Camden HS2 response

1. Introduction and response summary

- 1.1 This document ("the Response") sets out the Council's response to the consultation ("the Consultation") being undertaken by Central government on the proposed HS2 Rail link. The Council is not currently in a position to be able to support the proposed HS2 scheme, as the Consultation has failed to demonstrate that the negative impacts of the scheme would be outweighed by any benefits generated. Camden is especially concerned by the failure to properly assess the very significant impacts on local residents and businesses and on the transport network, which would be generated by the High Speed 2 scheme.
- 1.2 The HS2 scheme should not proceed because the adverse impacts of the scheme on Camden are substantial and the economic benefits are not sufficiently clear. It has not been demonstrated that there are no other alternatives an HS2 scheme terminating at Euston which could deliver a similar level of benefit but with the less disruption to surrounding communities and businesses
- 1.3 Camden's key concerns regarding the case put forward in support of High Speed 2 are:
 - The economic case put forward in support of High Speed 2 is questionable and insufficient supporting evidence has been put forward to demonstrate the benefits of the scheme. In particular, it is considered that insufficient information has been provided regarding the comparative economic benefits of alternative schemes (such as upgrading existing rail links), which could be delivered at significantly less cost both in terms of the funding required and impacts on surrounding communities and the environment;
 - The proposed scheme has a poor environmental case, with potential increases in overall carbon emissions;
 - Lack of information regarding consideration of alternatives and benefits/ impacts compared to the proposed scheme. In particular, consideration should be given to upgrading capacity and services on the existing West Coast Main Line (WCML);
 - Lack of adequate assessment regarding the potential impacts of the scheme on the environment, transport and on local communities. In particular, Camden considers that insufficient evidence has been produced regarding the potential impact of the scheme in terms of noise and disturbance and on the local transport network. The number of residential properties that would

- need to be demolished to allow for the expanded Euston footprint may also have been underestimated.
- 1.4 Further assessments should be made of alternative options, including improvements to existing rail services. Such options could cost less and could cause less harm to local communities and the environment, whilst delivering the capacity and service improvements needed to continue improvements to strategic transport and promote sustainable travel.

Consultation

- 1.5 Camden considers that the Consultation does not give effect to the basic requirement that consultation should enable those affected by proposals to be able to understand their implications and to be able to respond accordingly.
- 1.6 There is also a specific concern that the consultation documents contain insufficient information to enable the Secretary of State to discharge the duties set out in the Equality Act 2010 to inter alia eliminate discrimination or any other conduct prohibited by the Act and advance equality of opportunity and foster good relations between persons who share a relevant protected characteristic and persons who do not share it.
- 1.7 This concern applies to the Consultation generally but in particular to the Asian community around Euston. It is acknowledged in the consultation documents that the Asian population could be disproportionately affected; however there is no analysis of any such impact (see HS2 Appraisal of Sustainability Appendix 4 Equalities Impact Assessment Screening Report, paragraphs 3.4.2 and 3.4.3).
- 1.8 The Consultation has failed to provide sufficient information to adequately inform communities affected of the impacts and elicit their views. By way of example, the failure to provide a consultation event within Regents Estate, which would be most affected by the proposals, is a serious omission given that many residents may not be able to fully understand the impacts of HS2 in the absence of such an event.
- 1.9 Camden Council has itself carried out consultation of local residents, community groups and businesses. The main purpose of Camden's consultation was to inform its own response to the proposed scheme, not to overcome flaws in overall Consultation. Camden's consultation included:
 - 6,466 letters to properties 100m around the proposed Euston footprint and the 2 vent shafts, along with 129 letters to community groups in the affected areas;

- Three drop-in sessions for residents potentially affected by the proposed vent shafts, at Adelaide Road 21st April 2011) and in the Alexandra area (18th & 19th April 2011);
- Two drop-in sessions for businesses in the Euston area (4th and 5th May 2011);
- Two drop-in sessions in the Regents Park Estate to the west of Euston station (8th and 9th April 2011); and
- A consultation event at the Bengali Workers Association event (12th May 2011).
- 1.10 The Response has been drafted having regard to and reflecting the results of Camden's own consultation and this should be taken into account when considering the weight to be attached to this response. Furthermore, given the likely impacts that the HS2 proposals will have on residents and businesses it is imperative that HS2 urgently carry out wider additional consultation targeting the groups / areas identified in Camden's own consultation and takes the views received into account.
- 1.11 Additionally a full Equalities Impact Assessment assessing impacts in Camden is required before any decision to proceed is taken in order to secure compliance with the Equality Act 2010. In the absence of such an assessment the duties imposed, by section 149 of the 2010 Act, upon the Secretary of State when exercising his function to decide whether to proceed with the HS2 project could not be fulfilled. This requirement applies generally but is especially important with reference to the Asian community around Euston (see HS2 Appraisal of Sustainability Appendix 4 Equalities Impact Assessment, paragraphs 3.4.2 and 3.4.3).
- 1.12 The Secretary of State should not make a decision as to whether or not to proceed with HS2 before further information has been available as, in particular:
 - Insufficient information has been made available to allow consultees to consider the economic case, and in particular the basis upon which it is said that redevelopment of Euston Station could deliver between £900 million and £1.5 billion in benefits. In that absence of that information the consultation process is deficient.
 - No adequate analysis has been undertaken of the capacity of existing public transport facilities at Euston to accommodate demand arising from passengers using HS2.
 - No equalities impact assessment has been carried out.

- No adequate consideration has been given to alternatives.
- Insufficient information has been provided to allow Camden to make an informed and considered response to the proposals for a link to HS1.

Structure and content of this consultation response

- 1.13 The Response is structured as follows: **Sections 1 to 11** set out Camden's key concerns in relation to specific themes (some of which overlap) and which provide the justification for the Council's position that it cannot support the proposals. **Sections 1 to 11** also identify the scope of compensatory and mitigating measures that would be required were the proposals to go ahead. Camden's response to the 7 questions asked in the Consultation is set out in Appendix 1.
- 1.14 The themes covered by the Response are as summarised below (please see the full sections for a full description of potential impacts):
 - Blight and compensation: inadequate measures have been put forward regarding blight and compensation for those affected by the proposals. A strategy should be developed to deal with these issues.
 - **Housing:** including demolition of housing and impacts of HS2 on the local environment for remaining properties.
 - Environment: including loss of open spaces and biodiversity, loss of heritage assets and impact on air quality
 - Noise and disturbance: impact of noise and vibration generated both during construction and operation for the new station and line
 - Transport: including potential harm to existing rail services (short and long term) and onward movement of passengers
 - Schools: direct impacts of HS2 on Maria Fidelis RC secondary school. Direct and indirect impact of HS2 on local schools, including pupil place changes as a result of demolition of housing and new provision of housing
 - **Business and employment:** including demolition of existing business premises and disruption to nearby premises
 - Community and cultural facilities: potential loss of community and cultural facilities
 - Crime and safety: including issues during the construction phase

- Euston Area Planning Framework: mitigation measures and strategic planning for the Euston area, if the scheme were to go ahead.
- Camden's response to the formal HS2 consultation questions: This is attached as a separate Appendix.
- 1.15 Were the scheme to go ahead, an Environmental Statement should consider and address all of the potential impacts of the scheme. The Environmental Statement must be informed by and take into account the strategic vision for the area set out in the proposed Area Planning Framework referred to below. It should be noted that in each case where the Response identifies an impact, it is imperative that were the proposals to proceed the following should be carried out:
 - (I) the impact should be fully assessed in the Environmental Statement for the scheme;
 - (II) the Environmental Statement should set out specific measures required to mitigate and "compensate" for the identified impact. Mitigation measures that in Camden's view would be required to address impacts within the borough on Camden are set out below in summary (please see the full sections for a full description of required mitigation measures).
 - (III) the ES should detail the legal agreement or mechanism that would deliver the required mitigation/compensatory measures including timescales for delivery of measures and replacement facilities, parties to any legal agreement etc.
- 1.16 Key mitigation measures that would be required include:
 - Re-provision of all dwellings that would be lost through the High Speed 2 proposal, above or as close as possible to the new Euston station including the reprovision of the Camden housing at no cost the Council;
 - Appropriate attenuation measures for remaining properties where necessary to ensure an acceptable living environment is retained;
 - Re-provision of open spaces lost as a result of HS2 along with additional provision to meet needs generated by any over station development;
 - Maximise the extent of decking over the station and tracks to minimise noise and disturbance from HS2 when in operation; maximise provision of replacement and new open space, residential and other mixed uses; to provide a high quality local environment and setting for heritage assets; and to maximise accessibility across the station site;

- Implementation of a proper strategy, developed in conjunction with Camden to prevent blight of the surrounding area by supporting residents businesses and communities through the long period of uncertainly associated with the HS2 scheme.
- Production of a joint strategy for Euston, alongside Camden, in the form of an Area Planning Framework, which would provide a collaborative vision for the area, address the impacts and mitigation measures required and allow the comprehensive, strategic development of the site;
- The incorporation of the mitigation measures identified by the planning framework into the Environmental Statement and adequate mechanisms put in place to ensure that these are delivered.
- Phasing of development to minimise construction impacts on the existing rail network (and other transport networks), on the quality of life of local residents and to minimise disruption to local businesses;
- Measures to minimise noise and disturbance during the construction process, informed by a detailed study of the likely impacts and attenuation measures needed;
- A robust assessment of transport needs arising from the onward movement of additional passengers from Euston station and implementation of the schemes necessary to accommodate this, potentially including public realm enhancements and major public transport investment;
- Early agreement to financial compensation to enable the redevelopment and consolidation of Maria Fidelis school on its Phoenix Road site to enable it to continue as a viable school in the light of the significant impact of HS2 on its North Gower Street site;
- Compensation for any displaced businesses, including reprovision of alternative premises at similar or the same rental levels, professional support and any associated relocation costs;
- Provision of small shops and commercial units above the new Euston Station, suitable for occupation by small and independent businesses, alongside subsidised rates for businesses that would be displaced as a result of the HS2 proposals;
- Training, local apprenticeships and local recruitment for local people to access opportunities both during the construction phases and during the operation of HS2;
- Implementation of a proper strategy, developed in conjunction with Camden to prevent blight of the surrounding area by

- supporting residents businesses and communities through the long period of uncertainly associated with the HS2 scheme:
- Minimise opportunities for crime and antisocial behaviour through appropriate planning and management of the construction process and design and layout of the new station;
- Compensation measures to address the full hardships that would be caused by the scheme, including compensation and assistance to affected council tenants, and measures to ensure that leaseholders are able to buy alternative property in the area.

2. Blight and Compensation

- 2.1 The Council does not consider the options set out in the consultation adequately address the impacts of the proposals in Camden. Additionally the Council reserves the right to make further representations in response to the further detailed consultation on compensation referred to in the Consultation.
- 2.2 Should HS2 go ahead, the impacts in the Borough will be far reaching and would require significant measures to be put in place to "compensate" Camden, its residents and businesses for the impacts. Partly because of the unique position of Camden, many of these impacts could not be adequately addressed through the "standard" compensatory measures included in most hybrid Acts (which are along the lines set out in the Consultation).
- 2.3 Furthermore the proposed measures in the Consultation are targeted at owner occupiers whereas the proposals would also have a significant impact on other sectors including the Council as social housing provider, Council tenants and local businesses. The Council would also lose parking revenues as a result of road closures during the construction period and, over the longer term, the permanent loss of streets to the west of the station area, which currently include onstreet parking.
- 2.4 The prolonged period of scheme development and construction at Euston Station would threaten to blight buildings and development sites in the area. In order to address this, HS2 should develop a proper strategy, conjunction with Camden, to prevent blight of the surrounding area by supporting residents businesses and communities through the long period of uncertainly associated with the HS2 scheme. This should include the measures indentified in the mitigation section below.
- 2.5 In response to the recent consultation on the proposed Exceptional Hardship Scheme the Council considered that the scope of the scheme was far too narrow to meaningfully address the effects of HS2 and the criteria for inclusion were too restrictive. This remains the Council's position. The EHS should therefore extend to all those holding a property interest which is affected by HS2 and can show detriment, both in the construction period and after the line would come into operation.
- 2.6 Alternatively a bespoke scheme for Camden should be secured in a legal side agreement to be entered into with the Borough. For the avoidance of doubt in either case the provisions addressing impacts in Camden should be separate to and in addition to the statutory compensation scheme.

- 2.7 The compensation scheme of measures for Camden should include owner-occupiers of residential properties. To avoid break-up of communities the scheme should include compensation provisions that would secure compensation or shared equity arrangements enabling displaced owners to purchase comparable properties in the same area. The scheme should also provide compensation/grants for businesses and non commercial organisations (including Maria Fidelis school) that are displaced or affected by the HS2, especially during construction, to enable them to continue in operation during this period. In some cases the scheme should provide for construction of replacement facilities, for example the Maria Fidelis Catholic Secondary School and the Ampthill housing estate community facility.
- In respect of Council tenants, and all other occupants who would not have to move as a result of the line but whose quiet enjoyment of their home would be detrimentally affected by the construction and operation of HS2, a package of financial compensation and physical compensatory measures should be included in the scheme to mitigate the effects. This could incorporate payments or a scheme for double-glazing or reconfiguration of blocks/doorways/entrances. Section 2 above and Annex 1 to this response provide details regarding affected residential properties. However the impact on the affected properties may reduce depending on the environmental mitigation measures put in place around the line itself. The numbers are likely to significantly reduce if the line is decked over the railway tracks up to Hampstead Road Bridge and beyond to Camden Parkway.
- 2.9 The statutory position in relation to compensation for loss of value on property due to the impact of physical factors from the operation of HS2 is set out in Part 1 of the Land Compensation Act 1973. Under this Part of the Act residents would have to wait until the railway has been constructed and been running for a year to enable assessment of the actual physical impact on local residents homes, such as noise and then compensate them for the resulting reduction in value of their properties, if any at all.
- 2.10 As noted above the Council does not consider statutory compensation provisions to be adequate in properly addressing the Camden specific impacts of the proposals, not least because they are primarily directed at property owners. Furthermore, it would be possibly in the region of 15-20 years before the residents would receive any compensation for any loss of value. Until the one year anniversary of the train line commencing operation, the affected residents would continue to suffer blight and uncertainty if they wish to sell their property and occupiers of business properties may experience a similar drop in trade due to the same factors.

- 2.11 The Consultation proposes as one of the possible approaches the buying up of properties even if they are not actually needed for construction. Management responsibility for these properties would fall to the Department of Transport ("DOT"), including letting to and managing tenants and then selling the properties off after the line is constructed and running. It is considered by HS2 that this would also tend to break up communities.
- 2.12 The Council's position on this proposal is that whilst limited buy up of properties in clearly defined areas may be desirable, as will be clear from the paragraph above this clearly would not go very far in addressing all of the impacts affecting Camden which should be compensated for. Furthermore such a buy out would need to be very carefully managed were it not to distort the property market in the surrounding area.

Bond schemes

- 2.13 The Consultation also refers to two possible bond schemes. The first bond proposal (a Property Bond) referenced would take the form of a guarantee that the DOT will buy people out, if called upon to do so by the owner, subject to conditions. This would mean that the owner can stay in their home, but in the knowledge that should they decide to move home, they can sell to the DOT. This is likely to encourage people to stay, but has the disadvantage for DOT that they may end up having to own and manage properties and could be expensive. The price paid for those properties would be the usual no scheme world, i.e. one assumes, no HS2 line.
- 2.14 The second bond proposal (a Compensation Bond) in the Consultation is a guarantee not to buy out the property, but to meet any shortfall in value if an owner were to sell their property. This bond would be able to be passed on to a buyer if the property is sold on in the meantime. However, the compensation may not be paid out until HS2 is completed which is likely to be many years. The Government argues that this would encourage people to stay in their homes and would presumably be cheaper. The disadvantage of this scheme is that it would only pay out if loss can be demonstrated and leaves residents living close to a major construction site and then a running railway, when they might prefer to leave.
- 2.15 The Council's position on both bond proposals is that whilst the first option may be acceptable as part of a range of compensation measures, it would not address all of the impacts on Camden for which compensation should be given. The second option is only acceptable if the compensation is paid at a specified trigger date early in the project implementation process, e.g. the date of permission under the Act of Parliament, rather than at or close to

completion of the scheme. Furthermore both bond proposals are unlikely to overcome all distortion of the property market

2.16 Required Mitigation:

 Development and implementation of a strategy to prevent or minimize the blight of land, buildings and businesses in the area which should be developed in conjunction with Camden and should include:

Pre construction

- Upfront funding for re-provision of homes planned to be lost as a result of expansion of Euston;
- Funding for and cooperation in the production of a joint Blight Mitigation Strategy for the Euston area, alongside Camden,
- Support and financial assistance for local businesses to allow them to function effectively in an area with an uncertain future;
- Funding for interim improvements to public transport and other infrastructure and around the station which are needed now and may otherwise be withdrawn in anticipation of the potential construction of HS2;
- Short term lets for blighted properties.

Construction related

- Funding for resident support during the construction and relocation process;
- Support for businesses that would experience disruption as a result of the lengthy construction period;
- Careful phasing and management of construction to minimise impacts on local communities and on the existing transport network;
- Measures to minimise noise and disturbance during the construction process. HS2 to provide further details to all leaseholders of the current exceptional hardship scheme and the statutory blight provisions once the safeguarded area has been confirmed

- HS2 to provide further details to all leaseholders of the current exceptional hardship scheme and the statutory blight provisions once the safeguarded area has been confirmed
- Compensation to Camden for homes: reinstatement through replacement of demolished homes rather than financial compensation
- Compensation to Camden for lost on-street parking revenues
- Businesses compensation for years of building up business/ client base/reputation
- Compensation for business and home owners
- need to ensure implementation of required mitigation measures through a legal undertaking linked to Environmental Statement
- Schools: compensation for loss of viable education facility at Maria Fidelis lower school site
- Facilitation of appropriate temporary uses, together with financial assistance if necessary
- Reprovision of public open space to replace that to be lost in St James' Gardens, to be provided on the decked area above the railway and to a greater area, and payment to the London Borough of Camden to meet the substantial costs of disinterring and reburying the bodies currently buried under St James' Garden

3. Housing impacts

3.1 The HS2 proposal would cause major disruption to the lives of thousands of Camden residents. This would be through the removal or housing (and replacement elsewhere), and the impact the new station railway cutting and shafts would have on the immediate environment around existing properties. These impacts are explained in the following sections. A separate Annex is provided to this response, which sets out a profile for the estate most affected by the proposed scheme (Regents Park Estate).

a) Loss of housing

Properties within the safeguarded area

3.2 HS2 estimates that approximately 216 homes, which are located in the safeguarding area around Euston station, would be lost as a result of demolition in the Euston area. Details of the residential properties known to Camden in the safeguarded area are summarised in Table 1 below:

Table 1. Residential buildings within safeguarded area	
Total affordable units	136
Total leased units	46
Total unknown tenure	31
Total units	213
(Total units within buildings owned by LB Camden)	(182)
(Total units within buildings not owned by Council)	(31)

3.3 Therefore the HS2 assessment that there are approximately 216 properties within the safeguarding area seems to be broadly accurate.

Properties adjacent to the expanded station site that could be at risk

- 3.4 Whilst HS2 would appear to provide an accurate assessment of the number of dwellings that are within the safeguarded area, Camden considers that an additional 264 dwellings could also potentially be at risk as a result of HS2, due to their close proximity to the expanded station and track.
- 3.5 Camden therefore considers that close to 477 dwellings could be at risk as a result of High Speed 2, depending on the wider impacts of the scheme on neighbouring buildings.
- 3.6 Camden's assessment of the properties outside the safeguarded area that could be put at risk by HS2 has focused on premises within 20 metres of the safeguarded area, to the north and west of Euston

station. One residential block, to the east of the railway tracks (Gilfoot) has also been included, due to is proximity to the safeguarded area.

Table 2. Residential buildings immediately adjacent to safeguarded area that may be at risk	
Total affordable units	135
Total private units	48
Total unknown tenure	81
Total units	264
(Total units within buildings owned by LB Camden)	(263)
(Total units within buildings not owned by Council)	(1)

- 3.7 There is a risk that these premises may no longer be viable for continued residential use, as they would be affected by noise, vibration and other environmental impacts and therefore may no longer have a satisfactory living environment. The structural integrity of some of the buildings may also be undermined by the excavation and construction works associated with HS2.
- In some cases these buildings may need to be demolished and in other cases varying degrees of modification may be needed to ensure a good quality and sustainable living environment. The consultation so far contains little detail on the likely noise impacts of HS2 in Euston area both before and after construction so the level of works needed to deal with this issue is hard to identify.
- 3.9 Most of the buildings outside the safeguarded area whose continued viability could be compromised are in the following blocks:
 - Langdale, Coniston & Cartmel in Regent's Park estate
 - Gillfoot, on the Amtphill estate
 - 40-48 Cobourg St and 21- 35 Starcross Street

More details of the affected properties are provided in Annex 1.

- 3.10 The substantial loss of housing and the disruption caused by the proposals would cause significant harm to the lives of a large number of families. If individuals and families who lose their homes are forced to move out of the area, this would cause further harm not only to the quality of life of those who have lost their comes, but also to the cohesiveness and integrity of the local community.
- 3.11 The level of disruption to the lives of those affected, and the knock-on impacts for the wider community, have been raised as key concerns by local residents during the consultation process. Annex 2 to this response provides information regarding the socio economic

characteristic of the Regents Park Estate, which would be most affected by the proposals.

3.12 **Required mitigation:**

- Reprovision of all the dwellings which will be lost through the HS2 proposal with housing of an equivalent type in a location close to Euston;
- Reprovsion of all the Camden dwellings at no cost to the Council The ownership of the replacement council housing should be passed to LBC, at no cost prior, to occupation by tenants to enable LBC to be in control of lettings.
- HS2 to ensure that replacement housing is built prior to demolition of existing housing to ensure residents only need to move once;
- A proper assessment of the potential noise and disturbance impacts of the scheme, both during construction and in operation, the findings of which should be used to identify a programme of required mitigation measures, which shall be carried out in a timely manner;
- Reconfiguration or modification of dwellings and their surroundings affected by HS2 to ensure a satisfactory and sustainable living environment including decking over of railway track;

b) Impact on environment of remaining housing

3.13 The retained properties surrounding the expanded Euston Station and HS2 lines would suffer from an increase in noise and dust, and a loss of amenity and outlook. A number of residents and businesses close to the safeguarding area have raised concerns regarding the impact of the scheme in terms of disruption/ local quality of life, both during construction and when in operation. The details provided in support of the proposed High Speed 2 scheme are not sufficiently detailed to enable a definitive assessment of the every property that could be affected, and therefore require mitigation measures to address amenity impacts. Properties that would be affected could include the properties referred to in paragraphs 2.4-2.8 above (and Annex 1), but could also include other properties in the vicinity of the station, for example to the east of the station along Eversholt Street.

3.14 Required mitigation:

- Decking over the railway tracks up to Hampstead Road Bridge and beyond to Camden Parkway to provide a satisfactory living environment for residents close to the HS2 line.
- HS2 to carry out a noise assessment from Euston Station to the tunnel portal to assess the long term impact of the works and HS2 lines on retained properties, including noise contour maps to show which properties would be affected;
- Replacement, adaption or other mitigation for all of those dwellings close to the HS2 footprint in a manner to provide an acceptable living environment with a form of development which complies with Camden's Planning Polices. Replacement housing should be as close as possible to the housing which is lost;

d) Vent shafts

3.15 The Adelaide Road vent shaft is located immediately adjacent to the Chalcots Estate which has been identified for housing regeneration and development. The vent shaft would create noise and disturbance and could therefore have an adverse impact on these regeneration plans (see section 3 below for an assessment of the scheme in relation to open space and biodiversity).

3.16 Required Mitigation:

- To provide replacement open space to compensate for the loss of part of the nature reserve.
- To ensure vent shaft is designed in such a way as to minimise both visual and noise impacts including landscaping.
- 3.17 The Alexandra Place West vent shaft is located on the site of 1-8 Langtry Walk, which currently contains 6 shop units along with 12 workshops. Two of the shop units contain residential accommodation (two three bed flats) which would be lost.
- 3.18 Camden has plans to develop this site to provide additional homes and retail facilities, which are proposed as part of the Abbey Area Regeneration project. The location of vent shaft will reduce the capacity of this site.
- 3.19 The noise and disturbance generated by the vent shaft would have an impact on the overall regeneration plans of the wider estate. The vent shaft would negatively impact on the heritage value of the Alexandra Road Conservation Area, which includes grade 2* listed buildings.

3.20

3.21 Required Mitigation:

- Compensate LBC for loss of commercial premises/ loss of development potential,
- Provide replacement employment and housing floorspace in a nearby location.
- Ensure that the design of the duct and head house building improves the entrance into the estate that complements the existing listed buildings.

e) Tunnelling

- 3.22 Camden and its residents are concerned regarding the potential impact of the tunnelling process on the properties above, including on Chalcot Estate. Noise, disturbance, vibration and associated structural issues for properties above the tunnel could be caused by the tunnelling process, and this could adversely affect the residential environment.
- 3.23 Camden has recently carried out refurbishment works on the Chalcot Estate, and is concerned that the improvements generated by these works could be negated by vibration associated with the tunnelling process. In particular, the proposed tunnel is directly underneath Dorney block.

3.24 Required mitigation:

 Any remedial works that would be required to residential properties affected by tunnelling should be fully funded by HS2.

f) Provision of housing in new station development

- The HS2 proposals include the provision of new development over the station site, including new housing. Camden's adopted local development framework and London plan policies require that a substantial amount of housing should be provided, a significant proportion of which should be affordable. This affordable housing provision over/at the station site would need to be in addition to any replacement council housing required due to the demolition of housing as a result of HS2.
- 3.26 Leaseholders within council owned blocks that are compulsorily acquired may not be able to afford to purchase a new home in any redevelopment. During consultation events held by Camden, leaseholders raised concerns that financial compensation on its own would not allow them to afford to buy another property in the area.

3.27 **Required Mitigation:**

- Replacement council housing should be provided in addition to any general planning policy requirement to provide new housing and affordable housing as part of the over station development
- HS2 to ensure that the developers of the new residential units would operate an equity share scheme with zero interest (or similar) to ensure that leaseholders can purchase a new property in the redevelopment.

4. Environmental impacts

- 4.1 The proposed high speed 2 scheme would result in a number of negative environmental impacts, including:
 - Loss of open spaces
 - Loss of biodiversity
 - Impacts on heritage assets
 - Public realm major impact on surrounding streets
 - Loss of light / overshadowing
 - Sustainability (Climate change mitigation and adaptation sustainable construction, air quality)

a) Loss of open spaces and biodiversity

- 4.2 The HS2 proposal would result in the loss of a number of open spaces. This would result in the loss of recreation and open space facilities, landscaped areas and biodiversity, all of which are current enjoyed by Camden residents and communities.
- 4.3 Trees, plants and wildlife are found on the station site, along cuttings, in tunnels and along wildlife corridors and would be adversely affected by the proposals. Given the interrelated nature of the open spaces lost and biodiversity issues, the required mitigation measures are set out together at the end of this section.

i) St James Gardens

- 4.4 The majority of this public open space (approximately 2/3) will be lost as a result of the proposal. This will lead to a local deficiency in open space for those living and working in the area and to a reduced park user experience. This open space contains a number of sports pitches which are also used for sport provision by Maria Fidelis school, and these would also be lost
- 4.5 The gardens are the former Burial Ground of St James Church and contain a number of graves (some of which are listed) which would need to be removed including relocation of bodies. How this would be achieved and how bodies would be relocated does not appear to have been addressed.

ii) Hampstead Road Open Space

4.6 Approximately half of this park will be lost, affecting its viability to function as a public open space. This park serves the nearby

Regents park estate and its loss would be detrimental to the quality of life of nearby residents.

iii) Loss of other Open Spaces close to Euston

4.7 Other private open spaces would be lost such as British Home Stores open space on the corner of Hampstead Road and Cardington Street. There would also be a loss of public open space on the Ampthill estate from track widening to the north west of the station. This would have a negative impact in terms of increased noise and pollution on Ampthill Square estate, a designated London Square.

iv) Adelaide Road nature reserve

- 4.8 The proposed Adelaide Road extract shaft would be located on a designated Site of Nature Conservation Importance (SNCI) Grade 1. The shaft development would remove a significant area of land which will reduce the site's ability to function as a wildlife habitat and as an educational resource. The impact on biodiversity was highlighted as a concern by local residents as well as the Adelaide Nature Reserve Association.
- 4.9 Although the proposed location of the extract duct is clear, no details of the level of works needed to provide access to and from the duct for construction and maintenance have yet been provided. Judging from other high speed rail ducts in London this could well involve a large area of hardstanding and fencing which may result in further loss of wildlife. Also it could restrict access the adjacent Local Nature Reserve.
- 4.10 Habitats such as old grassland, as found at Adelaide LNR, take time to develop their animal, plant and insect associations. It is not possible to reproduce the specific habitat and species assemblies built up over time by simply creating similar habitat elsewhere. The nature reserve is home to:16 nature conservation priority invertebrates, 3 nature conservation priority plants, 27 species of birds, and national, regional and local priority habitats. The duct proposal is likely to substantially diminish this biodiversity.

v) Loss of biodiversity along railway corridors

4.11 The new HS1 link could involve track widening and new rail side infrastructure which could have an adverse impact on animal and plant species on land alongside the railway.

4.12 Required Mitigation:

 Provision of new public open spaces to compensate for the loss of St James Gardens, the Hampstead Road Open Spaces, Adelaide Road and on the Ampthill Estate. The open spaces should include

- new public parks, recreation facilities, outdoor gyms, and new wildlife areas.
- The new open spaces should include a large decked area to the north of the station up as far as Granby Terrace and the provision of green corridor up as far as the tunnel entrance by Camden Parkway.
- New open space should also be provided above the station to serve the needs on new occupants and also to compensate fro the loss of open space in the area and degradation of the local environment.
- Full ecological surveys should be undertaken to assess the biodiversity impacts which should be followed be a programme of managed replacement on appropriate sites in the area including the new open spaces. In some cases this may include financial contributions to fund these measures.
- Funding for temporary improvements to and management of open spaces to enable them to function through the constriction period

b) Impact on Heritage assets

4.13 There are a significant number of historic buildings and other heritage assets which are likely to adverse affected by HS2 development. These are described in the following sections. It is not clear that the impact of HS2 on these features has been properly examined and therefore Camden is considered that the special character of these assets will be undermined by the proposals.

i) Impacts on Statutorily Listed Buildings

- 4.14 A number listed buildings and structures fall within the HS2 footprint, which are identified in Annex 3. Section 4b (page 10) of the Appraisal of Sustainability (Main Report Volume 2, Feb 2011) states that there are no grade II* buildings within the Euston station footprint: Whilst this is literally the case, no. 9 Melton Street which falls within the footprint, is itself an extension of a Grade II* listed building (No. 1 Melton Street) which falls directly outside. The impact of demolition of No. 9 on the grade II* No. 1 should therefore be carefully considered.
- 4.15 The subterranean brick built vaulted structure which housed the Camden incline Winding Engine, is located under the existing railway line into Euston close to the line of the proposed HS2 tunnels below Gloucester Avenue north west of Gilbey's Yard. This is a grade II*

listed structure by Robert Stephenson built for the London and Birmingham Railway and dates from 1837. A separate response to the consultation has been sent to you by the Gloucester Avenue Association concerning this structure. Camden would support any measures which would safeguard this historic structure and allow for its refurbishment.

ii) Impact on setting of other listed buildings close to the HS2 footprint

- 4.16 There are also a number of listed buildings closely located and visible from the HS2 footprint, the setting of which would be affected by HS2 proposals. It is also possible that the construction works might have a physical impact on buildings in close proximity. The extent of impact on all of these buildings from design and construction of HS2 is not currently clear and needs to be addressed before it could be concluded that the impact of the HS2 proposal is acceptable.
- 4.17 Buildings that could be physically impacted by the proposed expansion of Euston Station are set out below (please see Annex 1 to this response for a detailed description):
 - No.9 Melton Street (West side) and attached railings
 - Nos.14 and 15 Melton Street (West side) and attached railings
 - Euston Square (East side): Statue of Robert Stephenson in Euston Station Forecourt
 - Hampstead Road Drinking Fountain in St James' Gardens
 - Park Village East: Pair of stone piers with lamp standards at west end of bridge
 - 119, 121 & 123 Parkway and attached railings
- 4.18 Annex 3 to this response also provides descriptions of the listed buildings whose setting could be affected by the proposals. These buildings include those opposite the station across Euston Road, and buildings in Melton Street and Eversholt Street to either side of the station. There are also listed buildings in Mornington Crescent and Park Village east which could be affected.

iii) Impact on other heritage assets

Bloomsbury Conservation Area

4.19 The southern edge of the station forecourt, Euston Square and the buildings to east and west of Euston Square are within the northern edge of the CA which is characterised by the terraced streets and

squares of the Georgian expansion of London in the late 17th to 19th centuries.

Camden Town Conservation Area

4.20 The western edge of Camden Town CA runs along the eastern edge of the HS2 route. Terraces of mid19th date run in regular layouts from north to south, and back gardens abut the railway line.

Regents Park conservation area

- 4.21 Extends along the western side of Park Village East north of no. 36..
 The area is characterised by detached villas, designed by John Nash, built in neoclassical and gothic styles set in landscaped gardens.
 These villas are Grade II listed, and planning policies seek to preserve or enhance the special character of or appearance of the conservation area and the avoid harm to the setting of listed buildings.
- 4.22 In addition to the nearby listed buildings, a pair of stone piers with lamp standards at the western end of Mornington Street Railway Bridge is Grade II listed. The historic buildings, and the spaces between them, are valued elements of the townscape which aid an understanding and appreciation of the character of the area.

Alexandra Road Conservation Area

4.23 The proposed shaft at Langtry Walk involves the demolition of 1-8 Langtry Walk, which is in the Alexandra Road Conservation Area. This building is identified as making a positive contribution to the character of that area, and the council has policies that seek to preserve such buildings. Impact on the character of the CA (beyond loss of a positive contributor) would be dependent on the design of the shaft.

Euston Square

- 4.24 Euston Square is protected under the London Squares' Preservation Act 1931. It was part of the planned development of Bloomsbury in the eighteenth and nineteenth century originally a large square space bisected by Euston Road. The southern side was built over in the early 20th century, and the surviving northern half of the square lacks enclosure and identity. This is caused to a great extent by the impact of traffic on the perimeter roads that isolate the square from the surrounding buildings, and the lack of a coherent built enclosure to the northern side.
- 4.25 The space itself is predominantly grassed with mature trees and railings defining the frontage and subdivided by a central access to

the station. The two halves of the space are unified by the trees along the Euston road frontage and the listed Portland stone lodges flanking the central access, and the listed war memorial beyond provide a centrepiece. These are the sole remnants relating to the former Victorian station buildings. ii)Impact on Euston Square Gardens

Ampthill Square

- 4.26 From the consultation documents it appears that the widening of the line to the north east of the station will remove a strip of land on the Ampthill Square Estate which is protected under the London Squares Preservation Act 1931. Much of the area likely to be affected is currently occupied by the Ampthill Estate Tenants Hall.
- 4.27 Although much of the original square has been encroached upon by various phases of railway construction, from the Council's investigations the area still seems to have statutory protection under the above act and should not be used other than for 'an ornamental garden pleasure ground for play rest or recreation'. The Act does allow for the reprovision of the open space elsewhere but the acceptability of this will this will require careful consideration in conjunction with English Heritage.

iv) Impact of HS2 development on conservation area views.

4.28 The scale of any proposed development should be sensitive to the views and setting of Camden Town conservation area, located to the east of the railway tracks, particularly the area around Mornington Crescent. The Camden Town conservation area was designated in 1986 and extended in 1997. The panoramic views from Mornington Terrace across the railway cutting are identified as a key view in the conservation area character appraisal.

4.29 **Required Mitigation:**

- Design of HS2 scheme to minimize the loss of heritage buildings and structures.
- Appropriate relocation of listed structures to a public accessible location in the area.
- Financilcal contributions to pay for the renovation of heritage features/assets which may have been adversely affected by HS2 proposals.

 Public realm improvements or financial contributions towards improving the setting of heritage features adversely affected by HS2 proposals.

c) Public realm – impact on surrounding streets

4.30 The new station will have a substantial footprint and, together with the over site development, will have a significant impact on the area immediately surrounding the station as well as longer distance views. Overshadowing and loss of light could be a problem for properties immediately adjacent and there is the potential for the creation of blank facades where the station interfaces with surrounding streets. The development will also be prominent in longer distance views, particularly from Primrose Hill, where it could have a dramatic effect on the central London skyline.

4.31 Required mitigation:

- A masterplan for the site and surrounding area should be produced in partnership with stakeholders and based on urban design principles the requirements of which should be incorporated into the Environmental Statement for HS2 and delivered through the resulting development.
- The new station should integrate with the surrounding area through the provision of attractive and active street frontages to Eversholt Street and Euston Square and the creation of a new street with attractive and active frontages along its western boundary.
- Extension of the deck northwards, at least as far as Granby Terrace but potentially beyond, to hide the track and provide new development above will allow the integration of the station in to the existing urban areas to the north. This could also include a new linear park above the current railway cutting.
- Development above the new station should include pedestrian friendly streets that connect with the surrounding street network, new public spaces to provide for active and passive use and high quality environmentally exemplary new buildings that sit comfortably in the wider environment including any new community facilities required to mitigate for those lost and for the new residents resulting from the over site development.

d) Loss of light / overshadowing

4.32 New buildings and structures associated with the station, track side development and the shafts and headhouses because of their size

bulk and location have impacts on the of surroundings buildings. This could be in terms of loss of light or overshadowing or loss of privacy from overlooking or from wind or other adverse conditions created.

4.33 Required Mitigation:

- Design and orientation of buildings and structures to minimize impacts.
- A micro climate assessment looking at wind impact the findings of which shall be incorporated into the design of any new buildings structures and spaces.
- A daylight and sunlighting assessment to comply with the recommendations of the Building Research Establishment on daylight and sunlight the findings of which shall be incorporated into the design of any new buildings structures and spaces.

e) Sustainability

i) The environmental case for HS2 to date

- 4.34 There is no definitive information on the environmental case for or against HS2 that assesses environmental impacts of HS2 against business as usual or alternative transport options, taking account of all whole life cost impacts and benefits. At this stage, only a very high level Appraisal of Sustainability been undertaken by HS2 to accompany consultation on the route. This concludes that "HS2 could result in either an increase or a decrease in CO2. At worst, over 60 years HS2 could result in an overall increase in CO2 emissions of 24 million tonnes; at best it could result in an overall decrease of 27 million tonnes."
- 4.35 Should the Government decide to proceed with the scheme, an Environmental Impact Assessment would be required. The boundaries for the EIA should relate not just to the line itself but to the areas affected by its development (in the case of Camden, Euston and its surroundings and vent shaft locations).
- 4.36 Key local environmental issues that would need to be covered by the EIA include carbon impacts, traffic assessments, transport analysis guidance, air quality assessments (arising from transport during construction), assessment of construction impacts on air quality, health impact assessment, site waste management plans.

ii) Climate change Mitigation and adaptation

4.37 HS2 and the redevelopment of Euston station may well put pressure on existing energy supply capacity in the area currently provided by

- the national grid. Furthermore, the proposed above station development would generate significant demands for additional energy.
- 4.38 Camden is targeting a 40% CO₂ reduction by 2020 and a robust technical study into the feasibility of this target has concluded that Combined Heat and Power led decentralised energy networks are the principle means of achieving it. Camden and the GLA have identified the Euston Road corridor as the most appropriate area in the borough to develop a core low carbon decentralised energy network supplying heat and power to local buildings. Any new development at Euston must help enable this decentralised energy programme.

4.39 Required mitigation:

- Station and above station development: development to generate electricity and heat on site through low carbon technology such as Combined Heat and Power and/or renewable energy. Explore the feasibility of exporting surplus energy from this generation to existing Camden housing in the vicinity.
- Deliver low carbon development. All new housing and nondomestic buildings built to zero carbon standards.
- Decentralised energy strategy for Euston and King's Cross
- 4.40 Future issues relating to climate change adaptation, including water movement also need to be taken into account in order to protect future occupiers and users of the station area.

4.41 Required Mitigation:

- Development to achieve a greenfield run-off rate through the application of the SUDs hierarchy:
- Store water for later use rainwater harvesting
- Specify permeable materials for external works
- Attenuate rainwater in landscaping features where available
- Discharge water to sewers

iii) Sustainable Construction

4.42 The redevelopment is likely to generate significant tonnages of construction and demolition waste and require significant amounts of new construction materials, the transportation of which could put significant impact on the local road network.

4.43 **Required mitigation**:

- At least 90% of construction and demolition waste should be diverted from landfill through the application of the ICE Demolition Protocol and the reuse and recycling of construction materials.
- Construction Management Plan to set out measures to mitigate the impact of the development on the local road network.
- A green fleet management plan to improve vehicle efficiency and reduce CO2 emissions from construction vehicles.

f) Air Quality

- 4.44 The potential negative impact on air quality during the construction phase is a key concern and must be prioritised at the design stages to ensure effective and continuous mitigation is achieved. A more detailed assessment of local air quality and traffic impacts is therefore essential, as the information provided in the AoS is lacking in detail and has not been quantified. Accompanying this should be a robust mitigation plan and air quality monitoring protocol. In addition, the Initial Health Impact Assessment does not make reference to air quality as one of the criteria included.
- 4.45 Dust (PM₁₀) emissions associated with HS2 demolition and construction work is likely to pose the greatest risk to local air quality, with most impacts occurring within a radius of 10-200m of Euston Station. The impacts to air quality will take place over approximately eight years. The construction will entail dwellings being demolished which will give rise to particulate matter emissions. The close proximity of construction to residential properties and schools and the long duration of works, places the site in the 'high risk' category in terms of air quality impacts.

4.46 Required mitigation:

- Strict dust and gaseous emission control measures should be implemented. These measures should be in accordance with the criteria and risk categorisation defined in the Mayor of London's best practice guidance note "Control of dust and emissions from construction and demolition".
- A construction management plan should be presented outlining the methods to control emissions to air during demolition and construction work in conjunction with a robust PM₁₀ and PM_{2.5} monitoring programme. This should be discussed with the Council to ensure the measures proposed will appropriately protect air quality.
- 4.47 No quantifiable data has been provided in relation to the increase in the number and types of vehicles associated with the construction

phase of HS2; this information is pertinent to understand impacts on PM_{10} and NO_2 concentrations. It is envisaged that large numbers of construction vehicles will be involved in the demolition and construction of HS2. This will give rise to increased particulate matter and nitrogen oxide emissions on the roads surrounding Euston Station. In addition, changes in traffic management around Euston station during the construction phase could also result in increased vehicle emissions.

4.48 Required mitigation:

- All construction vehicles should meet the latest European Emission Standards and if possible be powered by low emission fuels such as compressed biomethane gas.
- Non-mobile machinery used on site, for example generators and piling rigs, should be fitted with particulate matter abatement equipment and make use of electrical rather than diesel generation.
- Electric vehicle charging points should be installed at Euston Station to encourage the use of electric vehicles during the operational phase of the development
- Consider additional measures to raise awareness about air pollution levels to the public during the construction work. For example, DfT could install an electronic air quality sign in the vicinity of Euston Road station to inform the public of air quality levels in this area
- A financial contribution to delivering measures in Camden's Air Quality Action Plan and/or operating the Council's air quality monitoring network.

5. Noise and disturbance

- 5.1 The proposed HS2 scheme would be likely to have a significant negative impact on surrounding premises in terms of noise and disturbance, both during the construction process and when in operation. The following key issues are addressed below:
 - Vibration/ noise from Euston station construction
 - Vibration/ noise from tunnelling along new line
 - Vibration/ noise from vent shafts construction
 - Servicing/construction vehicles
 - Location of construction compounds
 - Dust fumes and air quality
 - Construction works required in connection with HS1 link
 - Noise /vibration impacts from trains on new railway lines after completion
 - Airborne Railway Noise (Euston Approach and HS1 Link)
 - Uses in and around Euston station
 - Use and operation of the shafts and headhouse buildings

a) Impacts from construction

i) Vibration/ noise from Euston station construction

- In addition to the properties which are actually going to be demolished there are a large number of properties in the area which are likely to be affected by the construction or an enlarged Euston station, including residential, commercial and educational properties. This was highlighted as a concern by those living close to the safeguarded area.
- 5.3 The new station will require major piling and other structures works to form the below ground platform areas and retaining walls alongside the widened throat area, as well as superstructure works, track works and major excavations for the approach ramp to the new portal area. These works are likely to take place in proximity to both residential and non-residential buildings: such premises may require additional noise insulation provisions (secondary glazing and associated assisted ventilation) as noise levels would otherwise render some premise untenable, especially during major diaphragm walling (or equivalent piled wall) activities, should these be required.

5.4 **Required mitigation:**

- Adoption of a Noise Insulation and Temporary Re-Housing Scheme: As above, most major projects now commit to a discretionary mitigation scheme offering affected parties either a noise insulation package or in particular extreme cases, temporary accommodation during the noise works, subject to satisfying a number of numerically based noise threshold criteria. Such criteria are well established and the most recent revision to BS 5228 now provides further guidance on this.
- Compliance with the Section 61 Consent Regime: The CoCP for major projects normally commits the Nominated Undertaker into seeking prior consent from the Local Authorities under Section 61 of the Control of Pollution Act 1974 (CoPA). This process is now a tried and tested procedure for major projects and has proved extremely successful in ensuring that contractors plan their works with noise control and legislative risks in mind at all times. The legislation couples the Section 61 process into the approved code of practice for managing noise and vibration from construction works, namely BS 5228.
- Compliance with a construction code of practice/construction management plan
- Restricted hours of operation

ii) Vibration/ noise from tunnelling along new line

- 5.5 The information currently available, suggests that the main HS2 tunnelled section between Euston and Old Oak Common will be constructed using Tunnel Boring Machine (TBM) excavation techniques. The vibration caused by TBMs is both perceptible (feelable) and can also manifest itself as a rumbling noise inside dwellings. This is more accurately referred to as groundborne noise (or re-radiated noise in HS2 AoS terminology), and can give rise to major concerns by building occupants during the passage of the TBM beneath the building.
- As indicated in Section 2e, there are concerns regarding the potential impacts of the tunelling process on properties above. Planned tunnelling would pass underneath numerous properties in Camden, including Chalcot Estate and the listed Alexandra and Ainsworth Estate. While HS2 claims that tunnelling would not adversely affect any buildings along the route, Camden is concerned about the potential impact on the structural integrity of the estates close to the line. These are high rise and/or comprehensive development schemes often with shared underground spaces and services which have the potential to be more affected by tunnelling than more

- conventional suburban housing. Insufficient details have so far been provided on the tunnelling machinery to be used and how severe these impacts could be.
- 5.7 Whilst the groundborne noise and vibration from TBM operation can be highly intrusive, the duration of impact for affected properties would depend on the speed of progress made. Sleep disturbance may be experienced if TBM operation is required on a 24/7 basis. Residents that would be located above the tunnel route have expressed considerable concerns regarding potential vibration and structural damage to their properties as a result of the excavation works.
- 5.8 A more prolonged period of intrusion may occur during the operation of a temporary construction railway (to deliver materials and personnel to the TBM work face) behind the TBM as it progresses. It is assumed that the spoil arisings will be removed from the tunnel by conveyor rather than by the railway. Camden understands that temporary construction railways are seldom built to the quality or tolerances of a permanent railway. As a consequence track joints and rough rails and wheels are typical, all of which can exacerbate groundborne noise and vibration generation in overlying buildings. There are a range of measures that can be pursued to minimise these impacts. HS2 should specify the measures that it will pursue to address this.
- The support activities to the tunnelling can also be disruptive due mainly to the activities taking place on a 24/7 basis. The HS2 project has indicated that the TBM will be launched from the Old Oak Common station site, boring towards Euston. This would mean that the spoil removal activity would take place at the OOC station end within established railway lands and not at Euston where the consequences would be more disturbing.
- 5.10 However, no detailed construction strategy is available to establish whether the project intends to simply turn the TBM around at Euston to drive the second bore back towards OOC, or whether it will be dismantled and sent back to OOC for the second drive. If the former then the Euston area could suffer from 24/7 tunnel support activities during the second drive.

5.11 Required mitigation:

 Ensure that the tunnelling process is planned and managed to avoid adverse impacts on the properties above (including those on Chalcot Estate) in terms of noise, disturbance, vibration and associated structural issues. Any residual adverse impacts should be fully mitigated for by HS2.

- Having regard to safety and construction requirements, ensure that the tunnelling process passes as quickly as possible.
- Ensure that tunnelling is carried out from Old Oak Common to Euston. The second bore should begin at Old Oak Common station site, boring towards Euston.
- Carry out public relations initiatives and information provision in advance of major TBM operations, along the route of the proposed HS2 tunnelled section.
- Ensure that tunnel construction is carried out using the following measures:
 - Including limited vibro-acoustic treatments into the track form to reduce vibration propagating into the surrounding soils.
 This requires forward planning to ensure that suitable clearances and engineering solutions are available.
 - limiting the unsprung mass of the locomotive and the rolling stock;
 - resilient pads incorporated into the trackform;
 - control of roughness profiles on rails and wheels;
 - controlling the impulsive effects caused by wheels on track joints by minimising the height differences between the ends of adjacent abutted rails;
 - enhanced silencers on the diesel locos

iii) Vibration/ noise from vent shafts construction

- 5.12 Two provisional sites within LB Camden have been identified as potential vent shaft locations, which are located close to residential and commercial properties. The construction of ventilation shafts (traditionally using diaphragm walling techniques) involves a noisy operation, in many cases requiring working hours outside of core hours due to the shear size of concreting operations involved.
- 5.13 This could have significant implications for the quality life for nearby residents and commercial occupiers close to the vent shaft locations. This was highlighted as a key concern for residents living close to the proposed vent shaft locations. It is possible that ventilation shafts are also used for spoil removal and even as a TBM launch or reception chamber. However, such details are not currently available.

5.14 **Required Mitigation:**

Works to comply with a construction code of practice/
 Construction management plan upon which Camden should be consulted.

- The plan should ensure that noise impacts relating to the construction of ventilation shafts will be minimised
- Construction should avoid use of vent shafts for spoil removal, in order to limit impacts on local residents;
- Construction noise and vibration effects to be controlled using the procedures and systems highlighted above for Euston Station works.

iv) Servicing/construction vehicles

- 5.15 Servicing and construction vehicles could generate noise and vibration impacts both around Euston station and the proposed vent shafts. Any controls on noise and vibration from vehicle movements must be identified as part of the main EIA work and any Local Authority permitting regime. Appropriate mitigation measures include routing, and siting of holding areas should be specified.
- 5.16 As part of any proposals for Euston, arrangements for construction and the associated vehicles would need to be developed in the form of a Construction Management Plan to ensure that facilities do not adversely impact on local residents, business or the road network.

5.17 Required Mitigation:

 Compliance with Servicing plan and Construction management plan containing measures to minimise impacts upon which Camden should have been consulted.

v) Location of construction compounds

No information has been provided regarding the likely construction compounds for the works within LB Camden. The consultation material suggests that the main tunnel support compound will be situated close to Old Oak Common station, and not at Euston. This would be appropriate: as explained above, the trajectory of the second bore would have important implications for the quality of life in neighbouring areas, and it is suggested that it should start at OOC, as with the first bore.

vi) Dust fumes and air quality

5.19 The potential negative impact on air quality during the construction phase is a key concern and must be prioritised at the design stages to ensure effective and continuous mitigation is achieved. A more detailed assessment of local air quality and traffic impacts is therefore essential, as the information provided in the AoS is lacking in detail and has not been quantified. Accompanying this should be a robust

mitigation plan and air quality monitoring protocol. Please see the Sustainability section for more detail on the required Air Quality

5.20 Required Mitigation:

 Compliance with a Construction code of practice and a Management plan on which Camden should be consulted.

vii) Construction works required in connection with HS1 link

- 5.21 HS2 proposes to utilise the North London Line and associated new tunnel for the HS1 to HS2 link from the former Kings Cross Railway Lands, through Camden Rd Station to Old Oak Common Station. The HS2 rolling stock will require the gauge to be upgraded along the North London Line. In terms of construction this could involve bridge or tunnel widening and additional works to rail tracks.
- There is concern about the impact of the degree of alteration which would be needed to the existing NLL to allow the operation of High Speed trains. The impact of these proposals on Camden's other transports networks and development sites (e.g. Hawley wharf) and open spaces adjacent to the line is not currently clear. There is insufficient information as to how the construction would be phased or a proper assessment on the impacts. This information needs to be incorporated into a proper assessment of the HS1 link.
- 5.23 Further technical details are needed on the link to fully understand its impacts including: its alignment, specifications and impact on bridges and structures. It is understood that HS2 Ltd, together with Network Rail, are undertaking further work on how this link would be delivered. The new tunnelled section of the link runs from Primrose Hill to Old Oak Common station. No specific details are provided at this time, but the same issues as described for the main HS2 running tunnels exist re. TBM and temporary construction railway operation.

5.24 Required Mitigation:

- Provide Camden will full details of the construction works associated with connection with HS1 link.
- Develop programme of works in consultation with Camden which minimises impacts on those in close proximity to the line.
- Carry out works in line with any agreed construction / impact management plans.

b) Impacts during operation

i) Noise /vibration impacts from trains on new railway lines after completion

- 5.25 No quantitative appraisal work appears to have been undertaken to support HS2's commentary conclusions in the AoS reports relating to noise and vibration from trains provided. Detailed studies should be conducted as part of the Environmental Impact Assessment stage of the project, including the site specific requirements for mitigation measures and project design aims. Such information is not available at this time.
- 5.26 Camden is concerned about the following operational noise and vibration issues:
 - Airborne noise arising from the new extended buildings at Euston Station, including building services, re-modelled road network, taxi ranks, public address systems;
 - Airborne noise arising from the operation of the new HS2 trains on new lines constructed within the widened throat area approaching Euston Station, including rolling noise, power / cooling noise;
 - Groundborne noise and vibration arising from the operation of trains in new HS2 (and HS1 link) tunnels;
 - Airborne noise arising from the ventilation shafts, including mechanical fans, draught relief and building services; and
 - Airborne noise arising from HS1 and HS2 trains using the new link railway between HS1 and HS2.
 - Further details are needed regarding potential impacts before the required mitigation measures can be established.

ii) Euston Station and Environs

5.27 The operational noise assessment to be conducted for the EIA is expected to consider in detail the noise (and/or noise changes) arising from the extended station buildings and associated road network. Traffic composition and movements are likely to vary considerably along the servicing roads around the new station.

5.28 Required mitigation:

 Compliance with a construction management plan which shall have been agreed with Camden to include

- Road surface treatments and / or noise barriers may be required to control adverse noise changes associated with new or realigned roads,
- Noise insulation for adjacent residential dwellings where eligibility criteria are exceeded.
- 5.29 It is likely that design aims for building services will be specified rather than any attempt to quantify actual noise levels, as the actual equipment to be used will not be known until the final detailed design for the Mechanical and Electrical equipment is completed and specific equipment has been specified.

iii) Airborne Railway Noise (Euston Approach and HS1 Link)

- 5.30 As discussed above, no quantitative operational noise appraisal has been conducted by HS2 within the LB Camden boundary. Instead the project has relied on an appraisal at commentary level concluding that 'potential impacts' or 'potential for annoyance' is minor and not appraised.
- 5.31 HS2 should provide at an appropriate stage, evidence which supports its commentary appraisal, and which takes into account the potential increase in noise exposure that can arise as a result of power car / cooling noise from trains running at relatively slow speeds.
- 5.32 Detailed EIA work should include consideration of the slower speed trains, taking into account the numbers of HS2 trains likely and any consequent changes in composition of traffic on other lines (e.g. WCML and NLL).
- 5.33 Mitigation may include the installation of lineside noise barriers and/or further commitments to modify / re-specify such noise sources. As discussed earlier in this report, the vertical position of non-rolling noise sources on traditional power cars or locomotives can negate the full effectiveness of mitigation measures.

5.34 **Required Mitigation:**

- Secure appropriate measures to minimise airborne noise from trains
- 5.35 Some high speed train systems outside of the UK have experienced a 'sonic boom' effect at tunnel portals caused by micro-pressure waves propagating along a tunnel when a train enters a tunnel a high speed. The effect is heard as a loud popping noise. Whilst this effect was not experienced in the HS1 London Tunnels, it is possible that train speeds could be higher on the approach to the portal for southbound trains. Mitigation measures exist for this phenomenon,

and appropriate discussions with the promoter would be required to secure the necessary commitments in the Environmental Statement.

5.36 Required Mitigation:

• Detailed design to ensure avoidance of sonic boom effect when trains enter tunnels.

iv) Ventilation shafts

- 5.37 Noise from ventilation shafts is mitigable through careful design from the outset. Mechanical fans are likely to only be used in emergency situations (for smoke extract), during maintenance operations (to provide air supply), and for routine testing (potentially daily). They also tend to be used during congested periods on metro style railways, but such occurrences are probably less likely on high speed railway systems.
- 5.38 High speed trains in tunnels generate high velocity air movements in tunnels both in front and behind trains. Ventilation shafts include draught relief structures allowing airflow relief from moving trains. If air flow velocities are high then turbulent airflow can occur giving rise to noise.

5.39 Required Mitigation:

• proper shaft design, including in-duct components and termination elements to avoid unnecessary noise during draught relief.

c) Impacts from new uses in developments

i) Uses in and around the station

5.40 There is a need to consider the impacts in relation to artificial lighting and noise disturbance from uses on the site, as well as disturbance caused by general activity associated with new uses.

5.41 **Required mitigation:**

- Design of development to avoid issues where possible
- Planning conditions to limit hours of use
- Management plans to manage activities
- Licensing restrictions.

ii) Use and operation of the shafts and headhouse buildings

5.42 The extraction plant associated with the proposed vent shafts could cause environmental issues both in terms of fumes and noise.

5.43 **Required mitigation**:

- Design of buildings and specification of plant
- Restrictions on access.
- Restrictions on hours of operation.

6. Transport

- 6.1 The development of the HS2 terminus at Euston will bring a very significant number of additional people to the rebuilt station. A further important issue would be the onward distribution of HS2 passengers potentially coming into Euston.
- Analysis undertaken as part of developing the Central London
 Transport Plan shows that whilst additional capacity is currently being
 provided on the transport network this will soon be absorbed by the
 increased demand as a result of population and employment growth
 and consequently there will still be significant pressure points on the
 network particularly on the Northern and Victoria Lines.
- 6.3 Therefore how the onward journeys are going to be accommodated and any upgrades funded, is a vital consideration as to whether Euston is the right location for the HS2 terminus. Transport for London estimates that if HS2 terminates at Euston there would be an extra 27,000 people using the station in 2033.
- These will all need to travel onward whether by train, tube, bus, taxi, cycle or on foot. The existing infrastructure, particularly the underground station, is already at capacity and so would be unable to cope with this significant increase in passengers.
- A decision on whether to proceed with HS2 should not be taken until and based on the findings:
 - A robust assessment of projected passenger numbers over the phased implementation of HS2 needs to be undertaken including the extensions to Manchester, the East Midlands, Yorkshire and Scotland. This assessment should also include pedestrian flows in the wider area around Euston as a result of station redevelopment proposals.
 - A corresponding programme of coordinated projects to increase capacity for onward travel has been established and implemented in advance of the delivery of HS2. In addition to infrastructure improvements on the Underground and DLR, there would be a need for significant improvements to bus services as well as for pedestrians and cyclists.
- 6.6 Euston is proposed as the central London terminus and, as such, a key objective should be to encourage as many passengers as possible to walk or cycle to onward destinations. This will require significant improvements to the streets around the station for pedestrians and cyclists, particularly Euston Road.

- 6.7 The cost of implementing the mitigation measures required would need to be included in the economic assessment before any decision to proceed is made. More detailed comments are provided below in relation to likely impacts of the scheme in the following areas:
 - Existing rail services/ rail network
 - Underground
 - Buses
 - Coaches
 - Taxis
 - Pedestrians
 - Cyclists
 - Car access and parking
 - Servicing

a) Impact on rail services/network

- The lengthy construction phase in the scheme could cause significant disruption to existing rail services. In the longer term, there is a risk that the proposed HS2 could reduce the level or frequency of existing rail services. It should be ensured that the proposed scheme would not have a negative impact on existing rail services.
- 6.9 During the construction phase and in the longer term there are concerns about the impact of HS2 on the 'classic' services between Watford and Euston. There would need to be a high degree of confidence that there would be no significant negative impacts on these suburban services as they provide vital transport links. In addition there are links to the underground network as if these overground services were not provided these passengers would be displaced onto the underground network, which is already operating at capacity.
- 6.10 The HS1-HS2 link will reduce capacity and reliability on the London Overground and freight routes as well as having a detrimental impact on the Hawley Wharf development site. A further options appraisal of the proposed link with HS1 is required, including the consideration of underground options.

6.11 Required Mitigation:

 the HS2 scheme shall be designed ensure that existing rail/ overground services are not disrupted and scope for future expansion of these services is not prejudiced.

b) Underground

6.12 There will be a significant increase in demand at an underground station and tube lines that are already at capacity. This would lead to significant issues relating to the onward movement of passengers from Euston, given existing capacity issues, in particular at rush hour. Significant improvements to interchange facilities will therefore be required, as set out below.

6.13 Required mitigation:

- Funding for and provisions of improvements to surrounding streets and wayfinding (see above) to encourage onward travel on foot
- Funding towards and provision of significant enhancements to existing transport networks, in order to make adequate provision for onwards passenger movement. HS2 should consider for the following
 - Implementation of capacity upgrades to Euston and Euston Square Underground stations (including a sub-surface link),
 - Increase capacity of Northern Line through line separation at Camden Town
 - Extension of DLR from Bank to Euston
 - Crossrail 2 (Chelsea Hackney line) including a station at Euston
 - Increased capacity of the Barclays Cycle Hire scheme in the vicinity of Euston
 - Reconsideration of the Cross River Tram project

c) Buses

6.14 There is no information about how bus access would be provided at Euston and the proposals include the removal of the existing bus station. At the current time, the number of people that use buses to access Euston is relatively low. As part of any proposals for Euston, bus access and service levels needs to be properly considered as well as the requirement or otherwise for a bus station to be reprovided.

6.15 There will be a potential reduction in bus access as a result of the removal of the bus station. The integration of bus services with the station (both during construction and when the new station is in operation) will also be an important consideration in enabling onward passenger movement.

6.16 Required Mitigation:

- Funding towards a strategic assessment of bus routes, stops and stands serving Euston is needed to inform proposals that must ensure convenient onward travel by bus within the scheme
- Re-provision of the bus station with appropriate integration with the rail station and wider area.

d) Coaches

6.17 The provision of coach parking and/or drop off / pick up facilities does not appear to be part of the proposal. The location of coach parking and the provision of a drop off area would have implications for the functioning of the station.

6.18 Required Mitigation

 an assessment of the need for coach parking and / or drop off and proposals to ensure necessary provision within scheme and integration with the wider station area to be carried out as part of the Environmental appraisal the findings of which shall be taken inn to account in any station proposals.

e) Taxis

- 6.19 There is no information about how taxi access would be provided at Euston. The demand for taxis is likely to increase should HS2 progress but there is no information about projected numbers. There will be an increase in demand for taxis potentially creating additional congestion at the station and on the surrounding streets. The location of the taxi rank will be an important issue, with implications for the public realm.
- 6.20 An assessment of the likely demand for taxi pick up and drop off based on passenger projections and modal shift needs to be undertaken. This should inform the proposal that provides convenient access to taxis while minimising the impact on the surrounding streets

6.21 **Required mitigation:**

- Taxi access to be provided to the enlarged station including routes, stands and dropping off points in a form that does not adversely impact on local residents, business or the road network
- Taxi rank facilities to be designed to minimise congestion and maximise the flow of taxis and passengers to minimise the level of idling vehicles and the impact on air quality. The design should support the taxi marshalling scheme

f) Pedestrians

6.22 There will be a substantial increase in the number of pedestrians from the rebuilt station and the new development above into an environment that is already overcrowded and unattractive for walking.

6.23 **Required mitigation:**

- The creation of a new network of pedestrian and cycle friendly streets and spaces above the new station and in the vicinity of the station to encourage movement in all directions
- New station entrance / exit points on the south side of Euston Road.
- Significant improvements to Euston Road to encourage pedestrian and cycle movement south towards Bloomsbury as well as east to Kings Cross St Pancras and to West Euston will be essential.
- Significant improvements to the streets around the station to provide better links with pedestrian and cycle priority to Camden Town, Bloomsbury, West Euston, Somers Town and Kings Cross. Works to Eversholt Street to encourage onward travel on foot eastwards
- The creation of a new pedestrian and cycle-friendly street along the western boundary to encourage onwards travel to West Euston, Camden Town and Bloomsbury.
- Public realm improvements to Eversholt Street to improve pedestrian and cycle links to St Pancras (via Brill Place) and Camden Town.
- Extension of the deck northwards to encourage onward travel on foot.
- The creation of a new network of pedestrian friendly streets and spaces above the new station to encourage movement in all directions

- Improved wayfinding signs and street lighting to encourage onward travel on foot.
- These improvements should be planned and delivered to be implemented at the start of construction of the project and not the completion.

g) Cyclists

- The Current station is an obstacle to cycle movement. This needs to be properly addressed and funded through any major changes at the station. Proposals should fully account for cyclists and maximise the potential for onward journeys to be made by cycling. This should include providing sufficient cycle parking facilities for passengers at the station and in the wider area. Also general policy requirement to increase levels of cycling which should not be compromised by station development.
- 6.25 **Required Mitigation:** Significant improvements to capacity for cyclists including:
 - New and improved routes across area
 - Junction improvements.
 - Secure station cycle parking
 - More cycle hire.

h) Car access and parking

6.26 There is no information about how the station or any proposed development would be accessed by cars. Any car access and parking would add additional congestion to this highly congested environment.

6.27 Required Mitigation:

 no provision of car parking (other than for disabled people) at the rebuilt Euston Station

i) Servicing

6.28 The consultation material does not provide any information about how Euston station or any proposed development would be serviced. As part of any proposals for Euston, servicing arrangements in the form of a Servicing Management Plan would need to be developed to ensure that facilities do not adversely impact on local residents, business or the road network.

j) Hampstead Road railway bridge

6.29 The reconstruction of the Hampstead Road railway bridge will cause substantial disruption for traffic movements through the area. The road is part of the Strategic Route Network and is used by many bus routes, so there would be a negative impact on bus services in the area.

6.30 Required mitigation:

- proper organisation of any bridge reconstruction works to minimize disruption to the surrounding area.
- proper consultation with surrounding communities on proposed bridge works.

7. Schools

7.1 High Speed 2 will have significant direct and indirect impacts on local schools including significant negative impacts caused by construction activity on the Maria Fidelis lower school site in North Gower Street, threatening its viability as a functioning school. Other local schools could be affected by reductions in the demand for places during the construction phase, by the demolition of housing and by noise generated by construction activity. In the longer term, the over station development is also likely to lead to an increase in the number of children coming to the area for which additional provision will need to be made and paid for by HS2.

a) Impact on Maria Fidelis school

- 7.2 The Maria Fidelis school is currently a split site school, and the lower school is situated on North Gower street adjacent to St James' Gardens and abutting the proposed expanded station. The school's proximity to significant construction activity for a number of years on at least two sides of the school site is likely to result in significant noise and other disturbances and impact on air quality from dust and noxious fumes. There are also likely to be adverse impacts on the general outlook from the school, the outdoor environment and external spaces at this school, as well as disruption to access during the station construction works.
- 7.3 The proximity of such a large construction scheme will generate significant noise, vibration and dust during the school day. It is likely these impacts will diminish the quality of teaching and learning to such an extent that it will threaten the overall viability of the school in terms of its suitability and functionality as an educational environment.
- 7.4 In addition it will also have an impact on the school's attractiveness to future parents, threatening the school's longer term viability. The upper school occupies a site to the east of Euston in Phoenix Road, and if HS2 goes ahead there will be a requirement to redevelop a consolidated single school on this site. Funding will need to be made available from HS2 to purchase adjoining land, for the construction of new school buildings and got the temporary relocation of part of the school
- 7.5 The provision of a new consolidated school would enable the continued provision of good quality education provision in the Euston Area to meet the needs of the community during the HS2

construction and could help to meet future educational needs in the area which is likely to see an increase in population.

7.6 Required Mitigation:

 Financial contribution to enable the purchase of land, the redevelopment of Maria Fidelis school at Phoenix Road and the temporary accommodation of part of the school during construction.

b) Educational demand changes from demolition & new residential development

7.7 Housing demolition on the Regents Park estate is likely to impact on the pupil numbers at local primary schools, and new residential development around or above the station is likely to generate needs for new educational provision. These needs will be assessed on the child yield based on recent development trends in Camden and applying it to development sites around the station.

7.8 Required mitigation:

- Financial contribution to any additional costs to schools associated with a reduction in pupil numbers during construction
- Financial contribution to additional provision of places in the area to meet need generated by the development

8. Businesses, Employment, Cultural and Tourism uses

- 8.1 The Euston area is home to a wide range of businesses ranging from the multi-national headquarters of companies such as Santander and Grant Thornton through to world-leading institutions including the Wellcome Trust, University College London Hospital (UCLH) and University College London (UCL).
- 8.2 A density of independent retailers and convenience shops are located on Drummond Street, Eversholt Street and Chalton Street which are all designated Neighbourhood Centres in the Camden local development framework. These areas provide convenience shopping and also more specialist retailing such as ethnic and vegetarian restaurants.
- 8.3 Euston station contains many high street food and clothing chains, banks and building societies. Small to medium sized businesses predominantly occupy office space on Stephenson Way, Euston Road, Hampstead Road and the far end of Eversholt Street. Stephenson Way and Eversholt Street are also home to a mix of small to medium sized enterprises from both the charity and private sector.
- 8.4 Some of the communities in the local area are relatively deprived. The St Pancras and Somers town ward ranks highest in Camden borough for unemployment, with a claimant count rate in March 2011 of 9.6% of the working age population. The ward has a high proportion of Black Minority Ethnic (BME) residents and the unemployment rate is considerably higher for this group, at 41% of the working age population. The neighbouring Regent's Park ward has the fourth highest unemployment rate in the borough at 7.4%.
- The southern end of Camden High Street will be within 250m of the proposed HS2 footprint. This is the largest town centre in Camden and contains a large number of businesses who may be affected by HS2.
- 8.6 The redevelopment and extension of Euston station will potentially have significant impacts on local businesses and the wider local economy. This is in respect of:
 - Demolition of existing businesses premises within the safeguarded area;
 - Disruption to businesses in the wider local economy during the construction phase

- Local employment and procurement issues.
- 8.7 The business and employment impacts could be severe for a number of businesses. The council's consultation with businesses in the local area suggests that the most adverse affects could be on the small to medium sized enterprises that will be required to re-locate elsewhere. The adverse impacts will require businesses to be compensated in full for any loss of business and inconvenience and measures put in place to mitigate negative impacts.

a) Demolition of commercial premises

- 8.8 The HS2 Appraisal of Sustainability refers to the demolition of around 20 commercial properties to make way for the HS2 terminus. The council believes this to be an underestimate and request further details from HS2 on how this figure has been arrived at. HS2 does not appear to have included the properties on the eastern side of Hampstead Road that will need to be demolished and it is unclear whether the figure includes the businesses within the existing station and in Euston Square. There are also eighteen small, independent businesses located on Langtree Walk which would need to be relocated because of one of the vent shafts.
- 8.9 The council has serious concerns about the ability to relocate displaced businesses within the local area and whether businesses will be permanently lost to the borough. This is for the following reasons:
 - Euston is a highly densely developed area with limited employment land and business premises.
 - The majority of the borough's businesses are located south of the Euston Road, with strong demand for business space leading to high property and business costs. For example, retail commercial properties in Bloomsbury, Covent Garden, Clerkenwell and Farringdon are considerably more expensive to rent than those in Euston, Somers town and King's Cross.
 - The council expects commercial and retail rents to increase in the Kings Cross area due to the development of Kings Cross Central and improved transport links, which may further reduce potential locations for the businesses to relocate.
- 8.10 Local businesses consulted by Camden have indicated that it can take 10-15 years to establish a customer base. Forced relocations may require businesses to start again from scratch and the loss of turnover, profit and employment. The council's business consultation suggests micro and small and medium sized enterprises may be most affected.

8.11 Most of the larger businesses we consulted hoped to move back to Euston if they were forced to relocate, providing rent rates do not increase significantly. Unless action is taken to ensure that relocating businesses have access to affordable premises elsewhere in the borough, Camden could permanently lose businesses to other boroughs.

8.12 Required Mitigation:

- 8.13 To develop and implement a strategy for business relocation upon which Camden should be consulted which should include an investigation of the full impacts on local relocations on businesses. If business relocations are necessary, the council would expect HS2 to compensate businesses in full and to put in place measures to mitigate negative impacts, for example:
 - Provision of professional support to any displaced businesses, including marketing intelligence on alternative properties elsewhere
 - Provision of small shops and commercial units above the new Euston Station, suitable for occupation by small and independent businesses, alongside subsidised rates for businesses that would be displaced as a result of the HS2 proposals
 - Prioritisation of displaced businesses for new business premises developed in the new station terminus (at similar or same rental levels as existing)
 - Re-provision of business space in the Langtry Walk area at similar or same rental levels, alongside provision of professional support and financial support for those forced to relocate
 - Full funding of costs borne by businesses that are forced to relocate, including physical removal costs, set up and fit out costs for new premises, (including IT services and utilities etc), stationary, advertising of change of location, congestion charge if moving south of the Euston Road and loss of business and profit during the move.
 - Length of time trading in local area to be taken into account in compensation agreements, if appropriate.
- 8.14 The HS2 proposals will also result in the demolition of 6 shops and 12 workshops in the vent shaft location at Langtry Walk. This will result in a loss of the existing businesses and is likely to prevent the site from being used for employment generating purposes in the future.

8.15 **Required Mitigation:**

- Re-provision of business space in the area at similar or same rental levels,
- Provision of professional support and financial support for those forced to relocate.

b) Impact on viability of surrounding businesses

- 8.16 Other businesses in the local area will be adversely affected by the HS2 works over the 10-15 year construction period. While a full environmental appraisal is still to be carried out by HS2, the likely effects will include noise, vibrations, dust, and increased traffic congestion in certain areas.
- 8.17 Potentially lengthy road closures, may lead to reduced footfall and dwell-time from commuters and potential visitors to the area, as well as disrupting servicing and deliveries. This was highlighted as a key concern by a number of local businesses.
- 8.18 Simple measures such as ensuring that access to materials is not public-facing for instance, can also help to minimise the impact of the disruption. Temporary 'business as usual' signage or hoardings should be used to promote local SMEs during the works.
- 8.19 Some businesses consulted by Camden commented that business rates and rents should be reduced during the construction period. The council would also expect consultation and communication groups to be established to communicate with affected businesses.
- 8.20 The council has policies to protect the vitality and viability of designated neighbourhood centres which include Drummond Street, Eversholt Street and Chalton Street. The proposed scheme should not compromise the character of the area and it must be ensured that the station creates an active frontage towards the Drummond Street area, in order to maintain the vibrancy and vitality of the neighbourhood centre.
- 8.21 Furthermore, the above station development should include adequate provision of small retail and commercial premises, suitable for occupation by small and independent businesses. This would be appropriate to the character of the area, reflecting the principles established in Camden's adopted planning policies. Such accommodation would also provide potential replacement accommodation for displaced businesses.
- 8.22 In relation to access to and from Euston station, in addition to the importance of pedestrian links, it must be ensured that access arrangements for the station, including for taxis, do not harm the

attractiveness and functioning of Drummond Street, but rather complement it and enhance it thorough the provision of appropriate routes and access points. The scale of the project is also likely to mean that there could be adverse impacts on Camden town centre both in terms of the construction related activity and more general blight on businesses.

8.23 Required mitigation:

- Put measures in place to ensure that blight is kept to a minimum during the construction phase of the station – e.g. access for materials should not be public-facing
- Minimise number and duration of road closures
- Financial compensation for affected businesses for disruption during the course of the construction phase Create links with King's Cross Central so that sites complement each other
- Ensure that affordable rents are put in place for any returning businesses in the future
- Ensure that access to streets and footfall is not adversely affected for small independent retailers
- Implement Legible London signage post-construction to ensure that facilities are well sign-posted
- Improve pedestrian access around Euston to encourage greater footfall and dwell-time for retailers
- Ensure that the character and vitality of shopping areas including Eversholt, Drummond Street and Chalton Street and Camden High Street are maintained and enhanced
- Ensure that the nature of commercial premises provided in the above station site reflects the character of the surrounding area, including through the provision of small shops and commercial units above the new Euston Station, suitable for occupation by small and independent businesses
- Use the unattractive and redundant eastern façade of the station to create more space for independent shops
- Use master planning to get the right mix of employment and work space. .

c) Impact on tourism

8.24 As one of the main gateways into London, the new terminus would require tourism marketing information within the station to provide

information regarding appropriate destination points and places of interest. In addition to information provision within the station, more effective signposting also needs to be implemented around Euston to allow visitors, residents and commuters to navigate their way around the area. Legible London signage has already been successfully implemented nearby and should be extended in the Euston area.

8.25 The council would expect the HS2 terminus to maximise benefits for the visitor economy given that it is expected that 70% of passengers will be leisure travellers. Consideration will need to be given as to whether the current hotel provision in the area is adequate to accommodate increased visitor numbers. However, this will need to be to be viewed in the context of more local needs for permanent housing and affordable housing in particular.

8.26 **Required mitigation:**

- Provision of tourist information within the new Euston Station
- Appropriate wayfinding, including through the Legible London signage to allow visitors to navigate more effectively and discover more attractions in the local area
- Improve pedestrian access to major sites of interest, including in the Bloomsbury area.

d) New jobs created during construction

- 8.27 The HS2 consultation documents highlight the significant employment opportunities that will be created by the scheme. The Appraisal of Sustainability estimates that the construction of HS2 could create 2,800 employment opportunities in the London area (relating to the works at and between Euston and Old Oak Common). In addition, the appraisal estimates that 350 permanent employment opportunities will be created from the operation of HS2 in the London area.
- 8.28 Should the scheme go ahead, the council would seek to prioritise employment opportunities at Euston from HS2 for local residents both during the construction period and once the new station terminus is complete. The council will seek to negotiate targets for the number of Camden residents employed in the project and this would be set in advance for each stage of the development through planning and contract negotiations.
- 8.29 The appraisal of Sustainability indicates that based on current trends only 6% of the jobs forecast to be created at Euston station may be filled by residents within the local Euston catchment area.

Camden considers that this sets a challenge for the project to overcome. It is unsurprising that there is currently a mismatch between the skill levels in the immediate catchment area and the types of jobs expected to be created given the deprivation in the local area and the regional and national significance of the HS2 development at Euston. London's labour market operates at a regional rather than local level. Camden council would expect the development to benefit local communities in a variety of ways and would work closely with partners to maximise employment benefits for local residents.

- 8.30 For example, prior to and during the construction phase, the council would expect HS2 to fund pre-employment and specialist training programmes, potentially through the King's Cross Construction and Skills Centre or a similar facility near to Euston. We would expect Camden residents to be given priority access to training programmes, including for technical skills such as tunnelling and local groups such as BME residents and young people. We would also expect HS2 to fund pre-apprenticeship and apprenticeship placements during the construction phase for priority groups such as young people, BME residents and the workless.
- 8.31 We would negotiate with HS2, the government and Job Centre Plus to ensure that construction and final occupier employment opportunities are advertised locally through employment agencies (for example the Kings Cross Skills and Recruitment Centre) before being advertised nationally. If necessary, we would expect a local recruitment centre to be developed within the new station terminus.

8.32 **Required mitigation:**

- HS2 to fund pre-employment and specialist training programmes, potentially through the King's Cross Construction and Skills Centre or a similar facility near to Euston
- Secure apprenticeship opportunities during the construction phase - ring-fence apprenticeship positions for Camden residents with Network Rail scheme if appropriate
- HS2 to fund pre-apprenticeship and apprenticeship placements during the construction phase for priority groups
- Seek funding through Section 106 for pre-apprenticeship training programmes to bring potential apprentices up to the right standard for apprenticeships
- Ensure that Camden residents are given priority access to specific training programmes including construction tunnelling courses -

- ring-fence places at specialist "tunnelling" training academies if appropriate.
- Provide temporary work opportunities for local Camden residents during the construction phase through temporary food outlets
- Prioritisation of local area for construction and final occupier employment opportunities: negotiate with central government and Job Centre Plus to advertise jobs locally in advance of them being announced through JCP
- Ensure that local residents are prioritised by creating targets for number of Camden residents employed during each phase of the development

e) Jobs post construction

- 8.33 The Sustainability Appraisal has estimated, based on certain assumptions, the scale of jobs that could be created in the Euston area¹ with or without HS2. Without HS2, the appraisal estimates that new development could create around 3,250 jobs. With HS2, the appraisal estimates the employment impacts could be around 5,300. HS2 may therefore specially contribute to the creation of 2,050 jobs in Euston within 10-15 years of the station being completed, over and above what may be created in the area without HS2.
- 8.34 The economic case for HS2 states that the re-design of Euston station could potentially deliver benefits of between £900 million and £1.5 billion. In the absence of the detailed figures which justify that assessment of benefits Camden is unable to provide a meaningful consultation response. Camden requests that no decision be made by the Secretary of State until HS2 have provided the detailed figures and Camden and other parties have been invited to comment on and respond to that information.
- 8.35 The 2,050 additional jobs appears low, given the scale of the development and current market interest, and there is insufficient detail in the Sustainability Appraisal as to how HS2 has arrived at its calculations. The council would welcome clarification from HS2 on the assumptions, including the site coverage for the development above Euston station. By way of comparison, the larger Kings Cross Central development is expected to bring forward 25,000 jobs.
- 8.36 The Council would expect to play a major role in determining the final scheme for the HS2 terminus and local area, including the amount

1.1		

Within one kilometre of Euston station.

and type of business space. Camden would expect a mix of business and retail space to be provided at Euston in line with the council's policy objectives and the needs of the London economy. We would expect a flexible range of business space to suit the needs of a diverse range of businesses and build on the existing strengths of the area in the medical, scientific, business/ professional services and cultural sectors.

- 8.37 The development will need to link well to neighbouring streets including the existing retailers on Drummond Street, with improved east-west links and to local public transport. It will also need to complement the King's Cross Central development, in respect of uses and occupiers. To this end, we recommend that feasibility studies are carried out to determine the most appropriate end users. The master planning should also take into account the need to provide community space for use by social enterprises and other third sector organisations.
- 8.38 The Euston / King's Cross area has an enviable reputation in the knowledge sector. The local area will shortly be welcoming the UK Centre for Medical Research and Innovation (UKCMRI) in 2015. This will provide an added boost to the borough's reputation as a centre for medical excellence which HS2 should seek to complement. In anticipation of this new development, Camden Council would also seek to secure space in the end development for the commercialisation of other research and medical spin-off opportunities.
- 8.39 The regeneration of the area could also provide opportunities to enhance the night-time economy. However, as Euston is a residential area any development would need to be carefully managed and we would limit/ exclude late night licenses.
- As one of the main gateways into London, the new terminus would also benefit from tourism marketing information within the station to showcase the borough's rich and vibrant visitor offer which also includes hidden gems such as the Dickens Museum, The Foundling Museum and St Pancras gardens as well as internationally recognised areas such as Camden Market and Covent Garden.
- In addition to information provision within the station, more effective signposting also needs to be implemented around Euston to allow visitors, residents and commuters to navigate their way around the area. Legible London signage has already been successfully implemented nearby and should be extended in the Euston area.
- 8.42 A new Euston terminus could be well placed to accommodate a meeting or conference centre facility for use both by the local community and by businesses. According to a demand study by the

GLA, the estimated value of UK conferences is £6.6 billion and there is a lack of particularly large-scale conference venues in London that are able to accommodate one to two thousand delegates. While space is a major issue in determining the feasibility of such a project, there may still be some value in creating a smaller meetings space for use by the local community (at peppercorn rent)).

8.43 **Required mitigation:**

- Provision of a range of business space on the station site to suit the needs of a diverse range of businesses and the needs of Camden's economy.
- Establish a recruitment centre in Euston station to ensure that the new retail jobs are taken up by Camden residents
- Negotiate with central government and Job Centre Plus to advertise jobs locally in advance of them being announced through JCP
- Local procurement: appoint an externally funded business advisor to develop local supply chain opportunities in Euston
- Ring-fence apprenticeship positions in the station's new retail outlets

f) Local procurement

8.44 To support small and medium sized businesses locally, the council would expect HS2 to develop and fund a local procurement brokerage package, to include funding Camden borough local procurement officer(s) to facilitate local business access to tender opportunities, networking opportunities and local supply chain opportunities.

8.45 Required Mitigation:

 HS2 to develop and fund and provide a local procurement brokerage package which shall have been developed in conjunction with Camden.

9. Community Facilities

a) Existing facilities directly affected

9.1 The Silverdale tenants' hall on the Regents Park Estate and the tenants hall of the Ampthill Estate would be lost as a direct impact of the station proposals.

9.2 Required mitigation:

- Construction of new tenants halls to replace those which are lost.
- Financial contribution to enable the provision of replacement or improved tenants halls which may include funds for site purchase..

b) Existing facilities indirectly affected

- 9.3 There are a large number of community halls and buildings in the Regents Park, Somerstown and Mornington Crescent area in close proximity to Euston station. The majority of these buildings are owned by the Council and leased to voluntary and community sector (VCS) organisations which provide services, although in some cases services are provided by the Council itself. Services provided include a range of important community support and informal education services.
- 9.4 Large scale development at Euston in connection with HS2 will impact on the operation of these facilities both in terms of the general disruption caused by construction works and by large numbers of additional people who will be brought into the area through new development associated with an expanded station.
- 9.5 Therefore HS2 development needs to take account of the impact on these community support operations and implement measures to deal with these impacts. Camden intends to develop an up to date list of the affected groups and buildings through the production of a planning framework for the area. This will examine the likely impacts on community facilities and any necessary mitigation measures.

9.6 **Required mitigation:**

- A proper assessment of the impacts on surrounding communities including a comprehensive survey of community groups operating in the area, to be carried out as part of the Equalities Impact Assessment and Environmental Impact Assessment.
- Financial contributions to the support and maintenance of community facilities disrupted by HS2 construction and to allow

for the appropriate expansion of facilities to meet the demands associated with development around the station.

c) Provision of community facilities in new development

9.7 The large influx of people that would be generated from the new station and above station development would generate a need for additional community facilities, including meeting spaces, play facilities and health and sports facilities. This would include facilities to serve travellers, new workers and residents.

9.8 **Required mitigation:**

- A comprehensive investigation of community and health care needs in the area as part of the Environmental Assessment looking at how these may be affected by the HS2 development and how provision may be expanded to address any new needs generated.
- Delivery of a programme of measures to address the identified needs including
- Direct provision of community meeting spaces and facilities to serve those in over station development.
- Provision of health care facilities to serve the needs of the occupants of the new development.
- Financial contributions towards existing community meeting spaces and cultural facilities in the area to ensure they can continue to function to serve the needs of the local population.
- Financial contributions to enable the provisions of new or expanded community meeting spaces in the area with existing providers to meet the needs generated by new development on or around the station
- Formation of public art and cultural events to foster new communities and links with existing communities.

10. Crime and safety

- 10.1 Improving community safety is a high priority for the Council. The Camden Community Safety Partnership has a Safer Camden Strategy that sets out a wide range of objectives and initiatives to tackle crime and anti-social behaviour.
- The level and type of crime and anti-social behaviour varies across the borough and "hotspots" have been identified at Camden Town, King's Cross and Bloomsbury. The Euston area sits between all three of the above crime hotspots. If the scheme is to go ahead, new development at Euston should respond to local issues of anti social behaviour (ASB) and crime by reducing opportunities for such behaviour, during and post construction through design, implementation and management which does not engender such activity to benefit established and new communities alike.
- 10.3 Given the scale of the HS2 project and the lengthy time periods for the construction, special consideration needs to be given to crime and safety issues during the construction period as well as on completion of the scheme. In both phases key issues include design, management and maintenance of the development.

10.4 Required Mitigation:

- All financial costs incurred by the Council in addressing crime and safety issues raised by the HS2 scheme and associated works to be covered by HS2, including that of policing.
- Capital contributions towards design against crime measures throughout the project to minimise the opportunity for crime and anti-social behaviour.
- Community safety measures to ensure the development is carried out without adverse effects on the safety and cohesion of communities in Camden, through out its duration.
- Crime Impact assessments and community safety management plans and will be expected for both construction and post construction phases
- 10.5 Both during construction and post construction, HS2 sites will be considered as sensitive locations in relation to counterterrorism. This issue will need to be dealt with in consultation with Camden's Counter terrorism teams.

10.6 **Required Mitigation:**

• implementation of measures to reduce risks associated with terrorism.

a) Crime and safety issues during construction

- 10.7 Large scale construction works (such as those proposed) can create poor quality environments that, combined with a mix of existing factors such as the night time economy and residential communities, will increase the opportunity for anti-social behaviour and crime.
- 10.8 Parts of the development site and associated construction compounds may be hoarded off for lengthy periods of time. This could create long blank elevations sections of street which are poorly overlooked and isolated from the surrounding area which could attract crime violent and anti social behaviour. Given the scale of the development, careful consideration should be given to design, management and maintenance of the hoarding in liaison with Camden to ensure this is not the case.
- 10.9 Experience suggests that the impact of such large scale construction works can be blighting particularly in relation to pedestrian use. The works should be implemented in a clear and safe fashion that allows people, including the many tourists and residents to understand routes and are able to use the area without putting themselves at increased risk. Requirements may change over the construction period to respond to local issues which may arise.

10.10 Required mitigation:

- Full consideration to be given to potential for crime and anti-social behaviour in the planning of construction works
- Safe routes need to be provided through and around the areas affected with adequate levels of lighting, signposting, the use of CCTV cameras, 24 hour staffing presence and other measures which are deemed appropriate.
- Proper consideration of crime and safety in the phasing and extent of development and the location and management of construction compounds.
- Fencing and hoardings need to provided in a way which does need to the creation of large sections of dead frontage which will isolate business and residential communities in the area.
- The sites should be properly staffed and managed to this effect, funding the resources Camden may need to facilitate this.
- 10.11 The design and management of the construction works and compounds will need to be properly coordinated with policing initiatives in the area and there should be adequate consultation with local communities through the construction process with a clear programme for the management of the construction sites over time.

b) Crime and safety after construction

- 10.12 Given the likely scale of development at the station and in the Euston area the Council would expect to see a Crime Impact Assessment undertaken, the findings of which should be used to ensure that developments are designed to reduce opportunities for crime and anti-social activities. This should cover working with the police and other agencies to "design against crime" and assess the need for facilities to support policing and community safety activities. Detailed schemes should be developed in conjunction with the Metropolitan Police and the Council's Community Safety Team.
- 10.13 **Required Mitigation:** New development in connection with HS2 should adopt urban design principles, including
 - active frontages to buildings and interesting and innovative design treatments that can reduce the need for physical barriers. In particular we would wish to see a new station substantially improve the current dead frontage along Eversholt Street;
 - using a local assessment of design to ensure that places are both well connected and safe.
 - the effect of designing against crime on properties adjacent to and in the vicinity of a development, and the personal safety of people who will use the locality; and
 - avoiding a 'fortress approach' as it tends to be unattractive and can result in an oppressive environment for both residents and passing pedestrians.
 - Improve the community safety of residential communities which will be affected by the impact of the development.
- 10.14 **Required Mitigation:** To enhance community safety, as a minimum, we would expect to see HS2 related development:
 - To maximise accessibility by encouraging usage of safe routes to, from and through developments;
 - To design in measures to reduce the opportunity of crime and ASB, encourage community engagement and cohesion including capital measures such as lighting, CCTV where appropriate, accessibility and ease of movement through the developments to enhance overlooking, and increasing perceptions of personal safety.
 - Not utilise existing resources to maintain safety associated with the works to the detriment of community safety in Camden.

 Coordinate pedestrian and cycling routes through the development sites and bus and taxi routes to avoid conflicts and minimize potential hazards.

11. Area Planning Framework and Joint Strategy for the Euston Area

- 11.1 If it is decided to proceed with HS2 then the impacts on the Euston area will be substantial, as described in the earlier sections of this document. Any development of this scale would need to be carried out in a coordinated manner.
- 11.2 To ensure a coordinated approach it is considered that a Joint Strategy involving Camden, HS2, the GLA, TfL and other Partners should be developed which would involve the development of a planning framework for the area. This would be consistent with the comments in the HS2 consultation document about HS2 wishing to work with Camden.
- 11.3 The contents of the planning framework should be carried through into the Environmental Statement for HS2 and any necessary mitigation would need to be delivered through legal binding agreements. Camden would also wish to be involved in the implementation and delivery of what is identified in the framework through participation in the development of the procurement (OJEU or other) criteria to select future development partners for the development over and around the new station.
- 11.4 The production of a planning framework would allow the creation of a collaborative vision for the wider Euston area and a demonstration of how that vision can be achieved though the creation of new homes, business, community facilities and open spaces as set out in the Camden Core Strategy and the London Plan.
- 11.5 The Draft Replacement London Plan identifies the wider Euston area as a Growth Area intended to provide a minimum of 1,000 homes and 5,000 jobs between 2006 and 2031. The adopted Camden Core Strategy envisages 1,500 homes and 70,000 square metres of business floorspace together with significant retail growth. Camden's aspirations are for a high quality, sustainable, mixed use development with significant provision of offices and homes including affordable housing, retail and facilities that meet local community needs together with a new station with increased capacity, public transport interchange and a substantially improved pedestrian environment.
- 11.6 Planning Frameworks have a wide scope covering a range of planning, urban design, transport and environmental issues. A Planning Framework for the Euston area was adopted by Camden in 2009 before the Government identified Euston as its preferred terminus for HS2. Any new planning framework for Euston could also

- explain how development in the area should address physical, social, economic and regeneration objectives. Any resulting development should be genuinely mixed use, sustainable, inclusive, high quality and reflect both London wide and local policy.
- 11.7 The Framework would set out a strategy by which developments will be expected to contribute to the funding of social and physical infrastructure, and in doing so will consider the applicability of S106 obligations or the Community Infrastructure Levy. If plans to deliver HS2 go ahead, the Hybrid Bill petitioning process will also play a part in securing funding to deliver a wide range of social, economic and physical benefits.
- 11.8 Public engagement will be an essential part of the framework process and a strategy would be prepared to ensure this is carried out meaningfully and effectively. Partnership working with both public and private sector organisations will be critical to the overall success of the project and in particular close working with HS2.
- 11.9 Camden and the Greater London Authority (GLA) would lead this work as the local and strategic planning authorities. The GLA has recent experience of working in this way at Waterloo and Nine Elms. It is suggested that a dedicated in-house multi-disciplinary project team is created that is supplemented with external resources as necessary. Partnership working would be essential and with HS2 in particular. It would be expected that HS2 would support such a project team financially.
- 11.10 A Euston Planning Framework would:
 - Consider and assess key stakeholder requirements and expectations;
 - Draw together all relevant existing Mayoral and Camden planning policies, requirements and objectives into a shared strategic planning framework for the area;
 - Provide a strategic planning framework for planning authorities and key stakeholders to develop and assess individual master plans and future development plan documents;
 - Incorporate an options appraisal as part of the technical work that is informed by a broad viability assessment;
 - Be supported by a sustainability appraisal, an environmental assessment, Transport Studies, and an Equalities Impact Assessment:

- Result in a usable, relevant document that will positively influence decision making in terms of planning and development control; and
- Give a clear indication of the potential for development in terms of quanta and mix of land uses that is likely and the infrastructure improvements necessary to support this.
- 11.11 As part of the joint strategy for the Euston area, and reflecting the crucial importance of the site to the borough, Camden would also expect to be involved in the delivery process for the above station development. This reflects Camden's legitimate interest in the proper development of the site, and would include involvement in the development of selection criteria and development partner(s) for the site.
- 11.12 Any planning framework should be put in place before the environmental statement for HS2 is finalised. The requirements of the planning framework should be taken into account when devising mitigation and compensatory measures. Any undertaking given to Parliament to carry out the mitigation and compensatory measures identified in the environmental statement should include a commitment to carry out mitigation works which accord with guidance given in the planning framework.