

**DR/24/17**

committee                      DEVELOPMENT & REGULATION

date                              23 June 2017

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**COUNTY COUNCIL DEVELOPMENT**

Proposal: **Construction of a new motorway junction (Junction 7a) on the M11 between existing junctions 7 and 8, to be located approximately 6km north of existing Junction 7, to the north of Moor Hall Road/Matching Road crossing and to the south of Sheering Village and the proposed construction of a new link road and roundabout to link the proposed Junction 7a to Gilden Way (B183) and Sheering Lower Road, to the north-east of Harlow Town in the district of Epping Forest. Proposed widening and road improvements to Sheering Road and Gilden Way (B183) from the proposed new Sheering Road roundabout to the London Road Roundabout, located within the district of Harlow**

Location: **Gilden Way and Sheering Road, public highways and land between, Sheering Road and M11 Motorway**

Ref: **CC/EPF/08/17**

Applicant: **Essex County Council**

Report by Acting Head of County Planning

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The full application can be viewed at [www.essex.gov.uk/viewplanning](http://www.essex.gov.uk/viewplanning)



## **1. BACKGROUND AND SITE**

The site of the proposed development is stated to be 41 hectares.

The site lies partly within the administrative areas of Harlow District and partly within Epping Forest District.

The site is located on to the north–east of Harlow town, mainly on the western side of the M11 motorway.

The part of the site consisting of the new motorway junction is located within the Metropolitan Green Belt in the District of Epping Forest.

The site lies within the safeguarding area for Stansted Airport.

The site is partly located in Flood Zone 2/3 as identified on the Environment Agency's online mapping.

The majority of the proposed site, including the new junction, is located in open, gently undulating countryside on land currently designated as Metropolitan Green Belt to the north-east of Harlow. The land in the area around the proposed new junction is currently in use predominantly for arable cultivation, with some housing. The Pincey Brook watercourse bounds this area to the north with The Mores Woodland to the south.

Gilden Way forms a green corridor into Harlow with mature hedgerows and trees along its length. Open countryside is replaced by an increasingly urban landscape heading along Gilden Way towards Harlow town centre.

Areas of land that are currently open fields, located to the north of Gilden Way close to the Churchgate Roundabout (known as the Harlowbury development) and to the south of the Gilden Way to the south-east of the London Road Roundabout (known as the Newhall development), have planning permission for residential development.

## **2. PROPOSAL**

It is proposed to construct an additional motorway junction on the M11 (Junction 7A) between the existing junctions 7 and 8, to the north-east of Harlow.

The scheme would also include a new link road and roundabout to join the new junction to Gilden Way and Sheering Lower Road. The scheme also proposes significant works to upgrade and improve Gilden Way.

The new M11 junction would be located approximately 6km north of the existing Junction 7, to the north of the Moor Hall Road / Matching Road crossing and to the south of Sheering Village. It is proposed to implement the proposed development in three phases as follows:

- Phase 1 – to widen and improve Gilden Way;
- Phase 2A – to construct the motorway junction (7a), the southern arm of the link road and the new Sheering Road roundabout; and,
- Phase 2B – to construct the northern arm of the link road and the new Princey Brook roundabout.

The proposed scheme is shown in detail on the Proposed Layout Plans (B3553F05-0100-DR-0500 to 0508). Please click in the hyperlinks below to view the site layout drawings via the Councils Website.

#### [Proposed Layout Key Plan - 0500](#)

The M11 Junction 7A scheme begins, to the west, at the London Road Roundabout on Gilden Way (B183) and involves widening of the existing two-lane road to three lanes. When completed, two of the lanes would take traffic in a westerly direction into Harlow Town and the third lane would take the outbound traffic towards Sheering and the M11 motorway. Proposed improvements to Gilden Way include the construction of a combined footpath/cycleway on the north side of Gilden Way. Two existing pedestrian crossings would be signalised and upgraded and three new pedestrian crossings are proposed. The Churchgate Roundabout (also known as Gilden Way Roundabout) would be upgraded to a 'hamburger' design roundabout to improve traffic flows along Gilden Way itself. The proposed changes to Gilden Way are shown on Sheets 1-3 of the Proposed Layout Plan (B3553F05-0100-DR-0501 to 0503). <http://planning.essex.gov.uk/>

Gilden Way becomes Sheering Road as it passes Marsh Lane on the left and Mayfield Farm on the right. At Mayfield Farm, a new carriageway is proposed which would realign the present route of Sheering Road to the east and link the existing Sheering Road with a new roundabout named Sheering Road Roundabout. The existing Sheering Road would be converted into a local access road for use by residents of 'The Champions' only, and would connect to the realigned Sheering Road via a new junction to the south west of the new Sheering Road Roundabout. The proposed road would consist of three lanes towards a new Princey Brook Roundabout; two lanes would be north-eastbound and one south-westbound back towards the Sheering Road Roundabout. A new access is proposed from the realigned Sheering Road to Mayfield Farm. The proposed changes to Sheering Road are shown on Sheets 4 and 5 of the Proposed Layout Plan (B3553F05-0100-DR-0504 and 0505). <http://planning.essex.gov.uk/>

Traffic would exit the Princey Brook Roundabout on one lane. The road would widen out to two lanes as it approaches the Western Dumbbell Roundabout on the western side of the M11. This stretch of road would be called the Eastbound Link. A new two-lane road, called the Westbound Link, would take traffic in the opposite direction, from the M11 to the new Sheering Road Roundabout. Both the Eastbound Link and Westbound Links have been future-proofed to allow for the potential construction of a Northern Bypass in the future, should it come forward. The proposed new roundabouts and link roads are shown on Sheets 5-7 of the Proposed Layout Plan (B3553F05-0100-DR-0505 to 0507). <http://planning.essex.gov.uk/>

The new Eastbound and Westbound Link would rise on an embankment (up to

10m high) close to the motorway to allow for the difference in elevation between Sheering Road and the M11 and to accommodate a grade separated junction over the M11.

The Eastbound and Westbound Link roads would converge at a roundabout adjacent to the M11; this would be one of two new roundabouts proposed on either side of the M11 and connected by a new four-lane bridge over the existing M11 motorway (known as the Western Dumbbell Roundabout, the Eastern Dumbbell Roundabout and the Dumbbell Link respectively, due to their Dumbbell-shaped configuration). Northbound southbound slip roads would be constructed connecting the M11 to the two new roundabouts to enable full access between the new link road and the motorway network without restricting traffic travelling in either direction on the M11 motorway.

This new infrastructure adjoining the M11 motorway is shown on Sheets 6-8 of the Proposed Layout Plan (B3553F05-0100-DR-0506 to 0508).

<http://planning.essex.gov.uk/>

The proposed scheme includes proposals for lighting, relocation of an unnamed watercourse, surface water drainage ponds, landscape planting and noise attenuation.

### Environmental Impact Assessment

The application is accompanied by an Environmental Statement comprising an assessment of the potential environmental impact of the proposal and proposed mitigation measures in relation to:

- Air Quality
- Cultural Heritage
- Landscape and Visual
- Nature Conservation
- Geology and Soils
- Materials
- Noise and Vibration
- People and Communities
- Road Drainage and the Water Environment
- Cumulative Assessment

The Environmental Statement (ES) also includes a summary of environmental commitments for pre-construction and construction management. An appraisal of the ES is set out in Appendix B of the report.

## **3. POLICIES**

The following policies of the Epping Forest District Council Local Plan and the Harlow District Local Plan provide the development plan framework for this application.

Please note that the full text of all relevant policies referenced in this report is available in Appendix A.

The following policies are of relevance to this application:

Epping Forest District Local Plan (EFDLP)

Combined Policies of Epping Forest District Local Plan (1998) and Alterations (2006), published February 2008.

<http://www.eppingforestdc.gov.uk/home/file-store/category/168-current-policy#>

Core Strategy

- CP1 Achieving Sustainable Development Objectives
- CP2 Protecting the Quality of the Rural and Built Environment
- CP6 Achieving Sustainable Urban Development Patterns
- CP7 Urban Form and Quality
- CP8 Sustainable Economic Development

Green Belt

- GB1 Green Belt Boundary
- GB2A Development in the Green Belt
- GB7A Conspicuous Development

Heritage Conservation

- HC1 Scheduled Monuments and other archaeological sites
- HC2 Ancient Landscapes
- HC3 Registered Parkland
- HC4 Protected Lanes, Commons and Village Greens
- HC5 Epping Forest
- HC6 Character, Appearance and setting of Conservation Areas
- HC12 Development affecting the setting of Listed Buildings
- HC13A Local List of Buildings

Nature Conservation

- NC1 SPAs, SACs and SSSIs
- NC2 Country Wildlife Sites
- NC3 Replacement of lost habitat
- NC4 Protection of established habitat
- NC5 Promotion of nature conservation schemes

Recycling and Pollution

- RP3 Water Quality
- RP4 Contaminated Land
- RP5A Adverse Environmental Impacts

Employment

- E5 Effect of nearby developments

Recreation Sport & Tourism

- RST2 Enhance rights of way network
- RST3 Loss or diversion of rights of way
- RST14 Playing Fields

## Utilities

U2A Development in Flood Risk Areas

U2B Flood Risk Assessment Zones

U3A Catchment Effects

U3B Sustainable Drainage Systems

## Design & the Built Environment

DBE9 Loss of amenity

## Landscape & Landscaping

LL1 Rural Landscape

LL2 Inappropriate rural development

LL3 Edge of settlement

LL7 Planting protection and care of trees

LL8 Works to preserved trees

LL9 Felling of preserved trees

LL10 Adequacy of provision for landscape retention

LL11 Landscaping schemes

LL13 Highway/ motorway schemes

## Sustainable Development

ST7 New roads and extensions or improvements to existing roads

ST9 Stansted aerodrome safeguarding

## Harlow District (HDC) Local Plan

Replacement Harlow Local Plan adopted July 2006 and saved policies 2009

<http://www.harlow.gov.uk/arhlp>

SD9 Waste reduction re-use and recovery

T6 Cycling and Walking

L1 Playing Fields

L13 Public Rights of Way

NE11 Trees and Hedgerows

NE12 Landscaping

NE13 Water Environment

NE14 Landscape Conservation

NE15 Biodiversity and Nature Conservation

NE17 Wildlife Sites

NE18 Wildlife Sites

NE19 Protected Wildlife Verges

NE20 Protected and rare species

BE2 Providing high quality, legible and successful public realm.

BE5 Crime prevention and personal safety

BE9 Conservation Areas

BE10 Conservation Areas

BE11 Historic Parks and Gardens

BE12 Archaeology

BE13 Archaeology

BE14 Archaeology

BE16 Light Pollution

BE17 Noise Pollution  
BE19 Environmental Improvements  
CP9 Public Utilities – infrastructure  
CP12 Public utilities- flooding

[National Planning Policy Framework \(NPPF\), DCLG March 2012](#)

Section 1: Building a strong, competitive economy.  
Section 3: Supporting a prosperous rural economy  
Section 4: Promoting sustainable transport  
Section 5: Supporting high quality communication infrastructure  
Section 6: Delivering a wide choice of high quality homes  
Section 7: Requiring good design  
Section 8: Promoting healthy communities  
Section 9: Protecting Green Belt land  
Section 10: Meeting the challenge of climate change, flooding and coastal change  
Section 11: Conserving and enhancing the natural environment  
Section 12: Conserving and enhancing the historic environment

The NPPF was published on 27 March 2012 and sets out the Government's planning policies for England and how these are expected to be applied. The NPPF highlights that the purpose of the planning system is to contribute to the achievement of sustainable development. It goes on to state that there are three dimensions to sustainable development: economic, social and environmental. The NPPF places a presumption in favour of sustainable development. However, paragraph 11 states that planning law requires that applications for planning permission must be determined in accordance with the development plan unless material considerations indicate otherwise.

For decision-taking the NPPF states that this means; approving development proposals that accord with the development plan without delay; and where the development plan is absent, silent or relevant policies are out-of-date, granting permission unless any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this NPPF taken as a whole; or specific policies in this NPPF indicate development should be restricted.

Paragraph 215 of the NPPF states, in summary, that due weight should be given to relevant policies in existing plans according to their degree of consistency with the Framework. Both the Epping Forest District Local Plan and the Harlow District Local Plan are now out of date. The level of consistency of the policies contained within the existing Epping Forest District Local Plan and the existing Harlow District Local Plan is considered further in the report where relevant.

Paragraph 216 of the NPPF states, in summary, that decision-takers may also give weight to relevant policies in emerging plans according to the stage of preparation of the emerging plan; the extent to which there are unresolved objections to relevant policies; and the degree of consistency of the relevant policies in the



emerging plan to the policies in the NPPF. Both Harlow District Council and Epping Forest District Council have emerging Local Plans. Consultation on the Pre-Submission draft for Harlow is anticipated in late Summer 2017 and for Epping Forest in early 2018. Due to the early preparation stage of both emerging plans they are considered to have limited weight at this stage. (Emerging policy on the green belt is relevant to this planning application and is discussed in further detail in the appraisal at Section 6B below.)

#### **Other Guidance/Policy/Legislation**

Planning (Listed Buildings and Conservation Areas) Act 1990 (see in particular sections 16, 66 and 72)

[Planning Policy Guidance \(PPG\)](#)

## **4. CONSULTATIONS**

EPPING FOREST DISTRICT COUNCIL – Supports.

*“That the Council strongly supports the provision of a new junction 7A on the M11, as it would greatly improve the transport network and traffic management for the area, and it is necessary to support the growth of homes and jobs in the forthcoming Local Plans of EFDC and the other three West Essex/East Herts authorities; and*

*That Essex CC should consider the phasing for delivery of the “future-proofing” spur and roundabout as the need for this will be determined by the District Council’s Local Plans which are not yet available.”*

HARLOW DISTRICT COUNCIL – Supports.

*“The Council has campaigned for Harlow’s infrastructure deficits to be addressed in order to achieve economic success and support housing delivery, which are critical to the regeneration of Harlow. The need to address existing congestion and improve access into Harlow has been identified as a key requirement in Harlow’s Economic Development Strategy in order to attract new businesses. The new junction is required to enable the delivery of new housing in Harlow which is crucial to also ensuring that Harlow’s affordable housing need is met. It is also important that improving access and reducing congestion improves the air quality by reducing nitrogen dioxide and thus it is important for the health of Harlow’s residents. The support for a new junction was confirmed by Special Council on 31<sup>st</sup> August 2016, which recognised the importance of sustainable growth to support economic success of Harlow and the evolution of the town and its community. It also recognised that the provision of appropriate transport infrastructure is vital to support the growth of the town and its hinterland.”*

UTTLESFORD DISTRICT COUNCIL- Supports.

*“Uttlesford has been working in collaboration with East Herts, Epping and Harlow District Councils, together with Essex and Hertfordshire County Councils in the Co-op Board for Sustainable Development. One of the main purposes of the Board is to demonstrate that the district councils have met the Duty to Co-operate in the*



*preparation of their local plans.*

*The councils have agreed to deliver a minimum of 51,000 homes during the lifetime of the respective plans with a focus on the growth and regeneration of Harlow. Three Memoranda of Understanding (MoU) have been prepared in support of this approach, one of which relates to transportation. The Transportation MoU recognises the need for a series of strategic highways interventions to facilitate growth. One of these is the provision of a new Junction 7a which is essential for Harlow's long term transportation requirements. The MoU has been signed by the four district councils, two county councils and Highways England. As Uttlesford is a signatory to the MoU the Council is in full support of the planning application and looks forward to the early implementation of the proposals."*

EAST HERTS DISTRICT COUNCIL- Supports. Need for new junction at this location is reflected in Memorandum of Understanding which has been agreed by four District Councils and the two County Councils and Highways England. The importance of delivering this scheme in order to support growth in the Harlow area, including significant new development within the Gilston Area in East Herts District, has therefore been well established. The Council strongly supports the planning application.

HERTFORDSHIRE COUNTY COUNCIL- Supportive in principle but raise concerns regarding traffic impact on Hertfordshire road network.

NATIONAL PLANNING CASEWORK UNIT- No comment received

ENVIRONMENT AGENCY – Holding objection subject to verification of fluvial modelling. – Members will be updated at the Committee meeting.

HIGHWAYS ENGLAND – No objection

SPORT ENGLAND – No objection

*“Having assessed the application, Sport England is satisfied that the proposed development meets the following Sport England Policy exception:*

*E3 - The proposed development affects only land incapable of forming, or forming part of, a playing pitch, and does not result in the loss of, or inability to make use of any playing pitch (including the maintenance of adequate safety margins), a reduction in the size of the playing area of any playing pitch or the loss of any other sporting/ancillary facility on the site."*

Note: the playing field is at [ ]

NATURAL ENGLAND – No objection

**HISTORIC ENGLAND – No objection -** *“In summary, we consider that the Heritage Statement and Built Heritage Assessments should be revised to cover the full geographical extent of the proposed scheme. The Environmental Assessment has identified a range of impacts on the historic environment during both the construction and the operational phases of the development and proposed a number of mitigation measures to seek to address these impacts. These mitigation measures should be secured by condition or legal agreement where appropriate to ensure the implementation of the scheme in accordance with the proposals set out*

*in the application. We would suggest that further consideration be given to the section of road improvements in or near to the two conservation areas and that opportunities are sought to improve the public realm in this area. In addition, further opportunities for planting and landscaping could be explored to minimise the impact on the setting of Sheering Hall and opportunities should be sought to strengthen existing hedgerows to minimise the impact of the historic landscape. The site of the proposed compound off Gilden Way should be evaluated to establish whether it contains archaeological remains which are contemporary with the bronze age barrow and, if present, these should be excavated. The above recommendations could result in proposals which help to reduce the impact of the development on the historic environment. In line with paragraph 129 of the NPPF your authority should seek to achieve this. Once efforts have been made to minimise the harm, your authority should weigh the harm that cannot be avoided against the public benefits of the scheme, paragraph 134.*

Comment: In a submission dated 27/04/17, the applicant clarified that the study area was updated to include the full geographical extent of the proposed scheme. Figure 6 of Appendix 6.2 of the ES shows assets south-west of Churchgate roundabout).

THE GARDEN TRUST – No comments received.

STANSTED AIRPORT (Aerodrome Safeguarding Authority) – No objection subject to a condition requiring a Bird Hazard Management Plan. *“The proposed development has been examined from an aerodrome safeguarding perspective and could conflict with safeguarding criteria unless any planning permission granted is subject to the condition detailed below”*

Comment: An appropriate condition is included in the recommendation below.

ESSEX WILDLIFE TRUST – No comment received.

CPRE – No comment received.

LEAD LOCAL FLOOD AUTHORITY – No objection subject to conditions relating to a detailed surface water drainage strategy.

HIGHWAY AUTHORITY – No objection.

HIGHWAY AUTHORITY (Public Rights of Way) – No objection  
Suggestions provided regarding location of pedestrian crossing points across Gilden Way.

Comment: The applicant states (response dated 27/04/2017) they will investigate this at detailed design stage.

COUNTY COUNCIL’S NOISE CONSULTANT – No objection.

COUNTY COUNCIL’S AIR QUALITY CONSULTANT – No objection

COUNTY COUNCIL’S LIGHTING CONSULTANT – No objection

PLACE SERVICES (Ecology) – No objection, subject to conditions.

PLACE SERVICES (Trees) – No objection - A number of significant trees will be lost to facilitate the development. A suitable number of replacements (suggested ratio of 2 planted for each 1 lost) should be planted as part of the final landscaping scheme.

PLACE SERVICES (Landscape) - Support subject to condition requiring a detailed landscape plan.

PLACE SERVICES (Historic Environment) - Support subject to conditions requiring archaeological evaluation. There is known archaeology along the route of the proposed development, this includes ring-ditches of probable prehistoric date as well as various undated linear features. The potential remains for further as yet unknown archaeological remains to be present.

PLACE SERVICES (Historic Buildings) - No Objection.

MATCHING PARISH COUNCIL – No comments received.

SHEERING PARISH COUNCIL – No comments received.

LOCAL MEMBER - EPPING FOREST – North Weald and Nazeing - Any comments received will be reported

LOCAL MEMBER – HARLOW- Harlow North - Any comments received will be reported

LOCAL MEMBER – HARLOW – West – Supports application *“Like many towns and cities around the country, Harlow has a traffic congestion problem. Although this is recognised and improvements have and are being made, the situation is bound to get worse. The new Enterprise Zone and Public Health England relocating to Harlow, as will the 15,000 new homes to be built in and around the town in the coming 15 or so years, will all add significantly to traffic.*

*It is important that the infrastructure is in place as these developments go ahead and, as such, I support the application for the new J7a as it will ease pressure on J7, providing an additional point of access to the town. It will not, in itself, be the solution to the town’s problems, but needs to be the start of a programme of traffic improvements. These have to include the enhancement of the existing J7 and the creation of a northern bypass, the latter happening before significant development to the north of Harlow.”*

## **5. REPRESENTATIONS**

919 properties were directly notified of the application. Public notices were published in Harlow Star newspaper and Waltham/Epping Forest Guardian newspaper and site notices were erected along the length of Gilden Way and in the vicinity of proposed development.

41 letters of representation have been received from 36 individual households/landowners/organisations, including 1 from Hatfield Heath Parish Council. These relate to planning issues covering the following matters:

<u>Observation</u>	<u>Comment</u>
Location of junction not best option. Traffic modelling not accurate.	See appraisal
Noise & Vibration Impacts	See appraisal
Green Belt impacts	See appraisal
Air Quality and Dust Impacts	See appraisal
Visual Impacts	See appraisal
Concern regarding additional traffic through Hatfield Heath village. Concern that traffic to and from Chelmsford and surrounding towns to the North & East will prefer to use A1060 route rather than more southerly A414. Use of B183 as a cut through for traffic to Stansted Airport through Hatfield Heath, Hatfield Broad Oak and Takeley from Harlow area likely to increase.  A1060 busy through village – no traffic calming proposed.  Need for roundabout at village junction of A1060 and B183.	Traffic modelling has been carried out.
Impact on No. 49 Mulberry Green, Old Police Station (Locally Listed Building, in use as private residence)	Appendix 6.6 of the ES describes the asset value, impact and proposed mitigation. The proposed noise barrier south and in front of the former police station would have an impact on the setting of this asset. The impact has been assessed as Moderate in the ES. Proposed mitigation includes sensitive design of noise barrier.
Impact on Durrington Hall, Sheering Road Lower (Grade II* Listed Building in use as private residence)	Paragraph 6.5.2.2 of the ES concludes there is a minor adverse impact. Also see appraisal.
Impact of proposed scheme on approved Harlowbury Development, land north of Gilden Way.	The applicant's submission dated 19/5/17 responds to the concerns raised by the consortium of developers on lands at Harlowbury.

	<p>The County Planning Authority considers the permitted developments at Harlowbury have been considered in the supporting documentation submitted with the planning application. The impact on the access points has been considered and there is likely to be a requirement for the developers at Harlowbury to amend a s.106 Town and Country Planning Act agreement. The design of the proposed acoustic barriers along Gilden Way/ Harlowbury boundary will be subject to approval under a proposed planning condition.</p>
Impact on lands put forward by Miller Homes for housing allocation. (East Harlow, lands between Gilden Way and M11 motorway)	<p>The applicant's submission dated 2/6/17 responds to the concerns raised by Miller Homes.</p> <p>In summary the County Planning Authority considers that, as the proposed housing allocations are not yet adopted policy and, having regard to the early stage of preparation of the emerging Epping Forest Local Plan, this is not a material planning consideration for the proposed scheme at this stage.</p>
Health and safety issue in regards to both access and departure from 122 Sheering Road. Alternative access similar to Campions needed.	<p>An alternative access has not been proposed by the applicant as part of this planning application. A Road Safety Audit was carried out in support of the planning application. The Highway Authority is a statutory consultee and did not raise any road safety objections.</p>

## 6. APPRAISAL

The key issues for consideration are:

- A. Need for the Scheme
- B. Principle of Development in the Green Belt
- C. Traffic Modelling /Highways Impact
- D. Landscape and Visual Impact
- E. Flood Risk
- F. Impact on the Natural Environment
- G. Impact on the Historic Environment
- H. Noise and Vibration Impact
- I. Air Quality and Dust Impact
- J. Human Rights and Equality issues.

### A NEED FOR THE SCHEME

Harlow, Epping Forest district and the M11 are located within the London Stansted Cambridge Corridor (LSCC) Core Area for economic development. Harlow town centre has been identified as an area for regeneration, with Local Enterprise Zones already designated for employment growth.

Harlow is recognised in the emerging district local plans as an ideal area for growth, being close to the M11 and M25, on the West Anglia mainline railway and close to Stansted Airport. Access to central Harlow is, however, somewhat restricted with only one link to the strategic road network (via Junction 7 of the M11) and two railway stations located on the northern edge of the town. The primary means of road access to the town, the A414, also serves as an important through route from Junction 7 of the M11 to the south-east of Harlow towards the A10 in Hertfordshire to the north-west.

With high levels of traffic using this one route, congestion is common with its impacts often felt across the town's wider road network. A significant intervention is required to address the challenges of capacity, alongside road improvements.

An initial study was under taken by Highways England<sup>1</sup> and their report concludes that *'Capacity problems currently occur at M11 Junction 7 at Harlow. Significant levels of growth are planned around Harlow, including the Enterprise Zone (Enterprise Essex West) and to the north of the town, with sustained calls from local authorities for a new Junction 7A with links to development and to A414 to improve east-west linkages across Hertfordshire'*.

In order to facilitate and support the planned growth highlighted above it is essential to improve access to the M11 and improve the transport flows in and around Harlow.

The proposed scheme, to create an additional junction onto the M11 between Junctions 7 and 8, is designed to relieve some of the congestion at Junction 7 and to improve traffic flows in and around Harlow by providing an alternative route to the north-east of the town. It is important to note that this proposal is part of a wider transport improvement plan for Harlow. The planned improved capacity at Junction 7 remains essential, along with junction improvements and increased capacity along the A414 corridor.

In the absence of the M11 Junction 7A scheme, future traffic congestion on the existing M11 Junction 7 is expected to worsen. The applicant has carried out traffic modelling to predict traffic levels with and without the scheme.

Both the Harlow and East Hertfordshire Local Plan are reliant on Junction 7a as part of the necessary infrastructure to deliver their development proposals.

In the foreword to Harlow Council's 2014 'Harlow Local Development Plan: Emerging Strategy and Further Options' document, it states that Harlow *'experiences a number of complex socio-economic and environmental issues; the town centre needs to be rejuvenated, the mix of housing needs to be broadened and the town's infrastructure needs upgrading. In particular Harlow needs a new*

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<sup>1</sup> London to Leeds (East) route-based strategy evidence report, Highways Agency, April 2014, Table 4.1

*junction on the M11 to alleviate congestion and to accommodate future growth in housing and employment'. With regard to infrastructure needs, Paragraph 2.17 further states that 'evidence shows that junction 7 on the M11 is operating close to its planned capacity and that any significant growth (housing and/or employment) in the Harlow area will cause the junction to exceed this capacity. Therefore, a new junction on the M11 (Junction 7a) is required to deliver growth in and around the town'. Paragraph 2.25 highlights that 'the Council, in partnership with Essex County Council and the Local Enterprise Partnership, is promoting a new junction on the M11 (J7a). Without this part of the Enterprise Zone development and substantial additional growth (housing and commercial) to meet the needs of the community cannot be delivered'. The Plan Period is 2011 to 2031.*

The emerging plans of the surrounding districts also support the need for Junction 7A to support the growth and regeneration of Harlow. The EFDC emerging local plan contains several specific references to the need for a new junction, including Paragraph 3.90, which specifically states that *'the delivery of the strategic sites around Harlow is dependent on the construction of key infrastructure, including improvements to Junction 7 and a new motorway junction (Junction 7A) to the north of existing junction 7 of the M11'*. The emerging East Herts local plan policy DPS4 Infrastructure Requirements states *'The following strategic infrastructure will be required to support the development identified in East Herts and the wider housing market area:(a) a new Junction 7a on the M11...'*. The Plan Period is 2011 to 2033.

#### Scheme Development and Alternatives

To meet the objectives of the Proposed Scheme and to minimise any environmental impacts, the scheme development went through a series of design iterations to reach the current option for the planning application.

An Options Assessment Report (Jacobs, 2016) sets out the history of options developed and the selection of the Proposed Scheme, including details of six strategic options considered to fulfil some or all of the scheme objectives. Through option evaluation, Option 1 (M11 Junction 7A) ranked the highest (best option) and was taken forward to the next stage of design development.

In conclusion, it is considered that the need for the proposed infrastructure to support wider economic growth in the area has been demonstrated.

The issues around the need for the route to be located in the Green Belt are addressed in Section B.

## **B PRINCIPLE OF DEVELOPMENT IN THE GREEN BELT**

The site of the proposed development is located partly within the Green Belt. The proposed new motorway junction 7a and the associated link road lie within Epping Forest District and would be within the Green Belt as defined in Policy GB1 of the Epping Forest District Local Plan and accompanying Proposals Map.

The elements of the scheme within Harlow District are not in the Green Belt.

It is a core planning principle of the NPPF to protect the Green Belt (paragraphs



79-92 reproduced at Appendix C).

As per paragraph 87 *“inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances.”*

However, the proposed new motorway junction and link road, is considered to fall under *‘engineering operations’* and *‘local transport infrastructure which can demonstrate a requirement for a Green Belt location’* and therefore having regard to paragraph 90 of the NPPF is *“not inappropriate in Green Belt provided they preserve the openness of the Green Belt and do not conflict with the purposes of including land in Green Belt.”*

The proposed development is considered to be *‘local transport infrastructure which can demonstrate a requirement for a Green Belt location’* as there is need for the proposed development in this location. This need is outlined in section A above and as all land between the town of Harlow and the existing M11 motorway is within the Green Belt, it is clear that to make any new connection to the existing motorway network would require development in a Green Belt location.

Accordingly it is necessary to consider the question, whether the proposed development *‘preserves the openness of the Green Belt’*? Having regard to the scale and height of the proposed motorway junction (slip roads extending over a distance of approximately 800m north and 600m south of the junction itself and with heights up to 10m), the screening from existing trees and the proposed landscaping scheme, the proposed structure would be an imposing visual feature in the landscape that would not preserve the openness of the Green Belt.

In considering whether the proposed development conflicts with the *‘purposes of including land in the Green Belt’*, it is necessary to consider paragraph 80 of the NPPF which lists the 5 purposes of including land in the Green Belt as follows:-

- *to check the unrestricted sprawl of large built-up areas*
- *to prevent neighbouring towns merging into one another*
- *to assist in safeguarding the countryside from encroachment*
- *to preserve the setting and special character of historic towns*
- *to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.*

Having regard to the nature, scale and location of the proposed motorway junction it is considered that the proposed development would conflict with the purpose of including land in Green Belt as it would not assist in *“safeguarding the countryside from encroachment”*.

The proposed development has been assessed under paragraph 90 of the NPPF and it is considered that although the development may be classed as *‘operational development’* and *‘local transport infrastructure which can demonstrate a requirement for a Green Belt location’*, it does not meet the tests to *“preserve the openness of the Green Belt and do not conflict with the purposes of including land in Green Belt.”*

Therefore the proposed development is *“inappropriate development”* and having

regard to paragraph 87 *“inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances.”*

As per paragraph 88 *“When considering any planning application, local planning authorities should ensure that substantial weight is given to any harm to the Green Belt. ‘Very special circumstances’ will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations.”*

Therefore it is necessary to consider if ‘very special circumstances’ exist to justify a departure against Green Belt policy.

In considering ‘very special circumstances’ the applicant has put forward the need for the development which is outlined Section A above. In addition, there is a Green Belt boundary review in the emerging Epping Forest Local Plan which would result in the land being outside the green belt. It is considered that taken together, the need for the development at this location in addition to the emerging green belt review, amount to ‘very special circumstances’.

However as per paragraph 88 of the NPPF, *‘Very special circumstances’ will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations.”*

Any other harm is considered in further sections of the assessment below.

## C TRAFFIC MODELLING/ HIGHWAYS IMPACT

Traffic modelling was carried out in support of the planning application. The Planning Statement submitted in support of the application states *“The core medium scenario figures have been utilised; these represent the most likely growth scenario for the area around the M11 corridor at the time that the modelling was undertaken. This encompasses projected housing and employment developments from the emerging district Local Plans, planned growth at Stansted Airport, planned infrastructure schemes in the modelled area and background growth as predicted by TEMPro5. Two future years have been assessed; 2021, representing the opening year of the M11 Junction 7A and 2036, representing the horizon year 15 years after the proposed scheme would be due to open. The model includes a variable demand component, which forecasts likely changes in travel behaviour due to congestion. Such changes include changes in numbers of car trips in the peak hour and changes in destinations of these trips. The traffic figures for the link roads at scheme opening and in the mid-long term are predicted to be as shown in Table 1.1 below.”*

Table 1.1: Predicted traffic flows (AADT24) to and from proposed M11 Junction 7A 2021 and 2036

J7a Link Road					
Visum Link ID	Direction	2021		2036	
		Flow (no. of vehicles per day)	%HDV	Flow (no. of vehicles per day)	%HDV
570412937	EB	11961	2.2%	16668	2.0%
570412936	WB	16704	2.1%	20638	2.0%
	Total	28665	2.1%	37305	2.0%

Key EB/WB – east bound/west bound HDV - ???

A Stage 1 Road Safety Audit of the proposals has been submitted as part of the planning application.

The Highway Authority comments as following on the proposed scheme;

*“The Highway Authority is satisfied that the proposal is not contrary to national/local policy and is compliant with appropriate design/safety criteria. The proposed access to the strategic road network (M11) is needed to address existing congestion issues and to support the sustainable growth of Harlow, West Essex and East Herts as set out in the adopted and emerging local plans for the area. The principal objectives of the scheme are:*

- *To improve accessibility to and from Harlow;*
- *To reduce congestion primarily for the A414 corridor;*
- *To ensure the proposed infrastructure is of the appropriate scale for the future traffic demands of the stated growth; and*
- *To facilitate future housing developments around Harlow and employment growth to the east of Harlow.*

*Consequently the Highway Authority is satisfied that this additional infrastructure is needed to support the current and planned growth in and around Harlow.*

*The Highway Authority would not wish to raise any objections to this proposal as it is not contrary to the Highway Authority’s Development Management Policies, adopted as County Council Supplementary Guidance in February 2011.”*

Highways England is a statutory consultee on this planning application and it does not object to the proposed scheme.

In conclusion, it is considered that the proposed development is in accordance with policies ST7(ii) & (iii) of the adopted EPDC Local Plan (New Roads and Extensions or Improvements to Existing Roads) and policies L13 and T6 of the adopted HDC Local Plan (Cycling and Walking; Public Rights of Way).

## D LANDSCAPE AND VISUAL IMPACT

A Landscape and Visual Impact Assessment (LVIA) has been undertaken as part of the EIA and submitted in support of the planning application.

It is a means of identifying probable changes to landscape and views resulting from the proposed development, and assessing the scale and significance of those changes. The findings are set out within the Landscape and Visual chapter of the ES.

The LVIA includes an evaluation of the effects of the construction of the M11 Junction 7A scheme and the effects of the scheme once in operation, both initially and 15 years after its opening, by when the proposed new planting will be well-established.

The LVIA includes an assessment of the effect on the townscape of the Harlow local character areas as a result of Phase 1 of the M11 Junction 7A scheme, particularly from vegetation losses and the visual severance effect of the road widening and noise barriers. Mitigation is proposed in the form of replacement hedge/tree planting, amenity planting and the addition of hedges and climbing plants to noise barriers to soften their appearance.

The LVIA also assesses the effect on the landscape character in the rural Princey Brook valley due to encroachment of urban features, particularly roads, roundabouts, lighting and traffic, into the area during Phase 2 of the scheme. Mitigation is proposed in the form of earth mounding to provide some screening, extensive screen planting with woodland, hedges, scrub, and the planting of many individual trees.

The realignment of unnamed watercourse 1 (a small stream that emerges from the north side of The Mores Wood) required as part of the M11 Junction 7A scheme would, despite the need to include culverts under the new link roads, result in a net landscape improvement for the stream. The course of the unnamed watercourse 1 would be improved from 204m of open channel to a total of 374m of open channel; there would remain 74m of culverted channel split into two sections. The landscape setting of the stream would be improved over 134 m (net). The effects on landform of the earthworks required for the M11 Junction 7A scheme are included within the LVIA. Although the landscape planting proposed as mitigation would soften and disguise the embankments and cuttings, a moderate adverse residual effect is found to result.

The LVIA finds a slight adverse residual effect on tranquillity results from the M11 Junction 7A scheme following mitigation in the form of extensive screen planting. Visual effects on assessed receptors – views from residential properties, from commercial properties, for all road users in high wheelbase cars, vans, lorries or buses on a stretch of Sheering Road north of Princey Brook (the only road categorised as scenic, which currently has attractive views of the Princey Brook valley over the roadside hedge), users of public rights of way, and users of playing fields – formed a key part of the LVIA. Mitigation is proposed in the form of the reinstatement of roadside hedges and the addition of other screen planting. Visual effects are forecast for Year 1 (at completion of construction) and for Year 15, the latter being the residual effect once the proposed planting has become more established although the full benefit of the trees will not be seen until a long time after this. A detailed assessment is shown in the Schedule of Visual Effects, which is appended to the Landscape and Visual chapter of the ES.

In addition, visual effects for many receptors are expected to be more significant during construction, as detailed in the Schedule of Visual Effects; however, construction effects are temporary in nature. Negative visual effects for the majority of receptors decreases over time as planting become more established.

The Council's Landscape Consultant and Arboricultural Consultant have assessed the proposed planning application and have no objection to the proposed scheme subject to conditions requiring replacement trees planting and a detailed landscaping plan to be conditioned.

Local EFDC and HC planning policy seeks to retain valuable trees and hedgerows, particularly trees or woodland protected by TPOs, and encourages beneficial tree and woodland planting

EFDC Policy LL7 seeks to *'(i) promote tree and woodland planting where it is considered that this will lead to significant amenity benefit; (ii) ... protect trees and woodland of amenity value; and (iii) promote good standards of tree care and woodland management'*.

EFDC Policy LL8 states that the Council will give consent for works to a tree or woodland protected by a tree preservation order *'provided it is satisfied that: (i) the health and appearance of the tree will not be impaired; and (ii) the works will not unjustifiably inhibit or prevent the full and natural development of the tree; or (iii) the works are necessary to its continued retention and consistent with good arboricultural practice; or (iv) in the case of a woodland, the proposed works are consistent with the principles of sound woodland management'*.

EFDC Policy LL9 states that *'The Council will not give consent to fell a tree or woodland protected by a tree preservation order unless it is satisfied that this is necessary and justified. Other than for woodland any such consent will be conditional upon appropriate replacement of the tree'*.

Although there are no TPO protected trees located within Harlow district that are affected by the scheme, HC Policy NE11 remains of relevance in relation to non-TPO trees and hedgerows within the district. It requires the production of a tree and hedgerow survey, and seeks to *'oppose the loss of trees and hedgerows of amenity value and wildlife importance' and 'the retention or replacement of trees and hedgerows of amenity value or wildlife importance, and their protection during construction'*.

Local and national planning policy seeks to protect visual amenity and conserve and enhance landscapes and townscapes.

Local EFDC Policy DBE9 seeks to prevent negative visual impacts, and thus a loss of amenity, to properties neighbouring new development.

EFDC Policy CP2 seeks to protect the quality of the rural and built environment by: *'...sustaining and enhancing the rural environment, including conserving countryside character, in particular its landscape, wildlife and heritage qualities, and protecting countryside for its own sake ...'*

EFDC Policy LL1, regarding the rural landscape, seeks to *‘(i) conserve and enhance the character and appearance of the countryside; and (ii) encourage the considerate use and enjoyment of the countryside by the public’*. It highlights that *‘Subject to specific circumstances, particular attention will be paid to: (a) the needs of agriculture, woodland planting and management, and other habitat and wildlife conservation; (b) the provision of facilities for public access and informal recreation and to enable quiet enjoyment; (c) the protection of historic features and their settings; and (d) the achievement and conservation of visually attractive landscapes’*.

EFDC Policy LL2 seeks to prevent inappropriate development in the countryside; it states that planning permission will not be granted for development in the countryside *‘unless it is satisfied that the proposal will:*

- (i) respect the character of the landscape; and/or*
- (ii) enhance the appearance of the landscape; and*
- (iii) where appropriate, involve the management of part or all of the remainder of the site to enhance its contribution to the landscape’*.

EFDC Policy LL10 states that *‘The Council will refuse to grant planning permission for any development which it considers makes inadequate provision for the retention of: (i) trees; or (ii) natural features, particularly wildlife habitats such as woodlands, hedgerows, ponds and watercourses; or (iii) man-made features of historical, archaeological or landscape significance’*.

EPDC Policy LL11 states that *‘The Council will: (i) refuse planning permission for any development which makes inadequate provision for landscaping; (ii) not approve landscaping schemes which: (a) are inappropriate because they fail to take account of the setting or intended use of the development; or (b) are ineffective because they would be unlikely to retain trees and other existing landscape features or to establish new long-term planting’*.

EFDC Policy LL13 is of particular relevance as it relates specifically to highway and motorway schemes. The policy states that *‘The Council will oppose any new, improved or altered highway or motorway proposal unless the associated landscaping scheme (including earth-mounding and planting) will:*

- (i) use appropriate species;*
- (ii) make effective visual screens;*
- (iii) create effective sound barriers; and*
- (iv) adequately replace trees, hedgerows and woodlands which will be lost to the development.*

*The Council will seek to ensure that, where feasible, appropriate landscaping will be undertaken prior to the commencement of construction works’*.

EFDC Policy ST7 regarding road schemes highlights that the Council such schemes to satisfy a range of criteria including: *‘minimal environmental impact on sensitive areas (including open countryside and its management, sites of wildlife and built heritage interest, and residential areas) with adequate compensatory measures in those cases where environmental losses are unavoidable’ and ‘retention of a defensible green boundary and minimal loss of Green Belt land’*.

In conclusion, it is considered the proposed development, in particular the

construction of the new motorway junction, dumbbell roundabouts, slips roads and associated link roads would be highly visible in the landscape and would result in a loss of existing trees and landscape features. The applicant is proposing extensive planting and, subject to the implementation of the landscape mitigation measures proposed, the negative effects would lessen over time as the proposed landscaping becomes established. It is considered the need for the development as outlined in section A above would outweigh the negative impacts on the landscape and visual amenity and subject to the landscape mitigation measures proposed, the development would be acceptable having regard to policies LL7, LL8, LL9, LL1, LL2, LL10, LL11, LL13, ST7, DBE9 of the EFDC Local Plan and policy NE11 of the Harlow Local Plan and the NPPF.

## E FLOOD RISK

The majority of the site is located within Flood Zone 1, low flood risk, as per the Environment Agency mapping, where the land is assessed as having a less than 1 in 1,000 annual probability of river or sea flooding (<0.1%). Small areas of the site in proximity to the Princey Brook and the Harlowbury Brook are in Flood Zones 2 (medium probability) and 3 (high probability). Where the B183 crosses the Harlowbury Brook, the road at Gilden Way is shown to be within the flood plain.

Paragraph 103 of the NPPF states *“When determining planning applications, local planning authorities should ensure flood risk is not increased elsewhere and only consider development appropriate in areas at risk of flooding where, informed by a site-specific flood risk assessment following the Sequential Test, and if required the Exception Test, it can be demonstrated that:*

- within the site, the most vulnerable development is located in areas of lowest flood risk unless there are overriding reasons to prefer a different location; and*
- development is appropriately flood resilient and resistant, including safe access and escape routes where required, and that any residual risk can be safely managed, including by emergency planning; and it gives priority to the use of sustainable drainage systems.”*

A site specific Flood Risk Assessment (FRA) has been submitted in support of the planning application.

The site-specific FRA considers flood risk to the scheme from all sources – including the sea, fluvial (main rivers and ordinary watercourses), surface water, groundwater, and artificial drainage systems and infrastructure failure (reservoirs, canals and sewerage). The FRA also evaluates the impact of the scheme on flooding elsewhere.

The majority of the site is located within Flood Zone 1, however the parts within Flood Zone 2 and Zone 3a are subject to a sequential test.

Section 3.3 of the FRA considers the sequential test. The overall aim of the sequential test is to steer new development to areas with the lowest probability of flooding. The report states *“Several variations have been considered for the proposed route. Numerous factors, including flood risk have been taken into account in reaching a preferred location for the various elements of the scheme.*



*The development of this linear road infrastructure is almost entirely located within areas of low flood risk and could not be achieved without crossing the watercourses in the area. Therefore the Sequential Test is deemed to be passed'.*

The FRA highlights that the M11 Junction 7A road scheme would be classed as 'essential transport infrastructure' under the PPG Flood Risk Vulnerability Classification, which falls within the 'Essential Infrastructure' category. Essential Infrastructure is deemed appropriate within Flood Zones 1 and 2; however, an Exception Test is required in relation to such development within Flood Zone 3.

Paragraph 102 of the NPPF states that for the Exception Test to be passed:

- *'it must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk, informed by a Strategic Flood Risk Assessment where one has been prepared'; and*
- *'a site-specific flood risk assessment must demonstrate that the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall'.*

It is considered that the proposed scheme would provide wider sustainability benefits to the community, principally to provide an improved access to the M11 to facilitate economic development and regeneration in Harlow, able to accommodate the predicted growth in traffic resulting from the existing permitted development schemes and allocated growth in the adopted and emerging local plans for Harlow and East Hertfordshire Districts. Without appropriate infrastructure, delivery of these local development proposals would be far less assured.

A number of mitigation measures are proposed including:

- a road drainage system that restricts run-off from the scheme;
- ensuring that the new culverts through the link roads for the unnamed watercourse from The Mores will be of a sufficiently large cross-sectional area to accommodate high flows and minimise the likelihood of blockage; and
- the provision of attenuation ponds and tanks to prevent contamination of the underlying aquifers and ground water emergence and to control the level of discharge entering the watercourses.

The FRA concludes that, with the inclusion of the mitigation measures proposed, the M11 Junction 7A scheme will not be at risk from flooding from any source and will not impact on flood risk elsewhere throughout the lifetime of the scheme.

Therefore it is considered that the proposed development meets the requirements of the exception test for development in Flood Zones 2/3 in accordance with the NPPF paragraph 103.

The Local Lead Flood Authority has assessed the proposed surface water drainage strategy and has no objection to the proposed development subject to a condition requiring the detailed design to be agreed.

Subject to conditions and to verification of the fluvial modelling, the Environment Agency does not raise an objection to the proposed scheme. An update will be

provided at the Committee meeting.

In conclusion, it has been demonstrated that subject to the mitigation measures proposed, the proposed development will not be at risk from flooding from any source and will not impact on flood risk elsewhere throughout the lifetime of the scheme. The development would meet the challenge of flood risk in accordance with policies U2A, U2B, U3A and U3B of the EFDLP and policies CP12 of the HDC Local Plan and the NPPF.

## F IMPACT ON NATURAL ENVIRONMENT

It is a core planning principle of the NPPF to *“contribute to conserving and enhancing the natural environment and reducing pollution.”*

A Phase 1 Habitat Survey and breeding birds survey, bat, dormouse, riparian mammal, great crested newt, reptiles and badger surveys have been submitted in support of the planning application.

There are no SAC's designated for bats within 30km of the proposed scheme and there are no European protected sites (SAC's, SPA's or RAMSAR sites), NNR's, LNR'S or SSSI's within 2km of the proposed scheme.

There are six Local Wildlife Sites (LWSs) within 1km of the Proposed Scheme; of particular relevance are Gilden Way Meadow LWS and Gilden Way Roundabout Protected Wildlife Verge (PWV), both located within Harlow district and are discussed further below.

### Protected Habitats

Gilden Way Roundabout PWV (Local BAP Habitat – Lowland Meadow (semi-improved grassland))

Churchgate Roundabout in Harlow district is designated at a Local level as Gilden Way Roundabout Protected Wildlife Verge (PWV), listed in HDC Policy NE19 as NE19/6. The botanical survey of the Gilden Way Roundabout PWV recorded the presence of betony, a locally rare (Essex Red List) plant, in an otherwise unremarkable grassland/scrub mosaic. The report assessed the habitat against the LWS criteria (in the absence of any criteria for PWVs) and determined that it was not worthy of designation, although it was noted that to reverse the decline of betony at the local level, all populations should be protected.

It is proposed that the entire Gilden Way Roundabout PWV would be removed permanently during the construction phase of the scheme as it is unavoidable to achieve the works to upgrade the Churchgate roundabout. As mitigation, when complete, the south-facing embankments of the new link roads, located close to the M11 and within Epping Forest district, would be seeded/planted using the material collected from Gilden Way Roundabout PWV and specialist seed-mixes, to create approximately 3.5ha of species-rich grassland. As a result of the timing lag between the loss of the PWV and establishment of the new species-rich grassland, there would likely be a short term reduction in the area of semi-improved grassland and flowering betony. However, in the mid-long term, there would be a net gain for biodiversity as a larger area of more diverse grassland habitat became established and the local population and distribution of betony

would increase. The Gilden Way Roundabout PWV has been assessed as having local value and would be permanently lost and, therefore, there would be a slight negative effect. However, on balance, the M11 Junction 7A scheme would deliver an increase in the area of species-rich grassland, the benefits of which are considered to outweigh the loss of the small area of semi-improved grassland habitat within the PWV.

The Harlow Adopted Local Plan contains several policies of relevance. HC Policy SC3 seeks to prevent the loss of protected habitats. Policy NE15 seeks to prevent development *‘that would harm habitats or other features of the landscape identified as priorities in the UK, or the Local Biodiversity Action Plan, or are of significant importance for wildlife, unless it can be demonstrated that the reason for the proposal outweighs the need to protect the habitat or feature’*. Policy NE19 regarding Protected Wildlife Verges is of particular relevance; it seeks to prevent development *‘that would have an adverse effect, either directly or indirectly, on the ecology of a Protected Wildlife Verge unless it can be demonstrated that the reason for the proposal outweighs the ecological value of the verge’* and requires the provision of appropriate mitigation and/or compensatory measures if permission is granted.

The significant need for the proposed M11 Junction 7A scheme as the reason for the proposal and the changes required to the Churchgate roundabout to enable the successful implementation of the scheme could be argued to outweigh the loss of the limited ecological value of the verge, as highlighted above. In addition, the mitigation proposed would, in the mid-long term, provide greater ecological benefits than the current PWV. The proposals for the Churchgate roundabout are therefore in line with Harlow district policy.

As the proposed mitigation site is located within Epping Forest district, EFDC Policy NC5 is also of relevance. The policy encourages the creation of new habitat, which is a key part of the mitigation for the M11 Junction 7A scheme; the proposals are therefore conditioned to be in line with this policy.

#### Other Local BAP Habitat – Hedgerows and New Ponds

In addition to the locally designated sites discussed above there are other BAP habitats of relevance to the scheme.

New drainage ponds are proposed as part of the scheme. The Nature Conservation chapter of the ES highlights that the construction and planting of the attenuation ponds has the potential to enhance ecological value and would provide a net increase in pond habitat across the proposed scheme.

The hedgerows within the scheme area are considered to fall within the Essex BAP habitat description for Hedgerows. The removal of some existing hedgerow is required to enable the implementation of the scheme. The 446m of hedgerow lost would be replaced by 4411m of new hedgerow, significantly more. All new planting proposed is native species and aims to create species-rich hedgerow.

The features discussed above are located within both Epping Forest and Harlow districts, so the local planning policies of both are of relevance. HC Policies SD3 and NE15 seek to protect habitats identified as priorities in the Local BAP from harm, *‘unless it can be demonstrated that the reason for the proposal outweighs*

*the need to protect the habitat or feature'* (NE15). EFDC Policy ST7 seeks to ensure that new roads schemes have minimal environmental impact on sites of wildlife interest, with adequate compensatory measures where losses are unavoidable. EFDC Policy NC4 seeks to protect and enhance established habitats of local significance for wildlife and EFDC Policy NC5 encourages habitat creation. In addition, Paragraphs 109, 113, 114 and 118 of the NPPF seek to encourage connectivity between green spaces.

It is considered the proposed scheme is in line with relevant local and national planning policy. It seeks to minimise habitat loss to that absolutely necessary to enable the successful implementation of the M11 Junction 7A scheme; on balance the habitat loss is considered acceptable when taking account of the economic development and regeneration benefits of the proposed development. The scheme also provides enhanced mitigation to more than offset the habitat loss. In addition, the significant additional hedgerow proposed should help to enhance connectivity between green spaces.

### The Green Wedge

Within Harlow district, some areas of land are designated through policies NE1 and NE2 as Green Wedge, partly for habitat preservation and biodiversity purposes; this includes an area of land which borders and includes Gilden Way from the London Road roundabout to the rear of residential gardens bordering Mulberry Green. The proposed works to Gilden Way as part of the M11 Junction 7A scheme are proposed to be undertaken within the highway boundary and would not impact upon vegetation on surrounding land within the Green Wedge. The road widening required for the M11 Junction 7A scheme will, however, necessitate the installation of acoustic barriers in some areas and the removal of some trees and hedgerows on highway land within the Green Wedge.

Replacement planting is proposed, where space allows. Vegetation removal, fencing and new planting are shown on the Landscape Mitigation and Landscape Section drawings that accompany the ES (ES Figures 7-3 and 7-4).

The aims of the Green Wedge designation (HC Policy NE1) with regard to nature conservation are *'preserving sites of ecological value and maximising potential for biodiversity in Harlow'*. The existing Gilden Way already forms a barrier to north-south movement for some wildlife. The removal of trees and landscape features in the green wedge would not be in accordance with policy NE1 *"Green Wedges will be protected from inappropriate development. Permission will not be granted, except for small scale development proposals and the replacement of existing buildings which do not have an adverse effect on the roles of the Green Wedges which are identified below"* however the impact would be mitigated by replacement planting and, having regard to the identified need for the road widening at this location, the losses entailed in the scheme proposals are not considered to be significant and the need for the scheme is considered to outweigh the impacts.

### Protected Species

Impacts upon relevant species are evaluated within the Nature Conservation chapter of the ES, supported by a range of species-specific surveys. Potential impacts were noted upon breeding birds, bats, otters, great crested newts, badgers and reptiles; these result from a range of issues including construction activities, habitat loss or fragmentation (including in relation to foraging and commuting), increased night-time light levels, increased noise and increased traffic

collision risk. A range of mitigation measures are proposed for both the construction and operational phases to minimise such impacts upon these species, including careful timing and implementation of construction activities including vegetation removal, high quality landscaping, multi-species underpasses / culverts, hop-over fencing, acoustic fencing, a reduced speed limit and sensitively designed street lighting.

Local and national policy seeks to protect and enhance habitats utilised by protected species. EFDLP Policy NC4 seeks to protect and enhance established habitats of local significance for wildlife, particularly when protected species are likely to be affected. EFDLP Policy RP5A seeks to prevent development *‘where it could cause excessive noise, vibration, or air, ground water or light pollution for ... protected wildlife species and habitats’*. HC Policy SD3 seeks to prevent the loss of protected species. HDC Policy NE20 requires applications that are likely to affect protected or other rare species to be accompanied by surveys assessing the impact and seeks to prevent development that will have an adverse effect on protected species *‘unless it can be demonstrated that the reason for the proposal outweighs the need to safeguard the specie(s)’*. In addition, Paragraphs 109, 113, 114 and 118 of the NPPF seek to encourage connectivity between green spaces.

Natural England and the Council’s Ecologist have assessed the planning application and do not object to the proposed scheme.

In conclusion, the proposed development would result in a permanent loss of the protected wildlife verge at Gilden Way roundabout and would result in the loss of some of the designated green wedge along Gilden Way. The proposals seek to minimise habitat loss and thus effects on associated species to those absolutely necessary to enable the implementation of the scheme; on balance the limited impact upon protected species and habitats is considered acceptable when taking account of the considerable regeneration benefits of the Junction 7A proposals.

The proposal would be contrary to policy NE1, as it would adversely impact on the green wedge, however the impact would be mitigated by replacement landscaping and the need for the development is considered to outweigh the minor impacts. Subject to the proposed mitigation measures the development would be acceptable having regard to policies NC1, NC3, of the EFDLP and policies NE15, NE17, NE18 and NE19 of the HDC Local Plan and the NPPF.

## G IMPACT ON THE HISTORIC ENVIRONMENT

It is a core planning principle of the NPPF to *“conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of this and future generations”*

A Heritage Statement and Built Heritage Assessment are submitted in support of the Planning Application and Chapter 6 (Cultural Heritage) of the ES considers impacts on the historic environment (archaeology, historic buildings and historic landscape).

The applicant has considered the impact of the proposed development on heritage assets within a 200 metre study area of the proposed scheme. A total of 82

heritage assets have been identified within the study area, with an additional nine assets located outside the study area also considered due to potential indirect impacts from the proposed scheme.

The predicted effects during construction and operation are set out in Appendix 6.6 of the ES.

### Historic Buildings and Conservation Areas

Section 66 (1) of the Listed Buildings and Conservation Areas Act 1990 (LBA) states, inter-alia that; in considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. The NPPF states in paragraphs 128 to 134 that heritage assets are an irreplaceable (and therefore finite) resource and should be conserved in a manner appropriate to their significance and notes that any harm or loss should require clear and convincing justification. It requires applicants to describe the significance of heritage assets including any contribution made by their setting.

The NPPF defines the “Setting of a heritage asset” as “The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.”

The NPPF defines “Significance (for heritage policy)” as “The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset’s physical presence, but also from its setting.”

The NPPF states at:

- Para 129. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset)...
- Para 132 When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset’s conservation. The more important the asset, the greater the weight should be. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. As heritage assets are irreplaceable, any harm or loss should require clear and convincing justification. Substantial harm to or loss of a grade II listed building, park or garden should be exceptional...
- 133. Where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits

that outweigh that harm or loss...

- 134. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be
- weighed against the public benefits of the proposal, including securing its optimum viable use.

Case law has clarified how development affecting the setting of a listed building should be considered. The Courts have confirmed that, even where the harm to significance is found to be less than substantial, a decision maker who follows the balancing approach recommended in para 134 of the NPPF must, when performing that balance, give “*considerable importance and weight*” to any harm to the setting of a listed building and to the desirability of preserving that setting without harm and start with a “*strong presumption*” that harm to the setting of a listed building should lead to a refusal of planning permission. Whilst the Courts will look at the substance of what is decided, rather than require the decision maker to recite a particular form of words to show he has met his statutory obligations, the Courts will look critically at decisions which seem to show no signs of reflecting the statutory requirement in S.66(1) LBA 1990.

EFDLP policy HC12 provides that planning permission will not be granted for development which could adversely affect the setting of a listed building.

Historic England comment as follows “*With respect to listed buildings there will be impacts of the proposals upon the setting of Sheering Hall and associated barns. Sheering Hall itself is grade II\* listed. The listing describes it as a pair of hall houses from the late 15th Century/early 16th Century of exceptional interest, being the only Wealden House known in Essex at this date which is jettied on both sides. There also are two associated grade II listed barns, both timber framed, weather boarded and roofed with corrugated plastics at Sheering Hall.*

*We note that the magnitude of the impact of construction upon the setting of these assets has been assessed in the Environmental Statement to be minor adverse with operational effects assessed to be negligible for all three assets.*

*Historic England had previously identified the potential for impacts upon the settings of Aylmers (Farm) grade II\* listed and Barn grade II listed, and Durrington Hall, also grade II\* listed and associated buildings including Domestic Quarters, Coach House and Stable Block as well as Gate Piers, all of which are grade II listed, just to the north of the proposed junction between Sheering Road and the new arm to the proposed motorway junction. Aylmers is a lobby entrance manor house, dating from the early 17th century, and was restored and extended in the 20th century. It is timber framed and plastered with exposed studding, roofed with handmade red clay tiles. Durrington Hall is a country house, dating from the mid-18th century, extended in late 19th century. It is constructed of plastered brickwork (exposed on the North West elevation) with a slate roof.*

*The Environmental Statement concludes that both the construction and operational phases will result in no impact on the setting of Aylmers with minor adverse impacts predicted for both phases on the setting of Durrington Hall.*



*The Environmental Statement has identified that Mayfield Farm, a non-designated building, will be subject to minor adverse impacts during the construction phase of the development whilst Mulberry Green, a locally listed building will be subject to a moderate adverse impact during the operational phase of the development. In both instances, mitigation measures have been proposed."*

The Council's Historic Buildings Consultants comments *"There are no historic buildings which are physically affected by the proposals however there are four groups of listed buildings (Sheering Hall, Alymers, Housham Hall and those within Old Harlow) and an individual listed building (a pump) which will have their settings impacted by the proposed works. Three of the four groups (Sheering Hall, Alymers and Housham Hall) are considered to not be close enough or to have a strong enough existing relationship with where the proposed development is to have their setting significantly detrimentally undermined.*

*The works to upgrade the road are considered to impact the pump and buildings within Old Harlow. However due to the existing presence of the road the proposals are not considered to further significantly undermine their existing setting. The proposals are not considered to significantly detrimentally affect the setting of the surrounding listed buildings provided adequate screening is provided, especially for the raised section of the junction."*

Accordingly, the proposed development is not considered to be in conflict with S66(1) of the LBA or the NPPF.

In conclusion, no historic buildings would be physically affected by the proposed development. There would be less than significant impact on the setting of some listed buildings in the vicinity of the proposed scheme. Having regard to paragraph 134 of the NPPF *"Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal..."*. The PPG describes public benefit as follows:

*Public benefits may follow from many developments and could be anything that delivers economic, social or environmental progress as described in the National Planning Policy Framework ([Paragraph 7](#)). Public benefits should flow from the proposed development. They should be of a nature or scale to be of benefit to the public at large and should not just be a private benefit. However, benefits do not always have to be visible or accessible to the public in order to be genuine public benefits.*

The need for the proposed scheme has been identified in Section A above and on balance the public benefit of the proposed road scheme is considered to outweigh the less than substantial harm to the 23 heritage assets listed in Appendix 6.6 of the Environment Statement.

The development would be in accordance with policies HC6, HC12, HC13A of the EFDLP and policies BE9, BE10, BE11 of the HDC Local Plan and the NPPF.

### Archaeology

Historic England comment *“We have considered the assessment of likely impacts and mitigation strategy for buried archaeological remains which suggest that the scheme will result in harm undesignated heritage assets, but that this can be addressed by phased evaluation and the implementation of a written scheme of archaeological investigation. In addition to the need to protect the scheduled barrow (gaz. site 59), the site of the proposed compound off Gilden Way should be evaluated to establish whether it contains archaeological remains which are contemporary with the bronze age barrow and, if present, these should be excavated.”*

The Councils Archaeologist states *“There is known archaeology along the route of the proposed development, this includes ring-ditches of probable prehistoric date as well as various undated linear features. The potential remains for further as yet unknown archaeological remains to be present”.*

It is considered that subject to a condition requiring archaeological excavation, the development as proposed would be in accordance with policy HC1 of the EFDLP Local Plan and policies BE6, BE12, BE13 and BE14 of the HDC Local Plan and the NPPF.

#### Historic Landscape Character

The ES concluded that there would be ‘negligible’ impact on HLT1 land. Historic England comment as follows *“We note from paragraph 6.4.3.3 that some consideration appears to have been given to the identification of historic landscape types. We note that the Environmental Statement concludes that there will be negligible impact upon the 20th Century Agriculture Historic Landscape Type (HLT1) through the removal of short lengths of hedgerows.”*

## H NOISE AND VIBRATION IMPACT

Paragraph 109 of the NPPF states *‘the planning system should contribute to and enhance the natural and local environment by ... preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of ... noise ... pollution’.*

Paragraph 123 of the NPPF states that planning decisions *‘should aim to:*

- avoid noise from giving rise to significant adverse impacts on health and quality of life as a result of new development;*
- mitigate and reduce to a minimum other adverse impacts on health and quality of life arising from noise from new development, including through the use of conditions...’.*

The NPPF states the focus should be upon ‘unacceptable’ noise levels and ‘adverse impacts on health and quality of life’ associated with noise, in line with the Noise Policy Statement for England (Defra, 2010).

HC Policy BE17 states that *‘planning permission will be granted if ... adequate*

*provision has been made to mitigate the adverse effects of noise likely to be generated or experienced by others'.*

EFDC Policy RP5A states that *'the Council will not grant planning permission for development where it could cause excessive noise [or] vibration ... for neighbouring land uses, protected wildlife species and habitats ... except where it is possible to mitigate the adverse effects by the imposition of appropriate conditions'*. In addition, EFDC Policy DBE9 seeks to prevent loss of amenity through noise to properties neighbouring new development.

The noise and vibration implications of the M11 Junction 7A scheme, both of a temporary nature, associated with construction, and of a permanent nature, associated with the road traffic, have been assessed and the results are detailed in Chapter 11 Noise and Vibration of the Environment Statement.

### Construction

Daytime noise impacts associated with construction are inevitable; however, as a result of their temporary nature, the resultant effect is found by the ES to be adverse but not significant. Limited night-time working is required for the construction of the M11 Junction 7A scheme to minimise disruption to traffic during daytime; this applies to both the Phase 1 and Phase 2 construction works. Although the night-time works would be relatively short (the predicted worst-case noise levels are only expected to last for a limited number of hours) and very transient in nature, there is a risk of sleep disturbance at night. In this respect, a more detailed assessment will therefore be necessary at the detailed design stage to demonstrate the potential noise impact. Such an assessment is also expected to inform the need for implementing a mitigation strategy to minimise construction noise impacts and will form part of the CEMP and is proposed to be subject to a suitable condition.

Noise barriers are proposed to mitigate the operational scheme, as set out below, and are proposed to be erected at the start of the construction process to also assist with mitigating construction noise.

Although adverse, no significant impacts are expected in relation to the vibration associated with the construction of the scheme due to their temporary nature, which is only anticipated to be perceptible for a matter of hours each working day.

### Operational

Impacts from operational noise are also evaluated within the Noise and Vibration chapter of the ES, including potential noise from increased traffic volumes, changes in traffic speeds and from revised road layouts. Without mitigation, adverse noise effects were found to be likely at numerous receptors located in the vicinity of Gilden Way and/or Sheering Road during operation of the scheme post 2021. As a result, noise mitigation measures in the form of acoustic barriers have been proposed. Some landscaping features would also contribute to noise reduction in places.

With mitigation, the majority of receptors in the study area would experience

negligible changes in their noise environment in the long term. Such changes in noise level over the longer term, i.e. less than 3dB, would be imperceptible. Minor to moderate, but significant, negative effects are, however, predicted for a few properties in the short-term, when the initial change in noise levels occurs, due to their proximity to the scheme and/or their height (above two storeys) and thus reduced protection from the acoustic barriers. These impacts are predicted to reduce to negligible to minor in the long-term [date?] as residents become accustomed to the new noise level and as planting matures. The acoustic barriers are predicted to result in short-term beneficial reductions in noise levels for a few properties. With regard to the predicted impact upon the wider area, the scheme is predicted to result in an overall beneficial effect in the short term due to reductions in traffic levels in many places on the surrounding local road network, with a neutral to slightly adverse effect in the long term. When looking across the wider road network, the minor to moderate noise effect on some receptors adjoining Gilden Way is off set by the benefits to receptors created by the diversion of traffic from other less suitable roads on the network, the reduction of congestion across the wider Harlow area, and the increase in capacity on the road network to accommodate the committed and planned growth in housing and employment.

### Acoustic Barrier Proposals

The applicant has proposed mitigation in the form of acoustic barriers at locations north and south of Gilden Way. The height of barrier proposed ranges from 2m – 3m in height in the form of either an acoustic fence or brick wall. The interface with individual properties along the route will need to be considered at detailed design stage and a planning condition is recommended to agree the details prior to installation.

The Council's Noise Consultant has assessed the proposed scheme and does not raise an objection.

In conclusion, the proposed scheme would result in negative environmental noise impacts at some noise receptors, in particular along Gilden Way, during the construction and operational phase. Subject to the mitigation measures proposed during the construction phase and subject to noise mitigation in the form of acoustic barriers, it is considered that the development as proposed would be in accordance with policies BE17 of the HDC Local Plan and Policy RP5A of the EFDLP and the NPPF.

## I AIR QUALITY IMPACT

Paragraph 109 of the NPPF states *“The planning system should contribute to and enhance the natural and local environment by preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of .... air.... pollution...”*

Policy RP5A of the EFDC Local Plan states the Council will not grant planning permission for *“development where it could cause excessive ...air pollution...for neighbouring land uses, protected wildlife species and habitats.....except where it is possible to mitigate the adverse effects by the imposition of appropriate conditions”*

A detailed assessment has been undertaken by the applicant to establish the potential effects of the proposed scheme on local air quality and regional emissions. Both human and ecological receptors were considered, including the effects within the two Air Quality Management Areas (AQMAs) in East Hertfordshire that are within the study area.

The ES submitted in support of the planning application concludes *“During construction of the Proposed Scheme, 71 receptors within 20m of the construction boundary could be susceptible to dust impacts. With appropriate mitigation measures implemented it has been assessed that the construction impact of the Proposed Scheme would not be significant.*

*Once the Proposed Scheme became operational, 126 of the receptors would experience an improvement of an AQO already above objective or the removal of an existing exceedance. Eight receptors located along the M11 and A414 Edinburgh Way would experience a worsening of AQOs already above AQO with small to medium changes.*

*Predicted concentrations of PM10 have been shown to be well below AQO limits (<30 µg/m<sup>3</sup>) with and without the Proposed Scheme.*

*The compliance risk assessment has been predicted as low and the impact on designated sites predicted by ecologists as not likely to be significant.*

*The majority of modelled receptors would receive improvements in annual mean NO<sub>2</sub> concentrations and the overall direction of change would be likely to be negative (i.e. an improvement). Based on IAN 174/13 guidance, the overall impact of the Proposed Scheme would not be significant.”*

The Council's Air Quality consultant has assessed the proposal and does not raise an objection to the proposed scheme.

In conclusion, it is considered that the proposed development would not result in an unacceptable risk on air quality and subject to the mitigation measures proposed during the construction phase (Appendix 5.5 of the ES), the proposed development would be in accordance with the NPPF and Policy RP5A of the adopted EPDC Local Plan.

## 7. HUMAN RIGHTS AND EQUALITY ISSUES

### Human Rights Act 1998 Issues

The determination of this application is considered to involve the following human rights issues:-

Article 8: Right to respect for private and family life.

- i) Everyone has the right to respect for his/her private and family life, his/her home and his/her correspondence.
- ii) There shall be no interference by a public authority with the exercise of this right except such as in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well being of the country, for the prevention of disorder or crime, for the protection of

health or morals, or for the protection of the rights and freedom of others.

And, The First Protocol

Every natural or legal person is entitled to the peaceful enjoyment of his/her possessions. No one shall be deprived of his possessions except in the public interests and subject to the conditions provided for by law and by the general principles of international law. The preceding provisions shall not, however, in any way impair the right of a State to enforce such laws as it deems necessary to control the use of property in accordance with the general interest or to secure the payment of taxes or other contributions or penalties.

This report considers in detail the competing rights and interests involved in the application. Having had regard to those matters in the light of the Convention rights referred to above, it is considered that the recommendation is in accordance with the law, proportionate and both necessary to protect the rights and freedoms of others and in the public interest.

The Public Sector Equality Duty applies to the Council when it makes decisions. The duty requires us to have regard to the need to:

- (a) Eliminate unlawful discrimination, harassment and victimisation and other behaviour prohibited by the Act. In summary, the Act makes discrimination etc on the grounds of a protected characteristic unlawful
- (b) Advance equality of opportunity between people who share a protected characteristic and those who do not.
- (c) Foster good relations between people who share a protected characteristic and those who do not including tackling prejudice and promoting understanding.

The protected characteristics are age, disability, gender reassignment, pregnancy and maternity, marriage and civil partnership, race, religion or belief, gender, and sexual orientation. The Act states that 'marriage and civil partnership' is not a relevant protected characteristic for (b) or (c) although it is relevant for (a).

There is no indication that equality impact issues arise or that the proposals in this report will have a disproportionately adverse impact on any people with a particular characteristic. It is noted that the proposals include provision for retaining access to private residences, public footpaths and footways and cycle routes.

## **8. CONCLUSION**

There is a demonstrated need for the proposed scheme to alleviate current and projected traffic demand in the area and to support the future economic growth of Harlow town and surrounding area.

The proposed development is located mainly within Flood Zone 1 and partly within Flood Zone 2/3. Having regard to the sequential and exceptions tests, it is considered the proposed development has been suitably located to minimise flood risk and would not result in flood risk elsewhere.

The proposed development would result in the loss of existing trees and landscaping and significant changes in the rural landscape. Subject to landscape mitigation, including replacement planting, the visual impact would lessen over

time.

It is considered the 'less than substantial harm' to the setting of 23 listed buildings would be outweighed by the public benefit of the proposed road scheme.

The proposed development would result in negative environmental noise impacts at some noise receptors, in particular along Gilden Way. Subject to the mitigation measures proposed during the construction phase and subject to noise mitigation in the form of acoustic barriers, the proposed development is considered acceptable.

A comprehensive Environmental Impact assessment has been presented and sufficient mitigation measures are included within the proposal to address the identified environmental impacts.

Although the development of the proposed motorway junction is proposed within the metropolitan Green Belt, it is considered that 'very special circumstances' do exist such that the potential harm to the Green Belt by reason of inappropriateness, and any other harm (loss of trees, visual impact, lighting), is clearly outweighed by the need for the road scheme and wider public benefits taking account of the proposal to amend the green belt boundary in the emerging local plan. The principle of this development within the Green Belt is considered acceptable having regard to the NPPF and Policies GB1 and GM7A of the EPDC Local Plan.

In conclusion, it is considered that subject to conditions, the proposed development would be in accordance with Policies CP1, CP2, CP6, CP7, CP8, GB1, GB2A, GB7A, HC1, HC2, HC3, H4, HC5, HC6, HC12, HC13, NC1, NC2, NC3, NC4, NC5, RP3, RP4, RP5A, E5, RST2, RST3, RST14, U2A, U2B, U3A, U3B, DE9, LL1, LL2, LL3, LL7, LL8, LL9, LL10, LL11, LL13, ST7 and ST9 of the adopted Epping Forest District Council 'Combined Policies of Epping Forest District Local Plan (1998) and Alterations (2006), published February 2008.' and Policies SD9, T6, L1, L13, NE11, NE12, NE13, NE14, NE15, NE17, NE18, NE19, NE20, BE2, BE5, BE9, BE10, BE11, BE12, BE13, BE14, BE16, BE17, BE19, CP9 and CP12 of the Replacement Harlow Local Plan adopted July 2006 and saved policies 2009 and the National Planning Policy Framework (NPPF 2012)

On balance, taking into account the NPPF and the relevant policies of the Development Plan taken as a whole, S66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990, the proposal represents sustainable development in the context of the NPPF and therefore planning permission should be granted.

## **9. RECOMMENDED**

Subject to no intervention by the Secretary of State, pursuant to Regulation 3 of the Town and Country Planning General Regulations 1992, planning permission be **granted** subject to the following conditions:

1. The development hereby permitted shall be begun before the expiry of 3 years from the date of this permission. Written notification of the date of commencement shall be sent to the County Planning Authority within 7 days of such commencement.



2. The development hereby permitted shall be carried out in accordance with the details of the application dated 26 January 2017 and validated on 13 February 2017, together with the following list of drawings and documents

### **Drawings**

B3553F05-0100-DR-0519 Rev. P0	Location Plan
B3553F05-0100-DR-0500 Rev. P0	Proposed Layout Key Plan
B3553F05-0100-DR-0501 Rev. P0	Proposed Layout Plan Sheet 1 of 8
B3553F05-0100-DR-0502 Rev. P0	Proposed Layout Plan Sheet 2 of 8
B3553F05-0100-DR-0503 Rev. P0	Proposed Layout Plan Sheet 3 of 8
B3553F05-0100-DR-0504 Rev. P0	Proposed Layout Plan Sheet 4 of 8
B3553F05-0100-DR-0505 Rev. P0	Proposed Layout Plan Sheet 5 of 8
B3553F05-0100-DR-0506 Rev. P0	Proposed Layout Plan Sheet 6 of 8
B3553F05-0100-DR-0507 Rev. P0	Proposed Layout Plan Sheet 7 of 8
B3553F05-0100-DR-0508 Rev. P0	Proposed Layout Plan Sheet 8 of 8
B3553F05-0100-DR-0509 Rev. P0	Site Location Plan
B3553F05-0100-DR-0510 Rev. P0	Existing Layout Key Plan
B3553F05-0100-DR-0511 Rev. P0	Existing Layout Sheet 1 of 8
B3553F05-0100-DR-0512 Rev. P0	Existing Layout Sheet 2 of 8
B3553F05-0100-DR-0513 Rev. P0	Existing Layout Sheet 3 of 8
B3553F05-0100-DR-0514 Rev. P0	Existing Layout Sheet 4 of 8
B3553F05-0100-DR-0515 Rev. P0	Existing Layout Sheet 5 of 8
B3553F05-0100-DR-0516 Rev. P0	Existing Layout Sheet 6 of 8
B3553F05-0100-DR-0517 Rev. P0	Existing Layout Sheet 7 of 8
B3553F05-0100-DR-0518 Rev. P0	Existing Layout Sheet 8 of 8
B3553F05-3000-DR-0201 Rev. P00.1	Landscape Sections Sheet 1 of 2
B3553F05-3000-DR-0202 Rev. P00.1	Landscape Sections Sheet 2 of 2

### **Documents**

- Planning Statement, prepared by Jacobs, dated January 2017
- Non-Technical Summary of Environmental Statement, prepared by Jacobs
- Environmental Statement - Volume A (Written Statement), Volume B (Figures), Volume C (i) (Appendices 1-7), Volume C (ii) (Appendices 8-13) prepared by Jacobs, dated January 2017
- Outline Environmental Management Plan, prepared by Jacobs , dated January 2017
- Flood Risk Assessment (B3553F05-0500-RP-0003), prepared by Ringway Jacobs, dated January 2017.
- Heritage Statement, Revision 1, prepared by Jacobs, dated January 2016.
- Built Heritage Assessment

### **Further Submissions**

- Response to external review of M11 J7a Air Quality Assessment, prepared by Jacobs, dated 09 May 2017
- Air Quality 'Addendum to the response from AQC' prepared by Jacobs, dated 25 May 2017

and in accordance with any non-material amendment(s) as may be subsequently approved in writing by the County Planning Authority.

3. **Dust Management Plan**

No development shall take place until a scheme to minimise dust emissions has been submitted to and approved in writing by the County Planning Authority. The scheme shall include details of all dust suppression measures and the methods to monitor emissions of dust arising from the development during the construction phase and shall include the mitigation measures outlined in Appendix 5.5 of the Environment Statement.

The development shall be implemented in accordance with the approved scheme.

4. **Archaeology – Written Scheme of Investigation**

No development or preliminary groundworks shall take place until a written scheme and programme of archaeological investigation and recording has been submitted to and approved in writing by the County Planning Authority. The scheme and programme of archaeological investigation and recording shall be implemented prior to the commencement of the development hereby permitted or any preliminary groundworks.

5. **Archaeology – Mitigation Strategy**

Prior to commencement of development, and following completion of archaeological work required under condition 4 above, a mitigation strategy detailing the excavation/preservation strategy shall be submitted for the prior written approval of the County Planning Authority.

No development or preliminary groundworks shall commence on those areas containing archaeological deposits until the fieldwork as detailed in the mitigation strategy has been completed to the satisfaction of the County Planning Authority.

6. **Archaeology – Post Excavation Assessment**

Within six months of completion of the programme of archaeological investigation identified under condition 4, the applicant shall submit a post-excavation assessment. This shall include the completion of post-excavation analysis, preparation of a full site archive and report ready for deposition at the local museum, and submission of a publication report.

7. **Detailed Landscape Scheme**

No development shall take place until a detailed landscape scheme has been submitted to and approved in writing by the County Planning Authority. The scheme shall include details of areas to be planted with species, sizes, spacing, protection and programme of implementation. The scheme shall also include details of any existing trees and hedgerows on site with details of any trees and/or hedgerows to be retained and measures for their protection during the period of (operations/construction of the development). The scheme shall be implemented within the first available planting season (October to March inclusive) following commencement (or completion) of the development or the relevant phase of the

development hereby permitted in accordance with the approved details.

Any tree or shrub forming part of a landscaping scheme approved in connection with the development that dies, is damaged, diseased or removed within the duration of 5 years during and after the completion of the development shall be replaced during the next available planting season (October to March inclusive) with a tree or shrub to be agreed in advance in writing by the County Planning Authority.

#### 8. **Tree Protection**

No development or any preliminary groundwork's shall take place until:

- a. All trees to be retained during the construction works have been protected by fencing of the 'HERAS' type. The fencing shall be erected around the trees and positioned from the trees in accordance with BS:5837 "Trees in Relation to Construction", and;
- b. Notices have been erected on the fencing stating "Protected Area (no operations within fenced area)".

Notwithstanding the above, no materials shall be stored or activity shall take place within the area enclosed by the fencing. No alteration, removal or repositioning of the fencing shall take place during the construction period without the prior written consent of the County Planning Authority.

#### 9. **Bird Hazard Management Plan**

Prior to commencement of development, a Bird Hazard Management Plan, to prevent the utilisation of the site by hazardous bird species, has been submitted to and approved in writing by the County Planning Authority.

The submitted plan shall include, but not limited be to:

- Details of measures to prevent the establishment of any colony of hazardous bird species and any dispersal methods to be used;
- Provision for the aerodrome to undertake visits to the site and make inspections (where necessary) and hold records of bird numbers;
- Measures to limit access to attenuation ponds through the erection of goose proof fencing.

The Bird Hazard Management Plan shall be implemented as approved on completion of the development and shall remain in force in perpetuity. No subsequent alterations to the plan are to take place unless first submitted to and approved in writing by the County Planning Authority.

#### 10. **Detailed Surface Water Drainage Scheme**

No development shall take place until a detailed surface water drainage scheme

for the site, based on sustainable drainage principles and an assessment of the hydrological and hydro geological context of the development, has been submitted to and approved in writing by the County Planning Authority. The scheme should include but not be limited to:

- a) Limiting discharge rates from Gilden Way (Highway Drainage Catchment A) to at least 50% of the existing runoff rate for all storm events up to an including the 1 in 100 year rate plus up to a maximum of 30% allowance for climate change.
- b) Limiting discharge rates from Proposed Link Roads (Highway Drainage Catchment B) to the greenfield 1 in 1 year rate for all storm events up to an including the 1 in 100 year rate plus up to a maximum of 40% allowance for climate change.
- c) Limiting discharge rates from the new slip roads and ancillary works associated with Proposed Junction 7A (Highway Drainage Catchment C) to the greenfield 1 in 1 year rate for all storm events up to an including the 1 in 100 year rate plus a 20% allowance for climate change.
- d) Provide sufficient storage in line with the design return periods shown in table 2.1 of the Drainage System Summary Report
- e) Final modelling and calculations for all areas of the drainage system.
- f) The appropriate level of treatment for all runoff leaving the site in line with the CIRIA SuDS Manual C753.
- g) Detailed engineering drawings of each component of the drainage scheme.
- h) A final drainage plan which details exceedance and conveyance routes and ground levels, and location and sizing of any drainage features.
- i) A written report summarising the final strategy and highlighting any minor changes to the approved strategy.

The approved scheme shall subsequently be implemented prior to commissioning and opening to traffic.

**11 Scheme to minimise risk off-site flooding caused by surface water run-off and ground water during construction.**

No development shall take place until a scheme to minimise the risk of offsite flooding caused by surface water run-off and groundwater during construction works and prevent pollution has been submitted to, and approved in writing by, the County Planning Authority. The scheme shall subsequently be implemented in accordance with the approved details.

Reason: To mitigate the risk flooding during construction in accordance with U2A, U2B, U3A, U3B of the EFC Local Plan and policies CP12 of the HDC Local Plan

and the NPPF.

Construction may lead to excess water being discharged from the site. If dewatering takes place to allow for construction to take place below groundwater level, this will cause additional water to be discharged. Furthermore the removal of topsoils during construction may limit the ability of the site to intercept rainfall and may lead to increased runoff rates. To mitigate increased flood risk to the surrounding area during construction there needs to be satisfactory storage of/disposal of surface water and groundwater which needs to be agreed before commencement of the development.

Construction may also lead to polluted water being allowed to leave the site. Methods for preventing or mitigating this should be proposed.

12. **Surface Water Drainage System – Maintenance Plan**

No development shall take place until a Maintenance Plan detailing the maintenance arrangements including who is responsible for different elements of the surface water drainage system and the maintenance activities/frequencies, has been submitted to and agreed, in writing, by the County Planning Authority. The completed development shall be maintained in accordance with the approved plan.

13. **Construction Environmental Management Plan (CEMP)**

No development shall take place (including demolition, ground works, vegetation clearance) until a construction environmental management plan (CEMP: Biodiversity) has been submitted to and approved in writing by the County Planning Authority. The CEMP: Biodiversity shall include the following:

- a) Risk assessment of potentially damaging construction activities;
- b) Identification of biodiversity protection zones;
- c) Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (may be provided as a set of method statements);
- d) The location and timing of sensitive works to avoid harm to biodiversity features;
- e) The times during construction when specialist ecologists need to be present on site to oversee works;
- f) Responsible persons and lines of communication;
- g) The role and responsibilities on site of an ecological clerk of works or similarly competent person; and the
- h) Use of protective fences, exclusion barriers and warning signs.

The approved CEMP: Biodiversity shall be implemented and adhered to throughout the construction period of the development hereby approved.

14. **Land Remediation Strategy**

Prior to each phase of development approved by this planning permission (1, 2A and 2B) no development shall commence until a remediation strategy to deal with the risks associated with contamination of the site has been submitted to, and approved in writing by, the County Planning Authority.

The strategy shall include the following components:

a). A preliminary risk assessment which has identified:

- all previous uses;
- potential contaminants associated with those uses;
- a conceptual model of the site indicating sources, pathways and receptors; and
- potentially unacceptable risks arising from contamination at the site.

b) A site investigation scheme, based on (1) to provide information for a detailed assessment of the risk to all receptors that may be affected, including those off site.

c) The results of the site investigation and the detailed risk assessment referred to in (2) and, based on these, an options appraisal and remediation strategy giving full details of the remediation measures required and how they are to be undertaken.

d) A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in the remediation strategy in (3) are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action.

The scheme shall be implemented as approved.

**15. Land Remediation Verification Report**

Prior to each phase of development being commissioned a verification report demonstrating the completion of works set out in the approved remediation strategy and the effectiveness of the remediation shall be submitted to, and approved in writing, by the County Planning Authority. The report shall include results of sampling and monitoring carried out in accordance with the approved verification plan to demonstrate that the site remediation criteria have been met.

**16. Land Remediation Strategy – contamination found during development**

If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the County Planning Authority) shall be carried out until a remediation strategy detailing how this contamination will be dealt with has been submitted to and approved in writing by the County Planning Authority. The remediation strategy shall be implemented as approved.

**17. No drainage systems for the infiltration of surface water drainage into the ground**

No drainage systems for the infiltration of surface water drainage into the ground is permitted other than with the express written consent of the County Planning Authority, which may be given for those parts of the site where it has been demonstrated that there is no resultant unacceptable risk to controlled waters. The development shall be carried out in accordance with the approved details.

Reason: Infiltration through contaminated land and soakaways act as preferential pathways for contaminants to have the potential to impact on groundwater quality.

18. **Borehole Management Scheme**

A scheme for managing any borehole installed for the investigation of soils, groundwater or geotechnical purposes shall be submitted to and approved in writing by the County Planning Authority. The scheme shall provide details of how redundant boreholes are to be decommissioned and how any boreholes that need to be retained, post-development, for monitoring purposes will be secured, protected and inspected. The scheme as approved shall be implemented prior to each phase of development being brought into use.

19. **Piling Method**

Piling using penetrative methods shall not be carried out other than with the written consent of the County Planning Authority. The development shall be carried out in accordance with the approved details.

20. **Noise Mitigation Plan / Acoustic Barriers Detailed Design**

Prior to commencement of development a detailed Noise Mitigation Plan shall be submitted for the prior written approval of the County Planning Authority. This shall include detailed design of any acoustic barriers required to achieve adequate noise mitigation. The development shall be implemented in accordance with the approved scheme.

21. **Lighting Detailed Design**

No fixed lighting shall be erected or installed on-site until details of the location, height, design, luminance and operation have been submitted to and approved in writing by the County Planning Authority. That submitted shall include an overview of the lighting design including the maintenance factor and lighting standard applied together with a justification as why these are considered appropriate. The details to be submitted shall include a lighting drawing showing the lux levels on the ground, angles of tilt and the average lux (minimum and uniformity) for all external lighting proposed. Furthermore a contour plan shall be submitted for the site detailing the likely spill light, from the proposed lighting, in context of the adjacent site levels.

The lighting plan shall have consider the impact on light sensitive biodiversity and shall

a) identify those areas/features on site that are particularly sensitive for bats and that are likely to cause disturbance in or around their breeding sites and resting places or along important routes used to access key areas of their territory, for example, for foraging; and

b) show how and where external lighting will be installed (through the provision of appropriate lighting contour plans and technical specifications) so that it can be clearly demonstrated that areas to be lit will not disturb or prevent the above species using their territory or having access to their breeding sites and resting places.

The details shall ensure the lighting is designed to minimise the potential nuisance of light spillage on adjoining properties and highways.

The lighting shall thereafter be erected, installed and operated in accordance with the approved details.

## **INFORMATIVES**

### **Surface Water Discharge**

The Environment Agency advises that the surface water discharge associated with this development will require an Environmental Permit under the Environmental Permitting Regulations 2010, from the Environment Agency, unless an exemption applies.

The applicant is advised to contact the Environment Agency on 08708 506 506 for further advice and to discuss the issues likely to be raised. You should be aware that the permit may not be granted. Additional 'Environmental Permitting Guidance' can be accessed via our main website

<https://www.gov.uk/topic/environmental-management/environmental-permits>

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## **BACKGROUND PAPERS**

Consultation replies

Representations

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## **THE CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2010 (as amended)**

The proposed development would not be located adjacent to/within distance to a European site.

Therefore, it is considered that an Appropriate Assessment under Regulation 61 of The Conservation of Habitats and Species Regulations 2010 is not required.

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## **EQUALITIES IMPACT ASSESSMENT**

This report only concerns the determination of an application for planning permission. It does however take into account any equality implications. The recommendation has been made after consideration of the application and supporting documents, the development plan, government policy and guidance, representations and all other material planning considerations as detailed in the body of the report.

## **STATEMENT OF HOW THE LOCAL AUTHORITY HAS WORKED WITH THE APPLICANT IN A POSITIVE AND PROACTIVE MANNER**

In determining this planning application, the County Planning Authority has worked with the applicant in a positive and proactive manner based on seeking solutions



to problems arising in relation to dealing with the planning application by liaising with consultees, respondents and the applicant/agent and discussing changes to the proposal where considered appropriate or necessary, through engaging in a Planning Performance Agreement. This approach has been taken positively and proactively in accordance with the requirement in the NPPF, as set out in the Town and Country Planning (Development Management Procedure)(England) Order 2015.

**LOCAL MEMBER NOTIFICATION**

EPPING FOREST – North Weald and Nazeing  
HARLOW- Harlow North

## APPENDIX A – RELEVANT LOCAL PLAN POLICIES

### **Extracts from the Adopted Epping Forest District Local Plan**

Combined Policies of Epping Forest District Local Plan (1998) and Alterations (2006), published February 2008.

[Click here - Full text of Adopted Epping Forest District Local Plan](#)

#### Core Strategy

##### CP1-Achieving Sustainable Development Objectives

*Planning powers and actions will be used to:*

- (i) avoid, or at least minimise, impacts of development upon the environment, particularly in ways likely to affect future generations. Where negative impacts cannot be avoided, compensatory measures will be required to offset such impacts, taking into account that social and economic activities depend upon the maintenance of a stable and healthy environment for their continuance;*
- (ii) secure the provision of sufficient types and amounts of housing accommodation, and different facilities, to meet the needs of the local population, and to retain and improve land resources to meet the recreational and countryside needs of the metropolitan area;*
- (iii) give effect to the Epping Forest Community Strategy (produced by the Local Strategic Partnership) which is in force at the time;*
- (iv) meet the employment needs of those who are unemployed and secure/achieve a mix of local employment and commercial activities that both meet local needs and reduce the need to travel, and reduce reliance on use of the private car;*
- (v) avoid further commuting, especially where it is dependent upon private car use;*
- (vi) help achieve prudent use of natural resources; and*
- (vii) minimise the use of non-renewable resources, including greenfield land.*

##### CP2- Protecting the Quality of the Rural and Built Environment

The quality of the rural and built environment will be maintained, conserved and improved by:

- (i) sustaining and enhancing the rural environment, including conserving countryside character, in particular its landscape, wildlife and heritage qualities, and protecting countryside for its own sake;*
- (ii) enhancing and managing, by appropriate use, land in the Metropolitan Green Belt and urban fringe;*
- (iii) retaining the best and most versatile land for agriculture;*

- (iv) safeguarding and enhancing the setting, character and townscape of the urban environment;*
- (v) preserving and enhancing the biodiversity and networks of natural habitats of the area, including river and wildlife corridors and other green chains;*
- (vi) giving priority to protecting and enhancing areas designated as having intrinsic environmental quality at international, national and strategic levels, in compliance with policy NC1 and PPS9;*
- (vii) managing the demand for water resources and sewerage infrastructure by controlling the location, scale and phasing of development so as to protect environmental and wildlife interests.*

### **CP3- New Development**

*In considering planning applications and in allocating land for development, the Council will require the following criteria to be satisfied:*

- (i) the development can be accommodated within the existing, committed or planned infrastructure capacity of the area (or that sufficient new infrastructure is provided by the new development/developer);*
- (ii) the development is accessible by existing, committed or planned sustainable means of transport;*
- (iii) sequential approaches have been used to ensure that appropriate types of development, redevelopment or intensification of use take place at suitable locations;*
- (iv) the achievement of a more sustainable balance between local jobs and workers;*
- (v) the scale and nature of development is consistent with the principles of sustainability and respects the character and environment of the locality.*

*The Council may use Planning Obligations to ensure these criteria are satisfied.*

### **CP7- Urban Form and Quality**

*In line with policies CP6 and ST1, one of the Council's primary objectives is to make the fullest use of existing urban areas for new development before locations within the Green Belt. In view of this primary objective, the environmental quality of existing urban areas will be maintained and improved as attractive places in which to live, work and visit. Where the existing urban fabric provides for high quality in design and local environment by virtue of its existing character, open land uses and buildings and areas of architectural, historic and archaeological importance, this will be strongly protected and enhanced. New development in all urban areas which results in overdevelopment, unsympathetic change or loss of amenity will not be permitted. Subject to those considerations, existing built-up areas will be used in the most efficient way to accommodate new development by the:*

- (i) recycling of vacant, derelict, degraded and under-used land to accommodate new development;*

- (ii) re-use of existing buildings by refurbishment, conversions, changes of use and extensions;*
- (iii) re-use of urban sites, which are no longer appropriate to their existing or proposed use in the foreseeable future, for alternative land uses; and*
- (iv) use of higher densities where compatible with the character of the area concerned and urban design controls.*

#### **CP8- Sustainable Economic Development**

*Provision will be made for economic, commercial and housing development and transport investment which will:*

- (i) facilitate economic regeneration in areas of relative social deprivation to reduce disparities in economic success across the district;*
- (ii) reflect capacity and result in balanced and sustainable economic and housing growth in urban areas and across the district as appropriate;*
- (iii) within the rural areas, make provision for environmentally and economically sustainable activities and adequate housing to encourage renewal and maintain vitality;*
- (iv) encourage local economic diversity;*
- (v) encourage the development of appropriate high value-added economic activities where this is economically beneficial and environmentally acceptable;*
- (vi) satisfy other plan policies.*

#### **Green Belt**

##### **GB1- Green Belt Boundary**

*The boundary of the Metropolitan Green Belt in this district is as defined on the Proposals Map.*

##### **GB2A- Development in the Green Belt**

*Planning permission will not be granted for the use of land or the construction of new buildings or the change of use or extension of existing buildings in the Green Belt unless it is appropriate in that it is:*

- (i) for the purposes of agriculture, horticulture, or forestry; or*
- (ii) for the purposes of outdoor participatory sport and recreation or associated essential small-scale buildings; or*
- (iii) for the purposes of a cemetery; or*
- (iv) for other uses which preserve the openness of the Green Belt and which do not conflict with the purposes of including land in the Green Belt; or*

- (v) a dwelling for an agricultural, horticultural or forestry worker in accordance with policy GB17A; or*
- (vi) a replacement for an existing dwelling and in accordance with policy GB15A; or*
- (vii) a limited extension to an existing dwelling that is in accordance with policy GB14A; or*
- (viii) in accordance with another Green Belt policy.*

#### **GB7A- Conspicuous Development**

*The Council will refuse planning permission for development conspicuous from within or beyond the Green Belt which would have an excessive adverse impact upon the openness, rural character or visual amenities of the Green Belt.*

#### **Heritage Conservation**

##### **HC1- Scheduled Monuments and Other Archaeological Sites**

*On sites of known or potential archaeological interest, planning permission will only be granted for development which would not adversely affect nationally important remains, whether scheduled or not, or their settings. The Council will also require:*

- (i) the results of an archaeological evaluation to be submitted as part of any application;*
- (ii) the preservation in situ, and provision for appropriate management, of those remains and their settings considered to be of particular importance;*
- (iii) provision for recording and/or excavation by a competent archaeological organisation prior to the commencement of development, where in situ preservation is not justified.*

##### **HC2- Ancient Landscapes**

*The Council will not grant planning permission for development which could adversely affect the nature and physical appearance of ancient landscapes (identified as such on the Proposals Map).*

##### **HC3- Registered Parkland**

*The Council will not grant planning permission for development which could adversely affect the areas of registered parkland (identified as such on the Proposals Map).*

##### **HC4- Protected Lanes, Commons and Village Greens**

*The Council will not grant planning permission for any development which would damage or be detrimental to the historic or landscape character of protected lanes (identified as such on the Proposals Map), commons or village greens.*

##### **HC5- Epping Forrest**

*The Council will not grant planning permission for any development or use which could prejudice the historic nature and wildlife value of Epping Forest (identified on the Proposals Map) or its function as open space for the purposes of public enjoyment.*

##### **HC6- Character, Appearance and Setting of Conservation Areas**

*Within or adjacent to a conservation area, the Council will not grant planning permission for any development, or give listed building consent or consent for works to trees, which could be detrimental to the character, appearance or setting of the conservation area.*

#### HC12- Development affecting the setting of Listed Buildings

*The Council will not grant planning permission for development which could adversely affect the setting of a listed building.*

#### HC13A- Local List of Buildings

*The Council will prepare a list of buildings of local architectural or historic importance (the 'Local List'). Maintenance of these buildings will be encouraged and they will receive special consideration in the exercise of the development control process.*

#### Nature Conservation

##### NC1- SPAs, SACs and SSSIs

*The Council will refuse planning permission for any development or land use change which could directly or indirectly destroy or adversely affect a Site of Special Scientific Interest. The Council will comply with the U.K.'s international obligations for those SSSIs designated or proposed as Special Protection Areas or Special Areas of Conservation.*

##### NC2- Country Wildlife Sites

*Development or land use change which could directly or indirectly destroy or have an adverse effect upon a County Wildlife Site will be refused unless it can be demonstrated that the reasons for the proposal clearly outweigh the need to safeguard the intrinsic nature conservation value of the site or feature.*

##### NC3- Replacement of Lost Habitat

*In cases where a County Wildlife Site will be harmed by, or lost to, development, the Council will expect satisfactory arrangements to be made for an alternative habitat of at least equivalent wildlife value.*

##### NC4- Protection of Established Habitat

*Development proposals will be expected to make adequate provision for the protection, enhancement and suitable management of established habitats of local significance for wildlife. Such provision may be more stringent when there are known to be protected species either on the site or likely to be affected by the development.*

##### NC5- Promotion of Nature Conservation Schemes

*The Council will encourage owners and occupiers of land to participate in schemes which promote the aims of nature conservation by:*

- (i) adopting less intensive forms of land management;*
- (ii) re-introducing traditional management techniques for existing wildlife habitats; and*
- (iii) creating new habitats.*

#### Recycling and Pollution

##### RP3- Water Quality

*The Council, after consultation with the Environment Agency, and, as appropriate, British Waterways and Thames Water, will refuse permission for developments or activities which present an undue risk to the quality and quantity of:*

*(i) groundwater; or*

*(ii) water in rivers, canals, lakes, ponds or other water courses.*

#### **RP4- Contaminated Land**

*The Council will not grant planning permission for the development or reuse of land which it considers likely to be contaminated unless:*

*(i) prior tests are carried out to establish the existence, type and degree of contamination; and*

*(ii) if contamination is found, appropriate methods of treatment and monitoring are agreed with the Council, pollution authorities and water companies; and*

*(iii) the agreed methods of treatment include measures to protect or recreate habitats of nature conservation interest.*

#### **RP5A- Adverse Environmental Impacts**

*The Council will not grant planning permission for:*

*(i) development where it could cause excessive noise, vibration, or air, ground water or light pollution for neighbouring land uses, protected wildlife species and habitats; or*

*(ii) sensitive development such as housing (or other forms of residential occupation, including mobile homes and caravans), hospitals or schools which could be subject to either excessive noise from adjoining land uses or traffic (road, rail and air), or other forms of adverse environmental conditions such as air pollution;*

*except where it is possible to mitigate the adverse effects by the imposition of appropriate conditions.*

#### **Employment**

##### **E5- Effect of Nearby Developments**

*In determining planning applications for development in the proximity of established or proposed business, general industrial and warehousing uses the Council will have regard to:*

*(i) any planning constraints that may eventually be placed on the use, or its successor, as a consequence of the development going ahead; and*

*(ii) the desirability of the established use being retained.*

#### **Recreation, Sport & Tourism**

##### **RST2- Enhance Rights of Way Network**

*In determining planning applications the Council may seek:-*

*(i) the appropriate expansion and enhancement of the rights of way network; and*

*(ii) to secure public access onto privately-owned land for informal leisure purposes*

#### **RST3- Loss or Diversion of Rights of Way**

*The Council will not grant planning permission for development proposals which entail the loss, stopping-up, or unreasonable diversion of public rights of way.*

#### **RST14- Playing Fields**

*The Council will not grant planning permission for development which involves the loss of any playing fields unless:*

- (i) adequate alternative provision of equivalent community benefit is made available in an appropriate location; or*
- (ii) there is an excess of sports pitch provision and public open space in the locality; or*
- (iii) sport and recreational facilities can best be retained and enhanced through the redevelopment of a small part of the site;*

*and the open nature of the site does not contribute significantly to its surroundings. Any development will also need to be in accordance with policy LL6.*

#### **Utilities**

#### **U2A- Development in Flood Risk Areas**

*Development proposals within the Environment Agency's currently designed Flood Risk Zones will be determined in accordance with a sequential approach as set out in PPG25.*

*This will be, in order of priority:*

- (a) areas with little or no flood risk*
- (b) areas of low to medium risk*
- (c) areas of high risk*
- (d) areas of functional flood plain.*

*In accordance with this order of priority, the Council will only permit development in areas of functional flood plain if:*

- (i) it involves use of land only, and would not increase flood risk or danger from flood risk; or*
- (ii) it is proven to be essential infrastructure which cannot be located elsewhere. No such development will be allowed if it would cause any negative impacts on any part of the flood regime of the watercourse involved.*

*Development in high risk areas will only be allowed if:*

- (i) there will be no increased risk of flooding either on site or elsewhere in the floodplain or suitable mitigation measures will be incorporated as part of the scheme; and*
- (ii) the development would not reduce the effectiveness of existing flood defence measures; and*
- (iii) there is no suitable alternative site available in the locality which is at a lower risk of flooding; and*



- (iv) there will be no significant adverse effects upon a watercourse, navigable waterway or sewer; or*
- (v) adequate and appropriate flood-prevention measures to minimise the risk of flooding are incorporated as part of the development.*

*Development in all other flood risk areas will be allowed under this policy, provided that suitable flood minimisation and/or mitigation measures are included as part of the development. All applications or proposals for development in flood risk areas will be required to be accompanied by a Flood Risk Assessment covering matters (i) to (v) above, to be carried out to the satisfaction of the Council and/or the Environment Agency.*

#### **U2B- Flood Risk Assessment Zones**

*Within the Flood Risk Assessment Zones as shown on the Alterations Proposals Map, Flood Risk Assessments will be required for any development proposals (other than house extensions) which exceed 50m<sup>2</sup>. Outside these zones, a Flood Risk Assessment will be required for any proposals which exceed 235m<sup>2</sup>.*

#### **U3A- Catchment Effects**

*The Council will not permit development which would result in either:*

- (i) increased risk of flooding or a reduction in the effectiveness of existing flood defence measures, either on site or elsewhere within the catchment; or*
- (ii) significant adverse effects upon a watercourse, navigable waterway or sewerage infrastructure,*

*unless it is satisfied that adequate and appropriate attenuation measures, such that there is no increase in the risk of flooding, are incorporated as part of the development.*

#### **U3B- Sustainable Drainage Schemes**

*In consultation with the Environment Agency and, where appropriate, sewerage undertakers, the Council may require developments to include sustainable drainage systems to control the quality or attenuate the rate of surface water run-off. Contributions in the form of commuted sums may be sought in legal agreements to ensure that the drainage systems can be adequately maintained.*

### **Design & the Built Environment**

#### **DBE3- Design in Urban Areas**

*Outside the Green Belt, new development will be required to ensure that:*

- (i) all spaces between and around buildings are deliberately created to be functional, attractive and safe for their intended users;*
- (ii) spaces are of individual identity and character and are satisfactorily enclosed;*
- (iii) public, private and semi-private spaces are clearly discernible to their intended users;*
- (iv) the informal supervision of public and semi-private spaces around buildings by their occupiers is encouraged; and*

*(v) front elevations face outwards onto public spaces and contain the main entrances.*

#### **DBE9- Loss of Amenity**

*The Council will require that a change or intensification of use, extension or new development does not result in an excessive loss of amenity for neighbouring properties. The factors which will be taken into account are:*

- (i) visual impact;*
- overlooking;*
- (ii) loss of daylight/sunlight; and*
- (iii) noise, smell or other disturbance.*

#### **Landscape and Landscaping**

##### **LL1- Rural Landscape**

*The Council will continue to act to:*

- (i) conserve and enhance the character and appearance of the countryside; and*
- (ii) encourage the considerate use and enjoyment of the countryside by the public.*

*Subject to specific circumstances, particular attention will be paid to:*

- (a) the needs of agriculture, woodland planting and management, and other habitat and wildlife conservation;*
- (b) the provision of facilities for public access and informal recreation and to enable quiet enjoyment;*
- (c) the protection of historic features and their settings; and*
- (d) the achievement and conservation of visually attractive landscapes*

##### **LL2- Inappropriate Rural Development**

*The Council will not grant planning permission for development in the countryside unless it is satisfied that the proposal will:*

- (i) respect the character of the landscape; and/or*
- (ii) enhance the appearance of the landscape; and*
- (iii) where appropriate, involve the management of part or all of the remainder of the site to enhance its contribution to the landscape.*

##### **LL3- Edge of Settlement**

*The Council will require proposals for development on the edges of settlements to show a sensitive appreciation of their effect upon the landscape by:*

- (i) extensive landscaping; and/or*
- (ii) reduced development densities; and/or*
- (iii) the use of subdued materials and colours; and/or*
- (iv) other techniques aimed at softening or improving their impact.*

#### LL7- Planting, Protection and Care of Trees

*The Council will:*

- (i) promote tree and woodland planting where it is considered that this will lead to significant amenity benefit;*
- (ii) seek to protect trees and woodland of amenity value; and*
- (iii) promote good standards of tree care and woodland management.*

#### LL8- Works to Preserved Trees

*The Council will give consent for works to a tree or woodland protected by a tree preservation order provided it is satisfied that:*

- (i) the health and appearance of the tree will not be impaired; and*
- (ii) the works will not unjustifiably inhibit or prevent the full and natural development of the tree; or*
- (iii) the works are necessary to its continued retention and consistent with good arboricultural practice; or*
- (iv) in the case of a woodland, the proposed works are consistent with the principles of sound woodland management.*

#### LL9- Felling of Preserved Trees

*The Council will not give consent to fell a tree or woodland protected by a tree preservation order unless it is satisfied that this is necessary and justified. Other than for woodland any such consent will be conditional upon appropriate replacement of the tree.*

#### LL10- Adequacy of Provision for Landscape Retention

*The Council will refuse to grant planning permission for any development which it considers makes inadequate provision for the retention of:*

- (i) trees; or*
- (ii) natural features, particularly wildlife habitats such as woodlands, hedgerows, ponds and watercourses; or*
- (iii) man-made features of historical, archaeological or landscape significance.*

#### LL11- Landscaping Schemes

*The Council will:*

- (i) refuse planning permission for any development which makes inadequate provision for landscaping;*
- (ii) not approve landscaping schemes which:*
  - (a) are inappropriate because they fail to take account of the setting or intended use of the development; or*

*(b) are ineffective because they would be unlikely to retain trees and other existing landscape features or to establish new long-term planting*

#### LL13- Highway/ Motorway Schemes

*The Council will oppose any new, improved or altered highway or motorway proposal unless the associated landscaping scheme (including earth-mounding and planting) will:*

- (i) use appropriate species;*
- (ii) make effective visual screens;*
- (iii) create effective sound barriers; and*
- (iv) adequately replace trees, hedgerows and woodlands which will be lost to the development. The Council will seek to ensure that, where feasible, appropriate landscaping will be undertaken prior to the commencement of construction works.*

#### Sustainable Transport

##### ST7- New Roads and Extensions or Improvements to Existing Roads

*The Council expects schemes for new roads or for extensions and improvements to existing roads to satisfy the following criteria:*

- (i) minimal environmental impact on sensitive areas (including open countryside and its management, sites of wildlife and built heritage interest, and residential areas) with adequate compensatory measures in those cases where environmental losses are unavoidable;*
- (ii) minimal adverse impact on road safety and traffic congestion;*
- (iii) minimal disruption to, or realignment of, the rights of way network;*
- (iv) retention of a defensible green boundary and minimal loss of Green Belt land.*

##### ST9- Stansted Aerodrome Safeguarding

*Within the Aerodrome Safeguarding Zone around Stansted Airport, development which will adversely affect the operational integrity or safety of the airport, or interfere with the operation of aeronautical navigation aids will not be permitted.*

## **Extracts from the Adopted Harlow District Local Plan**

Replacement Harlow Local Plan adopted July 2006 and saved policies 2009

### **Adopted Harlow District Local Plan**

#### **SD9- Waste Reduction Re-Use and Recovery**

*Development that results in the movement of the soil resource should:*

- 1. Employ techniques which minimise loss and/or damage to soil during handling and storage;*
- 2. Optimise the use of soil, either on the development site itself or at suitable alternative locations for “soft development”( e.g. landscaping);*
- 3. Prevent the unnecessary mixing of topsoil and subsoil. On development sites where they are to be replaced, ensure they are replaced in the correct order and depth;*
- 4. For developments where soil is to be removed, stored and replaced, a soil movement strategy should form part of the proposal.*

#### **T6- Cycling and Walking**

*New developments including redevelopments, changes of use and town centre and transport interchange improvements will be required to provide:*

- 1. Appropriate safe, direct cycleways within the development;*
- 2. Where appropriate, contributions to improve and develop cycleways serving the development;*
- 3. Where appropriate, links to the existing cycleway network;*
- 4. Safe, secure and convenient cycle storage in accordance with the “Adopted Vehicle Parking Standards”;*
- 5. Where appropriate, other facilities for cyclists such as employee showers, lockers and information and maintenance points.*

#### **L1- Playing Fields**

*Planning permission will not be granted for development which will result in the loss of all, or any part of a playing fields, unless:*

- 1. It can be demonstrated that there is an excess of playing fields in the locality; or*
- 2. A replacement playing field or fields of equivalent or better quantity and quality is to be provided in a suitable location; or*
- 3. Any proposed development for an indoor or outdoor sports facility is of sufficient benefit to the development of sport to outweigh the loss of the playing field(s); or*
- 4. The development only affects land that is incapable of forming a playing field or part of a playing field; or*
- 5. The proposed development is ancillary to the use of the playing field.*

#### **L13- Public Rights of Way**

*The existing network of definitive public rights of way within Harlow will be safeguarded.*

*New footpaths, bridleways and cycleways will be required as part of new developments, to link with existing routes outside and within the town’s boundary, and to provide better access to the surrounding countryside and areas of woodland within the town. Proposals for new or the enhancement of existing public rights of way will be required to meet the highest standards of design, accessibility and personal safety.*

#### NE11- Trees and Hedgerows

*In considering applications for development affecting trees or hedges the Council:*

- 1. May require a survey of the site and the trees and hedges concerned;*
- 2. Will oppose the loss of trees and hedgerows of amenity value and wildlife importance;*
- 3. Will serve Tree Preservation Orders to protect trees with public amenity value;*
- 4. May impose conditions on planning permissions to ensure the retention or replacement of trees and hedgerows of amenity value or wildlife importance, and their protection during construction.*

#### NE12- Landscaping

*Major development proposals shall be accompanied by a details of landscape features and wildlife habitats. Planning applications must include a landscaping scheme that indicates:*

- 1. Measures to protect landscape features and wildlife habitats;*
- 2. Measures to enhance landscape features and habitats;*
- 3. Measures to mitigate against potentially adverse effects;*
- 4. Measures to compensate where damage is unavoidable;*
- 5. Measures for monitoring and a management scheme including funding to ensure the landscape is successfully established and maintained;*
- 6. New landscape proposals;*
- 7. Measures that address personal safety in the proposed landscape.*

*Where the site is divided into a number of plots, a structural landscaping scheme for the whole site must be submitted and agreed prior to any work commencing on site.*

#### NE13- Water Environment

*In considering applications for new development affecting the quality of the water environment the Council:*

- 1. Will oppose any adverse effect on watercourses and their corridors, or on groundwater quality or levels;*
- 2. Will require the protection, maintenance and where possible enhancement of the River Stort, ponds, watercourses and field meadows;*
- 3. May require the reinstatement and management of ponds;*
- 4. May require the creation of new water areas, and the inclusion of schemes to enhance biodiversity;*
- 5. All management schemes, including funding, must be agreed with the Council.*

#### NE14- Landscape Conservation

*Planning permission will not be granted for proposals that detract from the visual quality of Special Landscape Areas.*

#### NE15- Biodiversity and Nature Conservation

*Planning permission will not be granted for development that would harm habitats or other features of the landscape identified as priorities in the UK, or the Local Biodiversity Action Plan, or are of significant importance for wildlife, unless it can be demonstrated that the reason for the proposal outweighs the need to protect the habitat or feature.*

*If granted, planning permission may be subject to conditions, obligations or management agreements for the provision of appropriate mitigation and/or compensatory measures.*

#### NE17-Wildlife Sites

*Planning permission will not be granted for development that would have an adverse effect, either directly or indirectly, on the ecology of a Local Nature Reserve unless it can be demonstrated that the reason for the proposal outweighs the ecological value of the site. If granted, planning permission may be subject to conditions, obligations or management agreements for the protection of the site's ecological interests and the provision of appropriate mitigation and/or compensatory measures.*

*All management schemes must be agreed with the Council.*

*The following Local Nature Reserves have been identified on the Proposals Map:*

<i>Ref No</i>	<i>Sites</i>
<i>NE17/1</i>	<i>Parndon Woods and Common</i>
<i>NE17/2</i>	<i>Stort Valley</i>
<i>NE17/3</i>	<i>Hawkenbury Meadow</i>

*The sites will be protected from on and off-site development that is likely to have an adverse effect on the ecology of that site.*

#### **NE18- Wildlife Sites**

*Planning permission will not be granted for development that would have an adverse effect, either directly or indirectly, on the ecology of a Wildlife Site unless it can be demonstrated that the reason for the proposal outweighs the ecological value of the site.*

*If granted, planning permission may be subject to conditions, obligations or management agreements for the protection of the site's ecological interests and the provision of appropriate mitigation and/or compensatory measures.*

*All management schemes must be agreed with the Council.*

*The following Wildlife Sites have been identified on the Proposals Map:*

<i>Ref No</i>	<i>Name, Grid Reference</i>	<i>Description</i>
<i>NE18/1</i>	<i>Third Avenue, Elizabeth Way TI 428093</i>	<i>Road verges, neutral grassland and hawthorn scrub with flora</i>
<i>NE18/2</i>	<i>Kingsdon Lane Pond TI 474092</i>	<i>Flora and Fauna</i>
<i>NE18/3</i>	<i>Edinburgh Way Pond TI 469121</i>	<i>Redundant pond, roadside bank</i>
<i>NE18/4</i>	<i>Marsh East of Wyldwood TI 478129</i>	<i>Amphibia and emergent vegetation associated with wintering birds</i>
<i>NE18/5</i>	<i>Harlow Common TI 480088</i>	<i>Neutral grassland and hedgerows</i>
<i>NE18/6</i>	<i>Clay Pit, Nr. The House TI 483127</i>	<i>Pond and surrounding vegetation with breeding amphibia</i>
<i>NE18/7</i>	<i>Church End Pond TI 434083</i>	<i>Emergent vegetation, submergent freshwater fauna and grassland bank</i>
<i>NE18/8</i>	<i>Third Avenue Meadow TI 435095</i>	<i>Flora, hedges and stream; abundant insects and birds. ABTO. habitat site</i>
<i>NE18/9</i>	<i>Burnett Wood and Pond TI 436075</i>	<i>Ancient woodland and pond</i>
<i>NE18/10</i>	<i>Latton Common including pond TI 468079</i>	<i>Neutral grassland and pond; flora and fauna</i>

NE18/11	<i>Stewards Meadow TI 445079</i>	<i>Relict part of old meadow with flora</i>
NE18/12	<i>Town Park Ditches TI 454118</i>	<i>Wetland and lake, meadows drains and islands with diverse flora and fauna</i>
NE18/13	<i>Gravel Pit Spring TI 463096</i>	<i>Ancient site of oak and hazel, many alien trees</i>
NE18/14	<i>Vicarage Wood TI 458104</i>	<i>Ancient oak and hazel coppice</i>
NE18/15	<i>Harolds Grove TI 424090</i>	<i>Ancient oak, ash, elm woodland of coppice with no standards. Good ground flora</i>
NE18/16	<i>Peldon Road TI 454070</i>	<i>Neutral grassland, wet, meadows, hedgerows, streams, woodland, diverse flora and fauna</i>
NE18/17	<i>Pincey Book Meadows TI 485128</i>	<i>Wet meadow, stream, hedgerows, good flora and fauna</i>
NE18/18	<i>Mead to West of Allende Ave. TI 439113</i>	<i>Wet marshy grassland and flora, extremely important for wintering birds</i>
NE18/19	<i>Netteswell Rectory TI 455096</i>	<i>Neutral grassland, pond, hedgerows, good flora</i>
NE18/20	<i>Third Avenue TI 439089</i>	<i>Neutral grassland. Bramble and hawthorn scrub</i>
NE18/21	<i>Gilden Way Meadow TI 479111</i>	<i>Pond with adjoining natural grassland and ancient hedgerows</i>
NE18/22	<i>New Pond Spring TI 477106</i>	<i>Freshwater stream, lined with oak and ash</i>
NE18/23	<i>Brenthall &amp; Barnsley Wood. Perry Spring &amp; Reservoir TI 478099</i>	<i>Diverse habitats, ancient woodlands, with oak, ash, hornbeam and hazel, rare species of flora on reservoir banks</i>
NE18/24	<i>Feltimeores Meadow TI 459110</i>	<i>Natural grassland semi-improved with oak, also spring and pond</i>
NE18/25	<i>Markhall Wood TI 467102</i>	<i>Woodland with oak, field maple, ash and hornbeam</i>
NE18/26	<i>Netteswell Plantation TI 449095</i>	<i>Diverse woodland with oak, hornbeam sycamore, scots pine, larch and redwood and varied ground flora</i>
NE18/27	<i>Eastwick Mead TI 426113</i>	<i>Alluvial grassland, semi improved, of importance to</i>



		wintering wetland birds, traversed by a diverse hedgerow
NE18/28	Gravelpit Spring, New Hall Farm TI 473104	Woodland developed by natural succession on an old gravel pit
NE18/29	The Moors. Long Ley TI 450098	A long linear glade with wood/scrub edges, neutral grassland and stream
NE18/30	Former 3m Research Ltd, Coldharbour Road TI 429093	Bee orchid colony
NE18/31	Fountains Farm Pond, Tye Green TI 456085	Pond with emergent and submerged flora and good fauna
NE18/32	Maunds Wood, Paringdon Road TI 448076	Ancient woodland, oak hornbeam wood
NE18/33	Ram Gorse TI 437108	Ancient woodland, oak hornbeam wood
NE18/34	Burnt Mill Lane TI 447114	Ancient hedgerows with pollard willow trees

#### NE19- Protected Wildlife Verges

*Planning permission will not be granted for development that would have an adverse effect, either directly or indirectly, on the ecology of a Protected Wildlife Verge unless it can be demonstrated that the reason for the proposal outweighs the ecological value of the verge. If granted, planning permission may be subject to conditions, obligations or management agreements for the protection of the site's ecological interests and the provision of appropriate mitigation and/or compensatory measures.*

*All management schemes must be agreed with the Council.*

*The following Protected Wildlife Verges have been identified on the Proposals Map:*

Ref No	Name, Grid Reference	Description
NE19/1	Second Avenue TI 458095	Verge with Diverse Flora
NE19/2	Parndon Wood Road TI 446072	Diverse Flora with woodland
NE19/3	A414 adjoining Mark Hall School TI 469111	Roadside Verge
NE19/4	Southern Way/Deer Park TI 435080	Roadside in Green Wedge
NE19/5	Southern Way/ Parnall Road TI 446082	Corner Verge
NE19/6	Gilden Way Roundabout TI 472112	Prominent Roundabout at the entrance to Harlow
NE19/7	Chalk Lane TI 495114	Roadside bank at top of M11 cutting
NE19/8	Well Lane TI 431101	Ancient Hedgerow

#### NE20- Protected and Rare Species

*Applications for planning permission for new development that is likely to affect protected or other rare (UK and Essex BAP) specie(s) must be accompanied by a fully informed survey, carried out at an appropriate time of the year, detailing the development's impact on the*

*protected or rare specie(s). Planning permission will not be granted for development or changes in land use which would have an adverse impact on species protected by Schedules 1, 5 or 8 of the Wildlife and Countryside Act 1981 (as amended), the Protection of Badgers Act 1992 (as amended), the Habitats Regulations 1994 (as amended) and other rare (UK and Essex BAP) specie(s) unless it can be demonstrated that the reason for the proposal outweighs the need to safeguard the specie(s). If granted, planning permissions may be subject to conditions, obligations or management agreements to:-*

- 1. Facilitate the survival of individual members of the species;*
- 2. Reduce disturbance to a minimum;*
- 3. Provide adequate alternative habitats to sustain at least the current levels of population;*
- 4. Provide a commuted sum towards securing the longterm management of the site. All management schemes must be agreed with the Council.*

#### **BE2- Providing High Quality, Legible and Successful Public Realm**

*Planning permission for major new development will be granted provided that all the following are met:*

- 1. New buildings are designed as part of a group of buildings creating a sense of enclosure;*
- 2. Public spaces should relate to the scale, appearance, location and function of the buildings around it;*
- 3. The layout of buildings, routes and spaces are clearly related;*
- 4. The fronts of buildings provide primary access and clearly define streets and public spaces;*
- 5. Public spaces are clearly distinguished from private areas;*
- 6. The ground floor use encourages activity and interest that is appropriate to the location and character of the area;*
- 7. Pedestrian, cycling and, where appropriate, horse riding routes are shown on*

#### **BE5- Crime Prevention and Personal Safety**

*Development proposals should demonstrate how the potential for preventing crime has been satisfactorily addressed through the design, layout and landscaping. These measures should be an integral part of the design and not compromise the creation of an area with distinct character, high quality landscaping and a successful public realm.*

#### **BE6- Listed Buildings**

*Proposals for the extension or alteration of any listed building, alteration of its setting, conversion or change of use should not adversely affect or harm any of the following:*

- 1. The character that forms its value as being of special architectural or historic interest;*
- 2. The particular physical features that justify its statutory protection;*
- 3. Its setting in relation to its grounds, the surrounding area, other buildings and wider views and vistas.*

#### **BE10- Conservation Areas**

*New development in Conservation Areas or development that affects the setting, surrounding area, or inward and outward views will be granted planning permission providing:*

- 1. It does not harm the character or appearance of the Conservation Area;*
- 2. The scale, height, form, massing, elevation, detailed design, materials, and layout respect the character of the Conservation Area;*

3. *The proposed land use is compatible with the function and activities of the Conservation Area.*

BE11- Historic Parks and Gardens

*Development proposals that would adversely affect the character, appearance, setting or views into and outward of a registered historic park or garden will not be permitted.*

BE12- Archaeology

*Planning permission will not be granted for development proposals that would adversely affect the site or setting of a Scheduled Monument listed below or other archaeological site of national or particular local importance.*

Ref No	Scheduled Monuments
BE12/1	Chapel at Harlowbury
BE12/2	Harlow Roman Temple
BE12/3	Netteswellbury Barn, Netteswell
BE12/4	Little Parndon moated site
BE12/5	Site of Parndon Hall
BE12/6	Harlowbury deserted medieval village
BE12/7	Bowl barrow, 230m north of Harlow Hospital
	Bowl barrow, 140m north of Harlow Hospital
	Bowl barrow, 110m north-east of Harlow Hospital
BE12/8	Cursus, south of Gilden Way
BE12/9	Roman villa, 500m north-east of Harlowbury
BE12/10	Bowl barrow, 240m north of The Kennels
BE12/11	Passmores House moated site, immediately south of Todd Brook

BE13- Archaeology

*The desire to preserve the remains and setting of a site with archaeological remains of lesser importance will be a material consideration when considering development proposals affecting the site. This desire will be balanced against the importance of the remains; the need for the development; the possibility of preservation in situ; and / or the appropriateness of an archaeological excavation for 'preservation by record'.*

BE14- Archaeology

*Development proposals that affect a site where archaeological remains may exist will only be determined after an archaeological field evaluation has been undertaken.*

BE16- Light Pollution

*External lighting proposed for any development will not be granted planning permission if any of the following apply;*

- 1. It is unacceptably visually intrusive;*
- 2. Its use would cause an unacceptable disturbance to the surrounding area;*
- 3. It causes danger to road safety;*
- 4. It is proven to have an adverse effect on sites of wildlife importance.*

*Where permission is granted, development will be required to minimise light spillage through the use of good design, screening and deflecting of the source; and the nature and intensity of the lighting and its hours of use will be carefully controlled.*

BE17- Noise Pollution

*Planning permission will be granted if noise sensitive developments are located away from existing sources of noise and potentially noisy developments are located in areas where noise will not be such an important consideration, or adequate provision has been made to mitigate the adverse effects of noise likely to be generated or experienced by others.*

**CP9- Public Utilities – Infrastructure**

*To allow for the proper provision of public utility services, planning permission for development that increases the demand for off-site service infrastructure will only be granted if sufficient capacity already exists or extra capacity can be provided in time to serve the proposed development. Where sufficient capacity does not exist, planning permission may be granted conditionally requiring the phasing of development to coincide with provision.*

**CP12- Public Utilities- Flooding**

*Development that will be at risk of flooding, or will contribute to flood risk or has an adverse impact on the river corridor will be resisted.*

**M11 JUNCTION 7A – ENVIRONMENTAL IMPACT ASSESSMENT**

An Environmental Statement dated January 2017 was submitted as part of the planning application which examines the existing situation on site and looks at the main aspects and impacts to be associated with the proposed development. The planning policies relevant to the development have been assessed in detail. The EIA looks at each of the impacts in turn to assess the potential impact on the natural and built environment and considers, where necessary, the mitigation measures needed to reduce and minimise the potential impact.

The impacts identified are:-

- Air Quality
- Cultural Heritage
- Landscape and Visual
- Nature Conservation
- Geology and Soils
- Materials
- Noise and Vibration
- People and Communities
- Road Drainage and the Water Environment
- Cumulative Assessment

**AIR QUALITY**

The potential air quality impacts of road traffic associated with the proposed scheme have been assessed at receptor points representing locations where air quality impacts would be greatest.

The study area for the assessment of local air quality has been defined in line with the guidance contained in DMRB Volume 11, Section 3, Part 1 (HA207/07). It comprises all land within 200m of the centre line of the existing road; land within 200m of the centre line of the Proposed Scheme; and land within 200m of any other 'affected roads'.

**Impacts during construction**

Part of the Proposed Scheme would be located in the open field to the north east of Harlow and east of Gilden Way. There are a total of 1,394 receptors within 350m of the boundary of this site. No ecological receptors within 50m of the boundary of the site; 50m of the route used by construction vehicles on the public highway; or 500m from the site entrances have been identified. The locations of these sensitive receptors are presented in Figure 5-2 of the ES.

The dust impact assessment has demonstrated that the risk of dust soiling without any mitigation would be High Risk for earthworks, Medium Risk for Construction and High Risk for trackout. The risk of adverse exposure effects of PM10 for all construction activities has been assessed as Low.

Construction traffic data associated with the entire construction phase to be below the DMRB HA207/07 criteria for affected links. Therefore it has been assessed that the impact of the construction traffic on local air quality would not be significant and therefore no further assessment has been undertaken for construction traffic.

Mitigation – Appendix 5.5 within Volume C outlines the recommended construction mitigation measures required for the dust related impact (dust soiling) associated with the construction activities to include a Dust Management Plan (DMP) and a Construction Environmental Management Plan (CEMP). Measures are also included in the outline EMP.

### Impacts during operation

#### Human exposure

The results show that for the NO<sub>2</sub> annual mean AQO, the Proposed Scheme would lead to a large magnitude improvement at 25 receptors, all of which are located along A1060 London Road and B1383 Stansted Road, Bishop's Stortford. There would be a medium magnitude improvement at a further 74 receptors located along A1060 London Road and B1383 Stansted Road, Bishop's Stortford; at Sawbridgeworth AQMA; a roundabout at A414/Second Avenue, Harlow; and Priory Court/A414 Harlow. Finally, there would be a small magnitude improvement at a further 25 receptors located approximately at A414/Second Avenue, Harlow and A1169 Elizabeth Way, Harlow.

Six receptors would experience a medium magnitude (worsening) and located along B183 The Street, Harlow and Crown Close, Sheering Harlow (along M11). There would be a small magnitude worsening at a further two receptors located at A414 Edinburgh Way, Harlow and Weald Hall Lane, Epping Forest (along M11). There would not be any new exceedances created with the Proposed Scheme.

Based on the conservative approach of excluding those receptors in Sawbridgeworth AQMA and Bishop's Stortford AQMA junction (which are potentially overestimated beneficial effects), ten receptors would experience small to medium improvements in local air quality and eight receptors would be predicted to experience small to medium worsening of local air quality.

As the number of properties affected would be fewer than the lower guideline bands (10-30 for medium and 30-60 for small) it has been assessed that the Proposed Scheme effects would not be significant.

Designated Site - The results indicate that the Proposed Scheme could decrease N-deposition (an improvement) by more than 1% of the lower threshold of the critical load (10-15kg N ha<sup>-1</sup> yr<sup>-1</sup> for neutral grassland) at the edge of Sawbridgeworth Marsh. No changes in N-deposition have been identified for the closest three Natura 2000 sites.

Regional Impact- NO<sub>x</sub>, PM<sub>10</sub> and CO<sub>2</sub> results for the regional assessment for opening year 2021 and design year 2036 are considered. The results for the opening year 2021 indicate an increase in NO<sub>x</sub> emissions of 6.4tonnes/year with the Proposed Scheme in place (compared to the DM scenario). PM<sub>10</sub> emissions have been determined to increase by 0.3 tonnes/year; and CO<sub>2</sub> emissions are predicted to increase by 2,962tonnes/year.

The results for the design year 2036 indicate an increase in NO<sub>x</sub> emissions of 8.8tonnes/year with the Proposed Scheme in place (compared to the DM scenario). It has

been predicted that PM10 emissions would increase by 0.6 tonnes/year and CO2 emissions would increase by 5,765 tonnes/year.

There is no published government guidance for assessing the significance of the effects of individual highway schemes on regional or greenhouse gas emissions. The regional assessment results have shown relatively small percentage increases (up to 5 millionths) in NOx, PM10 and CO2 emissions that would result from the Proposed Scheme compared to regional and national road traffic emissions. Therefore, the effect of the Proposed Scheme on regional emissions has been assessed as Negligible.

EU compliance - The values reported by Defra based on the PCM model are all below the EU limit values for the CRRN in 2016 (the latest year publicly available), and the impact of the Proposed Scheme would not lead to increases in concentrations sufficient to alter these conclusions. Therefore, the compliance risk assessment has identified that the Proposed Scheme has a low risk of being non-compliant with the EU Directive on ambient air quality.

### Conclusion

During construction of the Proposed Scheme, 71 receptors within 20m of the construction boundary could be susceptible to dust impacts. With appropriate mitigation measures implemented it has been assessed that the construction impact of the Proposed Scheme would not be significant.

Once the Proposed Scheme became operational, 126 of the receptors would experience an improvement of an AQO already above objective or the removal of an existing exceedance. Eight receptors located along the M11 and A414 Edinburgh Way would experience a worsening of AQOs already above AQO with small to medium changes.

Predicted concentrations of PM10 have been shown to be well below AQO limits (<30 µg/m3) with and without the Proposed Scheme.

The compliance risk assessment has been predicted as low and the impact on designated sites predicted by ecologists as not likely to be significant.

The majority of modelled receptors would receive improvements in annual mean NO2 concentrations and the overall direction of change would be likely to be negative (i.e. an improvement). Based on IAN 174/13 guidance, the overall impact of the Proposed Scheme would not be significant.

### **CULTURAL HERITAGE**

The study area assessed is 200m in all directions from the proposed scheme. A total of 82 cultural heritage assets have been identified within the study area; with an additional nine designated cultural heritage assets located outside the study area which have been considered due to potential indirect impacts associated with the Proposed Scheme.

Cultural heritage was considered under the subtopics of 'Archaeological Remains', 'Historic Buildings' and 'Historic Landscape'. For all three sub-topics, an assessment of the value of each cultural heritage asset was undertaken on a six-point scale of Very High, High, Medium, Low, Negligible and Unknown.

### **Impacts during construction**

#### Archaeological remains

The Scheduled bowl barrow Harlow Mound (Asset 59) is screened from the Proposed Scheme by a block of mature woodland. Proposed use of the neighbouring former plant

nursery as a temporary site compound (CS1) will have no physical impact on the site and is unlikely to have any impact on its setting. The magnitude of this temporary impact has been assessed to be Negligible.

Construction of the proposed Sheering Road and Pincey Brook Roundabouts and Westbound and Eastbound Links would remove a probable prehistoric barrow and remains associated with an early (possibly prehistoric) field system, identified by geophysical survey (Asset 98). Likewise, to the east of the M11, the construction of temporary haul roads, the Eastern Dumbell Roundabout, Compound Sites CS2 and CS4, Soil Storage Areas SS2, SS3, SS5, SS6 and SS7, and Topsoil Storage Areas TS3, TS5 and TS7 are likely to remove (see Figure 2-4) archaeological remains associated with possible prehistoric settlement and funerary activity (Asset 115). Because of the potential for total removal of these assets the magnitude of this impact has been assessed to be Major Adverse.

#### Historic buildings

The Grade II\* Listed Sheering Hall (Asset 8) and its associated Grade II Listed Barns (Assets 6 and 7) are located approximately 360m north-east of the proposed Sheering Road and Pincey Brook Roundabouts, and the Westbound Link. Construction activities, such as the movement of plant and the presence of site compounds and materials storage areas would have a temporary impact on their setting. However, the assets are screened by extensive mature vegetation which would block views from them to the south, and the temporary impact would cease on completion of the construction programme. The magnitude of this impact has therefore been assessed to be Minor Adverse.

Construction of the proposed Sheering Road and Sheering Road Roundabout would be directly adjacent to Mayfield Farm (Asset 31). There would be a likely increase in noise levels during construction due to the presence and operation of construction plant and earth-moving activities which would also result in a temporary visual impact on its semi-rural setting. Similar impacts would also be anticipated during the construction of temporary haul roads: Compound Site CS2; Soil Storage Areas SS2 and SS3; and Topsoil Storage Area TS3 (see Figure 2.4). These impacts would be temporary and would cease on completion of the construction programme. The magnitude of this impact has been assessed to be Minor Adverse.

Construction activities on Gilden Way could have an adverse impact on the setting of Old Harlow Conservation Area (Asset 49); Churchgate Street Conservation Area (Asset 85), and the Grade II Listed Long Barn (Asset 71). These impacts would be temporary and would cease on completion of the construction programme. The magnitude of impact has been assessed to be Minor Adverse for all three assets.

Grade II\* Listed Aylmers (Asset 105) would be approximately 450m north of the proposed Sheering Road and Pincey Brook Roundabouts and Westbound and Eastbound Links. This asset is well screened by existing mature vegetation within its grounds, alongside Sheering Lower Road and Sheering Road (B183), and adjacent to Pincey Brook. No impact is therefore predicted on the setting of this asset during construction.

Construction of the proposed Sheering Road and Pincey Brook Roundabouts and Westbound Eastbound Links would be approximately 540m south of Grade II\* Listed Durrington Hall (Asset 107). There would be a visual impact on its rural setting due to the presence and operation of construction plant. This impact would be temporary and would



cease on completion of the construction programme. The magnitude of this impact has been assessed to be Minor Adverse.

#### Impact during operation

##### Archaeological remains

Temporary site compound CS1 south of Gilden Way would be returned to its present condition during operation of the Proposed Scheme. Consequently, no impact is predicted on the setting of the Scheduled bowl barrow Harlow Mound (Asset 59) during operation.

##### Historic buildings

The setting of the Grade II\* Listed Sheering Hall (Asset 8) is defined by its relationship with the Grade II Listed Barns (Assets 6 and 7) and with the archaeological remains of Sheering Hall Ringwork (Asset 5). This relationship would not be affected. Views from these assets are restricted by surrounding mature vegetation and views of the Proposed Scheme would be largely screened. As traffic noise from the M11 already forms an attribute of the setting of Assets 6, 7 and 8, changes in noise levels resulting from operation of the Proposed Scheme would not affect this asset (see Chapter 11 - Noise and Vibration). The magnitude of this impact has been assessed to be Negligible for all three assets.

The relationship between Gilden Way and the Old Harlow Conservation Area (asset 49) and Churchgate Street Conservation Area (Asset 85) would be unchanged. However, potential loss of existing vegetation at their periphery, changes to lighting and signage, and changes in traffic volume in this area could result in an impact on their setting. The magnitude of this impact has been assessed to be Minor Adverse for both assets.

Grade II\* Listed Aylmers (Asset 105) would continue to be screened from the Proposed Scheme by existing mature vegetation within its grounds, alongside Sheering Lower Road and Sheering Road (B183), and adjacent to Pincey Brook. No impact is therefore predicted on the setting of this asset.

The proposed Sheering Road and Pincey Brook Roundabouts, Westbound and Eastbound Links would form a prominent new element of infrastructure in the rural setting of Grade II\* Listed Durrington Hall (Asset 107). The Proposed Scheme would not be visible at ground level from Asset 107, however, elements of Westbound and Eastbound Links would be visible in views south and south-east from the first and Attic floors, and visual impacts from lighting, signage and traffic movement could occur particularly at night or during winter months when screening from existing foliage cover is reduced. Views of agricultural fields beyond the fringes of the parkland surrounding Durrington Hall are an element of its designed landscape setting, and contribute to our understanding of the asset. Although distant, the Proposed Scheme would create a noticeable change to the setting of the asset when viewed from the first floor and attic rooms facing it. The magnitude of this impact has been assessed to be Minor Adverse.

Proposed noise barriers on the north side of Gilden Way would create a visual impact on the setting of 49 Mulberry Green (Asset 103) during operation. This asset is a former police station which was deliberately positioned at the roadside to advertise its presence, and the barrier would obscure views of it from the road affecting our understanding of its original function. The magnitude of this impact has been assessed to be Moderate Adverse.

The proposed Eastern Dumbell Roundabout on the M11 would form a prominent new element of infrastructure in the rural setting of Grade II Listed Housham Hall and Barns

(Assets 112, 113 and 114), and would introduce further visual impact due to lighting, signage and traffic movement. This could be accompanied by a predicted negligible but long term increase in noise levels (see Chapter 11 - Noise and Vibration). The magnitude of this impact on all three assets has been assessed to be Minor Adverse.

#### Historic landscape

Construction of the proposed Sheering Road and Pincey Brook Roundabouts, Westbound Link, Eastbound Link and Dumbell Roundabout would remove short lengths of hedgerow defining parcels within the 20th Century Agriculture Historic Landscape Type (HLT1). The magnitude of this impact has been assessed to be Negligible.

#### Mitigation

##### Archaeological remains

A staged programme of archaeological investigation is proposed for the geophysical anomalies west and east of the M11 (Assets 98 and 115). Archaeological trial trenching would provide more detailed information on their extent, condition, depth, character, quality and date of any associated archaeological remains. Trial trenching would also be used to confirm the presence or absence of unknown archaeological remains where the geophysical survey did not identify anomalies of potential archaeological origin. The results of the trial trenching would inform the design of site-specific mitigation measures for archaeological remains, which would be likely to comprise a combination of detailed archaeological excavation and strip, map and sample excavation as appropriate. Archaeological fieldwork would be followed by a programme of assessment, analysis, and publication.

The Scheduled bowl barrow Harlow Mound (Asset 59) is surrounded by mature woodland, and no physical impact is predicted during construction or operation of the Proposed Scheme. However, due to the close proximity of the proposed site compound on Gilden Way (CS1) there is a possibility for accidental damage to occur during construction. Therefore this asset would require protection through the use of protective fencing and signage.

#### Historic buildings

Due to the close proximity of Mayfield Farm (Asset 31) to construction works, there is a possibility for accidental damage to occur during construction. Therefore this historic building would require protection during construction through the use of protective fencing. Woodland, tree and hedgerow planting proposed would also serve to integrate the proposed scheme into its surroundings and reduce its visual impact on the setting of historic buildings particularly 163 Sheering Road (Asset 99), Aylmers (Asset 105) and Durrington Hall (Asset 107).

Although it would not remove it, sensitive design and the use of materials similar to those of the asset would go some way to reduce the magnitude of impact from the proposed noise barrier on the setting of 49 Mulberry Green (Asset 103).

#### Historic landscape

Because of the small magnitude of impact assessed on the 20th Century Agriculture Historic Landscape Type (HLT1), no mitigation is proposed for this sub-topic.

#### Conclusion

After mitigation, no significant effects on cultural heritage assets are predicted.

## LANDSCAPE AND VISUAL

### Summary of Landscape Effects

Table 7.6: Summary of landscape effects

Description of effect	Significance of effect (prior to mitigation)	Proposed mitigation	Residual effect (after mitigation)
Loss of mature woodland protected by Tree Preservation Orders (TPOs) (0.43ha).	Moderate Adverse	Proposed woodland planting totalling over 16ha. Woodland planting could not fully mitigate for the loss of mature trees.	Moderate Adverse
Loss of semi-mature woodland and scrub along the M11 (1.62ha).	Slight Adverse	Proposed replacement woodland planting.	Neutral

Description of effect	Significance of effect (prior to mitigation)	Proposed mitigation	Residual effect (after mitigation)
Loss of other woodland/hedges and scrub (1.50ha), some of which includes mature trees.	Moderate Adverse	Proposed woodland hedge and other native planting totalling over 19ha, (including the 16ha of woodland planting noted above) plus planting areas of scattered scrub and 361 individual trees at larger size. Woodland planting could not fully mitigate for the loss of mature trees.	Slight Adverse
Effect of proposed lighting in Harlow area, taking into account existing street lighting and lighting in the Hallingbury development about to be constructed.	Neutral	Proposed planting would not mitigate for new lighting. The new LED lighting would have full cut-off lanterns focused on the road and limiting light spill to adjacent properties.	Neutral
Effects of Proposed Scheme earthworks on landform in the Pincey Brook valley.	Moderate Adverse	Proposed earth mounding would not mitigate effects on landform but landscape planting would soften and disguise the embankments and cuttings.	Moderate Adverse
Effect of proposed road lighting in the Pincey Brook valley.	Moderate Adverse	Proposed planting would not mitigate the effect of road lighting. The new LED lighting would have full cut-off lanterns focused on the road and limiting light spill to adjacent properties.	Moderate Adverse
Reduction of tranquillity (mainly in the Pincey Brook valley) taking into account existing disturbance from the M11.	Moderate Adverse	Extensive screen planting with woodland, hedges, scrub and planting of many individual trees.	Slight Adverse.
Effect on the townscape character of the Harlow Core local character area due to vegetation losses and the visual severance effect of road widening and noise barriers.	Moderate Adverse (local)	Replacement hedge and tree planting, hedges and climbing plants to screen noise barriers, and amenity planting.	Slight Adverse (local)
Effect on the townscape character of the Harlow Environs local character area due to vegetation losses and the visual severance effect of road widening and noise barriers.	Moderate Adverse (local)	Replacement hedge and tree planting, hedges and climbing plants to screen noise barriers, and amenity planting.	Slight Adverse (local)
Effect on the landscape character of the Little Hallingbury Ridges and Slopes area in the Pincey Brook valley due to encroachment of roads,	Large Adverse (local)	Earth mounding, extensive screen planting with woodland, hedges, scrub and planting of many individual trees.	Moderate Adverse (local)

Description of effect	Significance of effect (prior to mitigation)	Proposed mitigation	Residual effect (after mitigation)
roundabouts, lighting and traffic into the Pincey Brook valley.			
Effect on the landscape character of the Matching Plateau area taking into account the proposed M11 junction and road lighting.	Slight Adverse (local)	Earth mounding, extensive screen planting with woodland, hedges and scrub.	Negligible (local)
The effect of the scheme as a whole on the landscape.	Large Adverse	Extensive screen planting with woodland, hedges, scrub and planting of many individual trees.	Moderate Adverse

## Summary of Visual effects

Table 7.7: Summary of Visual Effects

Receptor type	Sensitivity	Numbers of receptors with views affected									
		Significance of visual effect Year 1 (winter)					Significance of visual effect Year 15 (summer)				
		Slight Beneficial	Neutral	Slight Adverse	Moderate Adverse	Large Adverse	Slight Beneficial	Neutral	Slight Adverse	Moderate Adverse	Large Adverse
Residential	High	1	0	76	23	9	9	20	73	9	0
Commercial	Low	0	0	2	4	0	0	2	4	0	0
Public Rights of Way	High	0	0	13	0	1	0	4	9	0	1
Sheering Road north of Pincey Brook	Moderate	0	0	0	1	0	0	0	1	0	0
Playing Fields	Moderate	0	0	1	1	0	0	1	1	0	0

## NATURE CONSERVATION

### Impacts during construction

The main pathways to impacts are listed below and these are considered in relation to specific receptors in Section 8.5.1.1 to 8.5.1.5.

#### Habitat loss

The impact of habitat loss is partially reversible, in that compensatory planting would create habitats such as species-rich grassland and deciduous woodland which are, for the main part, more ecologically valuable than those proposed to be replaced. However, the area taken to construct the new road/additional lane, would no longer be available to wildlife, and therefore there would be a long-term reduction (albeit small) in available habitat.

#### Pollution of the water environment

During the construction phase, there is a risk that run-off from the disturbed ground and stored construction materials could contaminate surface water receptors such as Pincey Brook, Harlowbury Brook and the pond within the Gilden Way Meadow LWS. Contaminants

associated with construction machinery, such as engine oil and diesel, and with the construction personnel welfare facilities, could also contaminate surface water if left uncontrolled.

Contamination effects, light, noise and vibration impacts have also been considered.

### Impacts during construction

Increase in traffic – fauna collision risk

The new link roads within the Link Area are likely to lead to collision impacts upon fauna travelling across the site, as is the increase in traffic volumes along Sheering Road and Gilden Way on fauna attempting to cross that road.

### Summary of impacts on ecological receptors

Table 8.9: Summary of impacts on ecological receptors

Receptor and effect	Significance of effect (after mitigation)	Possible additional mitigation	Residual effect (after additional mitigation)
Locally designated sites	Slight Negative	None	Slight Negative
Birds – other than skylark	Slight Negative	None	Slight Negative
Skylark – fragmentation of arable habitat leading to loss	Slight Negative	Increased number of skylark plots in nearby	Neutral

Receptor and effect	Significance of effect (after mitigation)	Possible additional mitigation	Residual effect (after additional mitigation)
of nest sites		arable fields	
Bats – increase in night-time light levels leading to loss of commuting habitat	Moderate Negative	Monitoring to assess success of underpasses and hop-overs. If unsuccessful, revision of lighting scheme along link roads would provide dark corridors through Link Area north of The Mores Wood	Slight Negative
Otter	Neutral to Slight Negative	None	Neutral to Slight Negative
GCN	Neutral	None	Neutral

## **GEOLOGY AND SOILS**

### 9.5 Significant Effects

The following sections describe the potential effects of the Proposed Scheme on geology and soils.

### Impacts during construction

This section sets out the key elements of the proposed design from which the assessment of effects is based. Where work on the design is currently ongoing or options remain, a realistic worst case has been identified as the basis of this assessment, where possible.

The construction design is anticipated to include the following main activities:

Earthworks – cuttings

Cuttings are proposed in a number of locations as part of the proposed design. In the area of the Gilden Way north, the Sheering Road Roundabout and the Pincey Brook Roundabout, these are anticipated to be in the order of 4m depth. The M11 cuttings are proposed to be in the order of 6m depth.

The works along the existing Gilden Way are anticipated to be minor, with minimal earthworks (1-2m) and the creation of a new highway pavement.

#### Embankments

A number of areas of embankment are proposed within the current design. The embankments along the link road are expected to be in the order of 10m high, with the M11 embankments in the order of 6m high. All of the embankments are proposed to be vegetated. For the M11 Dumbell Roundabouts a combination of cutting and embankments is proposed, for this the cutting is expected to be in the order of 6m depth, with an embankment in the order of 2m high.

#### Placement of fill materials

Given the requirement for a number of embankments within the scheme design, some deposition of suitable fill materials would be required - preliminary calculations indicate that there is a deficit of fill so materials may need to be imported. See Section 10 - Materials for further information.

Structures – sheet pile walls, foundation piling, culverts

Earthworks structures integral to the proposed design include:

- sheet pile walls - these are proposed in two areas: Mayfield Farm and M11 south bound off slip extension. At Mayfield Farm the sheet pile wall is expected to be to be 10m in length and for the M11 south bound off slip extension the sheet pile wall is anticipated to range from about 10m to 15m in length;
  - the M11 Dumbell Roundabouts - these are anticipated to be founded on piles installed to a depth of approximately 20m; and
  - culverts - large culverts in the Link Area are likely to be founded on spread footings.
- Table 9.12 presents the potential construction impacts resulting from these activities in relation to geology and soils receptors.

The proposed mitigation and significance of impact prior to and after mitigation for geology and soils are summarised in Table 9.14.

Table 9.14: Summary of geology and soils impacts

Description of effect	Significance of effect (prior to mitigation)	Proposed mitigation	Residual effect (after mitigation)
<b>Construction effects</b>			
Vegetation clearance and excavation works - could increase/modify contaminated groundwater and ground gas regime in the scheme area	Large or Very Large Adverse	A CEMP would be prepared and implemented to identify measures to control contamination risk	Neutral
Piling – potential to introduce migration pathways for contaminants to deeper strata	Large or Very Large Adverse	Undertake piling risk assessment for any areas where piling would potentially impact aquifers.	Neutral
Installation of service trenches – these could act as preferential pathways for migration of ground gas, soil and water-derived vapours and contaminants in groundwater	Large or Very Large Adverse	A CEMP would be prepared and implemented to identify measures to control contamination risk	Neutral
Dewatering – if water arising from this process was found to be contaminated and discharged locally it could have a detrimental impact	Large Adverse	A CEMP would be prepared and implemented to identify and control contamination discharges	Neutral
Accidental spills and leaks – could impact surface or groundwater	Large or Very Large Adverse	A CEMP would be prepared and implemented to control contamination discharges	Neutral
Concrete and cement products – uses could impact on water quality, flora and fauna	Large or Very Large Adverse	A CEMP would be prepared and implemented to control the preparation and handling of concrete	Neutral
Construction workers – potential exposure to contamination	Moderate or Large Adverse (due to sensitivity of the receptor)	Control measure such as adopting PPE with appropriate health and safety risk assessments should be implemented	Neutral
Dust or mud from soils containing elevated concentrations of contaminants impacting on general public	Moderate or Large Adverse	A CEMP would be prepared and implemented to control contamination risk to public	Neutral to slight
Loss of soils – There is potential for damaged soils	Moderate to Large Adverse	Manage and try and reduce loss of soil with a SMP (see Section 9.6)	Slight to Moderate



Description of effect	Significance of effect (prior to mitigation)	Proposed mitigation	Residual effect (after mitigation)
and there will be a loss of high grade agricultural land within the scheme footprint		(Not fully mitigatable, loss could only be reduced)	
Existing contamination impacting highways infrastructure	Slight	A CEMP would be prepared and implemented to manage any contamination found during construction not identified in the GI	Negligible
Gas accumulation in voids	Large to Very Large Adverse	Complete additional monitoring and gas sample collection to refine gas risk assessment and design mitigation measures as part of the Proposed Scheme if needed (see Section 9.6)	Slight
Risk of encountering Unexploded Ordnance (UXO)	Large to Very Large Adverse	It is recommended that a targeted investigation is carried out prior to any construction works commencing. This investigation would help to identify and further refine the risk on site (see Section 9.6)	Slight
Risk of encountering unstable ground conditions	Large Adverse	Potential ground instability should be mitigated as part of the Proposed Scheme design (see Section 9.6)	Slight
<b>Operational effects</b>			
Contamination from road operation.	Moderate to Large Adverse	Monitoring following construction to assess adequacy of protective measures and that the need for any corrective action is identified in a timely manner (see Section 9.6)	Neutral to Slight
Exposure of superficial geology	Slight	Mitigated with drainage design, road surfacing and landscaping to reduce and protect areas exposed at the surface. However, the impact would be localised and most areas of the proposed development would remain largely unaffected	Neutral
Exposure of human receptors to contamination	Neutral	Monitoring following construction to make sure that protective measure are adequate and that the need for any corrective action is identified in a timely manner (see Section 9.6)	Neutral to Slight

## MATERIALS

### NOISE AND VIBRATION

The proposed impacts, mitigation and residual effects for noise and vibration are summarised in Table 11.22.

Table 11.22: Summary of noise and vibration impacts

Description of effect	Significance of effect (prior to mitigation)	Proposed mitigation	Residual effect (after mitigation)
<b>Construction effects</b>			
General construction of the Proposed Scheme - daytime noise. A number of inherently noisy operations required. Due to the transient nature of the works, receptors would be exposed to high noise levels. However this would be for a relatively short period only.	Noise levels at receptors in vicinity of the Proposed Scheme would exceed the specified BS 5228 construction noise level thresholds, but not the duration threshold; therefore not predicted to be significant.	Best Practice Means mitigation measures would be applied to minimise impacts wherever possible. The Proposed Scheme's acoustic barriers to be constructed at the start of the construction programme. A CEMP would be prepared and implemented to identify and control noise emissions.	Short term adverse effects; although these would be unlikely to be significant.
General construction of the Proposed Scheme - night-time noise. Night-time operations would be required for some construction activities to minimise disruption to traffic. High noise levels have been predicted at receptors in the vicinity of the Scheme. However these would only be	Noise levels at receptors in the vicinity of the Proposed Scheme would exceed the specified BS 5228 construction noise level thresholds, but not the duration threshold; therefore	Best Practice Means mitigation measures would be applied to minimise impacts wherever possible. Particular mitigation such as temporary hoardings could be required to minimise potential of sleep disturbance. The Proposed Scheme's acoustic barriers would be	Short term adverse effects; although these would be unlikely to be significant.

Description of effect	Significance of effect (prior to mitigation)	Proposed mitigation	Residual effect (after mitigation)
for a short duration due to the transient nature of the works.	not considered to be significant.	constructed at the start of the construction programme. A CEMP would be prepared and implemented to identify and control noise emissions.	
Vibratory compactions - elevated levels of vibration above thresholds where complaints would have the potential to occur. However, the impact would only be of a transient nature, i.e. vibration only perceptible when plant was in close proximity to receptor.	Vibration levels predicted to be at levels where complaints would be possible. However, due to the short exposure time, the effects have not been predicted as significant	A CEMP would be prepared and implemented to identify and control vibration emissions. Use of low vibration plant where feasible.  Proactive measures such as liaising with local residents.	Short term adverse effects; although these would be unlikely to be significant.
<b>Operational effects</b>			
Operation of the Proposed Scheme – the increase in traffic flow and speeds along Gilden Way / Sheering Road would result in elevated levels of noise emanating from the road.	Magnitude of impact at receptors in vicinity of the Proposed Scheme would range from: Moderate to major in the short term Minor to moderate in the long term The impacts would also be significant at relatively large number of receptors, in particular those closest to the Proposed Scheme.	A substantial suite of mitigation measures including acoustic barriers, landscaping and low noise road surfacing have been incorporated into the design to minimise impacts. However, not all receptors would be mitigated from such noise levels due their proximity to the Proposed Scheme and their heights	Minor to moderate in the short term Negligible to minor in the long term
Operation of the Proposed Scheme – impact upon the wider Calculation Area. Introduction of the Proposed Scheme would result in traffic noise changes on the local traffic network which would potentially affect the noise environment.	Short term: overall adverse Long term: overall adverse	As above	Short term: overall beneficial Long term: overall neutral to slightly adverse

## PEOPLE AND COMMUNITIES

This chapter covers the assessment of potential impacts caused by the Proposed Scheme on people and communities. Receptors and impacts relevant to this chapter include the followings.

- Private properties, including land take and impacts on farming businesses.
- Development land, including changes in viability and amenity. This includes how the access to the development site would change and how the site's appropriateness towards its planned use would change.
- Non-Motorised Users, the collective term for pedestrians, cyclists, equestrians, and bus users.
- Community severance, including access to community facilities.
- Public transport users, focussing on bus services.
- Vehicle users, particularly driver stress.

Additional effects on human beings are addressed under other headings including Air Quality, Landscape and Visual, Materials, Noise and Vibration.

## Residual Impacts

### Impact during Construction

#### Private assets

Private properties would be affected in a variety of ways. There would be an Adverse residual effect upon two businesses, Mayfield Farm (Sheering Road) and Morgans Farm (Moor Hall Road), in terms of a loss of 42.84ha of agricultural land during the construction period.

#### Development land

Following the implementation of both embedded and proposed mitigation measures, including the traffic plan, the residual effect has been assessed as Negligible.

#### Non-Motorised Users

During construction, mitigation would be in place to limit the inconvenience to pedestrians, cyclists and equestrians. However, the scale of construction works would have some effects on routes used by NMUs. Potential impacts would be overall short-term and Minor, and would include exposure to noise, dust and visual impacts of construction activities and temporary diversions and route closures. No locations have been identified where this is a major issue.

Where PRoWs are within the scheme footprint, diversions would be put in place throughout the construction phase, and there would be associated attractiveness issues expected for short periods due to the proposed phasing of the works.

#### Community severance

There would be temporary disruption to access to community facilities from some properties, but the effect has been assessed as Negligible.

#### Public transport users

Whilst widening works on Gilden Way would have the potential to temporarily impact bus routes that use this road, all bus routes would be maintained during construction with traffic management implemented and therefore, the residual effect has been assessed as Negligible.

#### View from the road and driver stress

Driver stress due to construction activities, periods of delay and congestion due to the reduced road capacity caused by the need to occupy lanes for construction would be mitigated through the construction programme, phasing, and the traffic management plan and site traffic management plan. These would reduce any temporary increase in stress caused by the roadworks and associated construction traffic. This would include temporary signage and traffic signals which would be put in place to reduce uncertainty, fear and frustration.

### Impacts during Operation

#### Private assets

As a result of design change and route realignment, the effects to private properties within the study area would be largely confined to loss of agricultural land with no residential land

take required. Where there would be agricultural land take this would be subject to compensation. This would be the case with Mayfield Farm and the owners of other agricultural land required for construction of the proposed new link road and associated roundabouts and the new junction. Overall the effect on agricultural land has been assessed to be Large to Very Large Adverse with 32.47ha of land required for the Proposed Scheme footprint or associated landscape mitigation.

## **ROAD DRAINAGE AND THE WATER ENVIRONMENT**

The Road Drainage and Water Environment topic covers potential effects of the construction and operation of the Proposed Scheme on flood risk, geomorphology, surface water quality and groundwater receptors.

Overall the significance of effect from the Proposed Scheme on all sources of flood risk, geomorphology and water quality and groundwater has been assessed to be Neutral to Slight Adverse, if the appropriate mitigation outlined in Section 13.6 is implemented as part of the Proposed Scheme.

The proposed effects, mitigation and residual effects for the road drainage and the water environment are summarised in Table 13.9.

Table 13.9: Summary of water impacts

Description of effect	Significance of effect (prior to mitigation)	Proposed mitigation	Residual effect (after mitigation)
<b>Construction effects</b>			
Flood risk	Slight Adverse	Minimise working areas within the floodplain; implementation of a CEMP	Neutral
Fine sediment input to watercourses	Slight Adverse	Implementation of good practices and an EMP during construction	Neutral
Altering surface water runoff and drainage processes	Slight Adverse		Neutral
In-channel working leading to fine sediment input downstream, physical alteration of the channel cross-section	Moderate Adverse	Implementation of good practices and an EMP during construction. Minimising length of time working within the channel. Work at periods of low flow	Neutral
Water quality effects from construction vehicles and fine sediment	Moderate Adverse	Implementation of good practices and an EMP during construction	Neutral
Contamination risk to groundwater	Moderate to Large Adverse	Implementation of good practices and an EMP during construction.	Slight Adverse
Construction of embankments leading to compaction of drift deposits	Neutral	None required	Neutral
<b>Operation effects</b>			
Fluvial flood risk	Neutral	Hydraulic modelling for the with-scheme condition has been completed for the Pincey Brook and unnamed watercourse 1	Neutral
Surface water flood risk	Neutral	Hydraulic modelling of the proposed surface water drainage system proposals has been undertaken	Neutral
Groundwater flood risk	Neutral	Lining of detention basins	Neutral
Reservoir flood risk	Neutral	None required	Neutral
Flood risk from services	Neutral	None required	Neutral
Changes to fluvial geomorphology through presence of outfalls, particularly altering flow processes (Pincey Brook and Harlowbury Brook)	Moderate Adverse	Mitigation through following good practice design, using existing outfall structures and inclusion of attenuation ponds	Slight Adverse
Changes to fluvial geomorphology through new	Slight Adverse	Mitigation through following good practice design.	Neutral

Description of effect	Significance of effect (prior to mitigation)	Proposed mitigation	Residual effect (after mitigation)
two new culverts (unnamed watercourse 1)		Minimising length of culvert and extent of bank modification upstream and downstream. Removal of existing extensive culvert downstream and daylighting of approximately 50m of channel, with an additional 170m of open channel	
Altering surface water runoff through increasing impervious surfaces	Slight Adverse	Mitigation through design and appropriately designed drainage strategy	Neutral
Pollution incidences effecting water quality	Minor to Moderate Adverse	Appropriate SuDS and emergency procedures in place	Neutral to Slight Adverse
Road cuttings intercepting groundwater	Slight Adverse	Mitigation is not possible. Slight Adverse impact considered acceptable	Slight Adverse
SuDS providing a route for potential contamination to groundwater	Moderate to Large Adverse	Lining of ponds. Implementation of an appropriately designed drainage system	Slight Adverse

## CUMULATIVE ASSESMENT

This ES provides an assessment of the potential cumulative effects of the Proposed Scheme, and those of the Proposed Scheme in combination with other major proposed developments. Cumulative effects occur when incremental environmental, social and economic impacts caused by past, present and reasonably foreseeable activities combine to create an additive or synergistic level of effect. They can occur during both the construction and operation stage of a scheme.

In summary, there are several locations along the Gilden Way and in the Link Area that would potentially be affected on a cumulative basis. Some of these effects would be temporary (during the construction process) and some more permanent (for the life of the developments/projects).

### Type 1 temporary cumulative effects

The combined effects of dust, noise, construction traffic, visual intrusion, direct landtake and restricted access would impact on all residential and business properties along the Gilden Way and Sheering Road, recreational users particularly of the playing field, NMUs and protected species.

It is expected that good construction techniques would be employed on the development site such that dust, noise, and access issues were kept to a minimum. As construction of the Proposed Scheme progressed, construction traffic would be able to access directly from the new M11 Junction 7A alleviating some of these effects.

### Type 1 permanent cumulative effects

Some residents along the Gilden Way, particularly between London Road and Churchgate Roundabout would suffer from increased noise levels mitigated by the erection of noise barriers in conjunction with a degradation of views. In addition, there would be some community severance to these properties due to the increase in traffic throughout the area.

Recreational users of the playing fields along the Gilden Way would have a reduction in accessible land area due to the installation of an attenuation pond. However, they would

benefit from a more enclosed area with an improvement in air quality and noise levels and ease of access into Harlow and to the M11.

NMUs would be adversely affected by increased noise levels and may feel some severance from facilities and visual intrusion due to noise barriers lining the footpath/cycleway. They should however find travel in the area easier due to the provision of a new footpath/cycleway although crossing the Gilden Way could be harder due to the increase in traffic flows. This has been mitigated by the provision of more toucan crossing points throughout.

Protected species and ecology would be negatively impacted by increased noise and light levels and traffic (causing traffic strike) across the Proposed Scheme. Although there would be a loss of habitats particularly in the Link Area, this would be off-set by replacement planting and drainage installations creating a beneficial habitat effect. In addition, improved air quality would most likely have a beneficial effect.

#### Type 2 temporary cumulative effects

It is difficult to predict the nature of cumulative effects of adjacent developments since the construction programmes of Harlowbury, New Hall and other sites are not known at the time of writing. However, it is assumed that Harlowbury and New Hall Phase II would at some point be under construction in the same period of time as the Proposed Scheme. It would therefore be reasonable to expect an increased impact of dust, noise, construction traffic, community severance and a degradation of views, on all residents and NMUs in the immediate vicinity.

In addition, there would be an increased risk of spillages and release of contaminants increasing the possibility of contamination of waterways and aquifers. It is assumed that the surrounding developments would follow good practice as laid out in a CEMP, and thereby minimise these effects.

The ecology of the area would be likely to be detrimentally affected by adjacent construction, with increased disturbance from noise, construction traffic and lighting and the increased deposition of dust.

It is expected that good construction techniques would be employed on the development site such that dust, noise and access issues were kept to a minimum. Construction traffic would increase in volume. However, should the Proposed Scheme be built prior to or concurrently with the other developments, there would be scope for the construction traffic for all developments to access via the M11 Junction 7A rather than via local roads from Junction 7, therefore reducing associated effects from construction traffic within an urban environment.

#### Type 2 permanent cumulative effects

The traffic figures used as the basis for the air quality and noise assessments have taken account of the New Hall and Harlowbury developments; hence these have already been accounted for in both assessments.

The main topic areas where there would be a significant increase in effects as a result of other developments in the area are nature conservation, landscape and visual and people and communities, particularly the loss of agricultural land.



Wildlife in the area would suffer from increased general noise and lighting disturbance and mortality from traffic strike and cat predation. In addition, populations could become more fragmented. The landscape character and views in the area would increasingly change from rural to more urban. An increased area of agricultural soils would be lost with the associated loss of agricultural business.

## SUMMARY AND CONCLUSION

Table 15.1 summarises the potential impact and the residual effects following mitigation. For further explanation and detail, the reader is to refer to the individual topic chapters.

Table 16.1: Summary of residual environmental effects after mitigation

Description of impacts	Proposed mitigation	Residual effects (after mitigation)
<b>Air Quality (no residual effects) (Chapter 5)</b>		
<b>Cultural Heritage (Chapter 6)</b>		
Archaeological remains	Implementation of a staged programme of archaeological investigation, followed by assessment, analysis and publication of results.	Slight Adverse
Setting of historic buildings	Photographic survey informed by Historic England guidance and landscape planting referred in Landscape and Visual section below.	Neutral to Slight Adverse
<b>Landscape and Visual (Chapter 7)</b>		
Loss of mature woodland protected by Tree Preservation Order (TPO) (0.43 hectares (ha))	Proposed woodland planting totalling over 16ha. Woodland planting could not be fully mitigated for the loss of mature trees.	Moderate Adverse
Loss of other woodland/hedges and scrub (3.12ha)	Proposed woodland hedges and other native planting totalling over 19ha (including the 16ha above), plus planting areas of scattered scrub and 361 individual trees of a larger size. Woodland planting could not fully mitigate for the loss of mature trees.	Slight Adverse
Effect of proposed lighting	Proposed planting would not mitigate for road lighting. The new LED lighting would have full cut-off lanterns focused on the road and limit light spill to adjacent properties.	Neutral in Harlow (urban), Moderate Adverse in the countryside (rural)
Effects of scheme earthworks on landform	Proposed earth mounding would not mitigate effects on landform but landscape planting would soften and disguise embankments and cuttings. However, the impact would still remain the same.	Moderate Adverse
Reduction of tranquillity	Extensive screen planting with woodland, hedges, scrub and planting of many individual trees.	Slight Adverse

Description of impacts	Proposed mitigation	Residual effects (after mitigation)
Effect on the townscape of the Harlow local character areas due to vegetation losses and the visual severance effect of road widening and noise barriers	Replacement hedge and tree planting and amenity planting; hedges and climbing plants to screen noise barriers.	Slight Adverse
Effect on the landscape character in the Pincey Brook valley due to encroachment of roads roundabouts, lighting and traffic into the Pincey Brook valley	Earth mounding, extensive screen planting with woodland, hedges, scrub and planting of many individual trees.	Moderate Adverse (local)
Visual effects at residential properties	Reinstatement of roadside hedges and other screen planting.	0 Large Adverse; 9 Moderate Adverse; 73 Slight Adverse; and 9 Slight Beneficial (Year 15)
Visual effects on road users (Sheering Road north of Pincey Brook)	Reinstatement of roadside hedges and other screen planting.	Slight Adverse (Year 15)
Visual effects on Public Right of Ways (PRoWs) (Each PRoW only recorded once at location with greatest effect)	Reinstatement of roadside hedges and other screen planting; however, for one receptor the impact would still remain the same.	1 Large Adverse; 0 Moderate Adverse; and 9 Slight Adverse (Year 15)
<b>Nature Conservation<sup>10</sup> (Chapter 8)</b>		
Habitat loss – Gilden Way Roundabout Protected Wildlife Verge (PWV)	Compensation and enhancement landscape planting of species-rich grassland especially Betony (local rare plant). However, the impact would still remain the same as the PWV would be lost.	Slight Adverse
Habitat loss – bats	Removal of recorded bat roost trees to be undertaken under Ecological Protected Species (EPS) licence. Compensation planting and woodland reinforcing planting would be carried out for the loss of confirmed and high potential roost habitat. However, the impact would still remain the same.	Slight Adverse
Reduction in local birds population from habitat loss/fragmentation especially for skylark	Timings control on vegetation clearance in construction programme to ensure that the bird nesting habitat is removed outside the nesting season. Introduction of hop-over fences, acoustic fencing and	Slight Adverse

Description of impacts	Proposed mitigation	Residual effects (after mitigation)
	reduction of speed limit to off-set increase risk of traffic collision to birds. Provision of LED lamps, lower lighting columns and landscape planting to reduce disturbance to birds. However, the impact would still remain the same.	
Impact to foraging and commuting bats from traffic collision, noise/air pollution and night-time light levels	Provision of multi-purpose mammal underpasses, hop-over fences, acoustic fences, associated landscape planting, reduction of speed limit and sensitive lighting to reduce disturbance to bats and the risk of collision with traffic.	Slight Adverse
Impacts to local otter population	Implementation of good practices and Construction Environmental Management Plan (CEMP). Provision of multi-species underpasses in combination with fencing, landscape planting and sensitive lighting to reduce disturbance to otters and the risk of collision with traffic.	Neutral to Slight Adverse
<b>Geology and Soils (Chapter 9)</b>		
Dust or mud from soils containing elevated concentrations of contaminants impacting on general public	A Construction Environmental Management Plan (CEMP) would be prepared and implemented to control contamination risk to the public.	Neutral to Slight Adverse
Loss of high grade agricultural soils within the scheme footprint	Manage and reduce loss of soil with Soil Management Plan (SMP) and Materials Management Plan (MMP); however, would not be fully mitigated, loss could only be reduced.	Slight to Moderate Adverse
Gas accumulation in voids	Additional monitoring and gas sample collection to refine gas risk assessment and design mitigation measures as part of the Proposed Scheme, if required.	Slight Adverse
Risk of encountering Unexploded Ordnance (UXO)	Recommended that a targeted investigation would be carried out prior to any construction works commencing. There is a risk associated with UXO. The slight adverse effect refers to the risk posed.	Slight Adverse
Risk of encountering unstable ground conditions	Potential ground instability would be mitigated as part of the Proposed Scheme design. The slight adverse effect refers to the design risk.	Slight Adverse
Contamination from road operation	Monitoring would be carried out following construction to assess adequacy of protective measures and that any need for corrective action would be identified in a timely manner.	Neutral to Slight Adverse

Description of impacts	Proposed mitigation	Residual effects (after mitigation)
<b>Materials (Chapter 10)</b>		
Material use and depletion (i.e. virgin aggregates)	Maximising the use of local materials and effectively managing materials use on site. Provision of a Site Waste Management Plan (SWMP) incorporating targets for recycling and waste minimisation and CEMP.	Slight Adverse
Use of imported materials (i.e. blacktop, steel, concrete)	Maximising the use of local and/or recycled materials. Provision of a SWMP incorporating targets for recycling and waste minimisation and CEMP. However, the impact would still remain the same.	Neutral to Slight Adverse
Carbon footprint of materials transport and use	Carbon monitoring and management and maximising the amount of material resources and waste to be re-used on-site. Provision of a SWMP incorporating targets for recycling and waste minimisation and CEMP. However, the impact would still remain the same.	Major <sup>11</sup> Adverse
<b>Noise and Vibration (Chapter 11)</b>		
Traffic noise in vicinity of the Proposed Scheme during operation	Provision of noise barriers, landscaping and low noise road surfacing; however, not all receptors would be mitigated from noise due their proximity to the Proposed Scheme and their heights.	Minor to Moderate Adverse (short term) Negligible to Minor Adverse (long term) <sup>12</sup>
Traffic noise to the wider area during operation	Provision of acoustic noise barriers, landscaping and low noise road surfacing; however, not all receptors would be mitigated for noise due their proximity to the Proposed Scheme and their heights.	Overall Beneficial (short term) Overall Neutral to Slight Adverse (long term) <sup>12</sup>
<b>People and Communities (Chapter 12)</b>		
Loss of Best and Most Versatile (BMV) Grades 2 and 3a agricultural land	Loss of good quality land would not be mitigated against, but owners would be compensated.	Large or Very Large Adverse
Entire Scheme (Driver Stress)	Reduced congestion, improved accessibility and lower speed limits	Beneficial <sup>13</sup>
<b>Road Drainage and Water Environment (Chapter 13)</b>		
Contamination risk to groundwater (during construction)	Implementation of good practices and a CEMP would be in place during construction.	Slight Adverse
Changes to fluvial geomorphology through	Mitigation by following good practice design, using existing outfall structures	Slight Adverse



Description of impacts	Proposed mitigation	Residual effects (after mitigation)
presence of outfalls, particularly altering flow processes (Pincey Brook and Harlowbury Brook)	and inclusion of attenuation ponds.	
Pollution incidences affecting water quality	Appropriate Sustainable Urban Drainage System (SuDS) and emergency procedures would be put in place.	Neutral to Slight Adverse
Road cuttings intercepting groundwater	Mitigation would not be possible. Slight adverse effect considered acceptable.	Slight Adverse
SuDS providing a route for potential contamination to groundwater	Lining of ponds. Implementation of an appropriately designed drainage system.	Slight Adverse
<b>Cumulative effects - Type 1 (Chapter 14)<sup>14</sup></b>		
Cultural heritage: noise, vibration and visual changes	Reinstatement of roadside hedges and other screen planting. Provision of noise barriers, landscaping and low noise road surfacing.	Minor Adverse
Some properties in London Road to Churchgate: increased noise levels, decreased air quality, visual degradation and some severance	Careful positioning of noise barriers and mitigation of visual degradation through screen planting including hedges.	Minor Adverse
Properties from Churchgate Roundabout to Pincey Brook roundabout: alterations in views. However they would benefit from improved air quality traffic flows and traffic reduction along the old Sheering Road	Mitigation of visual impacts through screen planting including hedges.	Minor Beneficial
Recreational users of playing fields: loss of land and visual alterations. Reduced noise, retention of games equipment and reduced visual intrusion	Use of screen planting. Loss of land would not be mitigated against, but would be compensated.	Minor Beneficial
Nature conservation: increased noise, traffic collisions and visual disturbance to local wildlife	Provision of multi-purpose mammal underpasses, hop-over fences, acoustic fences, associated landscape planting, reduction of speed limit and sensitive lighting to reduce disturbance to bats and the risk of collision with traffic.	Minor Adverse

Description of Impacts	Proposed mitigation	Residual effects (after mitigation)
<b>Cumulative effects - Type 2 (Chapter 14)</b>		
Impacts from new developments may increase impact on cultural heritage	None proposed. Assess information on local developments as it becomes available	Slight Adverse
Increased conflict with the character of the landscape and diminished sense of place	None proposed. Assess information on local developments as it becomes available	Moderate Adverse
Loss and fragmentation of habitats would increase. Increased predation by cats. Further loss of bat flightlines and lighting impacts	None proposed. Assess information on local developments as it becomes available	Slight Adverse
Low additional loading of groundwater with pollutants from road surfaces and spillages	None proposed. Assess information on local developments as it becomes available.	Neutral to Slight Adverse
Additional loss of agricultural agricultural soils	None proposed.	Slight to Moderate Adverse
Increased pressure on resources	Lack of waste arising and materials information	Not known
New community facilities may be proposed	None proposed. Assess information on local developments as it becomes available	Minor Beneficial
Loss of best and most versatile agricultural land impacting farming in the locality	None proposed.	Major Adverse
Additional discharges to local watercourses	Assumption that appropriate mitigation will be adopted by the other developments such as: controlled rates of discharge, standard design, good practice and allowance for climate change	

In summary there are eight Neutral to Slight, 17 Slight, four Moderate and two Large Adverse effects. In addition, with respect to visual effects on residential properties, there would be nine Moderate and 73 Slight Adverse effects. One public right of way would have a Large Adverse visual effect and nine would have Slight Adverse effects. There would likely be Beneficial effects in the short term on noise levels in the surrounding area on for reduction of driver stress levels.

In conclusion, the Environmental Impact Assessment, comprising the Environmental Statement and Addenda, has adopted a comprehensive approach to the identification of environmental issues, the potential impacts arising from the proposed development and the measures required to mitigate any significant adverse effects.



## **Extract from National Planning Policy Framework (NPPF) - APPENDIX C**

### **10. Protecting Green Belt land**

79. The Government attaches great importance to Green Belts. The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence.

80. Green Belt serves five purposes:

- to check the unrestricted sprawl of large built-up areas;
- to prevent neighbouring towns merging into one another;
- to assist in safeguarding the countryside from encroachment;
- to preserve the setting and special character of historic towns; and
- to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

81. Once Green Belts have been defined, local planning authorities should plan positively to enhance the beneficial use of the Green Belt, such as looking for opportunities to provide access; to provide opportunities for outdoor sport and recreation; to retain and enhance landscapes, visual amenity and biodiversity; or to improve damaged and derelict land.

82. The general extent of Green Belts across the country is already established.

New Green Belts should only be established in exceptional circumstances, for example when planning for larger scale development such as new settlements or major urban extensions. If proposing a new Green Belt, local planning authorities should:

- demonstrate why normal planning and development management policies would not be adequate;
- set out whether any major changes in circumstances have made the adoption of this exceptional measure necessary;
- show what the consequences of the proposal would be for sustainable development;
- demonstrate the necessity for the Green Belt and its consistency with Local Plans for adjoining areas; and
- show how the Green Belt would meet the other objectives of the Framework.

83. Local planning authorities with Green Belts in their area should establish Green Belt boundaries in their Local Plans which set the framework for Green Belt and settlement policy. Once established, Green Belt boundaries should only be altered in exceptional circumstances, through the preparation or review of the Local Plan. At that time, authorities should consider the Green Belt boundaries having regard to their intended permanence in the long term, so that they should be capable of enduring beyond the plan period.

84. When drawing up or reviewing Green Belt boundaries local planning authorities should take account of the need to promote sustainable patterns of development. They should consider the consequences for sustainable development of channelling development towards urban areas inside the Green Belt boundary, towards towns and villages inset within the Green Belt or towards locations beyond the outer Green Belt boundary.



85. When defining boundaries, local planning authorities should:

- ensure consistency with the Local Plan strategy for meeting identified requirements for sustainable development;
- not include land which it is unnecessary to keep permanently open;
- where necessary, identify in their plans areas of 'safeguarded land' between the urban area and the Green Belt, in order to meet longer-term development needs stretching well beyond the plan period;
- make clear that the safeguarded land is not allocated for development at the present time. Planning permission for the permanent development of safeguarded land should only be granted following a Local Plan review which proposes the development;
- satisfy themselves that Green Belt boundaries will not need to be altered at the end of the development plan period; and
- define boundaries clearly, using physical features that are readily recognisable and likely to be permanent.

86. If it is necessary to prevent development in a village primarily because of the important contribution which the open character of the village makes to the openness of the Green Belt, the village should be included in the Green Belt. If, however, the character of the village needs to be protected for other reasons, other means should be used, such as conservation area or normal development management policies, and the village should be excluded from the Green Belt.

87. As with previous Green Belt policy, inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances.

88. When considering any planning application, local planning authorities should ensure that substantial weight is given to any harm to the Green Belt. 'Very special circumstances' will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations.

89. A local planning authority should regard the construction of new buildings as inappropriate in Green Belt. Exceptions to this are:

- buildings for agriculture and forestry;
- provision of appropriate facilities for outdoor sport, outdoor recreation and for cemeteries, as long as it preserves the openness of the Green Belt and does not conflict with the purposes of including land within it;
- the extension or alteration of a building provided that it does not result in disproportionate additions over and above the size of the original building;
- the replacement of a building, provided the new building is in the same use and not materially larger than the one it replaces;
- limited infilling in villages, and limited affordable housing for local community needs under policies set out in the Local Plan; or
- limited infilling or the partial or complete redevelopment of previously developed sites (brownfield land), whether redundant or in continuing use (excluding temporary buildings), which would not have a greater impact on the openness of the Green Belt and the purpose of including land within it than the existing development.

90. Certain other forms of development are also not inappropriate in Green Belt provided they preserve the openness of the Green Belt and do not conflict with the purposes of including land in Green Belt. These are:

- mineral extraction;
- engineering operations;
- local transport infrastructure which can demonstrate a requirement for a Green Belt location;
- the re-use of buildings provided that the buildings are of permanent and substantial construction; and
- development brought forward under a Community Right to Build Order.

91. When located in the Green Belt, elements of many renewable energy projects will comprise inappropriate development. In such cases developers will need to demonstrate very special circumstances if projects are to proceed. Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources.

92. Community Forests offer valuable opportunities for improving the environment around towns, by upgrading the landscape and providing for recreation and wildlife. An approved Community Forest plan may be a material consideration in preparing development plans and in deciding planning applications. Any development proposals within Community Forests in the Green Belt should be subject to the normal policies controlling development in Green Belts.