

**BUCKINGHAMSHIRE COUNTY COUNCIL**

**COMMENTS ON THE EXAMINING AUTHORITY'S SECOND WRITTEN QUESTIONS**

**HIGHWAYS ENGLAND'S RESPONSE**

<b>Question No</b>	<b>Comments</b>	<b>Highways England Comment</b>
<b>4.3.1</b>	<i>BCC are waiting for HE to issue updated Flood Risk Assessment and Drainage Strategy Report which they confirmed would be available by 8<sup>th</sup> January 2016 (not received to date)</i>	The Flood Risk Assessment and Drainage Strategy were both issued at Deadline V and are available on the Planning Inspectorate website (REP5-002).
<b>4.3.4</b>	<i>BCC notes that HE are undertaking desk studies of flood sites put forward by BCC. HE are to issue feedback on suggested sites by 8<sup>th</sup> January 2016 (not received to date)</i>	A desk study assessment into the feasibility of using land within the Order limits put forward by Buckinghamshire County Council has been completed and is reported in the Deadline V submission of the Drainage Strategy Report. A summary of the feasibility assessment results detailed in paragraphs 3.1.11 to 3.1.21 is provided below.

		<p><u>Junction 4b</u> Highways England considers that the use of the land suggested at Junction 4b is not feasible for the following reasons:</p> <ul style="list-style-type: none"><li>• The Scheme does not include any proposals to undertake carriageway widening/drainage works in this area. Runoff from the nearest areas of widening would have to be conveyed over significant distances. Increasing Scheme costs and transportation of surface water over large distances is not practical as the topography of the land is relatively flat.</li><li>• There are no watercourses within the footprint of J4b so any SuDS outfalls would also have to be culverted underneath the existing interchange links to connect into adjacent watercourses.</li><li>• Areas within J4b may be subject to ground water flooding.</li><li>• It would be necessary to provide maintenance access. These areas are located between high speed interchange links so there would be safety risks to maintenance operatives associated with leaving and joining the interchange links to undertake maintenance works. It is likely that significant works would be required to ensure that safe maintenance access could be provided, potentially requiring additional bridges and maintenance access routes outside of the Order limits.</li><li>• The land currently has a dense tree/vegetation cover so extensive clearance work would be required to provide space for and allow maintenance access to any SuDS system. This work has the potential to adversely impact on other environmental receptors and has not been assessed as part of the environmental impact assessment of the Scheme.</li></ul>
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		<p><u>Lake End Road</u></p> <p>Highways England considers that the use of the land suggested at Lake End Road is not feasible for the following reasons:</p> <ul style="list-style-type: none"> <li>• The suggested area to the west of the road is required to accommodate the realignment of Lake End Road.</li> <li>• The suggested area to the east of Lake End Road is required temporarily for access and working space for the new Lake End Road bridge. The permanent use of such land for above ground SuDS would create issues relating to securing the future management and maintenance of the SuDS systems (and access for maintenance).</li> </ul>
4.4	<i>BCC notes all comments under Ecology and nature conservation</i>	

<p><b>4.9.1</b></p>	<p><i>BCC fully supports the Examining Authority's comments in relation to cumulative impact assessment.</i></p> <p><i>A full cumulative impact assessment should be undertaken as part of the Environmental Impact Assessment, which forms part of the DCO application. The cumulative impact, albeit limited to the construction phase, will have wider effects beyond that on travellers (including air quality and noise). The cumulative impact assessment should be a key consideration in the determination of the acceptability of the proposal.</i></p> <p><i>If the Secretary of State is minded to approve the DCO, BCC would wish to see the assessment and mechanisms for mitigation secured, either through the CEMP or as a DCO obligation.</i></p>	<p>A full cumulative impact assessment of the Scheme during construction and operation was undertaken as part of the Environmental Impact Assessment, which formed part of the Application for development consent. This is reported in Chapter 16 of the Environmental Statement (APP-156) and associated figures and appendices. The cumulative impact assessment considered the 'in combination' effects of different environmental topic-specific impacts upon a single resource receptor subdivided into six groups: residential property, ecological features, built heritage features, water bodies, all travellers, and community assets and businesses (see paragraph 16.2.3 of the ES). The cumulative effects assessment also addressed the effects of other projects in the area on receptors. This is summarised in Table 16.4 of the ES.</p> <p>There are a number of developments within the vicinity of the Scheme route, bridge works and construction compounds. These are presented in Drawing 16.1 of the ES (APP-286 to 289) and the details of these developments are presented in Appendix 16.1 of the ES (APP-356).</p> <p>Highways England has analysed the position of major infrastructure in the region and considers that it has addressed fully the concerns of the local authorities in the response provided with the Deadline V submissions to the Joint Statement on Cumulative Development, which was submitted at Deadline IV by the local authorities (REP5-005)</p> <p>Highways England has included paragraph 13.5.2 in the updated Outline Construction Environmental Management Plan ("CEMP") (REP5-002), which was provided with the Deadline V submission. This paragraph outlines appropriate actions that the contractor will undertake should the construction programmes for other major infrastructure interact with construction of the Scheme.</p>
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<p><b>4.9.9 ii</b></p>	<p><i>A full assessment of the transport impact on the local road network should have been undertaken where the highway assignment model had clearly identified significant changes in traffic flows. This matter should have been discussed with local authorities at an earlier stage in the process prior to the DCO application being submitted. The impact on the local road network should be a key consideration in the determination of the acceptability of the proposal.</i></p> <p><i>If the Secretary of State is minded to approve the DCO, Buckinghamshire County Council would wish to see a full assessment undertaken. This should include local junction modelling using industry standard software and a safety review. Any capacity or safety issues identified as a result will need to be appropriately mitigated at the cost of the applicant.</i></p> <p><i>BCC is seeking legal opinion as to how best this can be secured and will provide an update to the Examining Authority in due course.</i></p>	<p>A meeting was held between Highways England and Buckinghamshire County Council on the 25 November 2015 to demonstrate the forecast traffic flows on the A4, A355 and A412, which are routes in relation to which BCC had expressed particular concerns regarding any further traffic loadings.</p> <p>At the meeting Highways England demonstrated the minimal effects which are anticipated, some of which were reductions in flow, during the initial construction phase (2017) and the opening year of operation (2022) of the Scheme.</p> <p>It was agreed with BCC that no further assessment was required for these years. However, for the year 2020, during the second construction phase for the Scheme, the assessments had indicated some potential use of the A4, A355 and A412 by traffic diverting from the M4 during construction.</p> <p>BCC does not have traffic data for the majority of junctions on these routes with which to contradict the findings of Highways England's modelling and assessments. However, as a sensitivity test, it was agreed that Highways England would undertake traffic surveys during the first available neutral month for traffic flows, March 2016, to verify the modelling and assessment undertaken by Highways England.</p>
<p><b>4.9.9 vi</b></p>	<p><i>It has been confirmed that the applicant is unable to carry out the necessary manual classified counts in order to model the impact of their proposals on the local road network. Where available, BCC has provided manual classified counts and automatic traffic counts.</i></p> <p><i>At the time of determination of the DCO application, the impact on the local road network would not have been assessed and unmitigated</i></p>	

		Based on traffic forecasts (with and without traffic management in place) undertaken to assess the potential diversion from the M4 during the construction of the Scheme, it is expected that the surveys will confirm that there is no requirement for further appraisal. However, if a need for further modelling is identified, a verification appraisal will be undertaken. This will be secured by a provision within the Construction Traffic Management Plan (“CTMP”, REP5-002). Should any verification appraisal predict capacity problems at a particular junction, measures could be deployed by Highways England to mitigate any effect. These potential measures are outlined in the CTMP and the requirement provides similar provisions to undertake deemed mitigation elsewhere along the Scheme.
<i>Following a meeting between BCC’s Strategic Flood Management team and HE on 21<sup>st</sup> December 2015, the following items were discussed:</i>		
<b>Additional Item A</b>	<i>BCC requested HE to check compensation areas are not in existing surface water flooding areas. No response received to date.</i>	The proposed floodplain compensation areas have been reviewed against Environment Agency surface water flood risk maps. Highways England confirms that all of the preferred sites for the creation of floodplain compensation storage are situated within the ‘very low’ or ‘low’ risk of surface water flooding zones.
<b>Additional Item B</b>	<i>HE to provide drainage system maintenance regime plans, copy of HE Area 3 and copy of license. No response received to date.</i>	Copies of the drainage system maintenance requirements and the Highways England license were issued to BCC on 22 January 2016 (together with the minutes of the Meeting between Highways England and BCC held on 21 December 2015).
<b>Additional Item C</b>	<i>BCC requested HE to check compensation areas are not in existing surface water flooding areas. No response received to date.</i>	Please see response to Additional Item A.

## BUCKINGHAMSHIRE COUNTY COUNCIL

### WRITTEN REPRESENTATION

#### HIGHWAYS ENGLAND'S RESPONSE

1. *Buckinghamshire County Council's additional comments below regarding landscape, Minerals and Waste, and Old Slade Lane.*

#### 1.1 **Landscape – Riching Park**

- 1.1.1 *We are concerned about the potential impact of the Smart Motorway on both the setting of the historic parkland and the direct impact on surviving features located near the M4. The parkland is currently being surveyed by Buckinghamshire Gardens Trust in order to assess the significance of the surviving parkland. The site may deserve recognition as a nationally designated Registered Park and Garden. The survey work to date has identified important features near to the M4 and we are expecting a full report covering the whole of the site within the next month. A particular concern has been identified regarding the installation of a new gantry at the south end of the canal and the detrimental visual impact this may have.*
- 1.1.2 *We have also been in contact with the management of Richings Golf Course to the north of the motorway who have concerns with the scheme and we will shortly be meeting to discuss the landscape, parkland and other environmental issues. We hope that this will lead to opportunities to provide additional landscaping and SUDS on land adjacent to the motorway corridor and we will ensure that we work with HE on these matters going forward.*

#### Highways England Comment

- 1.1.2.1 Richings Park is situated on the East Bound side of the Scheme between approximate chainages 18910.00 and 18120.00, as shown on the Environmental Masterplan, Sheet 26, in Annex 4.1 of the Engineering Design Report ("EDR") (Application Document Reference 7-4, APP-101).
- 1.1.2.2 As there is no land-take outside the highway boundary, no direct physical impacts on heritage assets have been identified within Richings Park as a result of the Scheme. The parts of the park that lie within the Scheme's zone of visual influence ("ZVI") are currently occupied by the golf course and are not considered to constitute a heritage asset.
- 1.1.2.3 Given the existing intervening mature tree belt along the M4, the golf course and the parkland in general falls outside the Scheme's ZVI, as shown on Drawing 8.2, Sheet 13 of the ES (Application Reference Number 6.2, APP-221). The ZVI was developed by an experienced landscape architect who walked through the adjacent publically accessible areas i.e. the road and footpath network to identify the extent of views of the motorway.
- 1.1.2.4 In relation to the potential impact of the Scheme on the setting of the parkland and the direct impact of the Scheme on surviving features in the vicinity of Riching Park, Highways England notes that the existing M4 boundary along the length of this section of the Scheme comprises a substantial belt of mature

woodland, which is outside the Order limits. Highways England recognises that the western and eastern parts of this mature tree belt are covered by a Tree Preservation Order ("TPO") (South Buckinghamshire County Council reference TPO 07-1952 Richings Park Woodland, Areas W2 and W3). Areas W2 and W3 run along the back of the Order limits between approximate chainages 18810.00 and 18630.00 and 18240.00 and 18120.00 respectively. Highways England also recognises that since 1952 when the TPO was made, much of the protected area has already been dissected by the construction of the M4.

- 1.1.2.5 In the relevant area, the Scheme will introduce all lane running; the installation of three gantries (G3-03a - Type 1 and up to 13.4m high, G3-05 - Type 1 and up to 12.8m high, and G3-09 - Type 4, up to 12.7m high); the demolition of two existing gantries, and the installation of one Emergency Refuge Area (E3-B1).
- 1.1.2.6 The Scheme will require vegetation removal within the Order limits and on existing Highway land, as shown on the Vegetation Clearance drawing, Sheet 26 in Annex 4.2 of the EDR (Application Document Reference 7-4, APP-106). Highways England notes that the site clearance associated with gantry G3-09 (located at chainage 18782.00) and gantry G3-03a (located at chainage 18198.00) would extend up to the Order limits and will be immediately adjacent to those trees protected by the TPO. It is also noted that gantry G3-05 (located at chainage 18398.00) would sit at the south end of the existing canal feature (Home Farm Stream), which forms a central linear feature in Richings Park.
- 1.1.2.7 Highways England has not confirmed the full extent of the root zone associated with the surviving trees covered by TPO 07-1952 (Areas W2 and W3) whose trunks lie outside the Order limits but immediately adjacent to the proposed gantries G3-03a and G3-09, and the extent to which these tree roots may extend into the Order limits. However, there is a requirement in the CEMP (REP-002) for the Contractor to identify, retain and protect trees covered by TPOs throughout the construction phase. In doing so, the contractor is required to employ the services of an arboriculturalist to carry out a tree survey and report in accordance with BS5387. This survey will identify the full root zone for all trees to be retained, including those located outside the Order limits but where their root system is likely to extend into the area covered by the Order limits. The report will identify the necessary measures to protect the roots and the trees for the duration of the construction work.
- 1.1.2.8 Highways England does not consider it necessary to provide further mitigation through the provision of off-site planting to further mitigate the visual effects of the Scheme.
- 1.1.2.9 A summary of the feasibility assessment of using land adjacent to junction 4b for SuDs is detailed in the comments on the reponse to the Examining Authority's question 4.3.4 above.

## **1.2 Minerals and Waste**



1.2.1 *A meeting was held between BCC and HE before Christmas to discuss outstanding 'matters not agreed' regarding Minerals and Waste within the SoCG. BCC have agreed to share a more refined table of waste management facilities within Buckinghamshire with HE. A copy of this updated information can found in Appendix 1 and has now been shared with the HE. HE will be able to better assess their likely cumulative impact on the waste management capacity of Buckinghamshire. Equally, if HE are able to generate their own aggregate from recycling of inert CDE waste from demolition of the existing scheme, then this would affect the total aggregate requirement. It is important that HE uses this information to update their Materials Management Plan (MMP) as part of the DCO.*

#### Highways England Comment

1.2.1.1 The Environmental Impact Assessment for the Scheme was based on a worst case assessment that no materials would be reused on site. The materials strategy will be developed further once the detailed design has been finalised and as more detailed design information becomes available. The Environment Agency has confirmed that the Environment Agency data, which was used for the initial assessment by Highways England, contained some errors, as some locations were classified under the incorrect Local Authorities (e.g. Slough has been classified under Buckinghamshire instead Berkshire). Highways England has reviewed, and updated where necessary, the waste capacity records for landfill and waste management facilities provided by BCC following verification with the Environment Agency, Oxfordshire and Berkshire County Councils.

1.2.1.2 Highways England has reviewed the capacity of waste infrastructure sites that could potentially receive CD&E waste arisings from the Scheme using the updated waste capacity records. The original assessment, contained in Table 11.19 of Chapter 11 of the Environmental Statement (ES) (APP-151) demonstrated sufficient waste capacity to manage all waste arisings from the Scheme. The ES concluded that the sensitivity of the waste infrastructure receptors (based on 30,665,905 tonnes capacity per annum) likely to be affected by the estimated waste arisings from within the study area was considered to be medium. Using the same methodology, and the updated waste infrastructure capacity of 21,064,962 tonnes per annum, the sensitivity of these receptors is assessed as remaining medium. The assessed impact on the waste infrastructure capacity of Buckinghamshire therefore remains the same, and the conclusions of the ES remain valid.

1.2.1.3 It is Highways England's intention to generate aggregate from recycling of inert CD&E waste from demolition of the existing highways infrastructure. As more Scheme-specific information becomes available at the detailed design stage, Highways England will provide further details of where and how aggregates will be generated and managed to local authorities. This commitment will be secured in the next version of the CEMP to be submitted at Deadline VIII.

1.2.2 Based on BCC's more up to date data that is being shared with HE concerning available waste management capacity within Buckinghamshire, BCC request that the cumulative impact of the scheme on Minerals and Waste is also considered alongside the ExA's question on highways impacts. In particular, the BCC information highlights the limited capacity for landfilling wastes arising from the scheme, at a time when several other major infrastructure schemes are likely to take place (e.g. HS2 and Western Rail Access to Heathrow). There is also the issue of the capacity of quarries in the County to supply aggregates to this and other major infrastructure schemes. With respect to both issues the Council is concerned that Highways England needs to further address the issue of the cumulative impact of the scheme.

Highways England Comment

1.2.2.1 Highways England will maintain a dialogue with BCC on this issue. When the assessment for the Environmental Statement for the Scheme was carried out in 2014 - 2015, there was not enough detailed information relating to other developments available which would have enabled Highways England to carry out an informed assessment of the cumulative impacts of those developments with the Scheme (e.g. waste types produced and volumes, committed recycling rates and waste related to Buckinghamshire from other developments). As a result, Highways England had to make assumptions regarding the 36 proposed developments that were within 1km of the Scheme. The results included within Section 11.5 of the ES (APP-151) show that the Scheme and the other 36 proposed developments identified are forecast to produce a total of 2,591,128 tonnes of waste, which would amount to only 12% of the total waste arisings in the study area (the detailed analysis is in table 1.2.2.1 below).

Study Area	Landfill Sites	Waste Management Facilities	Grand Total
Berkshire	927,999	4,050,376	4,978,375
Buckinghamshire	400,000	2,184,992	2,584,992
Oxfordshire	904,999	3,016,478	3,921,477
West London	250,000	9,330,118	9,580,118
<b>Grand Total</b>	<b>2,482,998</b>	<b>18,581,964</b>	<b>21,064,962</b>

Table 1.2.2.1 Waste Management Facilities Capacity

1.2.2.2 Highways England has carried out additional research using the Environmental Statements of the suggested developments (HS2 and Western Rail Access to Heathrow ("WRLtH")).

1.2.2.3 There is still not enough data available in relation to the proposed Western Rail Access to Heathrow development, which would allow Highways England to carry out a further assessment of cumulative impacts on the capacity in relation to that scheme. However, WRLtH is currently at pre-application stage, with an application not expected until spring 2016. The applicant's Scoping Report confirms that WRLtH will undertake a cumulative assessment on the basis that the

M4 Scheme is 'reasonably foreseeable' and, as such, it will be included in the cumulative assessment for WRLtH. The Scoping Opinion for WRLtH confirms this requirement at paragraph 2.59 as follows:

*"The applicant should continue to engage with Highways England and the local highways authorities regarding the effects of potential construction haulage and access routes."*

Accordingly, it is WRLtH that is required to take account of the Scheme.

1.2.2.4 The promoter of HS2 estimates that it will send 272,783 tonnes of waste to landfill over 8 years. Therefore, even when combined with the Scheme and the 36 developments previously identified, this would cumulatively still only represent 25% of the available capacity within the study area.

1.2.2.5 The Outline Site Waste Management Plan appended to the CEMP (APP-294) for the Application states that material resources and waste targets have not yet been set and initial quantification of material resources use and waste arisings forecast from the Scheme have been provided using preliminary design information, Key Performance Indicators from similar schemes and professional judgment.

1.2.2.6 As the detailed design progresses, Highways England will be able to provide more details of where and how surplus materials from the Scheme will be managed and this information will be integrated within the Scheme's materials strategy.

1.2.2.7 The Scheme would expect and target 95% reuse, recycling and recovery based on experience from similar schemes, which would substantially reduce the import and export quantities assumed in the worst case ES assessment. A reuse, recycling and recovery target will be secured through the CEMP and monitored through the SWMP.

1.2.3 *BCC have also agreed that a dialogue with HE would be maintained on this issue which would be better known at the detailed design stage. In addition, the later dialogue with HE will include reference to borrowpits, landfill sites, and opportunities for storage and reuse of surplus inert waste arisings.*

#### Highways England Comment

1.2.3.1 There is no requirement for borrow pits in BCC but Highways England will maintain dialogue with BCC on the opportunities and storage for reuse of surplus inert waste arisings.

### **1.3 Old Slade Lane mitigation**

1.3.1 *Mitigation is sought for walkers, cyclists and equestrians unable to access the rights of way (ROW) network towards Colnebrook for a period of 12 months due to the closure of the Old Slade Lane overbridge. Users will be seeking suitable local alternatives on the north side of the M4 and these need to be in a condition to withstand the additional walking, cycling and horse riding traffic. Without viable alternatives this would lead to*

*a significant detrimental impact on the local RoW network and users thereof during the period of the temporary closure. HE have suggested an alternative route south via North Park, Sutton Lane, and Colnbrook bypass (A4), but this is largely unachievable and unrealistic due to the significant distance and unpleasant surroundings (noise and exhaust fumes). Without an attractive local network users will seek alternatives at honey pot sites (e.g. Burnham Beeches or Black Park/Langley Park), accessed in private cars, causing additional traffic delays.*

Highways England Comment

1.3.1.1 The Non Motorised User Survey Report (REP1-003) details low number of users of the Old Slade Lane public right of way (as shown in the extract from Table 1 of the report below).

Day	Adult	Child	School Child	Cyclist	Equestrian	Total
Saturday	35	0	0	9	0	44
Wednesday	45	4	2	7	0	58

*Table 1.3.1.1 - Extract from Table 1 of the Non Motorised Users Report*

1.3.1.2 The temporary closure of Old Slade Lane Bridge during its reconstruction will be inconvenient to those wishing to use the public rights of way. However, this has not been assessed as significant, given the low numbers of users, and availability of alternative direct routes in the area (even if possibly less attractive for leisure walking (depending on their origin)). Moreover, no evidence has been provided to the Examination which supports the contention that there will be effects at Burnham Beeches or Black Park/Langley Park (for example, even if 50% of users were diverted this would only represent approximately one user per hour at each site).

1.3.2 *The estimated total cost is £132, 700 for the NMU mitigation on the ROW network for the closure of the Old Slade Lane Bridge. Please see Appendix 2 for a map of the ROW route and the breakdown of mitigation costs.*

Highways England Comment

1.3.2.1 Given the low levels of current usage and the availability of alternatives, no further mitigation to that detailed in the Environmental Statement is considered proportionate or appropriate. Moreover, the proposed improvements are outside the Order limits of the Scheme.

1.3.2.2 Further, Highways England disagrees as to the suitability of the alternative public right of way suggested in terms of use by equestrians and in terms of the potential security issues when passing through the M25 underbridge. These are detailed in photo 3 in Appendix 2 of BCC’s submission (REP5-009), which shows that the suggested public right of way is secluded and in a dark location with visible graffiti and low headroom.

1.3.3 *BCC would like to clarify that we are still positively engaged with HE and will continue discussions relating to 'matters not agreed'. BCC would like PINs to note that we will be looking to amend the final Statement of Common Ground (SoCG) between BCC and HE on some traffic management and minerals and waste matters. BCC will continue to work with HE to get these amendments made and under the assumption that HE will continue to stay in contact to discuss the outstanding 'matters not agreed'.*