest of the UK with the South East and unlocking the full potential of the Leeds City Region. For Leeds this will mean the redevelopment of the busiest railway station in the North, fuelling our wider ambitions for regeneration of the South Bank, creating new jobs and homes, and delivering a reimagined waterfront and city park right in the heart of Leeds.
2.10.4 HS2 is also a key component in improving the wider connectivity and transformation of rail in the North. This includes Northern Powerhouse Rail that will connect Liverpool, Newcastle and Hull, and crucially driving down the journey time from Leeds to Manchester (via Bradford) to 30 minutes, uniting two of the main drivers of the Northern Powerhouse.

2.10.5 Additional to the jobs created by the construction of HS2 we anticipate that 40,000 jobs will be created by 2050 as a result of the arrival of HS2 in the Leeds City Region. This is a conservative estimate and it is considered that a further 50,000 jobs will be created in the Leeds City region in the same timescale as a result of additional growth strategy interventions leading to regeneration and productivity gains.

2.10.6 Supporting those affected by the infrastructure proposals is important in sustaining economic growth. Relocation of businesses will be critical to ensuring business rate growth continues and therefore the Council seeks release of the Community and Environment Fund Safety Improvement Fund, Business and Local Economy Fund prior to the submission of the Hybrid Bill to begin to support those impacted by the scheme.

Employment land

2.10.7 The WDES includes a review of employment land in Leeds district (e.g. Volume 2, LA17, para 12.3.6). This is based on the council’s 2016 Authority Monitoring Report (AMR). The council has undertaken further work to review the employment land supply position, which is set out in the 2017 AMR. This shows a supply at April 2017 of 437 hectares of industrial and warehousing land and land to construct 918,000 square metres of office floorspace. The 2018 version of the AMR should also be available to support the preparation of the final ES with up-to-date evidence. The employment land requirement for Leeds is set out in the Core Strategy as 493 hectares of general employment (industrial / warehousing land) and 1 million square metres of office floorspace over the period 2012-28. The WDES provides a simple comparison of the requirement against the supply but caution should be taken with this approach. The requirement is for a specific time period and the effects of HS2 will extend beyond the timescales currently being planned for. LCC would welcome a discussion with HS2 Ltd to clarify this matter for the final ES.

2.10.8 The 2017 AMR shows the employment land supply (industrial / warehousing land) amounting to approximately 18 years supply i.e. there was sufficient land to meet the city’s expected demand for employment land to 2035. However, the HS2 scheme will impact this in two ways. Firstly, as an assumption for loss of existing employment premises over the study period forms part of the calculation of the requirement, the additional loss of employment premises (and the land required to replace them) resulting from the HS2 scheme would need to be factored in. Secondly, the HS2 scheme described in the WDES involves the loss of committed and proposed employment land. The council calculates the loss of committed and proposed employment within the red line boundary to be 55 hectares over the current plan period to 2028. This is identified as a cumulative effect of the scheme as this land will either be lost for employment purposes or will need to be re-provided by provision of alternative employment land elsewhere in the district which would result in its own environment impact (an indirect effect of the scheme). In particular the proposed
Rolling Stock Depot at Junction 45 of the M1 and on land within the Leeds Enterprise Zone is blighting land which is immediately available for the development of employment uses, therefore reducing land supply within the city. Take up of space within this part of the city has been high with developments progressing at pace on those sites (Logic Leeds, Thornes Farm and Newmarket Lane) which are not impacted by HS2.

2.10.9 This will require the council to update the existing Leeds Employment Land Review to fully understand the implications of the HS2 scheme on the employment land position up to the proposed opening date of the scheme in 2033. The council therefore requests that a joint piece of work is commissioned, to be partly funded by HS2 Ltd, to inform the ES socio-economic assessment of cumulative effects and the employment land requirement for Leeds beyond 2028.

2.10.10 The WDES identifies direct impacts to a number of businesses (the council understands this to be around 70 businesses) along the route in Leeds particularly in Community Areas LA17 and LA18, and identifies the likely number of jobs that would be displaced or lost in each area. The assessment concludes that (e.g LA17 para 12.4.16) that there is a reasonable prospect that business would be able to relocate to places that are still accessible to residents due to the availability of vacant premises or where businesses would not be able to relocate the loss of jobs would be relatively modest in the context of the number of jobs in Leeds. The council does not consider that this assessment takes account of the cumulative issues relating to loss of employment premises and loss of employment land associated with the scheme set out above.

2.10.11 To mitigate the potential loss of business in the district, it will be important that the council and HS2 work together to develop a strategy to support businesses in relocating to new premises in appropriate locations at an early stage prior to the commencement of construction of the scheme.

2.11 Sound, noise & vibration

Operational Noise – fixed plant and infrastructure

2.11.1 There do not appear to be specific details of the proposed noise criteria for fixed plant or infrastructure within the various reports. It should be noted that noise will need to achieve a BS4142 rating assessment level at noise sensitive receptors of no higher than the representative background level, including the addition of any character corrections as appropriate. If the character is unknown at the design stage a penalty of 5dB should be applied to take into account potential corrections.

Operational Noise - Railway

2.11.2 The council finds the methodology and assessment criteria presented in the WDES acceptable with regard to the HS2 operational impacts of noise in terms of the stated alignment with Government noise policy, planning policy, planning practice guidance on noise (PPGN) and EIA Regulations. However without the inclusion of measured environmental baseline data, which the council understands will be provided in the
ES, the council is unable to state at present if the noise mitigation provided in the WDES is acceptable.

2.11.3 The WDES maps demonstrate how noise effects at receptors could be controlled to meet the objective target noise levels. The WDES does not include measured baseline data for noise, the noise maps show purely the expected effects of operational noise when screening effects of barriers and cuttings are taken into account. The final draft Environmental Statement will include the measured baseline data which will provide context to the operational noise levels needed by the council to undertake a full assessment of the impact of the operational noise of HS2.

2.11.4 For example, in areas where there exist relatively low levels of environmental noise, there may be a stark contrast between the baseline and operational noise level even though below the set threshold criteria for significant adverse effect. The cumulative impact in increase in decibel level with the introduction of a new noise source therefore need to be considered in the context of the existing baseline noise level.

2.11.5 As stated in the method statement, the assessment of noise impact will look at both absolute noise level criteria and the magnitude of change in noise level from the new railway. This may result in a reassessment of the mitigation measures required in some areas within the district. It may be the case that in some locations such as in the city centre, the impact on overall decibel level at sensitive receptors is unchanged due to the presence of high levels of existing environmental noise and therefore proposed mitigation may be deemed unnecessary. Note that existing baseline levels may be different to those prior to operation due to planned changes in major road networks in Leeds and an expected increase in electric vehicles which may see reductions in sound level from roads.

2.11.6 Baseline assessment data will inform on the likely thresholds (absolute or relative) for each receptor based on pre-existing acoustic environment and that predicted for construction and operation. We note that objective data and description of the character is to be taken in the baseline assessments and agree with this approach. This is because noise impacts must be judged on overall decibel level compared to the pre-existing level and its characteristics.

2.11.7 The scope and methodology mentions that HS2 may affect existing or create new ‘Noise Important Areas’ under the Environmental Noise Directive (END). The WDES states that HS2 will engage with competent authorities responsible for the relevant Important Areas - in the case of rail noise from HS2. The council seeks clarification from HS2 Ltd as to how will this work in practice as the END requires action plans to be drawn up to implement further measures to mitigate noise. The council expects this to be addressed in the final ES.

2.11.8 Across the route, there is potential for community and residential properties to be significantly affected by residual operational noise in the LA 15, 16, 17 & 18 areas.

2.11.9 The approach to the assessment of operational noise impacts taken thus far is acceptable in principal notwithstanding the need to examine the predictions in the context of the existing soundscape and also the expected soundscape (both natural and man-made sources) when operational in the absence of operational noise. i.e.
we expect that as the uptake of electric vehicles increases that general road traffic noise will reduce with the exception of roads where the average speed is above 40mph (tyre noise becomes more dominant at higher speeds so less likely to be lower than currently on those roads).

2.12 Traffic and Transport

2.12.1 The council recognises that the construction of a national infrastructure project the size of HS2 will inevitably cause disruption to the transport network, and welcomes the proposed measures and standards of work put forward in the CoCP to provide effective planning, management and control during the construction period and provide mechanisms to engage with local communities.

2.12.2 The council is fully committed to working in partnership with HS2 Ltd to help ensure that the delivery of a quality design solution for the city which achieves the optimum balance between a quality final design with level of mitigation deemed acceptable by the council, that is also deliverable from a HS2 programme perspective.

2.12.3 From the level of information provided in the indicative construction programme the council acknowledges the potential for a prolonged period of disruption for the city between 2023 and 2033 as HS2 is built, and seeks to work in partnership with HS2 Ltd to mitigate this. The council are committed to working with HS2 Ltd, and other stakeholders across the city to ensure a phased and co-ordinated programme of delivery. This programme should seek to minimise disruption and its associated negative economic impacts, with the aim that they are mitigated to a level deemed acceptable to the city in the context of the long term economic benefits associated with the arrival of high speed rail in Leeds and the Leeds City Region in 2033.

2.12.4 The council recognises the challenges and complexities of the construction of a high speed line of route at this location in terms of the severance and reduced network resilience caused by the existing infrastructure constraints of the classic railway, M621 and strategic road network. The council recognises that the construction impacts and associated disruption, while potentially significant for the city are also temporary, in the context of the potential long term infrastructure legacy of a constructed scheme of this size and scale.

2.12.5 Given the scale, location and duration of the proposed construction works, the council recognises there is the potential for these works to have a significant noise, air quality and journey time impact on both the capacity and resilience of the city’s local and wider transport network. On the level of qualitatively assessed information presented in the WDES, and the extent of the expected road closures and diversions, the council remains concerned with the current level of risk for significant disruption during the HS2 construction period.

2.12.6 This risk of disruption is both in terms of severity, duration and the subsequent cost to the economy, both in terms of economic cost of delay and the potential for associated blight in the both area around immediately around Leeds Station, the South Bank and wider city. The council is also concerned about the potential negative impact on local accessibility for the communities and businesses.
2.12.7 The WDES states that the potential effects on traffic and transport have been assessed qualitatively, with no quantitative assessment undertaken at this stage. The council understands that the quantitative assessment of the network management impacts will be reported in the Environmental Statement. The council formally requests through this consultation response to work in partnership with HS2 Ltd, alongside other key stakeholders to input into the methodology to quantitatively evaluate construction network management impacts of the Leeds Cutting design presented in the WDES. This should be carried out in the appropriate modelling package and agreed future design year scenario.

2.12.8 The council also formally requests that the outcome of this quantitative evaluation should inform the ongoing design development of the WDES proposed scheme, and the preparation of the quantitative assessment for the design put forward in the Environmental statement.

2.12.9 The council has put forward the following Network Management Principles for construction as a platform for our engagement with HS2 Ltd going forward

- **Support for off line construction solutions at strategic locations on the road network where practicable** - The construction methods should focus on the delivery of off line solutions in areas which have the potential for the greatest impact on the road network, with the closure of the strategic road network main carriageway avoided where possible.

- **Maintain the functionality of station and its environs during construction** - Maintain pedestrian connections during construction, Protect Bus routes from delays during construction and Maintain functional highway capacity during construction

- **Planning for effective phasing of road closures** - This is particularly important for mitigating the level construction impact on the network. A partnership approach with HS2 Ltd, Highways England, West Yorkshire Combined Authority and Network Rail is needed to deliver a comprehensive network management plan.

- **Mitigation according to hierarchy of impact** - The acceptability of a proposed road closures will depend on the location, duration and severity of the impact. The sequencing of road closures should consider the hierarchy of the road network, with the impact of potential closures above an agreed threshold should be modelled in the appropriate software package.

- **Maintaining Network Resilience and managing the cumulative network impact** The resilience of the road network should be preserved with the closure of no more than two bridges during the same time period with sufficient separation between the locations, alongside the closure of no more than one key adjacent radial or parallel route during the same time period. Given the proposed duration of the construction period the cumulative impacts of the road closures on the local network will need to be evaluated in order to mitigate prolonged periods of disruption for local communities and businesses.
- **Maintaining public transport and local accessibility as well as provision for walking and cycling**: Where public transport routes require diversion, the alternative route should offer a comparable journey time and level of accessibility. The citywide park and ride level of service will need to be maintained, given the importance of this infrastructure in removing traffic from the city centre network. Provision for non-motorised users should be maintained across all routes and should seek to minimise the length of diversions where needed.

2.12.10 The council’s strategic aim in terms of the final high speed rail scheme and its interface with the city centre highway network is to align any proposed infrastructure delivery works with the our delivery plans for the City Centre Transport Strategy to mitigate risks of abortive works.

**Connecting Leeds Vision**

2.12.11 Our Connecting Leeds Vision shaped by a city wide transport conversation looks to create:

- A world-class connected city, that allows seamless end to end public transport journeys internationally, nationally, regionally and locally;

- An ambitious city, that attracts and plans for inclusive growth;

- A smart city that embraces innovative technology to efficiently use, manage and maintain the transport network;

- A people-focused city, with well-connected neighbourhoods and a city centre that’s easily accessible for everyone.

2.12.12 The current programmes within Connecting Leeds build on the success of recent infrastructure investments. The new Park & Ride facilities at Elland Road and Temple Green, offer a real alternative to bringing the car into the city centre - reducing congestion, and improving air quality. Leeds Southern Station Entrance and Kirkstall Forge Railway Station have also supported both the growth in rail use and regeneration of communities. Alongside the Leeds Public Transport Investment programme, the council is leading on major schemes within the £1bn West Yorkshire Transport Fund. The delivery of the Leeds City Centre Package including Armley Gyratory, East Leeds Orbital Road and Airport Link Road are projects designed to deliver housing, employment and inclusive economic growth.

2.12.13 The emerging Leeds City Region Connectivity Strategy is aligned with Transport for the North’s Strategic Transport Plan, the West Yorkshire Transport Strategy and our existing connectivity priorities.

2.12.14 The council is fully committed to aligning our future transport plans to HS2 to both maximise the benefits of high speed rail within Leeds and the City Region, but to also help mitigate the impacts during construction on the network, through the development of strategic transport solutions for key points of the network impacted on by HS2 construction. For example the use of temporary Park and Ride. The council requests to work in partnership with HS2 Ltd to develop and evaluate these
options, and that these are modelled and quantified in the appropriate software package as part of a comprehensive transport assessment and network management plan for the design present in the WDES.

2.13 Water resources and flood risk

2.13.1 The council finds the methodology and assessment criteria presented in the WDES acceptable with regard to the HS2 construction and operational impacts on flood risk and drainage and we are pleased to note that the scheme promoters are progressing hydraulic model studies of the River Aire and Yorkshire Water Services Limited’s combined sewer network to determine mitigation measures, and that a full flood risk assessments and method statements for the works are being undertaken to avoid the risk of potential flooding to residential and commercial properties. The design of drainage systems aims to ensure that there would be no significant increases in flood risk downstream, during storms up to and including the 1 in 100 (1%) annual probability design event, with an allowance for climate change and the council agrees with this.

2.13.2 It is also noted that the Proposed Scheme affects the assets and infrastructure of several agencies beyond that owned and maintained by Leeds City council, notably Yorkshire Water, the Environment Agency and the Canals and Rivers Trust. Early engagement with these agencies will help identify the full range of issues and the feasibility of proposed mitigation measures and is therefore recommended. The ES should also take account of the Local Flood Risk Management Strategy – 2018 for the proposed works, impacts and mitigation, especially at Leeds Station and Barwick Road re-alignment.

2.13.3 Proposed un-attenuated discharge of rooftop rain water in to the River Aire – this is acceptable in principle, but ideally HS2 would contribute to LFAS2 to alleviate any potential concerns over impact downstream. Potential benefit to the sewer network which is over capacity.

2.13.4 Proposed/ assumed connections into YW sewers – YW have no duty to accept these.

2.13.5 Lack of identified outflows from balancing ponds – drainage models required to determine impact on watercourses.

2.13.6 Future maintenance of the drainage system, especially in relation to blockages.

2.13.7 The proposed use of culverts – open watercourses are preferred – and inverted syphons – these should only be used as the last resort

2.13.8 The surface water drainage strategy, ie the proposed rates of discharge and the systems that these will connect into, needs to be identified as part of the FRA.

2.13.9 The WDES correctly identifies issues and impacts in the area of the proposed HS2 station and along the line of the route. The document notes that sections of the proposed scheme, including the River Aire Viaduct, the earthworks needed for the proposed re-alignment of Barwick Road and the area around Leeds station will be located in Flood Zone 2 and 3. Initial assessment shows that the current design
would have a moderate impact on the high value receptors (residential and commercial properties) identified in Table 32, giving rise to a moderate adverse significant effect on flood risk.

2.13.10 Moderate adverse effects have been identified for the following:

(a) Garforth:

(b) Carr Wood south culvert;

(c) Barnbow drop inlet culvert;

(d) Stourton Dyke drop inlet culvert

(e) Weet Wood culvert.

(f) Hawk's Nest Wood drop inlet culvert

(g) Cock Beck around proposed Barwick Road realignment – potential permanent impact on 3 residential properties.

2.13.11 The council welcomes the stated potential for internal water harvesting and the use of blue and green roof infrastructure around the station.

2.13.12 The council remains concerned about the stated potential impact of the perimeter wall of the proposed cutting in LA17 on the surface water flow routes, which may cut off and increase the risk of flooding to residential and commercial properties bounded by Moor Road and Balm Road and therefore welcomes the full flood risk assessment.

2.13.13 It is also noted the proposed use of permanent culverts for smaller watercourses and welcomes measures to minimise their use due to concerns over their impact on ecology. Where possible, diversions should be considered instead of culverting watercourses. We note that construction of the Wyke Beck culvert underneath the Leeds East Rolling Stock Depot has the potential to result in a moderate impact on the channel hydromorphology of this high value receptor and would recommend that this is diverted rather than culverted. The Wyke Beck is also classed as a ‘main river’ and liaison with the Environment Agency is recommended for this and for any works affecting the River Aire.

2.13.14 The council are pleased to note restricted use of inverted syphons and recommends that these are only used as the last resort.

2.13.15 The council generally prefers attenuation ponds to (normally) dry detention basins. The council may adopt these, subject to payment of a commuted sum. The council would require information on where the outflows from the ponds would be and where would the ponds be discharging the water to. For all outflows, capacity needs to be determined for a new connection system. Maximum capacity that would be acceptable is outflow rate of 5 litres per sec. Where there is no connectivity at present, the council would require assessment that there is spare capacity in the receiving systems. Totally new connections may be limited to 3.5L/s.
2.13.16 The council notes the presence of a large, Victorian, combined sewer in the Leeds Station area and acknowledges difficulties with diverting this asset. In particular, the sewer under HS2 station conveys combined water from a large catchment in Leeds City centre and will therefore require a significant amount of temporary works.

2.13.17 The council notes the proposal to directly discharge the water draining off the station rooftop area to the River Aire, without the need for the clean rain water to be treated. This approach is acceptable; however, the council would be pleased to receive more data on the un-attenuated roof drainage. This can provide a net benefit to the overloaded and somewhat antiquated sewer system (estimated reduction of around 15%).

2.13.18 There may also be concerns from communities downstream about perceived additional discharge. Some attenuation storage may still be needed to deal with surface water flooding when outflows are not operational due to river levels. Agreement should be sought from the Environment Agency (EA) to finalise this approach. There may be a potential for combined attenuation to provide a benefit to properties around the area of the proposed station. YW may be willing to allow new connections to the public sewer if it can be demonstrated that there is an overall reduction in flows to the same drainage systems.

2.13.19 The WDES proposes an appropriate elevation of the HS2 station area above the flood zone to virtually eliminate the risk of flooding to HS2 infrastructure. It should be noted that LFAS2 will be designed to the 1 in 200 year event and therefore the flood zone around the station as outlined in the WDES will be reduced/eliminated therefore providing effective mitigation for the HS2 Structure with regards to flooding at this location. The council would be willing to receive a financial contribution towards LFAS2 in lieu of compensatory flood plain storage.

2.14 Draft Construction Code of Practice (CoCP)

2.14.1 Operating Hours The draft CoCP outlines the anticipated working hours. Core working hours would be from 08:00-18:00 on weekdays (excluding bank holidays) and from 08:00-13:00 on Saturdays. The nominated undertaker would require its contractors to adhere to these core working hours for each site insofar as reasonably practicable, unless otherwise permitted by the relevant local authority under Section 61 of the Control of Pollution Act.

2.14.2 It is unclear at this stage the extent of periods for works which will be beyond the core hours or undertaken as part of a Section 61 agreement. However, it is understood that activities, such as tunnelling at Woodlesford, will be expected to take place on occasions for 24 hours a day for weeks at a time. The main concern for works which take place at unsocial hours is the effects that noise and vibration will have on any sensitive receptors. Should Environmental Health enter into a Section 61 agreement for particular works, then it will be unable to exercise its normal functions under Statutory Nuisance legislation in the event of disturbance, as long as the measures put forward in the agreement are being met. While the WDES outlines that Best Practical Means will form part of any section 61 proposals.
2.14.3 **Light:** General proposals to minimise the effect on sensitive receptors from artificial light is included within the draft CoCP. It is anticipated that most construction activities will take place during day time hours. However, large scale engineering works, such as tunnelling activities, will take place during the night time period. Although statutory nuisance laws do not apply to artificial light from the operation of railways, any lights associated with the construction works could be subject to relevant legislation and should be controlled to avoid an undue loss of amenity to residential occupiers.

2.14.4 **Construction Noise:** Noise from construction could result in significant effects on residential communities within the Leeds area. Further work is currently being undertaken by HS2 Ltd to confirm the likely effects, including any temporary effects from construction traffic. This assessment will be reported in the formal Environmental Statement. However, it is expected that best practicable means (BPM) will be applied during construction works to minimise noise (including vibration) at neighbouring residential properties and other sensitive receptors (including local businesses and quiet areas designated by the local authority) arising from construction activities.

2.14.5 The reports look to assign numerical values to the planning terms of Lowest Observed Adverse Effect Level (LOAEL) and Significant Observed Adverse Effect Level (SOAEL). For construction noise the EIA claims a significance criterion consistent with the commonly used ABC assessment method with BS5228. Unfortunately this does not appear to be the case.

2.14.6 The draft EIA proposes a day time noise criterion of 65dB for the lowest effect level and 75dB or above before the construction noise would be considered significant. This would apply to all locations, even for quiet areas with low ambient noise levels.

2.14.7 The ABC method within BS5228 states that a potentially **significant** effect is indicated if the noise from construction exceeds the threshold level for the category appropriate to the ambient noise level. This would mean 65dB or above is significant in quiet areas, 70dB or above significant in noisier areas, and 75dB or above is significant in the noisiest areas.

2.14.8 Although those carrying out the construction may endeavour to try and reduce their impact if at the chosen LOAEL criterion, there would be no compulsion until they meet the louder SOAEL level. The difference between the EIA and BS5228 in this regard is that residents within quieter areas could experience an extra 10dB loudness of disturbance before action is required. This approach would not appear to be best practice or striking the appropriate balance between developing national infrastructure and the impact on sensitive receptors for such a long term construction project.

2.14.9 The evening, night time, and weekend assessment categories within BS5228 are similarly affected.

2.14.10 Therefore, it is recommended that the final ES includes in full the commonly used ABC assessment method within BS5228 for the assessment of noise from
construction activities, including the use of the different category thresholds for quieter noise areas.

2.14.11 **Vibration:** For ground-borne noise and vibration effects the draft EIA specifies adverse effect levels measured in vibration dose values (VDV) in m/s\(^2\). It is stated that the calculation methods are based on various guidance, including BS5228-2 “Vibration Control on Open Sites”. However, it is noted that this British Standard measures the effect of vibration levels in mm/s rather than m/s. Although the VDV incorporates different features to the assessment under BS2528, it makes direct comparison of the protection provided difficult. However, this issue has been discussed with acousticians from HS2 Ltd who advise that the vibration criteria chosen for construction activities will in practice provide a greater protection for receptors than the criteria used in BS5228. As such, this would be considered an acceptable approach.

2.14.12 **Air Quality:** Although the assessment approach taken within the WDES is considered to be generally robust, the final ES should be written so that updates of the best estimates for air quality baseline data can be incorporated as appropriate during progress of the project.

2.14.13 **Dust:** The reports propose dust management in accordance with the Institute of Air Quality Management “Guidance on the assessment of dust from demolition and construction”. This would seem an appropriate approach.

2.14.14 It should be noted that the areas to the East of Leeds are subject to both historical and recent coal removal activities. It is possible that engineering works will encounter coal seams or historical waste deposit pits. Bespoke dust assessments should take place for sites that may be particularly problematic to ensure that nearby receptors are not unduly affected.

2.14.15 **Construction activities affecting minerals:** As mentioned, the project may well encounter coal seams close to the surface in the areas to the East of Leeds. The removal of coal is a prescribed activity under the Environmental Permitting Regulations 2016 and an Environmental Permit will be required from the Environmental Health before operations take place. Certain additional activities, such as concrete batching plants and mobile crushers or screens may also require an Environmental Permit from the Local Authority. These permits will provide specific controls on any emissions to atmosphere from the prescribed activity.
3 IMPACTS IN COMMUNITY AREA LA15: SWILLINGTON AND WOODLESFORD

3.1 Overview of proposed scheme in LA15 (Leeds sections)

3.1.1 The WDES describes the route of the Proposed Scheme which would diverge at Scholey Hill, immediately north of the M62, to form two separate routes. The HS2 main line would continue north-east towards for onward connection with the East Coast Main Line (ECML) at Colton Junction. The Leeds spur would be 4.4km in length and would travel in a north-west direction, where it would continue to the HS2 Leeds station. The parts of the proposed scheme in this community area are:

HS2 main line

- **River Calder embankment to Scholey Hill embankment** - To the north of Altofts the HS2 main line would continue from an embankment alongside the River Calder onto a new viaduct over the River Calder. The viaduct would cross several features, including the River Calder, the Aire and Calder Navigation and the M62. At the northern end of the viaduct, after crossing the M62, tracks to form the Leeds spur would diverge from the HS2 main line as it passes onto an embankment at Scholey Hill.

- **Scholey Hill embankment to River Aire viaduct** - The HS2 main line would exit the Scholey Hill embankment and pass under the Moss Carr Wood viaduct into Scholey Hill cutting, before transitioning onto the River Aire embankment (south of the A639 Methley Lane) to then cross the River Aire Valley on the River Aire viaduct.

- **River Aire viaduct to Carr Wood South culvert** - The HS2 main line would continue north from the River Aire viaduct onto Swillington embankment and then into Swillington cutting as it passes to the east of the M1. Following Swillington cutting, the HS2 main line would rise onto West Garforth South embankment, cross over the A63 Selby Road viaduct, and then onto West Garforth North embankment to the end of the Warmfield to Swillington and Woodlesford area.

Leeds spur

- **Scholey Hill embankment to Woodlesford tunnel (southern cut and cover)** - North of the M62 and adjacent to Methley Park, the Leeds spur (northbound) would exit Scholey Hill embankment into Clumpcliffe cutting. The Leeds spur (southbound) would exit Scholey Hill embankment onto Moss Carr Wood viaduct before entering Clumpcliffe cutting to join with the Leeds spur (northbound). The Leeds spur would continue onto Clumpcliffe embankment, before entering the Woodlesford cutting to the east of Oulton. From the Woodlesford cutting.
- **Woodlesford tunnel (southern cut and cover) to Rothwell Country Park cutting** - The Leeds spur would continue into Woodlesford tunnel (twin bore) to pass under Woodlesford, where it would exit into the Woodlesford tunnel northern cut and cover section. The Leeds spur would continue in the Rothwell Country Park cutting to the end of the Warmfield to Swillington and Woodlesford area

### 3.2 Community

Understandably local communities are greatly concerned about impacts the scheme will have on their localities, both in the period leading to construction where blight is their concern; during construction where there is increasing concern about the disruption and potential dislocation to the community; and subsequently the quality of the final scheme and the legacy that will leave the communities on and adjoining the route, in Oulton, Woodlesford and Swillington especially.

#### 3.2.2 The Woodlesford tunnel remains a very important issue for the local community in an area with a long coal mining history exacerbating concerns that underground works could cause problems relative to this legacy of earlier underground workings. This requires sensitive engagement with the community to allay fears and provide reassurance as to the robustness of the plans and process for safely and efficiently delivering a modern 21st century railway tunnel, both in terms of construction and operation

#### 3.2.3 The council remains of the opinion that further development and refinement of the design is essential to bringing it closer to an acceptable final scheme in the village and requests a timetable on this.

**Open space**

#### 3.2.4 Rothwell Country Park (Volume 2: Map CT-06-622): The council considers that the mitigation proposed for the impact of the scheme on the country park is inadequate. The additional landscape mitigation planting and grassland shown to the east of the park is noted, but the proposed arrangements regarding future ownership and public accessibility are unclear. The rationale for the southern boundary to the compensatory area is also unclear, as it leaves behind small field that is likely to have limited function as agricultural land. There is a need to mitigate for the loss of publically accessible open space at Rothwell Country Park - not just landscape mitigation planting as is proposed. It is therefore suggested that once the mitigation planting established this land should be transferred to the council for public use, with a commuted sum to cover maintenance. The remaining parcel of land to the south should also be included as part of the proposed additional parkland. This approach is justified as compensation for the cumulative impact of the losses of green space noted elsewhere within the Rothwell and Woodlesford area.

#### 3.2.5 Woodlesford tunnel southern portal and Water Haigh Woodland Park (Volume 2: Map CT-06-621): The Woodlesford tunnel southern portal is located within the boundary of Water Haigh Woodland Park which extends over a wider area up to and across the Aire and Calder Navigation, including the Rothwell Juniors FC and West Riding County FA pitches, and incorporating a number of other green space designations set out in and/or proposed in the development plan. The park has been restored since the 1970s and contains 33 hectares of woodland within its 97 hectare
3.2.6 The impact of the scheme on the community and park at this location is a significant concern. The part of the park to the west of Eshald Lane would be mainly severed from the rest of the park to the east and north. Consideration should be given to setting back the tunnel portal back (to the south) further away from Woodlesford, ideally to the south of Oulton Beck, which the council have requested in previous correspondence with HS2. This would help to reduce the impact of the scheme on the local community, reduce the loss of open space land permanently lost and reduce severance between the different parcels of the park. The council consider that the system compound currently shown to the east of the tunnel portal, which would be in place for up to 7 years during the construction phase, is located too close to homes which could significantly increase health risks to residents, for example noise and light pollution, and ask HS2 Ltd to relocate this to a more appropriate location.

3.2.7 All of Water Haigh Woodland Park, west of Eshald Lane is shown as woodland habitat creation in the proposed scheme. It is unclear if proposal is to turn all of Water Haigh into woodland under proposed scheme, or the annotation on plan simply indicates plans for additional planting. As the green space currently has open areas, if it is all wooded it could have implication for how it is used by the community in future. Discrepancies are noted between figures quoted in WDES for example between the community and health section which should be clarified in the final ES. The council support the retention of Eshald Lane for non-motorised users.

**Housing proposals**

3.2.8 The boundary of the construction phase overlaps in full or in part with three housing allocations proposed in the Leeds Site Allocations Plan. Comments relating to each site as set out in the paragraphs below.

3.2.9 *Land adjacent to Bullough Lane - Haigh Farm, Rothwell* (Volume 2: Map CT-05-621, A-D2): There is a Strip along the northern boundary of the site shown within construction boundary. The council needs to understand the use of this land during the construction period, and the implications for the timely delivery of homes on this site. It is expected that the schemes should be able to co-exist, particularly given site requirements indicate a potential need for a biodiversity buffer to the north of the site (and there is an expectation that this land is unlikely to be developed upon). Subject to adoption of the SAP this site should form part of the environmental assessment in the final ES.

3.2.10 *Land at Fleet Lane / Eshald Lane, Oulton* (Volume 2: Map CT-05-621, E4-5): All of site within construction boundary and is site shown as woodland habitat in the Proposed Scheme. There is conflict between proposed allocation and HS2 plans. Following discussions between the council and HS2 Ltd, this site is proposed to be removed from the SAP.

3.2.11 *Land between Fleet Lane & Methley Lane Oulton* (Volume 2: Map CT-05-621, C1-3 & D1-4): Parts of site included within construction boundary related to hedgerow
habitat creation shown on small parts of the site in the Proposed Scheme. The council and HS2 Ltd have previously discussed the implications of the HS2 proposals for this site. The council’s understanding is that the schemes should be able to coexist, and on this basis no concerns are raised. Subject to adoption of the SAP this site should form part of the environmental assessment in the final ES.

3.2.12 *Skelton Gate housing allocation* (Volume 2: Map CT-05-623a, A-C): A housing allocation for 1,800 homes set in the adopted Aire Valley Leeds Area Action Plan lies to the north and east of the Skelton Lake, immediately to the south of the M1. This site should form part of the environmental assessment in the final ES.

**Impacts on Public Rights of Way**

3.2.13 The following section sets out the council’s views on the impact of the scheme on public rights of ways and the acceptability of proposed mitigation measures within LA15. As explained in paragraph 3.8 above, there are considered to be cumulative impacts alongside landscape and ecology issues which has guided the suggested approach to mitigation.

3.2.14 *Rothwell FP 38 (Trans-Pennine Trail alt. walking route)*: The diversion proposed is too close to both motorway and HS2 embankment. There is also an unnecessary dog-leg north of embankment here. The council request that the HS2 embankment is moved the east by extending the viaduct to create a wider gap between it and M62 Motorway. The diversion should also be re-aligned to run along edge of new woodland plantation.

3.2.15 *Rothwell FP 38 to West & Rothwell 83 to East*: There is no west to east crossing of railway embankments provided creating severance of the wildlife corridor. If a wildlife/estate access route could be provided, a public path link should also be provided here.

3.2.16 *Trans Pennine Trail/Canal towpaths on West & East side of Canal. Plus FP 80 on W bank of River Aire*: The River Aire viaduct passes over all of these routes, plus open access areas within Water Haigh Country Park. There is a need to ensure plenty of clearance for passing around viaduct stanchions.

3.2.17 *Jinny Moor Lane to Swillington BW 25*: Forms part of a key bridleway link between Temple Newsam Estate and St. Aidans Nature Park. An improved crossing facility is needed here underneath the viaduct. The embankment needs moving back to ensure safe sight-lines, waiting areas etc.

3.2.18 *Swillington FP 21 & FP 20*: FP 21 passes through a new balancing pond and is shown diverted to its east side. FP 21 & 20 are diverted to a joint underbridge via a gap in the embankment. It the embankment is moved back, a link to FP 21 from Jinny Moor Lane should be made along the north side of the A642, with the embankment gap left wide enough for future equestrian access. Slightly extending the diversion of FP 21 would create a more direct route to the underbridge.

3.2.19 *Swillington BW 11*: BW 11 is a key bridleway link between Swillington and the Temple Newsam perimeter bridleway route. A basic farm accommodation/BW bridge, adding to the M1 bridge of this type would be very off-putting for horse-riders
in particular. A much wider ‘green bridge’ should be seriously considered to significantly reduce the impact on bridleway users passing over both the HS2 railway and the M1 Motorway in short succession (a length of approx. 200m).

3.2.20 **Trans Pennine Trail walking route and Eshald Lane:** The new Fleet Lane overbridge route will result in an increase in on-road walking here. Eshald Lane is to be closed to vehicular traffic. A footway with verge should be provided along the length of the new Fleet Lane overbridge route. Keeping Eshald Lane open to non-motorised users should include horse-riders, cyclists and pedestrians.

3.2.21 **Trans Pennine Trail/canal towpaths and Bullough Lane:** The HS2 access road between Woodlesford Lock and Fishpond Lock affects a well-used walking and cycling route. Whilst the official TPT route lies on the northern towpath of the canal, the CRT access track on the south side of the canal should be maintained for walking and cycling as it offers a good circular route between the locks.

3.2.22 **Rothwell Country Park tracks and paths:** May be affected by the re-aligned Hallam Line towards the bottom end of the park.

3.2.23 **Bullough Lane:** Proposed underpass beneath both the Hallam Line and HS2 railway will result in a closure to vehicles and 2 underbridges of reduced height. The proposed 2m height clearance is too low for equestrian link therefore additional height clearance is required (minimum 3 metres). This key link between Rothwell and Temple Newsam should be kept open for all non-motorised users if possible, as it forms part of a key cross valley link between Rothwell and Temple Newsam. HS2 should seriously consider funding provision of a bridge across the Aire & Calder Navigation close to the Bullough Lane to link with the existing bridge over the river that links to Skelton Lake and the north bank of the river. This is justified as a compensatory measure for adverse impacts on the public rights of way network and provide a link to potential new pedestrian/cycle route around the rolling stock depot site (see also option below).

3.2.24 **Bowstring bridges over canal and river:** (Volume 2: Map CT-05-623a, F7 & G8) As a potential alternative to the bridge crossing suggested at the Bullough Lane, the new HS2 access road directly links to these disused railway bridges (which are owned by Harworth Estates). These two bridges and an underpass beneath the M1 Motorway provide a valuable option for re-routing the Trans Pennine Trail along the north bank of the River Aire past the rolling stock depot as far as Skelton Grange Road Bridge.

### 3.3 Ecology and biodiversity

3.3.1 In paragraph 7.3.7, St Aidans nature reserve should be given equivalent status as SSSI even though not yet formally designated - as it has a large enough proportion of the national breeding population of Black-necked Grebe to qualify.

3.3.2 The scheme does affect the Lower Aire Valley which has a network of SSSI wetland sites designated for bird interest – mention is required of both Mickletown Ings and Fairburn Ings SSSIs as well as relationship to St Aidans (SSSI value) and Skelton Lake and how this provides a corridor for wetland and wintering birds moving east/west along the River Aire corridor.
In paragraph 7.3.9, SEGI sites need to be given same level of significance as LWS as they are the same but just have a different name i.e. Countywide (W Yorkshire). Should include Swillington Ings/Cockpit Round as part of the description in paragraph 7.3.8.

Moss Carr Wood LNA has been assessed against the West Yorkshire Local Wildlife Sites Criteria in 2018 and meets under criteria Wd2, Wd3, Wd4, Wd5 and Wd7 – so should be afforded LWS status. Leventhorpe Lagoon an Rothwell Colliery LNA/SEGIs have also not yet been assessed against LWS Criteria so should be surveyed to a level to assess against any relevant Criteria and likely to also be afforded LWS (Countywide) level of importance as per Section 7.3.8

In section 7.3.11, the same comment in relation to St Aidans applies as it does to section 7.3.7.

In paragraph 7.3.23, there should be consideration of other locally important species likely to be affected – Roe Deer and Badger “Terrestrial Vertebrates”.

In section 7.4, Consideration should be given to construction phase impacts on wetland habitats through compaction of land for access and to install foundations for River Aire viaduct, storage of materials, impacts on drainage either side of the viaduct i.e. how are existing wetland areas connected hydrologically either side of the viaduct? What is the distance between supports and what types of foundations below ground are needed for each support? How much of a physical barrier is the viaduct structure to wintering and breeding wetland birds in this location?

In paragraph 7.4.1, some of the measures referred to are compensation rather than mitigation. The council considers that the following additional mitigation/compensation should be integrated into the scheme and request that further discussions are held with HS2 Ltd to discuss the details (we have sketch drawing available to share with HS2 Ltd to illustrate these proposals).

Swellington Ings/Cockpit Round – new wetland areas and ponds are required to compensate for changes in hydrology and land lost to viaduct footprint – to be added to reserve managed by Swillington Ings group.

Moss Carr Woods - new woodland planting should include physical connections under and across the route using covered tunnel sections, as well as at the section near motorway through underpass.

Compensation for loss of grassland and woodland near Oulton Beck and Water Haigh Park (for compounds and storage of materials) needs agreeing with the council but should include land adjacent to the Oulton Beck to be transferred to the council to be added to expand Water Haigh Park.

Section 7.4.6 states “It is expected that this distance and the implementation of measures in the draft CoCP will ensure there are no effects to the Humber Estuary Ramsar, SAC and SPA.” Following the European Court Judgement People Over Wind this year is it acceptable to take account of existing measures as mitigation at Screening Stage or should this now be done as part of the Appropriate Assessment?
3.3.13 In sections 7.4.10 to 7.4.12 and 7.4.15, the Impacts should be significant at the county/regional level (West Yorkshire).

3.3.14 In sections 7.4.13 and 7.4.17, the Impacts should be significant at the county/regional level (West Yorkshire) or possibly national depending on assessment of wintering/breeding birds in relation to network of St Aidans/Mickletown/Fairburn SSSIs.

3.3.15 In section 7.4.30, the Impacts are possibly national depending on assessment of wintering/breeding birds in relation to network of St Aidans/Mickletown/Fairburn SSSIs.

3.3.16 In 7.4.38, these mitigation/compensation measures should be part of the design 7.4.1 – not seen as additional.

3.3.17 In 7.4.41, the residual impacts too low as Swillington Ings/Cockpit Round/Moss Carr/Rothwell and Leventhorpe should all be Countywide

3.3.18 In section 7.5, there should be consideration of impacts of River Aire Viaduct on wetland wintering and breeding birds along River Aire Corridor between Skelton Lake and St Aidans – monitoring of potential impacts.

3.3.19 Monitoring of wetland habitats either side of the River Aire Viaduct to assess impacts on any hydrological linkages between wetland areas – and remedial measures.

3.4 Landscape and visual

3.4.1 River Aire Viaduct (Volume 2: Map CT-06-492): This structure, which is 2.2km long and up to 28m high, will be highly visible in long distance views across the rural landscape and from residential areas in Woodlesford and Swillington. This needs to be taken into account when designs for the viaduct are considered. It is very important that a high quality design is employed which is sympathetic to its rural location as it begins over Methley Lane. Consideration also needs to be given to how the overall appearance of the structure will be affected by features such as the proposed noise attenuation fencing, and this should be taken into account at an early stage in the design process.

3.4.2 West Garforth Embankment (Volume 2: Map CT-06-495a): will be a large engineered structure that will impact on views across the surrounding landscape. The large areas of woodland planting proposed to the east of the line will provide an important visual screening role that will help to mitigate the impact of the line. However, the woodland is largely confined to the embankment and will not perform this screening role, and so the embankment is likely to be highly visible from the M1 and Thorpe Park. The design of the embankment consequentially needs to have regard to this, and it is considered that the additional planting which serves a screening function should be considered. The location of the proposed overbridge across the A63 Selby Road at the edge of urban Leeds, means that it offers a great opportunity to form an iconic ‘gateway’ feature of the HS2 and the city. The council would strongly recommend that high quality design is employed in this location in order to make the most of this opportunity.
3.4.3 **Northern tunnel portal, Woodlesford** (Volume 2: Map CT-06-622): There are a number of large HS2 structures west of the northern tunnel portal. These will be located close to the canal and have potential to be highly visible to canal and canal towpath users. The structure should be designed in a manner is appropriate to this sensitive location, including landscape screening where appropriate.

3.5 **Socio-economics**

3.5.1 **Land at Methley** (Volume 2: Map CT-06-490 & 491): This is a designated area of search for sand and gravel extraction in the Natural Resources & Waste Local Plan. Scholey Hill Embankment satellite construction compound overlaps with policy designation. The impact of the temporary loss of this area of land is not assessed in the WDES. It is considered that it should be taken into account as a temporary impact, though given the temporary nature of the works and the wide extent of safeguarding area, the significance of the impact is limited.

3.6 **Traffic and Transport**

**Highway Impacts of Construction**

3.6.1 The draft working environmental statement states ‘In addition to increases in traffic flows due to construction traffic, construction of the Proposed Scheme is expected to result in temporary highway closures and diversions or realignments as set out in Section 2.12. The works to construct both temporary and permanent highway diversions/realignments could also result in disruption to highway users. In LA 15 These are expected to include’.

- overnight and weekend closures of the M62 between junctions 29 and 30;
- overnight and weekend closures of the A63 Selby Road between the M1 and the A642 Wakefield Road;
- overnight and weekend closures of the A642 Wakefield Road at Jinny Moor Lane;
- overnight and weekend closures of the A655 Wakefield Road in Warmfield;
- overnight and weekend closures of the B6135 Newmarket Lane between the A642 Aberford Road and Hungate Lane;
- local realignment of Hell Lane between the A655 Wakefield Road and New Sharlston;
- local diversion of Hungate Lane via the B6135 Newmarket Lane; and
- local diversion of Bottom Boat Road.

3.6.2 The council understands that these have been assessed qualitatively, with no quantitative assessment undertaken at this stage and that the quantitative assessment of the network management impacts will be reported in the
Environmental Statement. To mitigate the impact on the road network during the construction of the scheme as far as reasonable practicable the council has put forward Network Management Principles as a platform for highway authority engagement with HS2 Ltd going forward. These are outlined in the general comments Traffic and Transport section.

3.6.3 Planning for effective phasing of road closures is particularly important for mitigating the level construction impact on the network on local communities. A partnership approach with HS2 Ltd, Highways England, West Yorkshire Combined Authority and Network Rail is needed to deliver a comprehensive network management plan in LA15 which should be evaluated in conjunction with LA17, especially the closure of Pontefract Road for HS2 construction.

3.6.4 This should take into account the impact on and connectivity between the local communities of Rothwell, Woodlesford, Oulton, Swillington and Methley. Paying particular regard to where there is a lack of resilience in the network in this location due to the need to cross the River Aire between communities, in the case of Woodlesford and Swillington being connected by one road. The Council requests HS2 Ltd look at the feasibility of adding resilience to the road network in the area particularly when Pontefract Road will be closed during HS2 construction. The specific construction impacts that are of concern arising from the information presented in the WDES are those on A642 Wakefield Road/ Aberford Road and the M62 due to proposed viaduct construction. The potential risk of impact is severe due to limited opportunity for diversions at this location. We request further dialogue with HS2 Ltd to understand how disruption can be kept to a minimum at this location.

3.6.5 We would also request more detailed analysis and modelling of the impacts of the works on the M1; the M62; the A63 Selby Road; the A639 Methley Lane; the A642 Wakefield Road/ Aberford Road; the A655 Wakefield Road; Fleet Lane; Bullerthorpe Lane; Swillington Lane; and Leeds Lane in terms of identified impacts of additional congestion and delays.

3.6.6 Given the proposed duration of the construction period the cumulative impacts of the road closures on the local network will need to be evaluated in the ES in order to mitigate prolonged periods of disruption for local communities and businesses.

Proposed Scheme Highways Impacts

3.6.7 The WDES Proposed Scheme would result in a number of permanent highway changes. These include:

- Kirkthorpe Lane would be diverted to the south of the existing alignment to join the A655 Wakefield Road. A connection for non-motorised users would be maintained;

- Warmfield Lane would be closed where it would cross the route of the Proposed Scheme. A connection for non-motorised users would be maintained;

- Birkwood Road would be realigned via an overbridge to accommodate the Proposed Scheme;
- A639 Methley Lane would be realigned to the north of its existing alignment, to cross the route of the Proposed Scheme via the A639 Methley Lane underbridge.

- The existing Methley Lane would be closed where it would cross the route of the Proposed Scheme, with a short section retained for maintenance access to the east;

- Fleet Lane would be realigned to the south of its existing alignment, to cross the route of the Proposed Scheme on the Fleet Lane overbridge. Access to residential and commercial properties would be retained, including the West Riding Football Association and Rothwell Juniors Football Club; and Eshald Lane would be closed with access to residential properties retained. A connection for non-motorised users would be maintained.

3.6.8 With regards to the A639 Methley Lane/Leeds Road between the M1 at junction 44 and west of Station Road. The council welcomes in principle of the proposed realignment to the north of its existing alignment, to cross the route of the Proposed Scheme via the A639 Methley Lane underbridge.

3.6.9 The proposed Fleet Lane re-alignment and mitigation measures proposed are acceptable. Additional assessment/and modelling of the impacts on NMUs and, if applicable, appropriate level of mitigation to protect these from an increase in traffic levels is requested.

3.6.10 There are no specific concerns over the proposed closure of Eshald Lane provided that an NMU link is maintained. Appropriate turning facilities should be provided and an assessment/modelling of the impact of all vehicular movements being concentrated at the A642 junction nearest to the rail bridge.

3.7 Sound, noise & vibration

3.7.1 Securing an acceptable level of noise mitigation for residents whose properties are impacted upon by HS2 operational noise is imperative for the council. Understandably local communities are greatly concerned about impacts the scheme will have on their localities, with operational noise a key issue (see general comments section on Sound, Noise and Vibration).

3.7.2 Some areas of existing low environmental noise level with potentially affected dwellings and non-residential noise sensitive receptors in Swillington & Woodlesford. Findings of the baseline survey in the ES are awaited so that a view can be taken on this matter.

3.7.3 The proposed Tunnel through Woodlesford will reduce impact of airborne noise but careful design is needed to effectively design out ground-borne vibration.

3.7.4 The proposals through Swillington have potential to adversely affect both residential and non-residential sensitive receptors. The WDES currently proposes a
combination of cutting and acoustic barriers to mitigate noise levels below absolute threshold criteria levels however there are a number of farmsteads that may require additional measures which will be informed by the baseline assessments in the ES.

3.7.5 As outlined in the general comments section the methodology and assessment criteria presented in the WDES is considered to be acceptable in principle with regard to the HS2 operational impacts of noise in terms of the stated alignment with Government noise policy, planning policy, planning practice guidance on noise (PPGN) and the EIA Directive. However without the inclusion of measured environmental baseline data, it is understand will be provided in the ES, the council is unable to state at present if the noise mitigation provided in the WDES is acceptable. Therefore further engagement with HS2 Ltd is essential to agree an acceptable environmental baseline at the earliest opportunity.
4 IMPACTS IN COMMUNITY AREA LA16: GARFORTH

4.1 Overview of proposed scheme in LA16 (Leeds section)

4.1.1 The WDES describes the route of the proposed scheme through the Garforth area, running to the west and north of Garforth and the north of Micklefield before its leaves the district towards Church Fenton. The following key features are identified within Leeds:

- **West Garforth North embankment to East Garforth cutting** - From the boundary with the Warmfield to Swillington and Woodlesford Area (LA15) to the south, the route of the Proposed Scheme would continue north-eastwards on the West Garforth North embankment, towards East Garforth. The route of the Proposed Scheme would then continue into the West Garforth cutting before joining the Leeds to Selby overbridge and the East Garforth cutting.

- **East Garforth Cutting to Weet Wood cut and cover tunnel** - The route of the Proposed Scheme would continue onto Micklefield embankment where it would pass under Barwick Road overbridge. The route of the Proposed Scheme would then enter Micklefield cutting before entering Weet Wood cut and cover tunnel.

- **Weet Wood cut and cover tunnel to Ringhay Wood Embankment** - The Proposed Scheme would continue east into Weet Wood cutting before passing under the Great North Road and the A1(M) in the A1(M) cutting. The Proposed Scheme would then enter Ringhay Wood Cutting before rising up onto Ringhay Wood embankment.

4.2 Community

4.2.1 Securing an acceptable level of noise mitigation for residents whose properties are impacted upon by HS2 operational noise is of paramount importance for the council. Understandably local communities are greatly concerned about impacts the scheme will have on their localities, with operational noise a key issue.

**Public rights of way**

4.2.2 The following section sets out the council’s views on the impact of the scheme on public rights of ways and the acceptability of proposed mitigation measures within LA16. As explained in Section 2.5 above, there are considered to be cumulative impacts alongside landscape and ecology issues which has guided the suggested approach to mitigation.

4.2.3 Leeds Bridleway 125: The accommodation overbridge to be provided in mitigation is a narrow structure that is over 150m long. Barrowby Lane is an historic, tree lined route and landscape feature which would be mostly obliterated by this proposal. Over this distance it is recommended that a 50m minimum width overbridge is provided or that the diverted bridleway is positioned on a ‘cut and cover’ over rail line rather than
overbridge. This would provide potential for a green bridge to mitigation severance of the bridleway and landscape features. This is also justified to ensure safety, attractiveness of use and allow for dual use by pedestrians and equestrians and minimises the risk of horses becoming spooked and bolting as a result of the sudden noise of an HS2 train passing underneath. The bridleway also forms part of the strategic Core Cycle Network in Leeds providing a safe, mainly off road route between Garforth and Leeds city centre and mitigation proposals should reflect the important current status of this route.

4.2.4 Bridleway 123, Footpath 122 and Barwick Bridleway 10 realignment accommodation overbridge: The proposed bridge would need to bridge a gap of over 110m. This is a significant distance. To ensure safety, attractiveness of use and allow for dual use by pedestrians and equestrians will need to be very wide. It is considered that a better solution might be a cut and fill with green top over which pedestrians and equestrians can safely cross.

4.2.5 Parlington BW 5 (Non Def.); Garforth FP 7a; Garforth FP 8/Non Def. BW 2; Sturton Grange FP 1: There appears to be no non-motorised users crossing point of the HS2 route provided between Barwick Road and Sturton Grange FP 6 (The Flyline) – a distance of approximately 850m. This results in overlong path diversions to both the north and south sides of the HS2 route and causes a significant severance issue. A central crossing point of HS2 is needed to connect to the existing M1 motorway underpass. This could then link all of the existing and proposed new path links to the north and south of the HS2 route together. Without such a crossing, these diversions would be unacceptably long. The diversion of Non Def. BW 5 should instead follow the line of the old Barwick Road to come out opposite to the road entrance to Manor House. FP 7a diversion is OK. The Sturton Grange FP6 (Flyline) overbridge is to be welcomed but should be built to accommodate bridleway users, including equestrians.

4.2.6 Micklefield FP 11 & Micklefield FP1: Minor realignment of FP 11 to go over an agricultural standard overbridge; Closure of FP1 around Weet Wood with no crossing of HS2 into Scotts Wood. A proposed diversion of FP 1 west along farm access track to FP 11. The new bridge on the joint farm track/FP11 is to be welcomed but should be built to accommodate all bridleway users as it is known to be used for these purposes. A new footbridge is essential for FP1 to maintain a key path link between Micklefield village and Lotherton Hall Estate.

4.2.7 Claimed path along county boundary with North Yorkshire from Daniel Hartleys Wood: Not shown on the HS2 maps but a field edge footpath that is well used by locals from Micklefield, according to the Parish council. This Non Definitive FP makes a direct link to Micklefield FP No. 1 (Rangers Walk) and could be incorporated on a shared bridge with FP 1 over Ringhay Wood Cutting.

4.3 Ecology and biodiversity

4.3.1 In section 7.3.7 this is of Countywide importance (not metropolitan) i.e. West Yorkshire: Carr Wood at Barrowby has not been assessed against West Yorkshire LWS Criteria – but surveys should be used to assess the site to confirm value.
4.3.2 In section 7.3.13, if woodland qualifies as UK BAP Priority Habitat (such as Barrowby Woods) then level of importance should be higher than District – maybe Countywide alongside LWS.

4.3.3 In section 7.3.19, does County level = Metropolitan? County should be West Yorkshire level.

4.3.4 There should be consideration of other locally important species likely to be affected – Roe Deer and Badger “Terrestrial Vertebrates”

4.3.5 In paragraph 7.4.1, some of the measures referred to are compensation rather than mitigation. The council consider that the following additional mitigation/compensation should be integrated into the scheme and request that further discussion are held with HS2 Ltd to discuss the details (we have sketch drawing available to share with HS2 to illustrate these proposals):

4.3.6 Carr Wood Barrowby & hedgerow with trees north of Barrowby Lane – substantial green bridge or tunnel section (50-100m wide) to allow passage of large mammals and connectivity for bats (see also comments on Public Rights of Way illustrating the cumulative impact)

4.3.7 Hawks Nest Wood LWS – 6.6ha of land is lost (para 7.4.19) which needs to be compensated by new wetland habitats and terrestrial foraging on land of low ecological value for Great Crested Newts (at a ratio of more than 1:1 as this is currently high quality habitat and any new habitat will take years to establish) together with substantial green bridge or tunnel section (50-100m wide) to allow passage of amphibians and planting with trees and shrubs for woodland connectivity north-south. Positive management of this fragmented piece of land is required such as long-term habitat management by conservation body.

4.3.8 Coburnhill Woods LWS – The scheme has Countywide impact as it is a LWS. New wetland habitats and woodland planting on land of low ecological value with substantial green bridge or tunnel section (50-100m wide) to allow passage of amphibians, large mammals and planting with trees and shrubs for woodland connectivity north-south. Woodland loss (3.9ha, para 7.4.15) should be compensated for by a ratio of more than 1:1 as this is currently high quality habitat and any new habitat will take years to establish. Preference is for the landscape mitigation planting to connect with Daniel Hartly’s Wood located to the south east. This land has full public access under the council’s ownership and will need any compensation land transferring to the council together with a commuted sum for an agreed number of years.

4.3.9 In section 7.4.5, it is stated “It is expected that this distance and the implementation of measures in the draft CoCP will ensure there are no effects to the Humber Estuary Ramsar, SAC and SPA.” Following the European Court Judgement People Over it would appear unacceptable to take account of existing measures as mitigation at this Screening Stage and this should now be done as part of the Appropriate Assessment.
In section 7.4.24, Impacts of fragmentation of habitat on Great Crested Newts ('GCN') needs stating and assessing – movement of GCN across HS2 at specific locations (Hawks Nest Wood and Coburnhill Woods) is required in order to allow favourable conservation status to be maintained rather than creating a permanent severance to north-south movement (see above).

These mitigation/compensation measures described in 7.4.33 should be part of the design 7.4.1 – not seen as additional.

In 7.5.4, the impacts on movement of Roe Deer and Badgers will be significant and need recognising and addressing through well located green bridges/tunnel sections that are wide enough to be used (50-100m widths).

In 7.5.6 there will be residual impacts of countywide level for GCN (fragmentation) and Roe Deer/Badgers, and permanent woodland fragmentation.

In 7.5.7 the ponds created for GCN must be monitored to ensure they hold water and don't have invasive species/fish introduced, as well as terrestrial habitat.

4.4 Historic Environment

Barrowby Hall: The council requests that the effects of the scheme on this listed building are reviewed with them.

4.5 Socio-economics

North Newhold employment allocation: (Volume 2: Map CT-05-498, B-D 4-8) A wider area either side of the line is included within the construction boundary which will include temporary material stockpiles and a satellite construction compound. An area of woodland habitat creation is proposed on this site to the south of the HS2 line in the operational phase. This site is allocated for employment development in the Leeds Local Plan has an extant outline planning approval for B1/B2/B8 employment development but this is not considered in the WDES. Through the SAP, the council is proposing to reduce the extent of this site to reflect that the area occupied by the HS2 line will not be developable, and to reflect are uncertainties regarding the deliverability of the land to the north of the HS2 line, particularly in the period up to 2028. The council would query whether a north / south access along Ash Lane could be constructed to a suitable standard to serve future development north of the line. It is expected that the area to the south of the HS2 line will remain appropriate for development purposes following the construction of HS2. The council wishes to see HS2 minimise the impact on the developable area of the site by relocating area of proposed woodland habitat creation on the south of the site to the north of the HS2 line. The location would need to be determined depending on whether land to the north of the line could be developed.

Land at Hook Moor, Micklefield: (Volume 2: Map CT-05-498, H-J 1-5) Southern extent of area designated for minerals extraction (allocated as a Preferred Area of Search for Stone and Clay extraction in the Natural Resources and Waste Local Plan) lies in the within the construction boundary and is proposed for woodland
habitat creation in the Proposed Scheme. This site was allocated because it contains good quality limestone, of which there is very little remaining in the Leeds District. The site was also identified as having the potential to contribute to the provision of aggregate. A recent WYCA study on Magnesian Limestone emphasises the importance of the continuation of secure and steady supplies of aggregate derived from local magnesian limestone to supply to the construction industries in West and South Yorkshire (including for projects such as HS2). The council have had pre-application discussions with a minerals operator regarding a proposed limestone quarry in this area. The proposals would likely to have a significant impact on the viability of such a proposal, and could potentially result in sterilisation of this resource. Further assessment required of implications on HS2 scheme for long term viability of this minerals resource. The council recommends that HS2 proposes an alternative location for woodland habitat creation rather than using this site. The relocation of proposed woodland habitat from the site would help increase likelihood of there being a possibility that the remaining safeguarded area could be worked in future.

4.6 Sound, noise and vibration

4.6.1 Securing an acceptable level of noise mitigation for residents whose properties are impacted upon by HS2 operational noise is imperative for the council. Understandably local communities are greatly concerned about impacts the scheme will have on their localities, with operational noise a key issue.

4.6.2 As the line passes over the north of Garforth, it runs parallel to the M1 motorway and towards Micklefield there will be a level of pre-existing noise that will provide masking noise for HS2.

4.6.3 As outlined in the general comments section the council finds the methodology and assessment criteria presented in the WDES acceptable in principle with regard to the HS2 operational impacts of noise in terms of the stated alignment with Government noise policy, planning policy, planning practice guidance on noise (PPGN) and the EIA Directive. However without the inclusion of measured environmental baseline data, which the council understands will be provided in the ES, the council is unable to state at present if the noise mitigation provided in the WDES is acceptable. The council wishes to work in partnership with HS2 to agree an acceptable environmental baseline at the earliest opportunity.

4.7 Traffic and Transport

Highway Impacts of Construction

4.7.1 The WDES states ‘In addition to increases in traffic flows due to construction traffic, construction of the Proposed Scheme is expected to result in temporary highway closures and diversions or realignments as set out in Section 2.12. The works to construct both temporary and permanent highway diversions/realignments could also result in disruption to highway users. In LA 16 These are expected to include’.

- temporary realignment of the A1(M) northbound at its junction with the M1;
• temporary realignment of the A1(M) southbound at its junction with the M1;
• overnight and weekend closures of the A162 London Road just north of where it is crossed by the existing railway line;
• temporary realignment of the A642 Aberford Road at junction 47 of the M1;
• temporary realignment of the A656 Ridge Road at junction 47 of the M1;
• temporary closure of Great North Road between Micklefield and the M1, with local diversion routes available; and
• overnight and weekend closures of Saw Wells Lane

4.7.2 The WDES states that the potential effects on traffic and transport have been assessed qualitatively, with no quantitative assessment undertaken at this stage. It is understood that the quantitative assessment of the network management impacts will be reported in the Environmental Statement. To mitigate the impact on the road network during the construction of the scheme as far as reasonable practicable Network Management Principles are as a platform for our engagement as the highway authority with HS2 Ltd going forward are proposed. These are outlined in the general comments Traffic and Transport section.

4.7.3 Planning for effective phasing of road closures is particularly important for mitigating the level construction impact on the network on local communities. A partnership approach with HS2 Ltd, Highways England, West Yorkshire Combined Authority and Network Rail is needed to deliver a comprehensive network management plan in LA16.

4.7.4 Given the proposed duration of the construction period the cumulative impacts of the road closures on the local network will need to be evaluated in order to mitigate prolonged periods of disruption for local communities and businesses.

Proposed Scheme Highways Impacts

4.7.5 The Proposed Scheme would result in a number of permanent highway changes. These include:

• Barwick Road would be permanently realigned to the west with access would be retained to existing properties on the existing Barwick Road on both sides of the route of the Proposed Scheme;

• Ridge Road would be realigned to the east with access retained to properties;

• Great North Road would be realigned via an overbridge to accommodate the Proposed Scheme;

• Coldhill Lane would be realigned to the north-east of its current alignment and cross the route of the Proposed Scheme via Coldhill Lane underbridge;
• Saw Wells Lane would be realigned via an underbridge to accommodate the Proposed Scheme;

• Common Lane would be permanently diverted on a new alignment to the north-west of its existing alignment; and

• Sandwath Lane would be diverted to the west, north of the route of the Proposed Scheme, to join the realigned Common Lane with access to properties retained.

4.7.6 It is noted that the proposed realignment of the A656 Ridge Road at junction 47 of the M1 could provide benefits for this junction and become a permanent solution. The council requests to engage with HS2 Ltd and Highways England to explore this opportunity.
5 IMPACTS ON COMMUNITY AREA LA17: HUNSLET TO STOURTON

5.1 Overview of proposed scheme in LA17

5.1.1 The HS2 WDES describes the route of the Proposed Scheme which would extend westwards from the boundary with the LA15, which is located along the western side of Bullough Lane, to the south/east of the M1 and to the west of Rothwell Country Park. The Proposed Scheme would continue west under the M1 through Stourton and north-west on to Hunslet. The northern boundary, which is shared with the Leeds Station area (LA18), is located approximately 200m north of junction 4 of the M621. The Stourton to Hunslet area (which is wholly in Leeds) also contains the Leeds East RSD. The Proposed Scheme is described in four separate sections below.

- **Rothwell Country Park cutting to Aire & Calder embankment** - The route of the Proposed Scheme would continue from the boundary with the Warmfield to Swillington and Woodlesford area (LA15), west under the M1, just north of Junction 44, and towards the Aire & Calder Navigation embankment.

- **Aire & Calder Navigation embankment to Stourton embankment** - The route of the Proposed Scheme would continue onto the Aire & Calder Navigation embankment, west of the M1, before moving onto the Stourton embankment, which includes the section where the Proposed Scheme passes over Pontefract Road.

- **Leeds cutting** - The route of the Proposed Scheme would continue north-west along the full length of the Leeds cutting to the end of the Stourton to Hunslet area.

- **Leeds East rolling stock depot** - The Leeds East RSD (Volume 2: Map CT-06-623b-R1) would serve as an operational and maintenance hub

5.1.2 The council fully supports the proposals for the High Speed Rail line of route to approach the Leeds Station terminus in a cutting through the main urban area, as this offers greater environmental mitigation overall. In particular, the level of landscape and visual mitigation provided by the WDES design option in this location is found to be largely acceptable subject to any detailed comments made in this response. The Leeds cutting is the preferred design option in principle for the Council, where the level of landscape and visual mitigation provided by the WDES design option in this location is found to be largely acceptable, albeit it is recognised that further detailed resolutions may be needed.

5.2 Community

5.2.1 Securing an acceptable level of noise mitigation for residents whose properties are impacted upon by HS2 operational noise is of paramount importance for the council. Understandably local communities are greatly concerned about impacts the scheme will have on their localities, with operational noise a key issue.
Housing proposals

5.2.2 Former Motor Dealers, Church Street, Hunslet: (Volume 2: Map CT-06-625, I-J 6) Site is allocated for mixed use (housing and commercial development) in the AVLAAP. The assessed capacity of the site for housing is 26 units. Site within the construction and operational phases of the scheme resulting in a permanent loss of the allocation. This is considered to be a moderate adverse impact given the site is relatively small. The council recognises that this unlikely to be an appropriate site for new housing without significant mitigation but the site may still offer potential for commercial development (see comments for site under Section 5.5).

Open space

5.2.3 Beza Street Recreation: (Volume 2: Map CT-05-625, B-C 4) Site is designated as protected green space. There will be a loss of 30% of the site during the construction phase which will include the car park but not the playing pitch. HS2 Ltd are requested to liaise with the council to ensure that disruption to the use of the site is minimised during the construction period.

5.2.4 Westbury Grove: Site is designated as a protected green space. (Volume 2: Map CT-05-625, C5) The site lies entirely within the construction phase of the scheme. The council needs to understand the purposes of the site being in the construction area. If this is for the purpose of landscape mitigation planting the site could potentially be retained in use during the construction phase. In any event, the council considers that the site should be returned to green space use following construction.

Public rights of way

5.2.5 The following section sets out the council’s views on the impact of the scheme on public rights of ways and the acceptability of proposed mitigation measures within LA16. As explained in Section 2.5 above, there are considered to be cumulative impacts alongside landscape and ecology issues which have guided the suggested approach to mitigation.

5.2.6 Trans Pennine Trail & Skelton Lake FB/link: Whilst the HS2 scheme does not directly affect the TPT here, the map does not show the walking & cycling link to Skelton Lake via a recent FB over the River Aire. It is noted however, that the 2 bowstring bridges over the Canal and River are included in the land required during construction. As mentioned in relation to LA15, if the bow-string bridges are to be acquired for the HS2 scheme, there is the opportunity to retain these for a new walking & cycling link along the north bank of the River Aire to Skelton Grange Road Bridge for the Trans Pennine Trail NB. This would help to avoid a stepped access problem for cyclists and pushchair/wheelchair users of the TPT at Skelton Grange Road bridge.

5.2.7 Rothwell BW 8: A new woodland plantation is proposed to the south side of the realigned Hallam Line with an access track through. The council wishes to see consideration given to extending this further south towards the A639 Leeds Road in order to create a new bridleway link between BW8 and Bullough Lane/Rothwell Country Park.
5.2.8 Rothwell FP 1: A section of this footpath between Wakefield Road and Pontefract Lane is proposed to be permanently closed by this scheme with an on-road alternative route (NB. not a ‘diversion’ as such) via Queen Street and Pontefract Road. This urban footpath passes through a mainly industrial area and is not of much value for recreational walking. The on road alternative route would, in this case, only be acceptable mitigation if the footways next to these roads are in good condition.

5.2.9 Leeds City (claimed paths) 1, 2, 3, 4, 9, 10, 40 & 42: Paths which may be affected by construction works. Temporary closures and reasonable diversions are largely acceptable in principle during the construction phase, subject to local agreement.

5.3 Ecology & biodiversity

5.3.1 In section 7.3.10, Rothwell Colliery LNA (Country Park) has not been assessed against the West Yorkshire LWS Criteria but should be surveyed in a way to allow criteria to be applied and assessed (Mh1 or Mh2 likely to be the qualifying Criteria) – likely to meet this Criteria and therefore be Countywide value and included in 7.3.9.

5.3.2 The area adjacent to the River Aire which is proposed to be used for the rolling stock depot should also be assessed against the West Yorkshire LWS Criteria – it has a mixture of wetland/wet woodland/scrub/artificial substrates/grassland that are also likely to qualify under Mh1 or Mh2 and therefore be Countywide value and included in 7.3.9.

5.3.3 Skelton Lake should be Countywide level of importance due to bird interest (further information can be provided from RSPB).

5.3.4 In section 7.4.1, some of these measures are compensation rather than mitigation. The council consider that the following additional mitigation/compensation should be integrated into the scheme and request that further discussion are held with HS2 Ltd to discuss the details (we have sketch drawing available to share with HS2 Ltd to illustrate these proposals):

5.3.5 Compensation for loss of 6.7 ha. of Rothwell Country Park (para 7.4.7) needs agreeing with the council. This should provide substantial new areas to expand Rothwell Country Park at a greater than 1:1 ratio and will need land transferring to the council to manage long-term with a commuted sum for an agreed number of years. There is potential to use land to the west of Rothwell Country Park for compensation (in additional to the land to the east referred to in the comment under LA15).

5.3.6 Compensation for wetland/grassland (7.4.9) mosaic lost to rolling stock depot should include land to expand Skelton Lake nature reserve to the west of the M1 has ecological value and compensation is required that should include discussions with the RSPB to consider extending their nature reserve from Skelton Lake to the western side of the M1 and a portion of land either side of the Stock Yard together with public access.

5.3.7 The depot should be laid out to minimise the length of the Wyke Beck that needs to be culverted and to avoid a long culvert immediately adjacent to the existing
motorway culvert which would result in a cumulative adverse impact. Compensation for culverting the Wyke Beck (para 7.4.12) should be naturalisation of the rest of the engineered section of the Wyke Beck from Pontefract Lane to the River Aire through removal of concrete slabs on channel base and bank sides and replacement with Rootlok-type soft engineering solution to allow in-channel and bankside vegetation establishment. Consideration should be given to creation of a recreational route alongside the Wyke Beck from Pontefract Lane to the River Aire/Skelton Lake nature reserve to provide enhanced connectivity from the River Aire to Roundhay Lake along the Wyke Beck Valley trail.

5.3.8 Section 7.4.5 states “It is expected that this distance and the implementation of measures in the draft CoCP will ensure there are no effects to the Humber Estuary Ramsar, SAC and SPA.” Following the European Court Judgement ‘People Over Wind’ this year it is not acceptable to take account of existing measures as mitigation at Screening Stage and this should be done as part of the Appropriate Assessment.

5.3.9 In section 7.4.9, grassland at rolling stock depot should be Countywide value (likely to be part of LWS) – artificial substrates etc. and not improved

5.3.10 In section 7.4.14, the council seeks confirmation that only 3 ponds will be lost – there seems to be more than this number affected at Rothwell Country Park alone. Impacts from changes in hydrology either side of the route also need to be included. Pond loss should be Countywide value even if GCN not present – UK BAP Priority Habitat.

5.3.11 In Table 13, the following Impacts need raising to County level:

- Rothwell Country Park, and Grassland at rolling stock depot land.

5.3.12 In section 7.4.28, these mitigation/compensation measures should be part of the design 7.4.1 – not seen as additional.

5.4 Landscape and visual Rolling Stock Depot (Volume 2: Map CT-06-623b-R1): Indicative rolling stock depot area is a large land take and currently indicates no additional planting of screening which may benefit the views from the wider landscape.

5.4.2 Southern part of the rolling stock depot appears to be on a platform of engineered banking – this will raise the infrastructure above the surrounding land and therefore increase the impact of the proposal, this should be mitigated by landscape / planting.

5.4.3 There are no buildings/structures indicated on the plan – it is imperative that any built interventions are added to plans to ensure that full integration into the setting can be considered. While this site lies within the Enterprise Zone and much of its context is industrial in architectural style/treatment the opportunity to introduce architectural quality should not be ignored in this gateway location just off the M1 – the other side of which is planned residential development (Skelton Gate allocation).

5.4.4 There is a substantial face to A63 Pontefract Lane which is void of any feature – this face would benefit from development to welcome visitors to Leeds and the Enterprise Zone. This would improve the journey towards the city centre from planned
residential development east of the M1 by offering more than an industrial hinterland face to the beginning of the highway past the roundabout

5.4.5 **Aire & Calder Navigation Retaining Walls** (Volume 2: Map CT-06-624): Three retaining walls are noted at the southern edge of the river Aire – this will be of significant visual impact to this important natural corridor with amenity walking routes and the Trans Pennine Trail. Mitigation of this must be considered so as to lessen its impact in this location.

5.4.6 **Stourton Embankment Retaining Walls** (Volume 2: Map CT-06-624): The impact of these walls needs to be fully mitigated to minimise the visual impact of the structures.

5.4.7 **Pontefract Road Underbridge** (Volume 2: Map CT-06-624): The section of Pontefract Road running underneath the railway is to be significantly extended. This will have an impact on users of the road, particularly pedestrians and cyclists which needs full consideration in the design.

**Viewpoints**

5.4.8 The council requests that the visual assessment in the final ES considers views of the scheme through the LA17 area from ground level at the following locations.

- Hillidge Road facing towards A61
- Copper Hill residential community - road entrance to Church Street
- Junction of Longridge Avenue/ Burton Road
- Balm Road/ Telford Terrace
- Pepper Road
- Leasowe Road
- A639 Wakefield road; next to accurate laser cutting business
- Westbury Place North
- Junction of ring road / Middle Croft road looking down the hill
- Rothwell Haigh
- Temple Newsam House

5.4.9 The council has shared a map with HS2 Ltd highlighting these locations. The requested views will be necessary in order to understand the visual impact of the scheme on the local community.
5.5 Socio-economics

Relocation of businesses

5.5.1 The WDES identifies direct impacts to a significant number of businesses within Community Area LA17 (the council understand this to be around 30 businesses). Many of the businesses affected in this are smaller scale industrial and workshop uses which are likely to need to relocate in within the local area. It is particularly important therefore that the council and HS2 work together to develop a strategy to support these businesses in relocating to new suitable new premises at an early stage prior to the commencement of construction of the scheme.

Employment land

5.5.2 As referred to in Section 2.10, the construction area and proposed scheme includes land allocated for employment use in the Leeds Local Plan. Specific comments on the impact of the proposals on employment allocation are set out below:

5.5.3 Temple Green / Gateway 45 (Volume 2: Map CT-06-623b-R1, E-H 1-9): This site is allocated as for general employment (industrial / warehousing uses) within the Leeds Enterprise Zone. There are extant planning permissions (outline and detailed) for employment uses on site. The council calculates that the construction phase would result in a temporary loss of 22 ha of allocated/committed employment land within the current plan period. Prior to the announcement of the RSD proposal at this site, the land was ready to be brought forward for development of distribution uses in the shorter term. This land would be sterilised for employment development for the duration of construction up to at least 2029, delaying the development of the site by at least a decade. This is an adverse effect of the scheme which should be identified in the final ES. There would also be permanent loss of 10 ha of committed employment land although the depot would be considered to be an employment use in its own right, creating jobs and investment in the area. The land to north of site immediately to the east of the Temple Green park and ride site is proposed for Leeds University’s new technology campus at the heart of which will be the Institute of High Speed Rail and Systems Integration. This proposal would be jeopardised under the depot configuration and land take shown on the WDES scheme. The ability to access the remaining development land is critical, with developers Aire Valley Land progressing remediation of the western plots of Gateway 45 with a view to these being developed over the next 2-3 years. Access to these plots is via the road infrastructure already constructed including the bridge over the Wyke Beck.

5.5.4 Discussions have taken place with HS2 and it is understood that the latest designs are as per the land take set out in the Secretary of State’s announcement of July 2018, which accommodates the University of Leeds campus immediately to the west of the northern most element of the depot. The council supports this boundary rather than earlier version that is shown in the WDES. A reconfigured depot is unlikely to reduce the overall loss of employment land so additional employment land may need to be identified to compensate for the loss of this site subject to a wider strategic review of employment land requirements (see Section 2.10).
5.5.5 The council encourages HS2 to have early discussions with Aire Valley Land and the University of Leeds to ensure that development boundaries are consistent and to ensure that developments brought forward prior to HS2 can still be appropriately accessed following delivery of the HS2 RSD.

5.5.6 Skelton Grange (South) (Volume 2: Map CT-06-623b-R1, J1-4): Site is allocated as for general employment. 22% of site (2.1 ha) lies within the construction phase boundary resulting in a temporary loss. This part of site could not be developed during the current plan period to 2028. The council considers that HS2 Ltd need to identify additional land for employment in mitigation.

5.5.7 Pontefract Road, North of M1 J44 (Volume 2: Map CT-06-624, A-C 4-5): This site is allocated as for general employment. A distribution depot (Moran Logistics) is operational at the site as of 2018, fully implementing the allocation. The majority of site (4.2 ha) and recently constructed buildings and curtilage would be lost to the scheme part of construction phase and landscape mitigation for scheme. The council wishes to see this site removed from the construction phase and operational phase and an alternative approach to mitigation examined. This is a relatively large employment site with immediate access to the motorway network. The distribution depot on the site has only opened this year.

5.5.8 Land off Pontefract Road (Volume 2: Map CT-06-624, E5): Site is allocated as for general employment (industrial / warehousing uses). There is an extant planning permission for employment use on part of site. Site included within land potentially required for construction and within landscape mitigation planting area for proposed scheme resulting in a permanent loss of the employment allocation. This is considered to be moderate adverse effect given relatively small site area (0.7 ha). It is accepted that there are limited opportunities to provide landscape mitigation along this corridor without taking land occupied by existing premises. In mitigation, additional employment land may need to be identified to compensate for the loss of this site.

5.5.9 Adjacent to M621 J7, Stourton (Volume 2: Map CT-06-625, C5): Site is allocated as for general employment (industrial / warehousing uses). Site included within land potentially required for construction and within landscape mitigation planting area for proposed scheme resulting in a permanent loss of the employment allocation. This is considered to be moderate adverse effect given relatively small site area (1 ha). Development of site for employment would result in loss of existing vegetation so land migration associated with scheme would be a beneficial effect against the baseline position at the operational stage. It is accepted that there are limited opportunities to provide landscape mitigation along this corridor without taking land occupied by existing premises. In mitigation, additional employment land may need to be identified to compensate for the loss of this site.

5.5.10 Former Motor Dealers, Church Street, Hunslet (Volume 2: Map CT-06-625, I-J 6): Site is allocated for mixed use (housing and commercial development) in the AVLAAP. Site within the construction and operational phases of the scheme resulting in a permanent loss of allocated site. This is considered to be a moderate adverse impact given the site is relatively small. The proposals at this site would also result in the loss of Mecca Bingo building and the small industrial units immediately
adjoining the allocation. This create a potentially larger development opportunity for non-residential uses after the construction period has ended. HS2 are asked to reconsider whether this site at the edge of a busy centre in Hunslet is an appropriate location for a balancing pond and pumping station which would be fenced off and not accessible to the public. The council suggests a mixed approach with some land set aside for smaller balancing ponds which are open for public use alongside a development opportunity.

Specialist minerals, waste & freight sites

5.5.11 There are a number of allocated and safeguarded sites for specialist minerals, waste and freight uses within LA17 which lie within the construction phase or proposed scheme. This sites are identified in the council’s adopted Natural Resources and Waste Local Plan (NRWLP), part of the Leeds Local Plan. Specific comments on the impact of the proposals on these sites are set out below.

5.5.12 Cemex site / railway sidings, Pontefract Road, Stourton (Volume 2: Map CT-06-624, G-I 6): Cemex currently occupy this site which is used for asphalt and concrete processing. Site has a railhead which is utilised for bringing in aggregates, crushed sandstone by rail. Site is safeguarded as a minerals processing site & rail siding in the NRWLP. In addition to loss of direct employment. This results in the loss of a rail connected site and opportunity to bring aggregate into Leeds by rail. If this demand is not met by another rail connected facility within Leeds this could create more road based movement to satisfy demand within the Leeds construction sector. The WDES should identify this as a permanent major adverse effect. There is a need to identify a replacement rail connected site within Leeds. One such site is allocated in the NRWLP at Bridgewater Road. However, it is not known if this would be available for Cemex to relocate at the required time. The council would expect HS2 to investigate the feasibility of providing a replacement rail connected facility. A further indirect effect of using the site to relocate an existing rail connected business is that it reduces other opportunities to encourage modal shift to rail in this sector which was the purpose of making the allocation.

5.5.13 Skelton Grange Road Spur (Volume 2: Map CT-06-623b, F8 – I10): The track bed for the branch line into the former Skelton Power Station site is intact and unobstructed, including three bridges along the route. There is also a tunnel beneath the M1 to accommodate the alignment of the track bed. The line terminates at the edge of the power station site within the area allocated for employment. There is the potential for re-opening this line for the carriage of general freight and cargo. The line is safeguarded in the NRWLP to retain this potential. The HS2 Rolling Stock Depot bisects the alignment of this spur and it is assumed the ability to deliver this connection would be lost. This should be identified as an adverse effect in the WDES. While the council accept that it is unlikely the loss of safeguarded line can be mitigated. HS2 should take the opportunity to re-use the bowstring bridges on this alignment to provide a pedestrian/cycle connection across the river and canal in mitigation.

5.5.14 Cinder Oven Bridge (Volume 2: Map CT-06-624, C 6-7): Allocation to meet the needs for construction, demolition and excavation (CD&E) waste. This was meeting a requirement under the Waste Framework Directive and is the only such site in the
district. The site is not actively used for this purpose at present. Construction phase and proposed scheme results in loss of entire allocation. Potentially leads to a shortfall in provision in district. Accordingly HS2 should identify an alternative site in mitigation subject to an updated assessment of the ongoing need for land to manage CD&E waste.

5.5.15 *Intermodal Freight Area at Stourton* (Volume 2: Map CT-06-624): Area of search to encourage commercial activities that can make use of the rail and water freight opportunities. Construction phase and operational scheme compromises long term use of the north side of the Hallam line for future rail use potentially reducing opportunities in the area. Access for the south of the existing line and for canal freight is not compromised. HS2 Ltd should investigate the opportunity to bring in construction material for HS2 utilising the rail and canal freight opportunities in this area. This could help reduce road traffic impacts of the scheme.

5.6 **Sound, noise & vibration**

5.6.1 Securing an acceptable level of noise mitigation for residents whose properties are impacted upon by HS2 operational noise is imperative for the council. Understandably local communities are greatly concerned about impacts the scheme will have on their localities, with operational noise a key issue.

5.6.2 The line towards Hunslet initially runs through an industrial area at surface level where noise from HS2 is largely screened by existing buildings. The existence of major roads and motorways in this area of Leeds will provide some masking noise but we expect more detailed modelling long with the result of the baseline surveys in the final draft ES to quantify the impact on residential and non-residential noise sensitive receptors, particularly where the line is elevated on a viaduct before it reaches Leeds Station. Where the track is elevated noise levels will need to be modelled at heights representative of any residential buildings with line of sight to the track as the standard model runs are only at 4m above ground level.

5.6.3 As outlined in the general comments section the council finds the methodology and assessment criteria presented in the WDES acceptable in principle with regard to the HS2 operational impacts of noise in terms of the stated alignment with Government noise policy, planning policy, planning practice guidance on noise (PPGN) and the EIA Directive. However without the inclusion of measured environmental baseline data, which the council understands will be provided in the ES, the council is unable to state at present if the noise mitigation provided in the WDES is acceptable. The council wishes to work in partnership with HS2 to agree an acceptable environmental baseline at the earliest opportunity.
5.7 Traffic and Transport

Highway impacts of construction

5.7.1 The council recognises the challenges and complexities of the construction of a high speed line of route in LA17 in terms of the severance and reduced network resilience caused by the existing infrastructure constraints of the classic railway and, the M621 and strategic road network. It is recognised that the construction impacts and associated disruption, while potentially significant for the city are also temporary, in the context of the potential long term infrastructure legacy of a constructed scheme of this size and scale.

5.7.2 The council has developed a set a network management principles for engagement with HS2 Ltd. These are outlined in the general comments section and will be of particular importance in mitigating the impacts of construction in both LA17 &18.

5.7.3 The WDES states that ‘Changes in traffic have the potential, at some locations, to result in increased travel distance, congestion and delays and increased traffic severance for non-motorised users. The assessment of these changes will be reported in the final ES. The works to construct both temporary and permanent highway diversions/realignments could also result in disruption to highway users’. According to the WDES these are expected to include:

- local diversions, reduced lane widths and overnight and weekend closures of the main carriageway of the M1 and northbound on-slip road and southbound off-slip road at Junction 44
- closure of the M621 southbound off-slip road at junction 4,
- closure of the A61 Hunslet Distributor Road
- closure of the B6481 Pontefract Road
- closure of Balm Road where it crosses the existing Hallam Line
- closure of Pepper Road where it crosses the existing Hallam Line,
- closure of Beza Street where it crosses the existing Hallam Line
- closure of Hillidge Road where it crosses the existing Hallam Line, with traffic diverted onto the local road network

5.7.4 The WDES states that the potential effects on traffic and transport have been assessed qualitatively, with no quantitative assessment undertaken at this stage. The council understands that the quantitative assessment of the network management impacts will be reported in the Environmental Statement. The council formally requests through this consultation response to work in partnership with HS2 Ltd, alongside other key stakeholders to quantitatively evaluate construction network management impacts of the Leeds Cutting design presented in the WDES. This should be carried out in the appropriate modelling package and agreed future design year scenario.
5.7.5 The council seeks to minimise disruption to the strategic road network. Through the ongoing dialogue with HS2 Ltd and Highways England. In particular, the council requests HS2’s Ltd attention with regard to the following likely impacts that need to be mitigated;

5.7.6 M1 junction 44-45: Off line construction solutions at strategic locations of the road network are supported where these are practicable. With regard to the M1 junction 44-45 M1 Junction 44, the council seeks to maintain 3 lanes in each direction on the M1 main carriageway during the construction period. Given the importance of the strategic network at this location in term of east west connectivity and the limited crossing opportunities of the River Aire. On the level of information provided in the WDES there remains concerned with the potential disruption for local communities and businesses at this location. Lengthy closures of the slips at this location are the least preferred option, given the strategic road networks interface with the city’s park and ride infrastructure. The timing and duration of the closure of Pontefract Road is also a concern given the potential impact of diversions at this location.

5.7.7 M621 Junction 4: Given the potential high speed rail interface with the M621 Junction 4, and the city’s key urban distributor the A61 Leeds Inner Ring Road. It is recognised that this is a complex site involving a strategic junction and the council wishes to emphasise the importance of effective network management at this location throughout the construction period. The HS2 programme focus should be on minimising the disruption to the strategic and local road network at this location through keeping this junction open. The principle of night time and weekend closures is supported to construct temporary bridges which will maintain the following lane capacity changes; M621 South Bound exit slip 2 lanes to 1, A61 into Leeds 3 lanes to 2, A61 out of Leeds remains at 1 lane and South Bound entry slip 2 lanes to 1.

Highway impacts of proposed scheme

5.7.8 The council’s strategic aim in terms of the final high speed rail scheme and its interface with the city centre highway network is to align any proposed infrastructure delivery works with the council’s delivery plans for the City Centre Transport Strategy to mitigate risks of abortive works. The council finds the proposed scheme at this location largely acceptable in terms of the impact on the local road network and the alignment with our future delivery plans.

5.7.9 Jack Lane is currently a part of the local road network within the South Bank providing east west connectivity and is currently a principal local access route for a significant number of businesses and as well as providing access to the South Bank for adjacent communities. Jack Lane currently provides an element of local resilience to the adjacent strategic road network. We will continue to work with HS2 Ltd to ensure that the final design addresses local connectivity and business access and egress in this area.

5.7.10 Given the principles for future development and regeneration set out with in the South Bank SPD. As part of further phase of the City Centre package proposals to reduce the level of through traffic within the city centre and encourage greater usage of the inner ring road and M621, the council have identified aspiration to improve access from the A61 Inner Ring Road at Junction 4 to the M621 westbound.

78
Currently this move is available by means of a tightly curved slip road onto the motorway which results in joining traffic having to weave through westbound mainline traffic seeking to exit at the M621 Junction 3. Options to enable this to be improved have been shared by the council with Highways England. Although funding has not been identified and the proposals are at an early stage there is a general recognition that this scheme could offer appropriate mitigation for the closure of Jack Lane this would align with the South Bank SPD, with benefits to both the local and Strategic Road networks from an improvement at this location.

The council is working in partnership with Highways England and DfT to develop the appropriate funding package for this scheme. It is requested that HS2 Ltd make passive provision for the ability to widen the overbridge to two lanes at this location.

Structures Impacts of the proposed scheme

Given the HS2 WDES proposed scheme arriving in Leeds in cutting there are a number of strategic existing and proposed structures contained within LA17 and LA18 Community Area map books and Community Area reports, specifically Section 2 and Section 14. These are outlined in the table below, accompanied by the council’s understanding of the organisations which are liable for these structures.

The council recognises the potential opportunities that HS2 brings in terms of aligning our structures maintenance programme with the construction of HS2 and requests to work in partnership with HS2 Ltd to maximise these opportunities going forward. HS2 Ltd.’s attention is drawn to a number of structures maintenance projects which have currently been deferred to maximise the benefits of the arrival of HS2 in Leeds and reduce the risk of abortive work. As part of the ongoing design process the council requests to work in partnership with HS2 Ltd at the earliest opportunity and requests that we are provided with a sufficient level of information in a timely manner to enable the potential impact of HS2 as proposed in the WDES on Council owned structures to be critically evaluated.

The following list comprises 9 new structures shown in the WDES (LA17 & LA18) and 10 existing structures (belonging to the council or Network Rail (NR)) which would be affected by HS2 proposals.

(i) Pontefract Road Underbridge – existing NR bridge, carrying existing Hallam Line
(ii) Pontefract Road Underbridge – new bridge, adjacent to existing NR bridge
(iii) A639 Wakefield Road Overbridge – new and to replace existing council bridge
(iv) Pepper Road overbridge+ – new and to replace existing NR bridge
(v) Balm Road overbridge+ – new and to replace existing NR bridge
(vi) Beza Street+ – new and to replace existing NR bridge
(vii) Hillidge Road+ – new bridge adjacent to existing NR bridge

(viii) A61 Hunslet Distributor South Overbridge – new bridge adjacent to existing council bridge

(ix) A61 Hunslet Distributor Overbridge – new bridge adjacent to existing council bridge

(x) M621 Junction 4 from Junction 3 Overbridge – new bridge adjacent to existing council bridge

(xi) Victoria Bridge – existing council bridge over River Aire, adjacent to new station. (see LA18)

5.7.16 Of the existing bridges carrying highway, four are owned by Network Rail and were built pre-1970. Under the terms of the Transport Act 1968, the council are liable for carriageway capacity above 24 tonnes and footway capacity above dead load. Two of the bridges have weak footways and cannot sustain vehicular loading; as an interim measure, barriers have been installed to protect the weak elements. However, the footways can still carry pedestrian loading. If these structures are not replaced as part of the scheme, the council will continue to have a significant liability in respect of the structures.

5.7.17 The principle of the construction proposals for the new A639 Wakefield Road overbridge, and associated road and junction realignments is welcomed. The existing bridge is a council owned structure identified for a combined maintenance and strengthening scheme. Essential maintenance work is being carried out by the council during 2018-19 to extend the bridge’s service life by up to a further 10 years. A major scheme to deal with the long-term maintenance of this asset is currently paused in its development due to the current HS2 proposal. It is acknowledged that if this bridge is not replaced by HS2, the council scheme will need to be reinstated and significantly progressed within the next 10 years. The network management impacts of a council sponsored scheme would also need to be planned for and mitigated.

5.7.18 The Pontefract Road underbridge will be constructed to enable HS2 to pass over Pontefract Road. It will be adjacent to the existing Network Rail owned Pontefract Road underbridge which carries the Hallam Line. This will require a high degree of consultation, with both the council and Network Rail to ensure the existing adjacent Network Rail structure is not undermined or affected in other way during construction and active service life. The HS2 WDES Community Area Report 2.2.18 description of route states ‘Pontefract Road underbridge, 100m in length and up to 7m in height’. It should be noted that the current HS2 proposal does not address the existing constraint on the network due to the adjacent low headroom bridge (signed at 15'-6'”), which is managed by a low-bridge priority-controlled central pin-point system. HS2 Ltd attention is drawn to the potential impacts of constructing the new adjacent bridge without replacing the existing low headroom bridge, in terms of both network management and safety. Drivers may be tempted to ignore the warning signs as they see a new bridge ahead not realising there is a low headroom bridge further on which requires detailed consideration in the scheme design.
The Balm Road overbridge has some sub-standard elements supporting the carriageway. In recent years, the council have been working with Network Rail to jointly fund a strengthening scheme for Balm Road overbridge. HS2 Ltd should be aware that this scheme is currently paused by Network Rail pending a re-evaluation of options for diverting a large gas main, further to receiving cost estimates from contractors. It is also paused due to the current HS2 proposal.

Three of the proposed new bridges - A61 Hunslet Distributor South Overbridge, A61 Hunslet Distributor Overbridge and M621 Junction 4 from Junction 3 Overbridge - would be adjacent or very near to existing council structures and the highway network. A high degree of consultation would be required to ensure the existing structures and highway are not undermined or affected in other way during construction and active service life.

In addition, assuming the new adjacent structures are built to latest standards, there could be an issue with different height parapets and/or different construction materials.

Alternatively, HS2 may choose to also replace the parapets on the adjacent existing spans to tie in structurally and visually with their scheme. This would potentially require the reconstruction of the adjacent structures. This is not considered as a possibility in the WDES.

Temple Green Park & Ride site

The Temple Green Park & Ride Site (Volume 2: Map CT-06-623b-R1, F7-9) is now operational. 17% of the park and ride site is within the construction phase of the scheme. This would result in the temporary loss of park and ride capacity which is a major adverse effect which is significant. Through the discussions that have taken place with HS2 and the SoS announcement of July 2018 of a revised depot safeguarded area, this issue appears to have been addressed but the council reaffirm that the Park and ride site should be removed from the construction area of the scheme. This land can be avoided by reconfiguring the depot layout as per comments on the Temple Green / Gateway 45 site in Section 5.5.
6 IMPACTS ON COMMUNITY AREA LA18: LEEDS STATION

6.1 Overview and background of proposed scheme in LA18

6.1.1 The HS2 WDES describes the Proposed Scheme within the Leeds Station area (which is wholly within Leeds) as having three main components:

- **HS2 Leeds station approach** - The route of the Proposed Scheme would continue from the Stourton to Hunslet area north-west towards the existing Leeds Station. The first part of the route of the Proposed Scheme would be located on Leeds embankment, continuing onto Leeds viaduct.

- **HS2 Leeds station** - The HS2 Leeds station would mark the terminus of the Proposed Scheme in the Leeds Station area. It would span the River Aire and join the southern part of the existing Leeds Station forming a combined T-shaped station, broadly occupying land from Holmes Street in the south to the existing Leeds Station at its northern extent.

- **Modifications to the existing Leeds Station** - The HS2 Leeds station would be integrated into the existing Leeds Station via a new pedestrian overbridge to the north. This would create a common concourse by providing direct interchange to the existing Leeds Station platforms.

6.1.2 The WDES is based on an earlier design of scheme. The development of the design of the station and surrounding area has benefitted from close partnership working. The Leeds Station Integrated Master Plan (LISM) and South Bank SPD set out our proposals for the future development Leeds Station and the South Bank, which the council expects HS2 Ltd to take into account in future design iterations.

6.1.3 LISM sets out a long term framework for the future development of Leeds Station. It has been produced through commissioning of a world class design team by the council, HS2 Ltd, Network Rail, and Communities and Local Government. The scheme will incorporate commercial development, which will contribute to the financing of the project. It will support the growth of Leeds City Centre through development adjacent to the station and enhanced public realm.

6.1.4 Redeveloping the South Bank area of Leeds aims to double the economic impact of Leeds city centre by transforming South Bank into a distinctive global destination for investment, sustainable living, learning, creativity and leisure. The South Bank Leeds Regeneration Framework Supplementary Planning Document (SPD) has been produced to provide clear guidance for the future development of South Bank and to establish principles to drive the growth of the area through

- An amplification of policies SP3, SP11, CC1, CC2, CC3, P10 and P11 of the Core Strategy;
- Principles about how development and growth will be delivered across the South Bank;
• Details of the key interventions proposed across the area, including infrastructure requirements and transport proposals to achieve the intended growth;

• Principles and guidance about how HS2 is best integrated into the city’s urban grain and economic vision. This is to help set out the detailed design of the Leeds Integrated Station and developments immediately near it, achieving a world-class gateway that projects an image befitting of Leeds’ role as an international city.

6.2 Station design

6.2.1 The council welcome the constructive workshop process and dialogue into which HS2 Ltd have engaged in respect to the design of the proposed Leeds station and look forward to continuation of this approach in the future design development of the project. This process has resulted in agreed changes to the station design which are not included in the earlier designs included with the WDES consultation. As such our response includes these station design changes as well as providing comments on issues that are yet to be resolved.

6.2.2 The council’s approach to the design of the station is based on the ‘10 HS2 design prompts’ shared with HS2 Ltd at the May 2018 Independent Design Review Panel. We also support the 14 recommendations of the Design Review Panel with respect to collaborative workings and the design of the station and adjoining areas.

6.2.3 The council’s specific requests on the station design are set out from paragraph 6.2.4 onwards below.

6.2.4 The Station viaduct structure is almost 500m (0.5km) long and 60m wide. Activation, usability, public perception, attractiveness, climatic conditions, issues of lighting, servicing, safety and security are all concerns for a structure/intervention of this magnitude within the key regeneration zone in the South Bank of Leeds City Centre.

6.2.5 HS2 Ltd is asked not to preclude activity by third parties underneath the station structure – to enable activation of the city under its footprint.

6.2.6 HS2 Ltd is asked to provide opportunities to service a mixture of uses as needed by third parties.

6.2.7 HS2 Ltd is requested not to preclude the creation of structure under the viaduct by third parties which would enable activation of the structure.

6.2.8 Opportunities to puncture the structure with light wells to bring natural light to the space underneath the viaduct should be taken and maximised to reduce the impact of the structure and improve the environment beneath – particularly important over the river Aire for ecological purposes.

6.2.9 River Aire waterfront is a key underutilised asset within Leeds city centre and HS2 should both respect and make opportunity to utilise this asset. On both banks, north and south, activity should be introduced, space between structure and banks should
be generous, space between the banks and structure must be public thoroughfare throughout the day.

6.2.10 Interventions within the current Leeds Station should offer a qualitative uplift in experience for all users

6.2.11 The HS2 and current stations should become a seamless experience and the celebration of new engineering and architecture should not come at the cost of successful integration both as experience and articulation of built form.

6.2.12 The HS2 station would directly abut the existing Leeds Station, causing the loss of visibility and impact of historic and symbolic Victorian railway arches which offer positive contribution to surrounding public realm. HS2 intervention should be respectful of this significant historical structure and create space between new and old engineering. Successful examples such as Granary Wharf should be considered good precedent for the use, treatment and success of reusing this asset.

6.2.13 The HS2 structure east of the viaduct directly south of the current station would directly interact with Sovereign Square, a recent, high quality and successful piece of public realm and place making. HS2 needs to provide positive architectural and place making contribution to this space and also offer activity and physical movement connections between station and space. The environment and experience of using the space between new HS2 structure and the existing station should be explored in detail to ensure it is attractive, useable, has favourable climatic conditions and will be safe throughout the day.

6.2.14 The viaduct structure would bridge an extensive section of Neville Street. Enclosing this space and elongating the covered section brings significant place making challenges. HS2 Ltd must find ways to create an attractive, welcoming and safe environment at all times of day in this space.

6.2.15 The HS2 station would directly adjoin Yorkshire Place (South Bank Framework place making aspiration) and the interaction between structure and space must be a positive one on a key waterfront gateway destination. Engineering and architectural articulation of the proposed station must contribute positively to this space. Public realm in this area will allow for natural sunlight to penetrate beneath the viaduct through the afternoon and evening, offering environmental enhancement.

6.2.16 If an MSCP is required the proposed location, east of the viaduct, is right however the relationship to the viaduct and surrounding buildings is unsatisfactory at present. The orientation needs a 90 degree shift alongside Holmes Street. A smaller footprint would be preferable at potentially greater height. It will be important to achieve the right standard of design for the MSCP and incorporate ground level activation and animation.

6.2.17 The treatment of the banking/viaduct at the 'tail' (where HS2 comes into the city centre) will be important to ensure activation and appropriate treatment at this Gateway Location.

6.2.18 Maximising opportunities for light penetration through the viaduct is critical. Lightwells should be incorporated wherever possible to allow natural light to
penetrate. This is particularly important where the viaduct crosses the river Aire for both ecological reasons and also to enhance the environment for all users.

6.2.19 A Southern Entrance (south of Meadow Lane) is essential to provide inclusive access for all users of the station approaching for the south as an entrance through the car park not appropriate for people with mobility issues. It is also critical to maximise regeneration and connectivity to the anticipated regeneration area in 2033 south of Meadow Lane. High quality public realm and genuine integrated multi modal transport connections will be important, bus interchange, cycling and safeguarding future integration of mass transit.

6.2.20 North south connectivity at both platform level and at street level is important i.e. integrated north south access at ground level from MSCP along whole length of Station through to Classic Station and Bishopsgate. All these are supported by the adopted Supplementary Planning Document. Strong supportive street network to be retained.

6.2.21 Development site to west of viaduct opposite MSCP is a key Gateway site ideal for prominent landmark building and with active frontages at street level.

6.2.22 The treatment of the viaduct as it crosses Meadow Lane will be important. In addition, Meadow Lane under viaduct requires quality pedestrian crossings to ensure north south connectivity.

6.2.23 The council’s aspiration is to down grade roads in Southbank in general and mitigate impact of traffic on pedestrians and cyclists to be addressed as part of HS2 Ltd.’s proposals.

6.2.24 The proposed pick up and drop off area (PUDO) dissects the arbour proposed in the LISM scheme. The council ask that the PUDO is re-orientated to leave arbour clear through to Victoria Road as well as being moved away from the main entrance to the central concourse.

6.2.25 There is a key opportunity to create a high quality public realm or civic space to the west of the HS2 Central concourse which should be incorporated into the detailed scheme design.

6.2.26 Land holding for HS2 construction includes council land identified for development prior to HS2 being operational. This is Hunslet Lane and Meadow Lane car park land within Meadow Lane which will also contribute to the connection of the city park through to the waterfront and the new Sovereign Street bridge. This will be fettered if the land is acquired, so HS2 Ltd need to ensure the landings and space to construct these are protected. A high quality connection linking the City Park to the proposed Sovereign Square footbridge is important to maintain (through the ASDA site).

6.2.27 The Car Park at Riverside north of classic station is currently proposed to be used for site compound for HS2. This site will be required for development within the construction time frame for HS2. The council therefore ask that the site is excluded from the Limits of Land to be Acquired or Used (LLU boundary) for the scheme and an alternative location for the compound identified.
6.2.28 Physical connection of the HS2 structure to the classic station critical to ensure one Yorkshire Hub integrated station with active frontages.

6.2.29 A more efficient management of plant and back offices for the Central concourse would ensure better future development opportunities adjoining the station and also to create the arbour as a place. The size and bulk of the HS2 station to the East adversely impacts on the arbour and opportunities for public spaces and key routes and avenues through the station.

6.2.30 The Core Strategy has a Policy CC2 to regenerate the South Bank and better integrate the north and southern halves of the city centre. Creating a pleasant space with a high quality urban environment and fine urban grain and street scape critical to integrate infrastructure. HS2 will need to demonstrate how they contribute to this ambition.

6.2.31 There is an existing highways proposal to close Saynor Road to through traffic. Also the regeneration anticipated within the area makes it inappropriate for a temporary lorry holding area. An alternative proposal is required, Butterley Street or an off-highway solution would be preferable.

6.2.32 Servicing access to development sites next to the central concourse should be provided underground where possible. Relationship with Victoria Bridge is key and HS2 viaduct undercroft will be really important to reflect the key pedestrian / leisure route.

6.2.33 Neville Street pedestrianisation needs to take account of a safeguarded route for mass transit and need to reflect light welcoming space, also aspiration to open up additional connections under the existing Dark Arches linking Pit Row to Bishopgate Street to ensure pedestrian connectivity during and after construction in line with the South Bank SPD.

6.2.34 The proposed HS2 overbridge should reflect the South Bank SPD aspiration to create north south non rail user connectivity and ease of transfer from classic station to HS2 station via overbridge.

6.2.35 The waterfront pedestrian walkway and Route 66 cycleway should be maintained for as long as possible during construction. The land should be included in acquisition to ensure that integrated placemaking with waterfront can be achieved. There is an aspiration for a high quality public realm and connection along both the north and southern banks of the River Aire. The Arbour needs to be framed by development and public realm moved to take account of arbour, development sites.

6.2.36 In para 2.2.13, the HS2 Leeds station roof will need to reflect the character of each of the zones “ABCD” referred to in the Leeds Integrated Station Masterplan.

6.2.37 In para 2.2.20, the 14m overbridge is narrow when trees supporting roof taken into consideration. Need a solution which takes into account ticketed and non-ticketed bridge users as well as queueing around escalators and lifts.

6.2.38 In 2.3.34, the route from the city centre down Neville Street to Dark Neville Street needs to maintain pedestrian access at all times. The council consider the diversion
proposed is too long, particularly given the long period of closures proposed at present (4 years and 3 months and 5 years).

6.2.39 In para 2.3.18 and Figure 7, the programme anticipates all site compounds set up and utilities diversions happening in Q4 2024 and Q1 2025 this will need to be co-ordinated with the council’s Network Management team and phased to ensure alignment with other development happening in the Southbank. This will need to be discussed in detail with the council as the construction programme is further developed.

6.2.40 In para 2.5.3 and 2.5.4, the council would expect to be involved in the development of future design proposals all of which will need to reflect planning policy including the Southbank Regeneration SPD.

6.3 Air quality

6.3.1 In para 5.1.2, the Clean Air zone will be implemented prior to HS2 operation and construction. This needs to form the baseline position for Air Quality monitoring.

6.4 Community

6.4.1 In para 6.1.2, the Leeds Access Group should be included in the consultation process.

Residential proposals

6.4.2 The boundary of the construction phase overlaps in full or in part with two residential sites proposed in the Leeds Site Allocations Plan.

6.4.3 Criterion Place North (Sovereign Square): (Volume 2: Map CT-05-627, E6) Site is proposed in the Site Allocations Plan for mixed use development (with potential for residential (210 units) and office uses). Part of the site (63%) is shown within the land potentially required for construction (along the northern edge of the site. It is not clear from the information presented in the WDES whether this would affect delivery of the allocation during the construction period and such clarification should be provided by HS2 Ltd.

6.4.4 Kidacre Street: (Volume 2: Map CT-06-626, H5) Site is proposed to be safeguarded as a Gypsy and Traveller Site in the Leeds Site Allocations Plan. The site has a temporary planning permission is now completed and occupied as 8 pitches. The site is shown within the land potentially required during construction and for temporary material stockpiles and is within the public realm boundary for the operational scheme. The safeguarding allocation has been made until the site is required for HS2 as it has been assumed that site will be lost as part of the scheme. A site has been identified in the SAP for the relocation of the pitches when the site is acquired. The council therefore expects HS2 Ltd to engage early in order to facilitate this relocation with minimum disruption to residents. An 18 month window from notification to taking possession is requested to allow time for planning permission to be secured for an alternative site.
6.5 Ecology & biodiversity

6.5.1 Covering up of River Aire will cause shading on plants and organisms in the water. Use as public space/paths will result in the need for lighting which will affect the use by light sensitive bats foraging/commuting.

6.5.2 Need to ensure light penetration for Fish and other aquatic species where viaduct crosses watercourses. Mitigation needs to include a sensitive lighting scheme to avoid any light spill over the water.

6.5.3 In para 7.4.1, mitigation measures should form part of the design as they are not general enhancements.

6.6 Health

6.6.1 The increase in construction traffic could obstruct or deter pedestrians and/or cyclists from using these routes but they could also increase the risk of accidents involving cyclist and pedestrians. The council expects drivers of HGVs and construction vehicles to be offered any training by HS2 Ltd to increase awareness of vulnerable road users including cyclists and pedestrians.

6.6.2 The impact of the wider food environment within the new HS2 station on Public Health should be considered as there is the potential for an increase in fast food restaurants that may contribute to increasing obesity and diabetes prevalence in Leeds. In support of this factor the council have recently signed up to Healthy Weight Declaration highlighting a commitment to promoting a healthy weight across the council with a view to improving health and wellbeing across the Leeds population. Free water access at the station needs to be considered. Public Health are also hoping to get sign up for Refill UK in the coming weeks which will be a commitment to ensuring free access to water for people across the city through links with local businesses.

6.7 Historic environment

6.7.1 Further to the general comments made in Section 2.7, the following non-designated and “lost assets” have been identified by the council which should be noted and assessed in the final ES:

6.7.2 Middleton Railway: used to run from Middleton into the city terminating where Kidacre Street meet Hunslet Road.

6.7.3 Filtrate Works: used to exist where the Crown Point Retail park is now with historical connection to George Stephenson.

6.7.4 Victoria Bridge: a wooden footbridge built in the position of today’s Victoria Bridge was lost in the floods of 1837.
6.8 Landscape & visual

6.8.1 Holbeck SPD is the wrong reference should read Southbank Regeneration SPD.

6.8.2 The council expects the final ES to include a photo montage of the view from Great Wilson Street looking towards the Station, from Dewsbury road end looking back up towards the city centre.

6.9 Socio-economic

Relocation of businesses

6.9.1 The WDES identifies direct impacts to a significant number of businesses within Community Area LA17 (the council understand this to be around 40 businesses). A mix of large (including the national headquarters of Asda) and smaller business are impacted. It is particularly important therefore that the council and HS2 work together to develop a strategy to support these businesses in relocating to new suitable new sites and premises at an early stage prior to the commencement of construction of the scheme to ensure these businesses are retained within Leeds. Loss of major businesses such as Asda would have a major adverse impact on the economy of the city which is acknowledged in para 12.4.16. However, it is considered that the subsequent conclusion in para 12.4.17 that the overall impact if businesses are unable to relocate to suitable premises will be “modest in the context of the economy of Leeds” is not consistent with this impact for this scale and importance of business. Further mitigation is required.

Employment allocations

6.9.2 The construction area and proposed scheme includes land allocated for commercial (office) uses in the Leeds Local Plan.

6.9.3 Criterion Place North (Sovereign Square): (Volume 2: Map CT-05-627, E6) Site is proposed in the Site Allocations Plan for mixed use development (with potential for residential and office uses). Part of the site is shown within the land potentially required for construction along the northern edge of the site. It is not clear from the information presented in the WDES whether this would affect delivery of the allocation during the construction period and such clarification is required.

6.9.4 No. 3 Sovereign Square: (Volume 2: Map CT-05-627, E6) Site is proposed for office uses in the Site Allocations Plan which reflects earlier planning approvals. The western part of the site is shown within the land potentially required for construction. An office building has been constructed on this land which is occupied by KPMG. The council understand that this site/building is included in the construction area because cranes would be required to pass over (over-sail) the land during construction and the building itself would not need to be demolished. It would be appropriate for the ES to clarify this (as has been done for the residential block on Little Neville Street (LA18, para 6.4.2). Subject to the above there is no effect of the scheme on the allocated site.
6.10 **Sound, noise and vibration**

6.10.1 Securing an acceptable level of noise mitigation for residents whose properties are impacted upon by HS2 operational noise is of paramount importance for the council. Understandably local communities are greatly concerned about impacts the scheme will have on their localities, with operational noise a key issue.

6.10.2 As the Leeds spur reaches its terminus at Leeds Station, it passes near 3 residential areas defined as Noise important Areas under the Environmental Noise Directive and also a number of sensitive non-residential uses. The precise impact of HS2 requires further modelling work at relevant receptor heights particularly when the line runs along the Leeds embankment and viaduct. The pre-existing high background noise levels may change as future planned road network changes are made in the City Centre however, trains arriving at and leaving the station will be travelling at low speeds and therefore the noise source levels will be lower here.

6.10.3 Taking account of the avoidance and mitigation measures this initial assessment has identified no airborne noise effects with the potential to be considered significant on a community basis due to increased noise levels forecast to arise from the operation of the Proposed Scheme in line with the SMR. The initial assessment indicates that, the forecast noise from long-term railway operation would not exceed the daytime threshold set by the Noise Insulation Regulations, the night-time Interim Target identified in the WHO Night Noise. Guidelines for Europe 2009 or the maximum noise levels criteria set out in the SMR, at any individual residential properties close to the Proposed Scheme. Further assessment work is being undertaken to identify operational sound and Vibration significant effects. This must be reported in the final ES.

6.10.4 As outlined in the general comments section the council finds the methodology and assessment criteria presented in the WDES acceptable in principle with regard to the HS2 operational impacts of noise in terms of the stated alignment with Government noise policy, planning policy, planning practice guidance on noise (PPGN) and the EIA Directive. However without the inclusion of measured environmental baseline data, which the council understands will be provided in the final ES, we are unable to state at present if the noise mitigation provided in the WDES is acceptable. The council wishes to work in partnership with HS2 to agree an acceptable environmental baseline at the earliest opportunity.

6.11 **Traffic and Transport**

6.11.1 The council’s strategic aim in terms of the final high speed rail scheme and its interface with the city centre highway network is to align any proposed infrastructure delivery works with the council’s delivery plans for the City Centre Transport Strategy to mitigate risks of abortive works. The council continues work in partnership with HS2 Ltd with regard to ensuring the following key principles for the highway network in the environs of the station.

(a) Maintain option for 2 way Mass Transit in Neville Street

(b) Need for a Bus Interchange Facility at Southern Entrance
(c) On Street bus facilities and bus lanes where necessary

(d) Deliver Boulevard aspirations on Meadow Lane / Meadow Road under HS2 Station

(e) Ensure east/ west connectivity for pedestrians and cyclists under the station

(f) Creating a connection at overbridge level between HS2 platforms and existing station

(g) Northern concourses which is open to all users (not just rail ticket holders)

(h) Ensure platform 6 walkway is accessible by all users and has good links to east west movements

(i) Segregated Cycling facilities on key routes of Meadow Lane and Victoria Road across Victoria Bridge and on Neville Street.

Structures

6.11.2 The council recognises the potential opportunities that HS2 brings in terms of aligning our structures maintenance programme with the construction of HS2 and wishes to work in partnership with HS2 Ltd to maximise these opportunities going forward. As part of the ongoing design process the council wishes to work in partnership with HS2 at the earliest opportunity and requests that we are provided with a sufficient level of information to enable the potential impact of HS2 as proposed in the WDES on Council owned structures to be critically evaluated.

6.11.3 Victoria Bridge carries Neville Street and crosses the River Aire and is within very close proximity of the proposed new Leeds HS2 Station. A high degree of consultation would be required to ensure the existing structure would not be undermined or affected in other way during construction and active service life.