Hertfordshire County Council and Environment Agency

A120 Bypass (Little Hadham) and Flood Alleviation Scheme

Planning Statement

235086-ARP-XX-XX-RP-YP-00001

Submission | November 2015

Working in Partnership

Contents

1. Introduction

1.1 Purpose of the Statement

This Planning Statement has been prepared by Arup to support an application for full planning permission, submitted on behalf of Hertfordshire County Council's (HCC) Major Projects team and the Environment Agency (EA) (the joint Applicants) for the development of a single lane bypass of the A120 and flood alleviation works at Little Hadham, East Hertfordshire (herein referred to as the Proposed Scheme).

The application for full planning permission is submitted to Hertfordshire County Council, as Local Planning Authority (LPA), under Regulations 3 and 4 of the Town and Country Planning General Regulations 1992 (SI 1492) (as amended). The application seeks full planning permission for:

> "Proposed development of a 3.9km northern bypass of the A120 and flood alleviation scheme, comprising a new 9.3m wide single carriageway road, verges, roundabout junctions (including lighting), bridges, embankments, drainage, landscaping and associated engineering operations on land north of Little Hadham, East Hertfordshire."

The extent of the Proposed Scheme is defined in the accompanying plans and described in this Planning Statement.

This Planning Statement forms part of a suite of documentation that accompanies the planning application. The documents are:

- Planning application form, notices and certificates
- Environmental Statement (ES);
- Flood Risk Assessment (FRA) and Drainage Strategy;
- Transport Assessment (TA);
- Landscape Strategy;
- Arboriculture Implication Assessment; and
- Statement of Consultation (SOC)

The following drawings submitted with the application are:

Drawing Number	Drawing Title
235086-ARP-ML-ZZ-DR-YP-00100	Location Plan (Overview)
235086-ARP-ML-ZZ-DR-YP-00101	Location Plan (Sheet 1)
235086-ARP-ML-ZZ-DR-YP-00102	Location Plan (Sheet 2)
235086-ARP-ML-ZZ-DR-YP-00103	Location Plan (Sheet 3)
235086-ARP-ML-XX-DR-YP-00103	Site Plan
235086-ARP-ML-XX-DR-YP-00104	Full Scheme with Flood Extents
235086-ARP-ML-XX-DR-YP-00102	Topography Plan
235086-ARP-ML-XX-DR-CH-00101	General Arrangement (Sheet 1)
235086-ARP-ML-XX-DR-CH-00102	General Arrangement (Sheet 2)
235086-ARP-ML-XX-DR-CH-00103	General Arrangement (Sheet 3)
235086-ARP-ML-XX-DR-CH-00104	General Arrangement (Sheet 4)
235086-ARP-ML-XX-DR-CH-00105	General Arrangement (Sheet 5)
235086-ARP-ML-XX-DR-CH-00106	General Arrangement (Sheet 6)
235086-ARP-ML-XX-DR-CH-00107	General Arrangement (Sheet 7)
235086-ARP-AL-08-DR-CH-00101	Albury Tributary General Arrangement
235086-ARP-AL-07-DR-CH-00101	Lloyd Taylor Drain General Arrangement
235086-ARP-ML-06-DR-CH-00101	River Ash General Arrangement
235086-ARP-ML-XX-DR-CD-00101	Drainage Layout (Sheet 1)
235086-ARP-ML-XX-DR-CD-00102	Drainage Layout (Sheet 2)
235086-ARP-ML-XX-DR-CD-00103	Drainage Layout (Sheet 3)

235086-ARP-ML-XX-DR-CD-00104	Drainage Layout (Sheet 4)
235086-ARP-ML-XX-DR-CD-00105	Drainage Layout (Sheet 5)
235086-ARP-ZZ-XX-SK-CD-00002	Surface Water Management Strategy Catchments
235086-ARP-ZZ-ZZ-SK-CD-00001	Overland Flow Catchment Area Plan
235086-ARP-XX-XX-DR-CD-00301	Typical Balancing Pond
235086-ARP-ML-XX-DR-CH-00301	Cross Sections (Sheet 1)
235086-ARP-ML-XX-DR-CH-00302	Cross Sections (Sheet 2)
235086-ARP-ML-XX-DR-CH-00303	Cross Sections (Sheet 3)
235086-ARP-ML-08-DR-CH-00301	Albury Tributary Cross Sections (Sheet 1)
235086-ARP-ML-08-DR-CH-00302	Albury Tributary Cross Sections (Sheet 2)
235086-ARP-AL-07-DR-CH-00301	Lloyd Taylor Drain Cross Section
235086-ARP-ML-06-DR-CH-00301	River Ash Cross Section (Sheet 1)
235086-ARP-ML-06-DR-CH-00302	River Ash Cross Section (Sheet 2)
235086-ARP-ML-XX-DR-CH-00201	Plan and profile (Sheet 1)
235086-ARP-ML-XX-DR-CH-00204	Plan and profile (Sheet 2)
235086-ARP-ML-XX-DR-CH-00203	Plan and profile (Sheet 3)

The Planning Statement should be read in conjunction with these reports, and with reference to the drawings outlined above. This Planning Statement demonstrates and concludes that the proposed development is in accordance with both National and Local planning policy. Accordingly, we respectfully request that planning permission to be granted for the development hereby proposed.

1.2 Structure / Purpose of this Statement

This Planning Statement supports the application made to HCC in November 2015 and sets the context for the planning application. The purpose of this Planning Statement is to provide a clear understanding of the Proposed Scheme in line with all relevant planning policy and other material considerations. It is intended to assist HCCs assessment of the relevant planning issues and to promote the case for the positive determination of the planning application. This statement describes the existing conditions at the site, the nature of the Proposed Scheme and assesses the Proposed Scheme within the context of national and local planning policy.

This Planning Statement is structured as follows:

- Section 2 describes the application site;
- Section 3 provides background to the Proposed Scheme;
- Section 4 describes the Proposed Scheme and its key benefits;
- Section 5 assesses the Proposed Scheme within the context of planning policy; and
- Section 6 sets out the conclusions of this Planning Statement.

2. The Application Site

2.1 Site Description

The proposal straddles the boundary between the parishes of Little Hadham (population of 2,468[1]) and Albury (population of 592[2]). Both are located in East Hertfordshire, England, approximately 5km west of the centre of Bishop's Stortford. The location of the Proposed Scheme in the local area is illustrated on Figure 1.

The parishes are predominantly made up of arable agricultural land, with small settlements scattered throughout. One of the largest clusters is The Ash, located at the junction between the A120 (traveling east to west) and Albury Road (traveling north to south). The confluence of the River Ash, the Albury Tributary and the Lloyd Taylor Drain are also located in this vicinity.

The A120 is an important east-west link in Hertfordshire's primary road network. The road runs from the A10 at Puckeridge eastwards to join the M11 near Bishop's Stortford and Stansted Airport, before continuing through Essex, past Braintree and Colchester, to the port of Harwich. The A120 is also used as part of an official signed emergency diversion route for the M11 and M25.

Figure 1 - Scheme in the local context

The road currently experiences severe congestion and delays, as a result of a signal controlled junction at the junction between the A120 and Albury

[1] Office for National Statistics, 2011 UK Census Data.
[2] Office for National Statistics, 2011 UK Census Data.

Road that allows traffic from one of the four arms through at a time only. This area is known locally as The Ash traffic lights.

The Ash and The Ford, in the parish of Little Hadham are at risk of flooding from the River Ash and its tributaries. Both have suffered from flooding from rivers on several occasions, most recently in February 2014.

Flood modelling indicates that currently, 72 properties in The Ash and The Ford are assessed as having a 1 in 100 (1%) or greater annual probability of river flooding.

2.2 Site Context

The application site comprises mostly agricultural land and is semi-rural in nature. The River Ash flows north to south across the Proposed Scheme. The crossing point is located approximately 1 km north east of Little Hadham.

The application area lies entirely within the single National Character Area (NCA) known as No.86 the South Suffolk and North Essex Clayland. The Local Landscape Character Assessment (LCA) by East Herts Council (EHC) identifies that the Proposed Scheme passes through or is adjacent to five LCAs including; Perry Green Uplands, Wareside / Braughing Uplands, Hadhams Valley, Upper Ash Valley and Hadham Plateau.

The landscape is characterised by strongly undulating river valley slopes in the west with a flat valley floor. Steeper, undulating slopes define the valley sides, some of which are densely vegetated others wide and open. Arable fields are irregular in shape but generally medium/large in scale and bounded with managed hedgerows; there is little pasture.

Little Hadham is a Conservation Area in which there are several Listed Buildings. Mill Mound is a Scheduled Monument. Hadham Hall to the east of Little Hadham formed the centre of a 14th century estate that included 980 acres of farmland. St Cecilia Church, Hadham Park, Church Farm and extensive farm buildings and barns are located between the existing and proposed A120 alignments. Public Rights of Way (PRoW) footpaths and bridleways cross the study area including the Hertfordshire Way Long Distance footpath.

Hadham Plateau local character area characterises the eastern half of the site. Gentle undulations and gentle slopes towards the River Ash valley floor characterise this landscape. Large, agglomerated, arable geometric fields bounded with managed hedgerows and interspersed with occasional woodland blocks distinguish the landscape pattern.

3. The Background to the Proposed Scheme

3.1 The Purpose of the Proposed Scheme

HCC is currently progressing plans for a bypass of Little Hadham, along the A120 to cut journey times between Bishop's Stortford and the A10 and to create a more reliable route. As part of the proposed scheme, the Environment Agency is also planning an associated flood alleviation scheme on the River Ash, the Albury Tributary and Lloyd Taylor Drain which will reduce flood risk in Little Hadham and downstream communities.

The purpose of the Proposed Scheme is to:

- Reduce the majority of through traffic congestion, thereby improving the environment of residents along the current route through Little Hadham village;
- Reduce the risk of flooding in the village and surrounding communities downstream as part of the delivery of the bypass; and
- Decrease journey times and improve time reliability along the A120 between Bishop's Stortford and the A10, to provide an improved transport network to support the East of England region by 2019.

3.2 The Need for the Proposed Scheme

Currently, the one-way working signal controlled junction in the centre of Little Hadham causes severe congestion and delays, especially at peak hours. This situation is likely to deteriorate considering the major housing development of 2,200 dwellings in Bishop's Stortford and the projected growth of London Stansted Airport. The airport is in the consultation stages (as of October 2014) of its Draft Sustainable Development Plan, which aims to create 10,000 new jobs in the area.[3] The forecasted growth in the surrounding area would be to likely to increase traffic flows along the A120 and have a negative impact on the area causing higher congestion levels and detrimental impacts on the community and environment. With the bypass in place, congestion would be alleviated in the village and journey times along the A120 would be reduced, improving the quality of life for residents and supporting the local economy.

The 2011 Government Transport White Paper provides key objectives for future transport investment: to create growth in the economy and to tackle climate change by cutting carbon emissions. The White Paper also aims to tackle places where congestion causes slow and unreliable journeys with significant impacts on the economy and environment. It highlights that public transport does not represent a viable alternative to the private car for all journeys, particularly in rural areas and for some longer or multi-leg journeys. The A120 Bypass supports these objectives by encouraging economic growth and reducing congestion within a rural area.

The A120 Bypass is also identified as strategic infrastructure required to support development identified in the emerging East Hertfordshire District

[3] London Stansted Airport, October 27 2014. Press Release.

Plan. The bypass would be included in an Infrastructure Delivery Plan to be prepared as part of the emerging plan, which would address the co-ordinated phasing of infrastructure and development.

3.2.1 The Case for the A120 Bypass

A proposed bypass for Little Hadham has been considered since the 1970s. The existing traffic signals have been upgraded several times over the years but there is no further scope for improvement in reducing congestion.

The current Proposed Scheme was originally developed in 2006-2008 with a preliminary route which was refined further to form the Preferred Route. The A120 Bypass (Little Hadham) provides a northern 3.9 km bypass to the village of Little Hadham, which currently experiences congestion and delays as a result of a one-way working signal controlled junction in the centre of the village. This junction acts as a bottle neck for vehicles travelling through the village. An increase in current traffic would cause the existing A120 to be operating over capacity if the route is not improved, or if no alternative route is provided. This would further delays to journey times.

Flooding, particularly from the River Ash and associated tributaries is an issue in Little Hadham. The Environment Agency carried out the River Ash Flood Risk Management Strategy following flooding in Little Hadham in 2001 in order to assess solutions to reduce flood risk in the area. The project did not go ahead due to a lack of government funding. More recent Environment Agency modelling of the river indicates that 72 properties in Little Hadham and Hadham Ford are at risk from at least a 1 in 100 (1%) chance of flooding in any year and there has been a number of flooding incidents in the area between 2001 and 2015. The proposed flood alleviation scheme will reduce flood risk to Little Hadham.

The traffic congestion and delays in Little Hadham originate from the constraints imposed by a narrow “S” bend on the A120 as it passes east to west in the centre of the village. Two minor side roads, from Albury to the north and Much Hadham to the south, join the main road at this location, forming a staggered crossroad. The roads and footways are very constricted by adjacent historic buildings and a bridge over the River Ash.

The width restrictions mean that only one-way working is possible, with only one arm at green at any one time. The two junctions lie at the bottom of a shallow dip with the A120 climbing away in both directions. This junction acts as a bottle neck for vehicles travelling through the village and an increase in current traffic would cause the existing A120 to be operating further over capacity if the route is not improved, or if no alternative route is provided. This would further delay journey times.

The current situation results in delays to road users as a result of the capacity restraints and traffic signals in the village of Little Hadham. Long queues occur at the traffic signals, particularly during peak hours. The traffic signal cycle at the junction can be as long as five minutes, which can result in a long delay for road users in both directions even when the traffic volume is low, should they arrive shortly after the signal turns red.

The existing traffic signals have been upgraded on a number of occasions. However, there are no further options for widening or improving the junction due to the proximity of Grade II listed buildings.

3.2.2 The Case for Flood Alleviation

The Ash and The Ford, Little Hadham, are at risk of flooding from the River Ash and its tributaries. There have been six extensive flooding events between 1947 and 2014, with one severe flooding event experienced in the village in 2001. The Environment Agency carried out the River Ash Flood Risk Management Strategy following flooding in Little Hadham in 2001 in order to assess solutions to reduce flood risk in the area. No solutions were implemented at the time due to a lack of funding. More recent Environment Agency modelling of the river indicates that 72 properties in Little Hadham and Hadham Ford are at risk from a 1 in 100 (1%) chance of flooding in any year.

With the proposed bypass, flood storage areas would help reduce the risk of flooding to The Ash and The Ford. Where the road is above existing ground levels, embankments would be designed to hold back flood water in flood storage areas. Using the flood model to assess the benefit of the scheme, it is estimated that all 72 properties would have a reduced risk of flooding, of which 69 would no longer be at risk from a 1 in 100 (1%) or greater annual probability of river flooding. While a small number of properties would still be at risk of flooding from the rivers, these properties would have a reduced risk.

3.3 Planning History

There have been no direct planning applications impacting the development area, however, a wider search of the local area highlighted a committed development for the erection of up to 2,200 dwellings on 4.1ha of land at Bishop's Stortford North. (Ref: 3/13/0075/OP). This development would include affordable housing, green infrastructure, amenity and formal and informal recreation space, landscaping and two mixed use local centres.

3.4 Alternative Options Considered

In 2004, a number of studies were carried out to examine the options for improving the A120. This was a broad 'corridor' assessment, which considered environmental, engineering, traffic and economic constraints and opportunities. The range of options included improvements to the junction in the centre of Little Hadham, a local by-pass to Little Hadham, upgrading the A120 between the A10 and M11 and alternative east-west routes.

There were five levels of option (as summarised in A-E below), all involving road construction and traffic management, with each leading to very different benefits and disadvantages. In addition there is a railway option (E) and a range of passenger transport solutions (F).

A. Local improvements in the centre of the village of Little Hadham;
B. A local bypass to Little Hadham;
C. Upgrading the A120 between the A10 and M11 to local standard;
D. Upgrading the A120 between the A10 and M11 to strategic standard (i.e. dual carriageway);
E. Alternative east-west routes for strategic traffic movements; and
F. A range of Passenger Transport Solutions.

Each of the above (A-F) had a number of sub-options, provided in Table 1.

Table 1 – Options considered

Corridor Option	Description
Option A1	Road widening in the village.
Option A2	Construction of a short relief road.
Option A3	Traffic signal alterations.
Option A4	A TRO banning the movement of HGV's through Little Hadham.
Option B	Local bypass to Little Hadham.
Option C	Local bypass to Little Hadham and Standon, with other localized upgrading and improvement works on the A120 between the A10 and M11, but maintaining a single carriageway road.
Option D	Local bypass to Little Hadham and Standon, with other upgrading works on the A120 between the A10 and M11 to provide a dual carriageway road.
Option E1	Alternative East – West routes for strategic movements (highway route).
Option E2	Alternative East – West routes for strategic movements (railway route).
Option F1	Enhance bus network and frequency
Option F2	Enhance coach services including express quality coach corridors.
Option F3	Optimise use of the existing rail network
Option F4	Enhance provision for cyclists
Option F5	Enhance provision for walking
Option F6	Introduce Traffic Restraint including Road User Charging
Option F7	Implement Green Travel Planning
Option F8	Implement Accessibility Planning including at schools and businesses

Options initially discounted

An initial screening of the options was completed and the following options discounted, with the remaining options taken forward for a more detailed assessment.

- **Options A** - Local improvements in the centre of the village of Little Hadham were typically lower scoring that other options as they offered limited benefits to the local community.
- **Option E2** - A new east-west rail route was not believed to be deliverable, and is unlikely to result in significant traffic relief within Little Hadham.
- **Options F** - Alternative Transport Solutions were all low scoring, but could be considered in a complementary role alongside some of the main options.

3.4.1 Corridor Assessment Results

The more detailed assessment of the remaining options considered both the details of the previous assessment but also the deliverability. The adopted strategy for A120 needs to have a reasonable chance of being delivered and therefore it was considered it must:

- Conform to adopted HCC policy;
- Be affordable;
- Be buildable; and
- Address the problems within the corridor.

The details of the assessment of each route is summarised below:

Option B - Local bypass to Little Hadham to local standard (i.e. single carriageway) consistently scored well across all objectives.

Option C – Local bypass to Little Hadham and Standon to local standard (i.e. single carriageway) generally scored highest due to:

- Safety - the A120 at Standon had a very poor accident record and is not included in Option B alone;
- Integration - bypassing both villages was seen as a bigger benefit than just Little Hadham;
- Local and regional issues - bypassing both villages was seen as a bigger benefit than just Little Hadham; and
- Function / role - bypassing both villages was seen as a bigger benefit to A120 than just Little Hadham.

However, Option C scored lower on fundability and deliverability given the challenge of promoting and securing funding for a scheme of such magnitude in a single project.

Option D - Strategic bypass to Little Hadham and Standon to strategic standard (i.e. dual carriageway) scored highly, but it scored lower on fundability and deliverability due to the challenge of promoting and securing funding for a scheme of such magnitude as a single project.

Option E1.1 - Strategic east-west route near to Little Hadham did not score as highly as there would be lower ‘local’ traffic transfer to a strategic

route. It also scored lower on fundability and deliverability given the challenge of promoting and securing funding for a scheme of such magnitude as a single project.

Option E1.2 - Strategic east-west route at a distance from Little Hadham scored lowest of all due to the reduced benefits for the A120 in terms of traffic. There could be minimal benefit unless other measures were taken to divert traffic.

Conclusions and Recommendations

It was clear from the assessment that the maximum benefits for the A120 would be derived through the implementation of Option C, the local bypass to both Little Hadham and Standon. It scored higher than a bypass to Little Hadham due to the benefits that can be gained in accident reduction between the two villages, and in forming a good quality link between the A10 and M11.

It was considered feasible to implement Option C in a staged approach with bypasses for Little Hadham and later Standon being linked by on-line improvements. In this way Option C provides a whole route strategy for the A120 from the A10 to Bishop's Stortford.

The studies therefore recommended that the following strategy should be adopted for the A120 corridor between A10 and Bishop's Stortford:

- To recognise the important role of the A120 between A10 and Bishop's Stortford as a Primary Route, by bringing the route up to modern safety standards and providing appropriate capacity, whilst minimising adverse environmental impacts;
- To make future improvements within the corridor 'on-line' where possible, but to promote local bypasses for Standon and Little Hadham; and
- The local bypasses for Standon and Little Hadham should be of single carriageway standard.

In accordance with the Local Transport Plan (LTP) priorities for major projects a bypass for Little Hadham was identified to be promoted as the first phase of the strategy. Other phases would be prioritised against other projects across the county as part of the LTP processes.

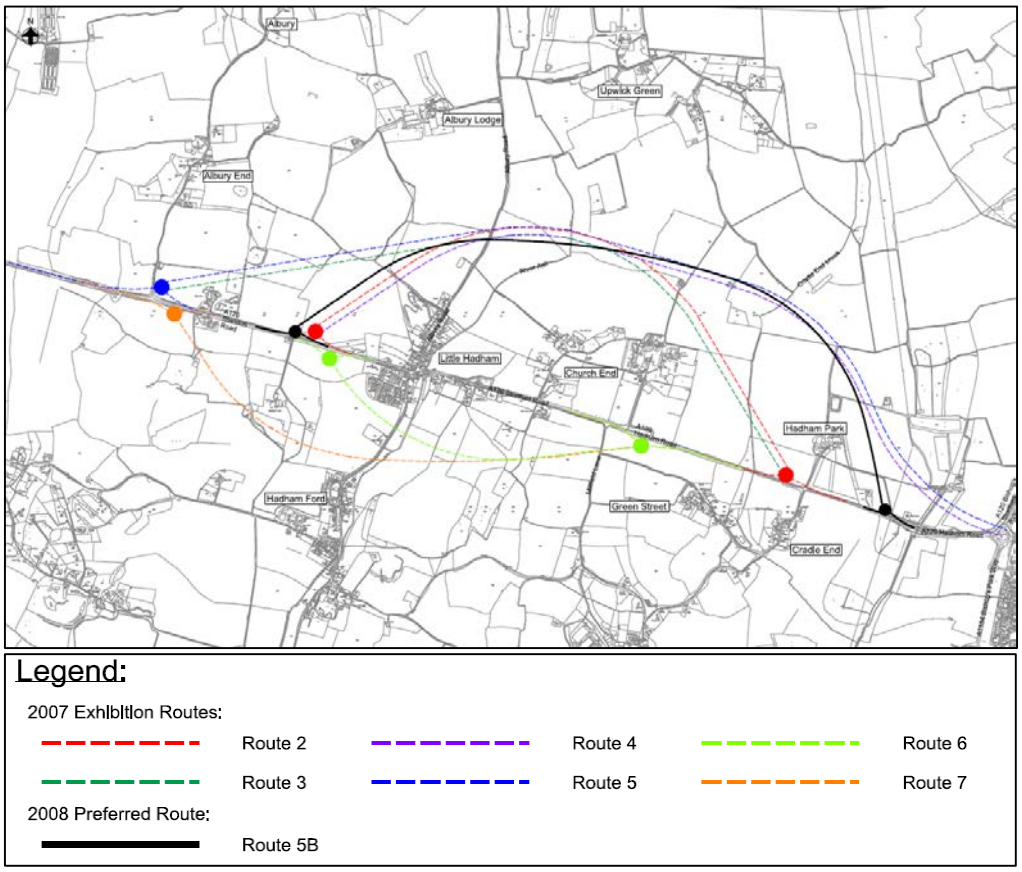
3.5 Preferred Route Option

Following, the Corridor Assessment in 2006, six route options, plus a 'Do Minimum' option of minor improvement works within the village were identified for further assessment (see Table 2 and Figure 2).

Table 2 – Preferred Route Option

Option	Description
Option 1	Minor local improvements / safety schemes.
Option 2	Construction of a bypass to the north of Little Hadham. This option would require a new junction on the existing A120 approximately 350 m to the west of the village. It would then pass to the north, across Albury Road and the River Ash valley on an embankment. Finally passing through a cutting between Hadham Hall and Mill Mound to another new junction on the existing A120 close to the road to Cradle End.
Option 3	Construction of a bypass to the north of the A120. It would require a new junction on the A120 approximately 1 km to the west of the village, to the west of the veterinary hospital. It would then pass to the north of Tilekiln Farm, across the Albury Road and then follow the line of Option 2.
Option 4	Construction of a bypass to the north of the A120. It would require a new junction on the A120 approximately 350 m west of the village. It would then pass to the north, across Albury Road, across the River Ash valley on an embankment and through a cutting to the north of Mill Mound. It would then pass to the north of Hadham Park and re-join the existing A120 in the vicinity of the roundabout on the A120 Bishop's Stortford northern bypass.
Option 5	Construction of a bypass to the north of the A120. It would involve a new junction on the A120 approximately 1 km west of the village, to the west of the veterinary hospital. It would then pass to the north of Tilekiln Farm, across the Albury Road, across the River Ash valley on an embankment and through a cutting to the north of Mill Mound. It would then pass to the north of Hadham Park and re-join the existing A120 in the vicinity of the roundabout on the A120 Bishop's Stortford northern bypass.
Option 6	Construction of a bypass to the south of the A120. It would require a new junction on the A120 approximately 200 m west of the village. The bypass would then pass to the south of the village, between The Smithy and Halfway House, on an embankment approximately 7 metres high. A viaduct would then take the bypass over the Much Hadham Road and the River Ash floodplain, to re-join the existing A120 at another new junction approximately opposite Hadham Hall.
Option 7	Construction of a bypass to the south of the A120. It would require a new junction on the existing A120 approximately 1 km to the west of the village, to the west of the veterinary hospital. The bypass would then pass to the south of Little Hadham Place in a cutting, and cross between Halfway House and Hadham Ford. It would then be taken on a viaduct over the Much Hadham Road and the River Ash floodplain to re-join the A120 at another new junction approximately opposite Hadham Hall.

Figure 2 - Options for A120 Bypass



Option 5 was generally the most preferred option by the general public. 65% of respondents thought that it was acceptable, which is the highest percentage of all options put forward. It is also the least unacceptable option (32%). Option 5 also has the support of EHC and Little Hadham Parish Council. The Environment Agency also welcomed any scheme which has the potential to provide flood attenuation to Little Hadham and the villages downstream.

Whilst Option 5 is the most expensive option it still provides a very healthy BCR. It also creates the greatest environmental benefit, alongside the other northern options, to the village centre and does not sever the village, as the southern options do. However it does create the greatest severance of agricultural land, and it passes close to the Scheduled Monument of Mill Mound. As one of the northern routes, it also attracted strong objection from the owners of the agricultural land. Residents from Albury End (near the western tie-in) also expressed concern that the road could be visible from the village and spoil the views across the valley to the east. The eastern tie-in also lay's within the Green Belt and local landowners expressed concerns over the effects on their properties.

Overall Option 5 was considered to be the best performing route, however, given the above concerns and issues, it was recommended that further localised analysis and consultation should be undertaken as part of the

preferred route development to determine the optimum arrangement for the tie-ins at the east and west extremities.

3.6 Preferred Route Development

During 2008 further detailed investigation and design of Option 5 (the preferred bypass route) was undertaken to determine the preferred alignment at each end of the bypass route, seeking in particular to minimise the impact on local farms, the village of Albury and the environment.

Options for alternative alignments for the tie–in arrangements at both the western and eastern ends of the bypass route were considered.

Table 3 - Western end tie-in options

Option	Description
Original Option 5	Starts with a roundabout to the north of the A120 at the junction of the road to Albury End. The route passes 25m to the north of Tilekiln Farm, between the farm and Albury End Wood in an east-north-east direction.
Alternative	Starts with a roundabout approx. 650m east of the original position. Alignment continues in a north-east direction to effectively re-join the original Option 5 alignment to the west of where the route crosses the Albury Road.

Table 4 - Eastern end tie-in options

Option	Description
Original Option 5	Alignment passes 170m to the east of Hadham Park over the drive to Hadham Lodge, approx. 95m from the house and joins directly into the Tesco roundabout.
Option 5A	Utilises a reduced radius curve on the approach to the Tesco roundabout and therefore moves the centre line of the road further to the south of Hadham Lodge but closer to Hadham Park. The alternative route would continue to tie-in to the A120/A1184/A1250 roundabout as per the original Option 5 route.
Option 5B	Provides a new alignment passing between the properties known as Savernake and Plantings Cottages, ending in a new roundabout on the A120.

As a result of analysis it was recommended to amend the tie-in at the western end of the Proposed Scheme to the new alternative alignment and provide a new roundabout at the eastern end (option 5B).

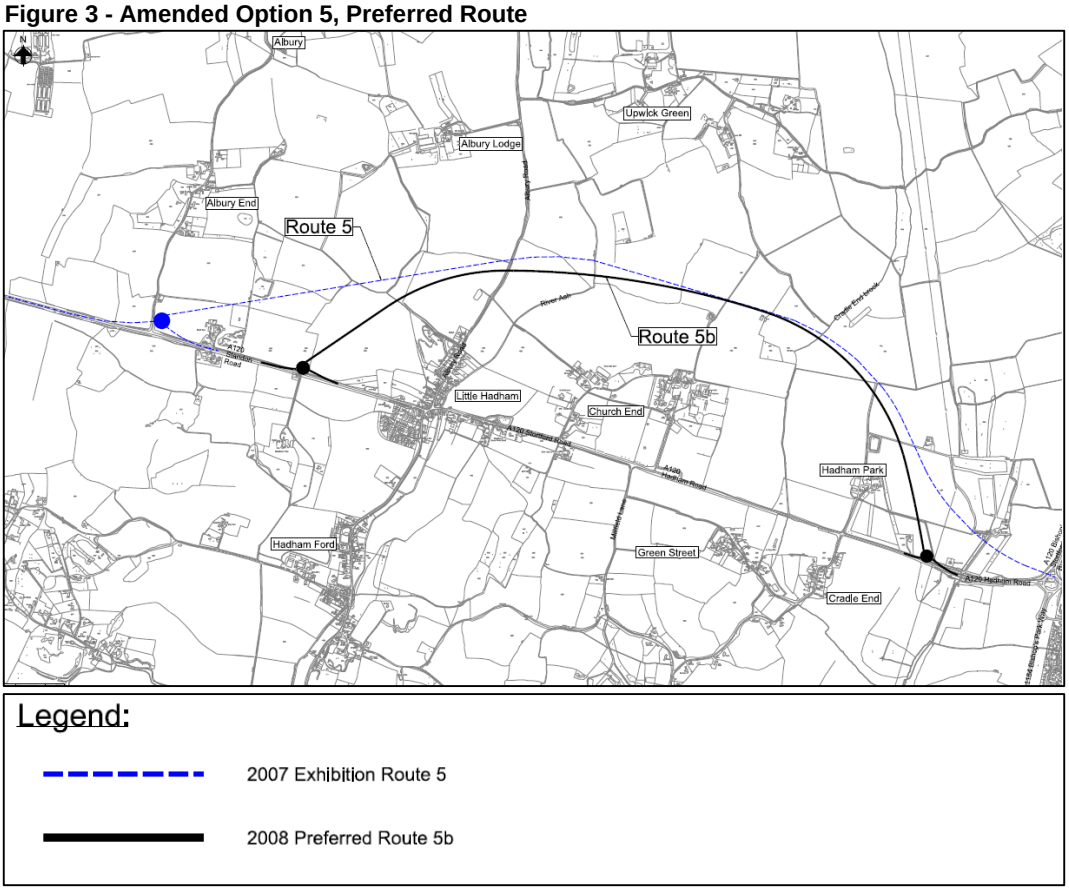
At the western tie-in the preferred option follows the advice of the landscape assessment and moves the junction with the A120 approx. 650m to the east. This greatly reduces the effects of the bypass on Tilekiln

Farm, Albury and Poplar Hall Cottage by increasing the distance from these properties and locating the line of the bypass on lower ground, thereby reducing its impact.

At the eastern tie-in the preferred option moves the route away from Hadham Lodge but closer to Savernake and Plantings Cottages.

The recommendations were adopted in the Proposed Scheme and overall result in less land take and severance of farm land, less overall capital cost and improved BCR. They also offer greater overall environmental benefits than the original preferred route.

Figure 3 - Amended Option 5, Preferred Route



4. The Proposed Scheme

4.1 Outline of the Proposed Scheme

The proposed new road alignment is situated to the north of Little Hadham parish, along the boundary of Albury parish. The combined site area of the new bypass and flood alleviation areas is 40.5 hectares.

The proposed bypass will consist of 3.9km of new single carriageway with a national speed limit. The typical carriageway width will be 9.3m (excluding verges), which will consist of two 3.65m wide lanes, with a 1m hard strip on either side or the carriageway. The Proposed Scheme will also include a differential acceleration lane on the exit from the western roundabout, and a 1km eastbound climbing lane in the middle of the Proposed Scheme due to the gradient of the carriageway. In addition, the typical cross section would include 2.5m grass verges along both sides of the Proposed Scheme, increasing in width to accommodate forward visibility requirements and bridge piers as required. The proposed bypass, with the exceptions of the roundabouts, would not have road lighting.

With the majority of traffic diverted to the new bypass, congestion would be alleviated in Little Hadham reducing queuing and delays; access to the existing A120 between the bypass roundabouts would also become easier from the existing side roads. Priority of the signals at traffic lights at The Ash adjusts with demand, therefore with changed demand, the timing will automatically re-prioritise.

The Proposed Scheme includes new roundabouts to link the proposed bypass to the existing A120. These are located between Hadham Park and Hadham Lodge in the east, and between The Ash and Albury End Road junction in the west.

North of Hadham Hall, to the south of the bypass, a noise bund to mitigate is proposed. This will be located at the beginning east of Mill Mound which will merge into the proposed embankment at the River Ash. A bridge is proposed to accommodate the public bridleway (Little Hadham Bridleway 10/35) and agricultural access.

Albury Road would pass over the proposed bypass when it is in cutting via a new bridge. The crossing would be located slightly west of the existing road to allow for offline construction. No connection is proposed between Albury Road and the bypass.

There are two sections of the Proposed Scheme that would include flood storage infrastructure, these are:

- River Ash, approximately 1km north-east of The Ash traffic lights; and
- Albury Tributary, approximately 600m north-west of The Ash traffic lights.

Flood storage helps to reduce the risk of flooding by collecting water and releasing it gradually when a storm has passed. The rate at which water is released is controlled by the outlet pipe through the bypass earthworks,

which act as a flood storage embankment. In every day conditions the river would behave as it does now, with a small natural flow.

The Proposed Scheme also includes work to divert the Lloyd Taylor Drain to the south of the village to further contribute to reducing flood risk at The Ash and The Ford. The design has incorporated plans to reduce the potential impact on the landscape character and views where feasible. This is achieved through avoiding felling mature trees where possible.

4.1.1 Tilekiln Roundabout

The proposed scheme would start from a new roundabout constructed approximately halfway between the crossroads in Little Hadham and Albury End Road junction, adjacent to the Lodge for Little Hadham Place. The roundabout will be predominately constructed off-line, to the north of the existing A120, to minimise the impact on traffic during the works. The turning movements from the A120 eastbound onto the bypass will be accommodated with a segregated left turn that will provide unhindered passage through the junction. This roundabout will include road lighting, which will be designed to minimise light pollution outside of the extent of the road.

The public footpath (Little Hadham Footpath 57) which joins the existing A120 at the location of the proposed roundabout will be diverted westwards along the existing A120 to an uncontrolled pedestrian crossing located where Little Hadham Footpath 55 joins the existing A120.

4.1.2 Albury Tributary

From this roundabout, the Proposed Scheme would move offline in a north-easterly direction. The Proposed Scheme will initially be in a cutting, up to 4m below existing ground level. Where the proposed bypass is close to existing ground levels for a short section, an environmental bund will be provided to mitigate the visual and noise impacts. The top bund is 2m above the centreline of the road, and reaches a maximum of 3 m above the ground profile.

The Proposed Scheme then crosses the Albury Tributary at the confluence of the two watercourses. The road would cross the watercourse on an embankment, which has been designed to provide a flood storage area of up to 5.5m in height. The size of the culvert orifice in the embankment would be designed to restrict flow during storms, therefore creating a temporary reservoir, which would then gradually drain down after the storm. The design of the Proposed Scheme also includes a bridge carrying the proposed bypass over the spillway for the flood storage area.

The public footpaths (Little Hadham Footpath 57 and 58) will be formally diverted and linked to a new at grade uncontrolled crossing of the bypass, however an alternative pedestrian route will also be provided under the proposed bypass through the proposed structure accommodating the spillway. The highway drainage system also includes drainage basins at this location, and a 2 m high noise barrier is proposed on the embankment to reduce noise impacts of the Proposed Scheme.

4.1.3 Albury Road

The Proposed Scheme continues in a north easterly direction towards Albury Road, through this section the Proposed Scheme will be up to 5 m below existing ground level. Albury Road will be maintained through the provision of a new bridge over the bypass. Albury Road will be slightly realigned to allow the construction of the new bridge while minimising the impact on traffic flows. No connection is proposed between Albury Road and the proposed bypass.

4.1.4 River Ash

To the east of Albury Road the proposed bypass will move onto embankment to provide the second flood storage area. The embankment will be up to 10 m above existing ground levels. The embankment provides sufficient height to retain the volumes of water associated with the PMF (probable maximum flood) event. The flood storage area will operate in a similar manner to the first site with a constriction on the flow through the embankment, and a bridge carrying the bypass over a spillway. The Proposed Scheme will include grass-crete (or reinforced grass) access laneways to integrate them into the surrounding earthworks. Minor works are proposed to raise the level of Upwick Road slightly to reduce the risk of it flooding. Potential local flood risk implications have been assessed with full details provided in the Flood Risk Assessment that is submitted as part of the Planning Application for the Proposed Scheme.

4.1.5 Mill Mound and Hadham Hall

To the east of the River Ash flood storage area the proposed bypass moves into a cutting, and at its deepest point will be up to 7.5 m below existing ground level. The gradient of the road at this point means a climbing lane will be provided on the eastbound carriageway. A new bridge providing agricultural access over the proposed bypass, and accommodating the bridleway (Little Hadham Bridleway 10/35), will be provided to the east of Mill Mound Monument.

Moving further east the proposed bypass is close to existing ground levels. A 2 m environmental bund (height from centre of road surface to top of bund) is proposed immediately to the east of Mill Mound to reduce the noise impacts of the Proposed Scheme on Hadham Hall. The environmental bund reaches a maximum height of 4.5 m from the existing ground profile. A second bridge is included in the Proposed Scheme design to accommodate a bridleway (Little Hadham Bridleway 36) and agricultural access. Large approach embankments are required to provide the required headroom for the proposed bypass below the bridge.

4.1.6 Hadham Park Roundabout

The Proposed Scheme re-joins the existing A120 via a second new roundabout constructed approximately halfway between Hadham Park and Hadham Lodge. This roundabout will also include street lighting. The public footpath (Little Hadham Footpath 34) will be diverted slightly to join

at the roundabout, which will include uncontrolled pedestrian crossing points and footways to maintain the existing provision along the northern side of the A120.

4.1.7 Lloyd Taylor Drain Diversion

In addition to the two flood storage areas provided in conjunction with the proposed bypass, a third watercourse, the Lloyd Taylor Drain to the west of the village, would be diverted around the current houses of Lloyd Taylor Close and The Smithy. It would operate by diverting flood flows away from the undersized culvert beneath the properties off Spindle Hill, taking them into the River Ask below The Ash settlement. A new oversized culvert would be constructed under the B1004 Albury Road to allow the flood flows to pass without issue.

4.2 Access

4.2.1 Vehicle Travellers

The Proposed Scheme would create 3.9km of high speed single carriageway with a national speed limit of 60mph. The scheme would have two junctions with traffic flow in each direction linking to the existing A120.

The Proposed Scheme provides a single carriageway which meets the latest design standards for roads in terms of condition and safety. Drivers would be able to continue travelling east west after joining the bypass from the existing A120 by a roundabout. Where the gradient requires it, a (climbing) lane would be provided.

There are currently high levels of congestion at the Ash traffic lights causing significant delays in vehicle travellers' journey times. Traffic movements would be diverted onto the bypass, improving east west journey times, driver stress and reducing delays and queuing.

With the majority of traffic diverted to the new bypass, the local traffic travelling through Little Hadham would also see improvements. Congestion would be alleviated reducing queuing and delays. Access to the existing A120 may become easier from the existing side roads. Signals in the centre of Little Hadham could then be re-programmed to allow more time for north south traffic to cross or join the existing A120.

4.2.2 Pedestrians, Cyclists and Equestrians

Construction of the Proposed Scheme will take place off-line and not affect the existing A120 between the two tie-locations or Little Hadham. There will be limited construction traffic travelling along the existing A120 between the tie-ins. Any impacts will be temporary and limited to the short periods at the tie-ins where limited pedestrian activity is expected. Traffic management measures and temporary provision for pedestrians and cyclists will be provided as required during the final stages of construction of the two roundabouts. Therefore, the effect on pedestrians and cyclists during construction is expected to minimal.

The construction of the bypass will impact public footpaths at six locations along the proposed route. Alternative provision will be provided where practicable however there will be temporary closures required where alternate routes may not be available until other access can be constructed.

The current bridleway running north from Hadham Hall will require temporary diversion and possibly temporary closure as a result of construction of the bypass and provision of the Mill Mound Bridge to provide permanent replacement to the standard suitable for use by equestrians. The number of equestrians using this bridleway is not known but is expected to be low.

4.3 Key benefits

4.3.1 Congestion relief

The A120 Bypass (Little Hadham) provides a northern 3.9 km bypass to the village of Little Hadham, which currently experiences congestion and delays as a result of a one-way working signal controlled junction in the centre of the village. This junction acts as a bottle neck for vehicles travelling through the village and an increase in current traffic would cause the existing A120 to operate further over capacity if the route is not improved, or if no alternative route is provided. Overall, particularly during times of high traffic flow, a poor travelling experience is perceived by drivers, thereby increasing driver stress and frustration.

The A120 Bypass would remove this congestion resulting in large journey time savings, improved travelling experience and vehicle operating cost savings due to increased speeds. The bypass would also provide a more consistent journey time compared to the existing variable journey times associated with long queues and long cycle time for signals at Little Hadham.

The average journey time savings resulting from the bypass in the opening year of 2019 are shown in Table 1.

Table 5 Average Journey Time Savings

	Journey time (minutes)			Saving relative to Base (minutes)		
Route	**AM**	**IP**	**PM**	**AM**	**IP**	**PM**
Eastbound						
A120 Base	13.3	8.2	13.1	-	-	-
A120 Base plus Bypass	5.6	5.3	5.5	7.7	3.0	7.6
Bypass	4.6	3.8	5.0	8.7	4.4	8.1
Westbound						
A120 Base	13.7	7.6	13.0	-	-	-
A120 Base plus Bypass	5.0	4.8	5.1	8.6	2.8	8.0
Bypass	4.6	4.0	4.6	9.1	3.6	8.4

Besides the improved travelling experience, village residents and the surrounding community would experience benefits from the bypass. Community facilities within Little Hadham currently experience high levels of severance due to the fact that the A120 bisects the village and with anticipated reduced congestion, greater connectivity would reduce this severance.

Within Little Hadham, at the junction of Albury Road, Standon Road and Stortford Road, beneficial impacts are predicted at 82 residential properties as an indirect effect of reduced traffic noise on the A120, including:

- Major beneficial impacts are predicted at 23 residential properties;
- Moderate beneficial impacts are predicted at 33 residential properties;
- Minor beneficial impacts are predicted at 26 residential properties;

Adverse noise impacts have been identified at some residential properties including some at Albury End, Albury Lodge, properties along Albury Road, Church End and Hadham Industrial Estate, Hadham Hall and Hadham Park; however, noise levels at these locations remain below given limits and significant effects are not predicted.

A potential significant adverse effect has been identified on the community of Hadham Ford. This is a result of indirect increases in traffic predicted in the village causing increased traffic noise. Mitigation measures have been considered in this area but are not considered practical in this location.

Listed Buildings within Little Hadham village would also experience benefits as a result of reduced traffic passing along the existing A120 resulting in less noise, vibration and traffic emissions. Listed Buildings in The Ash and The Ford will also benefit from reducing risk of flooding.

The proposal supports the vision of the Hertfordshire Local Transport Plan to provide a safe, efficient and resilient transport system that serves the needs of business and residents across Hertfordshire and minimises its impact on the environment with the goal of supporting economic growth. The A120 Bypass would reduce east west journey times improving the link between the M11 and A10, whilst also improving congestion within the village, travellers' experiences and quality of life for the majority of residents.

4.4 Standon Area – Proposed Mitigation

HCC's current agreed strategy for the A120 between the A10 and Bishop Stortford is to promote local bypasses of Little Hadham and Standon of single carriageway standard and with Little Hadham, which is the subject of this report, coming forward first.

At present funding is only available for a bypass of Little Hadham. However, in a separate exercise, HCC will now undertake a further desktop study to define potential alignments for a Standon Bypass and engage with residents to clarify the levels of support for the identified options. It is anticipated that a consultation will take place early in 2016. The results of this consultation will feed into the long-term transport vision that the County Council is currently developing for Hertfordshire, identifying the key areas and corridors where transport improvements will be required in the period from now to 2050. This process will prioritise the County Councils key transport projects and will be subject to separate and wider public consultation. It is currently planned that this document will be finalised and adopted in 2016.

Following the above actions, should it be determined through monitoring post implementation of the Little Hadham bypass, that significant capacity issues have arisen, HCC will consider opportunities for providing interim mitigation at appropriate locations in Standon. The Council has already looked at potential measures on the basis of the forecast future year traffic flows in case they are required, and these would form the basis for the consideration of interim options in the future, which would assist with delivering improvements in a reasonable timeframe.

4.5 Flood risk

As part of the Proposed Scheme, flood storage areas would help reduce the risk of flooding to The Ash and The Ford. Where the road is above existing ground levels, embankments would be designed to hold back flood water in flood storage areas. Using the flood model to assess the benefit of the scheme, it is estimated that all 72 properties (at risk) would have a reduced risk of flooding, of which 69 would no longer be at risk from a 1 in 100 (1%) or greater annual probability of river flooding. While a small number of properties would still be at risk of flooding from the rivers, these properties would have a reduced risk.

The proposal would address the urgent need to provide flood alleviation measures for an area that has experienced seven extensive flood events since 1947. The scheme is in accordance with the National Planning Policy Framework, which requires local planning authorities to adopt proactive

strategies to mitigate and adapt to climate change. The Proposed Scheme provides benefits to the village of Little Hadham improving the quality of life and reducing the negative economic impact and disruption that flooding causes.

4.6 Lighting

The proposed bypass, with the exception of junctions, will not have road lighting. The Tilekiln Roundabout and Hadham Roundabout will include road lighting, which will be designed to minimise light pollution outside of the extent of the road.

Lighting columns would be installed at the roundabouts and would be designed to be directional, with low levels of light spillage, avoiding illumination of adjacent habitats and hedgerows where possible. The lighting columns will be 10m high and set back 1.5m from the road edge.

It may be necessary for night time lighting during the construction phase, this will be minimised to illuminate only temporary work areas, but remain sufficient to allow safe working.

4.7 Construction, Maintenance Management and Materials

4.7.1 Construction Compounds

The main site compound will be located to the north of the proposed Tilekiln Roundabout as shown on the Location Plan (Drawing 235086-APR-ML-XX-DR-YP-00103). It is proposed to light this compound for security reasons during night time hours.

There is a possibility that during construction there will be a need for satellite compounds, these are likely to be at the new bridge locations, new Cradle End Brook Culvert, the Lloyd Taylor Drain Diversion and Hadham Park Roundabout. Where necessary these will be lit during night time hours too. Stockpile areas for topsoil would be located at regular intervals along the Proposed Scheme. Where possible they would be located near to the satellite compound locations to minimise disruption and impact of the works.

4.7.2 Working Hours

The working day would vary between the seasons. However, it would typically be Monday – Friday 7am to 7pm in the summer months and 7am to 5pm in the winter. Weekend or night work would be required in some instances, typically for works on or adjacent to existing highways. These instances would be kept to a minimum and require agreement beforehand with the Local Planning Authority.

4.7.3 Construction Programme

The construction programme will be finalised by the main contractor in advance of the works. The duration of the works is currently estimated to

be approximately 20 months including 6 months advance works. A full Construction Management Plan will be provided by the contractor.

The sequence of the construction activities will follow the general timeline outlined below:

- Advance/preparatory works likely to be undertaken prior to construction;
- Site establishment and demolition works;
- Main construction works involved in the Proposed Scheme drainage, earthworks, including the flood alleviation infrastructure;
- Road works and structures; and
- Final finishes, such as landscaping.

Pre-works and earthworks are likely to work from one end to another, likely west to east, undertaken in sections.

A temporary haul road will be created. It is likely that it will work one end to the other (west to east) in line with construction, however it would be established wholly inside the land take boundary first.

Structures will be built in sequence, but with works overlapping, with specific teams moving on to the next structure when their work on the first has been complete. The final sequence will be determined by the contractor, although it is envisaged Albury Road Bridge would be early in the construction programme.

4.7.4 Construction Impacts

The potential impact on the local highway network would vary dependent upon working hours per day and the full construction programme is yet to be finalised. An indicative stage programme is highlighted in the section above.

The aim is to reduce as many of the construction impacts as possible, these will be captured in the Construction Environmental Management Plan (CEMP) which shall be submitted prior to formal works commencing.

4.8 Public Consultation

4.8.1 Introduction

Consultation is a key part of any planning application and is encouraged to be included as early as possible in the design process to encourage engagement and transparency. HCC have an adopted Statement of Community Involvement (SCI) (2013) outlining at what stage the county council plans to engage with communities in relation to new county council led developments.

By consulting with the LPA and taking and open and comprehensive approach to the promotion of the scheme. HCC have been able to address

any fears and misunderstandings, whilst taking comments and suggestions on board to revise the proposals where feasible.

4.8.2 Statement of Consultation

As part of this application a full comprehensive Statement of Consultation has been prepared and is submitted with the application supporting documents. It provides a summary of the pre-planning application consultation including publicity and awareness raising about the public consultation process, the public consultation events themselves as well as a summary of responses received and the key issues.

4.8.3 Pre-planning Consultation

Stakeholders

Technical and statutory stakeholders were contacted for information and opinions during the development of the design and its assessment. This approach ensures two things;

a) To establish a working relationship with the stakeholder during the design process ensuring two-way communication is enacted

b) Feedback from those stakeholders helping influence the design in accordance with their own parameters

Landowners

Meetings have been held with affected landowners throughout the design refinement. These meetings were an opportunity for the team to understand impacts on land due to land take requirements. Based on this, refinement has been made to the design in the form of accommodation works. This has included features such as repositioning and reducing land take for mitigation planting and providing alternative access points to fields.

Public Consultation

A number of methods were used to engage with the public including the use of online/social media, print media, exhibition events and workshops. The range of methods used ensured we were able to capture as many people from a wide spectrum as possible. Public consultation is key to this application and the responses and comments received throughout have been assessed and used to influence the design where ever possible and feasible.

A full list of public consultation events are outlined in the Statement of Consultation in Chapter 5.

4.8.4 Summary of Responses

The feedback received during the pre-planning application consultation period has played a significant role in shaping the planning and design process. Overall, the responses received from the feedback questionnaires generally support the proposed scheme, especially in regards to the flood

alleviation scheme. Where concerns have been raised, work has been undertaken either to amend the proposed design or ensure appropriate mitigation. Where amendments to the design have not been possible, information has been provided to explain the decision-making process.

A full range of themes were raised during any one of the consultation approaches. The majority of respondents were positive regarding the proposals. In summary the key issues raised were:

- Long term strategic nature of the route and preferred route options
- Funding for the project
- Concern of the Albury Road junction and how best to minimise conflicts
- Traffic, community and social impacts
- Environmental impacts and flooding concerns
- The impact upon Standon bypass

A comprehensive summary of the responses and key issues are outlined in the Statement of Consultation in Chapter 7.

5. Planning Policy Assessment

5.1 Introduction

Section 70(2) of the Town and Country Planning Act 1990 (as amended) and Section 38(6) of the Planning and Compulsory Purchase Act 2004 (as amended) requires that planning applications are determined in accordance with the development plan, unless material considerations indicate otherwise.

The planning policy context for the proposed development comprises both national and local planning policy. This section of the Planning Statement reviews planning policies that are relevant to the Proposed Scheme.

5.2 National Planning Policy

5.2.1 National Planning Policy Framework

The National Planning Policy Framework (NPPF) [4] sets out the Government's planning policies for England and how these are expected to be applied.

Sustainable Development

The NPPF confirms, in Paragraph 6, that the purpose of the planning system is to contribute to the achievement of sustainable development. Sustainable development has three dimensions: economic, social and environmental. Paragraph 14 of the NPPF states that sustainable development is at the heart of NPPF and should be seen as a golden thread running through both plan-making and decision-taking. For decision taking, Paragraph 14 also states that,

- *"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 Framework taken as a whole; or*
  - *specific policies in this Framework indicate development should be restricted".*

Core Planning Principles

Paragraph 17 of the NPPF refers to 12 core planning principles. In particular, it notes that planning should *"encourage multiple benefits from*

[4] National Planning Policy Framework. Department for Communities and Local Government, March 2012steve

the use of land in urban and rural areas, recognising that some open land can perform many functions (such as for wildlife, recreation, flood risk mitigation, carbon storage, or food production).” In this case, the Proposed Scheme would provide multiple benefits of improving transport connectivity, alleviating congestion and delivering flood risk storage for the area.

Promoting Sustainable Transport

With regard to transport, the NPPF notes in Paragraph 29 that transport policies have an important role to play in facilitating sustainable development and in contributing to wider sustainability and health objectives. Encouragement should also be given to solutions which support reductions in greenhouse gas emissions (Paragraph 30). The proposed scheme would substantially reduce congestion through the centre of Little Hadham by diverting traffic onto the bypass. Residential receptors in Little Hadham next to the existing A120 would experience an improvement in air quality. The largest improvements would be seen close to the junction, where traffic congestion is expected to reduce to give a moderate beneficial effect on air quality.

Requiring Good Design

The NPPF requires good design and the Government attaches great importance to the design of the built environment. It states that good design is a key aspect of sustainable development, is indivisible from good planning, and should contribute positively to making places better for people (Paragraph 56). Paragraph 65 notes that local planning authorities should not refuse planning permission for buildings or infrastructure which promote high levels of sustainability because of concerns about incompatibility with an existing townscape, if those concerns have been mitigated by good design. In this this case, the Proposed Scheme has been subject to design evolution and public consultation, with mitigation measures incorporated in the preferred design. Visual receptors (such as residential properties and users of public rights of way) would be exposed to permanent significant adverse effects, ranging from moderate, to very large adverse on existing rural rights of way, as a result of their views of the Proposed Scheme in a previously rural setting. These impacts have been reduced as far as reasonably possible by the inclusion of screening planting within the Proposed Scheme, which would mature over time.

Climate Change and Flooding

Paragraph 93 of the NPPF notes that planning plays a key role in helping to shape places, including minimising vulnerability and providing resilience to the impacts of climate change. Paragraph 94 further requires local planning authorities to adopt proactive strategies to mitigate and adapt to climate change, taking full account of flood risk, coastal change and water supply and demand considerations. The provision of flood storage areas as part of the Proposed Scheme would reduce flood risk in Little Hadham and downstream communities.

Conserving and Enhancing the Natural Environment

Paragraph 109 states that the planning system should contribute to and enhance the natural and local environment by, amongst other things:

- protecting and enhancing valued landscapes, and soils;
- minimising impacts on biodiversity and providing net gains to biodiversity; and
- preventing both new and existing developments from being put at unacceptable risk from unacceptable levels of soil, air, water or noise pollution.

Further guidance on conserving and enhancing biodiversity is provided in Paragraph 118. An Environmental Impact Assessment of the Proposed Scheme has been undertaken. Where potential impacts were identified, mitigation and enhancement measures would be provided as part of the scheme. The incorporation of mitigation measures would result in no significant adverse impacts on nature conservation, with beneficial impacts predicted as a result of the provision of new hedgerows. In addition, the Proposed Scheme would be undertaken in accordance with a Construction Environmental Management Plan (CEMP).

In order to conserve the natural environment and avoid significant harm, the design includes lower physical mass and footprint for bridges in order to be less visually intrusive. Positioning Albury Road Bridge to the west of the existing alignment rather than east also reduced the amount of earthworks required and retained more vegetation in the view for receptors to the east. Where adverse impacts could not be avoided, proposed native species planting and maturing of vegetation would provide more visual integration of the scheme within the landscape.

In order to mitigate these effects, semi-mature native tree standards of at least 3m in height would be planted on slightly raised bunds to encourage bats and birds to fly higher reducing the risk of collisions with fast moving vehicles. Lighting would be designed to be directional so as to avoid illumination of the hedgerows and habitat features close to the Proposed Scheme. A bridge and culvert would allow for safe passage of animals and prevent fragmentation of the foraging habit mammals. Mesh fencing would be included in order to exclude fallow deer and badgers from the proposed road thereby reducing the risk of vehicle collisions and human fatalities/injuries

Paragraph 112 of the NPPF refers to agricultural land. It states that where significant development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of a higher quality. The Proposed Scheme would involve the permanent change of use of approximately 39.5ha of agricultural land. The land is a mix of good quality land in Subgrade 3a and moderate quality land in Subgrade 3b. The areas proposed for flood storage are currently predominantly classified as Subgrade 3a land. The ES concluded that agricultural land quality would be unaffected in the flood storage areas, and that the existing land uses would be able to continue as at present in these areas

To prevent unacceptable risks from pollution and land instability, planning decisions should ensure that new development is appropriate for its location, including the cumulative effects of pollution (Paragraph 120). There is low potential for contaminated material to be generated from the site as a result of the rural nature of the area. Best practice, such as the adoption of a CEMP throughout construction would ensure human health and environment incidents are avoided.

Paragraph 123 and 124 refer to noise and air quality. With regard to noise, adverse noise impacts have been identified at some residential properties including some at Albury End, Albury Lodge, properties along Albury Road, Church End and Hadham Industrial Estate, Hadham Hall and Hadham Park. However, noise levels at these locations remain below given limits and significant effects are not predicted. A potential significant adverse effect has been identified on the community of Hadham Ford. This is a result of indirect increases in traffic predicted in the village causing increased traffic noise. Mitigation measures have been considered in this area but are not considered practical in this location. Significant beneficial effects on noise are predicted around the properties in the vicinity of the junction in Little Hadham and those in the vicinity of Green Street and Cradle End, due to the predicted reduction in traffic.

With regard to air quality, residential receptors in Little Hadham would experience an improvement in air quality as a result of reduction in pollutant concentrations in the area, Construction activities and the introduction of new man made infrastructure would change the tranquillity and views of the rural landscape. In order to counteract these impacts, the Proposed Scheme would provide mitigation planting, using native species, to screen views and integrate the Proposed Scheme into the rural landscape

Conserving and Enhancing the Historic Environment

Guidance on the historic environment is set out in Paragraphs 126 to 141 of the NPPF and requires the significance of heritage assets affected by a proposal to be assessed. The ES concluded that the setting of listed buildings and the Scheduled Monument, Mill Mound, would not be significantly effected during construction due to the temporary nature of works. Little Hadham is a Conservation Area in which there are a number of Listed Buildings. The reduction of traffic in the village is considered to have a moderate beneficial effect on the setting of many of these heritage assets. The effect on the setting of other listed buildings in the wider area are not predicted to be significant or result in substantial harm. The combined operational effect of visual and noise impacts upon the rural setting of Mill Mound is considered to represent a moderate adverse effect. The visual impact of the Proposed Scheme has been minimised by planting where practicable.

Pre-application Engagement

The NPPF advocates early engagement to enable improved outcomes for the community and better coordination of resources (Paragraph 188). Extensive pre-application engagement was undertaken for the Proposed Scheme, dating back to 2007. A full record of recent public consultation

undertaken is provided in the Statement of Consultation. In addition, discussion was undertaken with the local planning authority, to establish requirements for the planning application, including application for EIA screening and scoping opinions, in accordance with the Regulations and Paragraph 192 of the NPPF.

5.3 Local Transport Plans

5.3.1 Hertfordshire County Council Local Transport Plan (2011-2031)

The Hertfordshire County Council (HCC) Local Transport Plan (LTP)[5] sets out the County Council's vision and strategy for the long term development of transport in the county. Its vision is to provide a safe, efficient and resilient transport system that serves the needs of business and residents across Hertfordshire and minimises its impact on the environment.

The improvement of highways is a core strategy of Hertfordshire County Council, which supports economic growth; enhances and maintains the natural environment; improves the connection between neighbourhoods; and addresses design infrastructure in light of future constraints. The A120 Bypass (Little Hadham) and Flood Alleviation Scheme is shown as an identified scheme on the LTP Transport Schemes Map.

With regard to new road building, the LTP states that the County Council will:

- *"Seek to minimise and/or mitigate the adverse physical impact of the road or the improvement on the landscape and environment and will try to secure significant and demonstrable environmental gains.*
- *Take into account the needs of pedestrians, cyclists, powered two wheelers, equestrians and passenger transport users and, where appropriate seek to provide increased capacity, easier movement or improved accessibility in order to enable more effective use.*
- *Identify ways of improving highway safety and weigh up any recommendations against the impact on all users.*
- *Design new road developments to accommodate existing demand and that of planned development and not necessarily to accommodate future growth in traffic demand.*
- *Consider measures to manage demand on the new or improved road and in the surrounding area."*[6]

This approach reflects the design evolution and development of the Proposed Scheme, as well as the public consultation input to the iteration of the preferred design. Similarly, the preparation of a comprehensive EIA and TA of the Proposed Scheme ensures that where possible potential adverse effects could be mitigated and ameliorated.

[5] Hertfordshire County Council Local Transport Plan. Hertfordshire County Council, 2011.
[6] Hertfordshire County Council Local Transport Plan. Hertfordshire County Council, 2011, Transport Policy A-Z

The Local Transport Plan advocates for reducing the level of stop-start conditions through traffic management and to construct, maintain, and operate all infrastructure as part of its response to climate change adaptation.

With regard to congestion, the LTP notes that,

"Public surveys suggest that traffic congestion is considered a significant problem in Hertfordshire. Traffic delays, often made worse as a result of collisions, and the uncertainty as to the time any journey might take, are a major concern to local businesses and to bus, coach and freight operators and can badly affect the economy of the county.

Congested traffic results in higher levels of emissions compared with free flowing traffic. This further increases transport's contribution to climate change and reduces local air quality creating air quality problems in congested areas. Congestion can also impact on the environmental character of an area, and deter people from walking and cycling there, and can lead to rat-running on less suitable roads, with all its attendant safety and environmental problems."

In response, the LTP states that the County Council will seek to:

- manage, and where feasible, reduce traffic in congested areas and on congested routes particularly in peak period, and
- improve traffic flows and minimise the adverse environmental effects of congestion by using intelligent transport systems, traffic management and small scale interventions.

The plan also acknowledges the need for a road hierarchy in order to divert traffic onto appropriate roads for its journey purpose which would keep the County moving and support economic growth.

Currently, the one-way working signal controlled junction in the centre of Little Hadham causes severe congestion and delays, especially at peak hours. The new A120 Bypass would accommodate this existing demand and divert traffic away from the village centre, which would reduce the amount of idle time and stop-start conditions from waiting in long queues for the traffic lights and improve traffic flows and congestion.

The LTP also aims to improve the quality of life of individuals and manage the environmental impacts by enhancing the natural environment, improving connections between neighbourhoods and reducing the impact of transport noise and greenhouse gas emissions. Through emissions and transport noise displacement and reduced congestion, the quality of life for residents within Little Hadham would improve by improving the permeability of the village centre. Driver stress would also be improved by decreasing east west journey times and reducing delays and queuing.

In summary, the Proposed Scheme is set in the LTP as an identified project and the Proposed Scheme complies with the policies and objectives of the LTP.

5.3.2 East Hertfordshire Council Local Transport Plan (2007)

The Eastern Herts Transport Plan covers the major settlements of Bishop's Stortford and Sawbridgeworth, and includes the surrounding rural area approximately bounded by the A10 in the west, the A120 to the north, and the county boundary to the south and east.

The Transport Plan is the long term framework which will provide a focus for transportation improvements over the next 15 to 20 years. It provides a base to deliver a more sustainable, integrated transport system for the towns and surrounding rural areas.

The Transport Plan vision states:

"To provide a safe, efficient and affordable transport system that allows access for all to everyday facilities. Everyone will have the opportunity and information to choose the most appropriate form of transport and time of travel. By maximising the capacity of the network we will work towards a transport system that balances economic prosperity with personal health and environmental wellbeing"

Ten objectives are identified within the plan, they complement the central and local government transportation and land use policies and reflect the transport issues raised by the consultation process. These objectives are:

- School Traffic
- Parking
- Safety
- Pedestrian and Cycle Facilities
- Maintenance
- Access to Facilities
- Passenger Transport
- Congestion/Ease of Movement
- Street Scene
- Future Developments

The Transport Plan recognises the importance role of the A120 between A10 and Bishop's Stortford as a Primary Route. It recognises the need for improvements on the existing road and new bypasses for Standon and Little Hadham.

5.4 Local Planning Policy

5.4.1 The Development Plan

The application site is located within East Herts District Council. The Development Plan for the area comprises the Saved Policies from the East Herts Local Plan Second Review (April 2007)[7] and relevant Supplementary Planning Documents (SPD). The Proposals Map indicates that the application site is not designated for any particular land use. The strategy diagram for the Local Plan identifies the application as lying within the rural area beyond the Green Belt.

East Herts District Council are currently preparing the new East Herts District Plan. Saved Policies from the East Herts Local Plan Second Review will continue to form part of the statutory Development Plan until they are replaced by policies as part of the emerging East Herts District Plan.

Local Plan Saved Policies

Table 2 below sets out the saved policies, which are relevant to the Proposed Scheme, and details how this has been considered within the application.

Table 6: Assessment of Relevant Saved Policies from the 2007 East Hertfordshire Local Plan

Policy Summary	Assessment
GBC2 The Rural Area Beyond the Green Belt A rural area beyond the Green Belt will be maintained in the central and northern part of the District, wherein inappropriate development will not be permitted.	The nature of the development is that there are no viable alternatives other than the preferred route of the Proposed Scheme. The preferred route reflects the route selection process undertaken in 2007 and associated public consultation. The Proposed Scheme would provide both transport and flood alleviation benefits. The rural area to the north would be unaffected and the flood storage areas would allow existing agricultural land uses to continue as present. The Proposed Scheme should be regarded as appropriate and essential development in this area.
GBC3 Appropriate Development in the Rural Area Beyond the Green Belt Within the Rural Area Beyond the Green Belt permission will not be given other than developments which meet the criteria defined within the policy (items a to l).	This policy states that permission will not be given for the construction of new buildings or for changes of use other than in limited exceptions. Item h) of the policy refers to services or uses of land which meet a local need and are appropriate to a rural area. The Proposed Scheme has been designed to address a proven local need to improve transport links and to reduce congestion and associated adverse effects in the village of Little Hadham and to provide much needed flood alleviation, reducing the risk to a large number of properties in the area.

[7] East Herts Local Plan Second Review. East Herts District Council, 2007.

Policy Summary	Assessment
GBC14 Landscape Character Landscape Character Assessment prepared in accordance with an agreed methodology will be used to assess development proposals which will be required to improve and conserve local landscape character. Where damage is unavoidable, appropriate mitigation measures will be sought.	A Landscape Character Assessment was undertaken using a methodology agreed with a landscape architect at HCC. Details of the Assessment are provided in Chapter 9 of the ES. The Landscape Strategy submitted with the planning application details landscaping proposals along the route, which would act to mitigate some of the effects identified within the ES.
TR3 Transport Assessment Developments that are likely to generate significant movement and travel demand will require the submission of a Transport Assessment to accompany the planning application.	A full Transport Assessment has been prepared and is submitted with the planning application.
TR17 Traffic Calming The application of traffic calming measures is supported in principle in the design and construction of new highways and on existing roads. Where calming measures would detract from the appearance and amenity of the area they will not be supported.	The Proposed Scheme has been subject to a Road Safety Audit, which is appended to the Transport Assessment.
ENV1 Design and Environmental Quality All development proposals will be expected to be of a high standard of design and reflect local distinctiveness. Proposals will be expected to demonstrate compatibility (where relevant) with the surrounding area, relate well to the surrounding townscape, respect the amenity of occupiers of neighbouring buildings and future occupants, incorporate sustainable initiatives, consider the impact of any loss of open land, minimise loss or damage of important landscape features and provide landscape, recreation or amenity features, and where appropriate habitat creation.	The Proposed Scheme has been designed to DMRB standards, confirming a high standard of design. It has been designed to sit within the rolling landscape, making the best of the existing landform to screen the road where possible. Environmental bunds have been designed to tie in to the existing landscape, and mitigation planting is made up of native species reflecting species already in the area. Existing broken lines of planting have been filled wherever possible. Full details of this can be found in the Landscape Strategy and Chapter 9 of the ES. Impacts on significant historic landscape features can be found in Chapter 8 of the ES. Impacts on amenity of occupiers of nearby buildings have been assessed in Chapters 12 (Noise and Vibration) and 6 (Air Quality) in the ES. It is considered that the Proposed Scheme is compatible with this policy.
ENV2 Landscaping Development proposals will be expected to retain and enhance existing landscape features. Where losses are unavoidable compensatory planting or habitat creation will be sought.	Impacts on existing landscape features are reported in Chapter 9 of the ES, and in Chapter 10 of the ES where related to impacts on habitats. Efforts have been made to work with the landscape, making the best of the existing landform to screen the road where possible. Landscape and ecological mitigation planting would be made up of native species reflecting

Policy Summary	Assessment
Detailed surveys of landscape features will be required to be submitted. Proposals on prominent sites will be required to give special consideration to landscape treatment. Landscaping proposals should include a statement setting out how they will meet the targets set in the Hertfordshire Local Biodiversity Action Plan.	planting already in the area. Existing broken lines of planting have been filled wherever possible to create continuous movement corridors for a number of affected species. Details of how landscaping proposals would meet targets set out in the Hertfordshire Local Biodiversity Action Plan are set out in the Landscape Strategy.
ENV11 Protection of Existing Hedgerows and Trees In considering development proposals, including new roads, the Council will endeavour to ensure maximum retention of existing hedgerows and trees, and their reinforcement by new planting of native broad-leaved species. Where removal is unavoidable, replacement planting of native broad-leaved species will be expected.	The Proposed Scheme has been designed to retain and integrate trees and hedgerows. Where hedgerows and trees must be removed, mitigation efforts include new native species planting to form new field boundaries and would replace hedgerows removed due to construction. Details of new and replacement planting to mitigate any loss of hedgerows and trees can be found in Chapter 9 of the ES and in the Landscape Strategy.
ENV13Development and SSSIs Proposals for development in, or likely to affect, Sites of Special Scientific Interest will be subject to special scrutiny. Where such development may have an adverse effect, directly or indirectly, on the SSSI it will not be permitted unless the reasons for the development clearly outweigh the nature conservation value of the site itself and the national policy to safeguard the national network of such sites.	There is one designated site, located 2km from the application area (Patmore SSSI). No impacts are predicted because of the distance of the site from the Proposed Scheme. Further information is provided in Chapter 10 of the ES.
ENV14 Local Sites Development likely to have an adverse effect on a Local Nature Reserve or Wildlife Site will not be permitted unless it can be clearly demonstrated that there are reasons for the proposal which outweigh the need to safeguard the substantive nature conservation value of the site or feature.	There are 11 Wildlife Sites within 500m of land required for the Proposed Scheme. Potential impacts have been considered in the ES. However, no impacts are predicted because of the distance from the Proposed Scheme. Additional information on the assessment of these sites can be found in Chapter 10 of the ES.
ENV16 Protected Species Development and other land use changes which may have an adverse effect on badgers and other species protected by Schedules 1, 5, and 8 of the Wildlife and Countryside Act 1981, as amended, and the Nature Conservation (Natural Habitats, &c.) Regulations 1994 will only be	The proposed Mill Mound Bridge, underground tunnel and culvert near Cradle End Brook Culvert are designed to allow full access for animals between the lands bisected by the bypass and prevent fragmentation. A full assessment of the impacts and mitigation efforts can be found in Chapter 10 of the ES.

Policy Summary	Assessment
permitted where harm to the species can be avoided.	
ENV17 Wildlife Habitats The district Council will support work to achieve targets contained within the Hertfordshire Local Biodiversity Action Plan, seek to realise opportunities for habitat creation and seek to improve nature conservation wherever possible.	Opportunities for ecological mitigation and enhancement are included within the Proposed Scheme. For instance, the proposed Mill Mound Bridge, underground tunnel and culvert near Cradle End Brook Culvert would be designed to allow full access for animals between the lands bisected by the bypass to prevent fragmentation. Some of the cutting and embankment slopes within land required for the Proposed Scheme would expose clay which would be left to naturally colonise encouraging the establishment of grassland benefitting a range of species.
ENV 18 Water Environment Development or change of use of land will be required to preserve and enhance the water environment.	Measures such as sediment control, controlled storage of materials, restricting the use of polluting materials near receptors, and local flood control measures, result in the potential for impacts from the Proposed Scheme on the water environment being considered not significant.
ENV19 Development in Areas Liable to Flood Proposals for development including raising of land in the flood plains and washlands will not be permitted if they would materially impede the flow of flood water, increase the risk of flooding elsewhere, reduce the capacity of floodplains, or increase risk to people or property.	The Proposed includes flood storage areas to reduce the risk of flooding to people and property. It would retain and control surface water flows during flood events. Beyond the transport benefits of the Proposed Scheme, the flood alleviation element offers the greatest long term local direct economic impact. A Flood Risk Assessment is provided as part of the ES.
ENV20 Groundwater Protection Development which may cause the contamination of, or otherwise prejudice, groundwater will not be permitted. Development proposals in areas of known groundwater importance will be required to submit a detailed assessment of the impact the development proposals will have on groundwater resource, including measures to mitigate any potential threat to the groundwater.	Best practice, such as the adoption of a CEMP throughout construction would ensure human health and environment incidents are avoided. Measures incorporated into the design such as sustainable drainage and pollution barriers would ensure surface water and accidental spills during operation do not pose any significant risk to the ground or groundwater. As a result no significant effects are expected to human health or the natural and built environment as a result of the proposed scheme, either during construction or operation.
ENV21 Surface Water Drainage Where appropriate and relevant, all development proposals will be expected to take into consideration Best Management Practices to surface water drainage, as advocated by the Environment Agency.	The drainage design of the Proposed Scheme is integral to the nature of the development and includes SuDS to control water quality release as advocated by the Environment Agency. Full details are contained in Chapter 15 of the ES.
ENV23 Light Pollution and Floodlighting	During construction, night-time lighting would be minimised to illuminate only temporary works areas, but remaining at sufficient levels

Policy Summary	Assessment
In order to minimise light pollution, proposals will only be approved where the scheme proposed is the minimum needed for operational purposes, it minimises potential pollution from glare or light spillage, it minimises impact on residential amenity, it minimises the impact on the character or openness of the rural area, it would not adversely affect ecological interests and the aesthetic effect of light is not adverse.	to allow safe working. Where necessary, hoarding would be used to reduce the impact of the lighting on foraging habitat. During operation, lighting columns would be installed at the Tilekiln and Hadham Park Roundabouts and would be designed to be directional, with low levels of light spillage, avoiding the illumination of the hedgerows and habitat features. Further information is provided in Chapter 10 of the ES.
ENV24 Noise Generating Development The Council will expect noise generating development to be designed and operated in a way that minimises the impact of noise nuisance on the environment. And; **ENV 25 Noise Sensitive Development** Noise sensitive development (including homes schools and hospitals) should not be exposed to noise nuisance from existing noise generating sources, or programmed developments such as new roads.	Potential noise and vibration impacts during construction have been identified. Measures to minimise and manage these impacts are described in the CEMP. Adverse noise impacts have been identified at some residential properties; however, noise levels at these locations remain below given limits and significant effects are not predicted. A potential significant adverse effect has been identified on the community of Hadham Ford. Mitigation measures have been considered in the ES. Significant beneficial effects on noise are predicted around the properties in the vicinity of the junction in Little Hadham and those in the vicinity of Green Street and Cradle End, due to the predicted reduction in traffic.
ENV27 Air Quality The Council will have regard to the potential effects of a development on local air quality when determining planning applications. Consideration will be given to the impact caused by both the operational characteristics of the development (industrial, commercial, and domestic) and the traffic generated by it, and development which will significantly increase air pollution will not be permitted. Where development proposals are likely to involve emissions into the air, submission of appropriate details will be required to enable a full judgement of the impact of the development to be made.	Following implementation of best practice dust management on the site there would be no significant effect during construction. Best practice dust management measures are outlined in the CEMP. Residential receptors in Little Hadham next to the existing A120 will experience an improvement in air quality. The largest improvements are seen close to the junction, where traffic congestion is expected to reduce to give a moderate beneficial effect on air quality. As the proposed development does not result in any significant adverse effects on local air quality during operation no mitigation for the operational phase is necessary.
BH1 Archaeology & New Development Development will not be permitted where it is considered that it will adversely affect archaeological sites of national importance, whether scheduled or unscheduled, and their setting.	Areas of potential archaeology have been identified and a programme of trial trenching has been recommended, to be undertaken prior to construction. Additional excavation may be required to preserve items if identified. An archaeological watching brief will be provided where works are to be undertaken in areas of known archaeology that do not require excavation. As a result of this mitigation the potential effect on buried archaeological

Policy Summary	Assessment
	remains is not considered to be significant. See Chapter 8 of the Environmental Statement for full analysis.
BH6 New Developments in Conservation Areas New developments in or adjacent to a Conservation Area will be permitted subject to a range of criteria.	Little Hadham is a Conservation Area in which there are several Listed Buildings. The reduction of traffic in the village is considered to have a moderate beneficial effect on the setting of many of these heritage assets. The effect on the setting of other listed buildings in the wider area are not predicted to be significant or result in substantial harm.

5.4.2 The emerging East Herts District Plan

The emerging East Herts District Plan is at the preferred options stage. It has been subject to public consultation, but due to the early stage of preparation, it carries only limited weight. However, the Key Diagram does identify the A120 Bypass of Little Hadham as a road improvement and it is listed as a strategic infrastructure requirement (Policy DPS5).

Table 7: Assessment of Relevant Policies from Preferred Options East Hertfordshire Local Plan

Policy Summary	Assessment
DPS5 Infrastructure Requirements East Herts Council will prepare an Infrastructure Delivery Plan to address the co-ordinated phasing of infrastructure and development of items of strategic and local infrastructure. Little Hadham Bypass is highlighted as item f) of this policy.	The A120 Bypass would allow for increased economic growth, reduced congestion in Little Hadham village and reduced journey times. It would support the projected housing need within the Development Strategy 2011-2031 and is identified in the emerging plan as a key infrastructure requirement.
DPS7 Presumption in Favour of Sustainable Development The District Council will work proactively with applicants jointly to find solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area. Planning applications that accord with the policies in this District Plan will be approved without delay, unless material considerations indicate otherwise. Where there are no policies relevant to the application or relevant policies are out of date at the time of making the decision then the Council will grant permission unless material	The NPPF states that 'transport policies have an important role to play in facilitating sustainable development but also in contributing to wider sustainability and health objectives' and that planning should encourage multiple benefits from the use of land. It states that 'encouragement should be given to solutions which support reductions in greenhouse gas emissions and reduce congestion.' The proposals would substantially reduce congestion through the centre of Little Hadham by diverting traffic onto the bypass. Furthermore, the proposal would provide opportunities for economic growth and improve the quality of life for residents, vehicle users and pedestrians within the village centre. The flood alleviation scheme would also provide long term environmental and economic benefits for the village.

Policy Summary	Assessment
considerations indicate otherwise taking into account whether: (a) Any adverse impacts of granting permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the National Planning Policy Framework taken as a whole. (b) Specific policies in the National Planning Policy Framework indicate that development should be restricted.	
GBR2 Rural Area Beyond the Green Belt The rural area beyond the Green Belt will be maintained in the central and northern parts of the district, as defined on the Policies Map. The construction of new buildings in the Rural Area Beyond the Green Belt will be considered as inappropriate. Certain other forms of development are also not inappropriate in the Rural Area Beyond Green Belt. This includes item (c) local transport infrastructure, which can demonstrate a requirement for a location in the Rural Area Beyond the Green Belt.	The Proposed Scheme falls within the definition of local transport infrastructure and there is a proven local need for the proposal, both in terms of the relief of traffic mitigation and flood alleviation. The Proposed Scheme is considered to be an appropriate form of development in the rural area beyond the Green Belt.
DES1 Local Character and Amenity All development proposals must be of a high standard of design and layout to reflect and promote local distinctiveness. Developments should make the best possible use of the land available by respecting or improving the character of the surrounding area in terms of scale, siting, layout, materials, landscaping, environmental assets and design features, having due regard to the design opportunities and constraints of a site;. Proposals should embrace high quality innovative design, new technologies and construction techniques. Proposals must not prejudice the development opportunities of surrounding sites.	The Proposed Scheme has been designed to DMRB standards, confirming a high standard of design. It has been designed to sit within the rolling landscape, making the best of the existing landform to screen the road where possible. Environmental bunds have been designed to tie in to the existing landscape, and mitigation planting is made up of native species reflecting species already in the area. Existing broken lines of planting have been filled wherever possible. Full details of this can be found in the Landscape Strategy and Chapter 9 of the ES. Impacts on significant historic landscape features can be found in Chapter 8 of the ES. Impacts on amenity of occupiers of nearby buildings have been assessed in Chapters 11 (Noise and Vibration) and 6 (Air Quality) in the ES. It is considered that the Proposed Scheme is compatible with this policy.
TRA1 Sustainable Transport Proposals should comply with the provisions of the Local Transport Plan, ensure that a range of alternative options are available to users, priorities the provision of modes of transport other than the car,	The NPPF states that 'transport policies have an important role to play in facilitating sustainable development but also in contributing to wider sustainability and health objectives.' It states that 'encouragement should be given to solutions which support reductions in greenhouse gas emissions and reduce congestion.' The East Herts Council's

Policy Summary	Assessment
allow for the early implementation of sustainable travel infrastructure, protect existing rights of way, cycling and equestrian routes, and ensure provision is made for long term maintenance.	Draft District Plan identifies the A120 Bypass as strategic infrastructure required to support development and the Proposed Scheme is identified in the LTP. The A120 Bypass is a long-term solution to reducing congestion allowing for improved permeability and reducing severance within Little Hadham village. Measures to reduce adverse effects the Proposed Scheme on pedestrians, cyclists and vehicle travellers are included within the design. Chapter 13 of the ES details the impact on various modes of transport including PRoWs, cycling and equestrian routes.
NE1 International, National and Locally Designated Nature Conservation Sites Development proposals which are likely to have a detrimental impact on the integrity of a site will not be permitted unless it can be demonstrated that there are reasons which clearly outweigh the need to safeguard the nature conservation value of the site, and any broader impacts on the nature conservation assets. Where a priority species or habitat is adversely affected the District Council will need to be satisfied that there are imperative reasons of overriding public interest sufficient to override the harm to the site. In exceptional circumstance where proposals are allowed any adverse impact should only occur as a last resort and should be compensated by replacement with a feature of comparable or higher ecological value.	There is one designed nature conservation site located 2 km from land required for the Proposed Scheme, Patmore Heath SSSI. No impacts are predicted to the designated nature conservation site because of the distance from the Proposed Scheme. Measures to facilitate biodiversity gain and also to benefit other species have been included within the design of the Proposed Scheme and would be carried out in accordance with the CEMP. Chapter 10 of the ES explains in detail the effects of the Proposed Scheme on species and habitats.
NE2 Species and Habitats Development proposals which may impact on Species and Habitats of Principal Importance included in the England Biodiversity List under section 41 of the Natural Environment and Rural Communities Act 2006 will only be permitted where harm to the species can be avoided. Locally important biodiversity sites and other notable ecological features of conservation value will be protected and enhanced. Developments which would result in the loss or significant damage to trees, hedgerows or ancient	The Proposed Scheme has been designed to retain and integrate trees and hedgerows. Where hedgerows and trees must be removed, mitigation efforts include new native species planting to form new field boundaries and would replace hedgerows removed due to construction. Details of new and replacement planting to mitigate any loss of hedgerows and trees can be found in Chapter 9 of the ES and in the Landscape Strategy. The proposed Mill Mound Bridge, underground tunnel and culvert near Cradle End Brook Culvert are designed to allow full access between the lands bisected by the bypass and prevent fragmentation.

Policy Summary	Assessment
woodland sites will not be permitted. The Council will seek their reinforcement by additional native species planting where appropriate.	Some of the cutting and embankment slopes within land required for the Proposed Scheme would expose clay which would be left to naturally colonise encouraging the establishment of grassland benefitting a range of species. A full assessment of the impacts and mitigation efforts can be found in Chapter 10 of the ES.
NE3 Green Infrastructure A diverse network of accessible, multi-functional green infrastructure across the district will be protected and enhanced for its biodiversity, recreational, accessibility, health and landscape value and for the contribution it makes towards combating climate change. Development proposals should avoid the loss, fragmentation or impairment to the functionality of the green infrastructure network, and opportunities should be maximised in accordance with the Council's Green Infrastructure Plan, its Parks and Open Spaces Strategy, the Hertfordshire Biodiversity Action Plan, Living Landscape Schemes, locally identified Nature Improvement Areas and any future relevant plans and programmes as appropriate.	The Proposed Scheme has been designed to reduce the potential impact on landscape character and views where possible. This has been achieved through minimising the loss of most mature trees, developing visually sensitive bridge designs and identifying areas where new native planting may screen views of the proposed road. Efforts have been made to work with the landscape, making the best of the existing landform to screen the road where possible. Where adverse impacts could not be avoided, proposed native species planting and maturing of vegetation would provide visual integration of the Proposed Scheme within the landscape. Hedgerow and tree planting would form new field boundaries and would replace hedgerows removed due to construction. Existing broken lines of planting would be filled wherever possible to create continuous movement corridors for a number of affected species. Further information is provided in the Landscape Strategy and Chapters 9 and 10 of the ES.
LAN1 Landscape Character Development proposals must demonstrate how they conserve, enhance or strengthen the character and distinctive features of the district's landscape. A Landscape and Visual Impact Assessment should be provided to ensure that impacts, mitigation and enhancement opportunities are appropriately addressed. In exceptional circumstances, where damage to landscape character is unavoidable and justified by other material considerations, appropriate mitigation measures will be sought. Where an area is identified in the Council's Landscape Character Assessment this will be used to inform consideration of development proposals.	Landscape and visual mitigation measures have been built into the Proposed Scheme throughout the design process. Full details are provided in Chapter 9 of the ES. Policy LAN1 is linked to the East Herts Landscape Character Assessment SPD and is considered in section 5.4.3 of this Statement.
LAN2 Landscaping	The Proposed Scheme has been designed to reduce the potential impact on landscape character and views where possible. This has

Policy Summary	Assessment
Development proposals must demonstrate how they will retain, protect and enhance existing landscape features which are of amenity and/or biodiversity value. In exceptional circumstances, where losses are unavoidable and justified by other material considerations, compensatory planting or habitat creation will be sought either within or outside the development site.	been achieved through minimising the loss of most mature trees, developing visually sensitive bridge designs and identifying areas where new native planting may screen views of the proposed road. Full details of the landscape assessment and strategy are provided in Chapter 9 of the ES.
HA1 Heritage Assets Development proposals should protect and enhance the historic environment. Proposals that would harm the significance of a designated heritage asset will not be permitted unless it can be demonstrated that it is necessary to achieve substantial public benefits which outweigh the harm or loss.	Areas of potential archaeology have been identified and a programme of trial trenching has been recommended, to be undertaken prior to construction. Additional excavation may be required to preserve items if identified. An archaeological watching brief will be provided where works are to be undertaken in areas of known archaeology that do not require excavation. As a result of this mitigation the potential effect on buried archaeological remains is not considered to be significant. See Chapter 8 of the Environmental Statement for full analysis.
HA2 Non-designated Heritage Assets Where a proposal would adversely affect non-designated heritage assets, regard will be had to the scale of any harm or loss and the significance of the heritage asset.	Construction works would be temporary and of limited duration, and would not affect the significance of non-designated heritage assets within the study area. There would also be no direct impact during operation of the Proposed Scheme. See Chapter 8 of the Environmental Statement for full analysis.
HA3 Archaeology Where a site has the potential to include heritage assets with archaeological interest applicants should submit an appropriate desk based assessment and where necessary the results of a field evaluation prior to the submission of an application. Where development is permitted on sites containing archaeological remains, permission will be subject to conditions and/or formal agreements requiring appropriate excavation and recording in advance of development.	Potential for heritage assets has been considered fully in the ES. Areas of potential archaeology have been identified and a programme of trial trenching has been recommended, to be undertaken prior to construction. Additional excavation may be required to preserve items if identified. An archaeological watching brief will be provided where works are to be undertaken in areas of known archaeology that do not require excavation. As a result of this mitigation the potential effect on buried archaeological remains is not considered to be significant. See Chapter 8 of the Environmental Statement for full analysis.
HA4 Conservation Areas Development proposals outside a Conservation Area which affect its character and setting will be required to respect established layouts and patterns, use traditional materials and design details, and be sympathetic in scale and character. Development must conform to any 'Conservation	Little Hadham is a Conservation Area in which there are several Listed Buildings. The reduction of traffic in the village is considered to have a moderate beneficial effect on the setting of many of these heritage assets. The effect on the setting of other listed buildings in the wider area are not predicted to be significant or result in substantial harm.

Policy Summary	Assessment
Area Appraisals' prepared by the District Council.	
HA7 Listed Buildings The Council will actively seek opportunities to sustain and enhance the significance of Listed Buildings and ensure their viability. Proposals which affect the setting of a Listed Building will only be permitted where the setting of the building is enhanced.	By diverting traffic away from Little Hadham, the impact on the setting of the majority of listed buildings is beneficial. Traffic reduction would diminish the modern intrusion into the setting of the Conservation Area and reduce the noise and vibration on numerous listed buildings whilst improving the air quality in the nearby area. Flooding to Listed Buildings will also greatly be reduced.
CC1 Climate Change Adaptation All new development should demonstrate how it would minimise overheating in summer and reduce the need for heating in winter, and integrate green infrastructure in the design process.	This policy is primarily aimed at new buildings. However, the Proposed Scheme aims to address climate change adaptation through flood mitigation and integration of the scheme within the landscape through tree planting, new field boundaries and SUDS infrastructure.
CC2 Climate Change Mitigation All new developments should demonstrate how carbon dioxide emissions will be minimised across the development site. Carbon reduction should be met on-site unless it can be demonstrated that this is not feasible or viable. In such cases effective offsetting measures to reduce on-site carbon emissions will be accepted as allowable solutions. The energy embodied in construction materials should be reduced through re-use and recycling of existing materials and the use of sustainable materials and local sourcing.	This policy is primarily aimed at new buildings. The Proposed Scheme addresses climate change mitigation through improving transport efficiency, reducing delays on the network and reducing vehicle emissions. A construction management plan would address the use and re-use of material on site during the construction process.
WAT1 Flood Risk Management The functional floodplain will be protected from development and where possible developed flood plain should be returned to Greenfield status with an enhanced level of biodiversity. Development proposals should neither increase the likelihood, intensity or risk to people, property, crops or livestock from flooding.	The Proposed Scheme includes flood storage areas to reduce the risk of flooding to people and property. It would retain and control surface water flows during flood events. Beyond the transport benefits of the Proposed Scheme, the flood alleviation element offers the greatest long term local direct economic impact. A Flood Risk Assessment is provided as part of the ES.
WAT2 Water Quality and the Water Environment Development proposals will be required to preserve and enhance the water environment, ensuring improvements in surface water quality	Best practice, such as the adoption of a CEMP throughout construction would ensure human health and environment incidents are avoided. Measures incorporated into the design such as sustainable drainage and pollution barriers would ensure surface water and accidental spills during operation do not pose any

Policy Summary	Assessment
and the ecological value of watercourses and their margins.	significant risk to the ground or groundwater. As a result no significant effects are expected to human health or the natural and built environment as a result of the proposed scheme, either during construction or operation.
WAT4 Sustainable Drainage Development must utilise the most sustainable forms of drainage systems in accordance with the SUDS hierarchy unless there are practical engineering reasons for not doing so.	Sustainable drainage systems have been employed where practical in consultation with HCC and the EA. This would reduce flood risk and water quality issues as well as providing opportunities for biodiversity gains. The drainage design includes open ditches and pond features upstream of each receiving watercourse – key components of the SuDS (Sustainable Urban Drainage Systems). Details on the design of SuDs in the scheme can be found in Chapter 15 of the ES.
EQ1 Contaminated Land and Land Instability The District Council will encourage the remediation of contaminated land to ensure that land is brought back into use. The Council will require evidence, as part of any application, to show that unacceptable risks from contamination and land instability will be successfully addressed through remediation without undue environmental impact during and following the development. In particular, the developer shall carry out an adequate investigation to inform a risk assessment.	Pollution prevention measures would be implemented to ensure that land and rivers are not contaminated. A Surface Water Management Plan would be developed and temporary settlement ponds and cut-off ditches would be designed into the works and installed before the bulk earthworks are undertaken. Where possible the permanent drainage attenuation ponds would be installed early and used in the construction phase. Further information on the contaminated land can be found in Chapter 11 of the ES.
EQ2 Noise Pollution Development should be designed and operated in a way that minimises the direct and cumulative impact of noise on the surrounding environment. Noise sensitive development should be located away from existing noise generating sources or programmed developments where possible to prevent prejudicing the continued existing operations. The use of design, layout, landscaping tools and construction methods should be employed to reduce the impact of surrounding noise sources.	Potential noise and vibration impacts during construction have been identified. Measures to minimise and manage these impacts are described in the CEMP. Adverse noise impacts have been identified at some residential properties; however, noise levels at these locations remain below given limits and significant effects are not predicted. A potential significant adverse effect has been identified on the community of Hadham Ford. Mitigation measures have been considered in the ES. Significant beneficial effects on noise are predicted around the properties in the vicinity of the junction in Little Hadham and those in the vicinity of Green Street and Cradle End, due to the predicted reduction in traffic.
EQ3 Light Pollution External lighting schemes must not have an inaccessible adverse impact on neighbouring uses or the wider landscape, and minimise harm to the amenity of residents and road users	During construction, night-time lighting would be minimised to illuminate only temporary works areas, but remaining at sufficient levels to allow safe working. Where necessary hoarding would be used to reduce the impact of the lighting on foraging habitat.

Policy Summary	Assessment
and prevent impacts on the local ecology.	During operation, lighting columns would be installed at the Tilekiln and Hadham Park Roundabouts and would be designed to be directional, with low light spillage avoiding the illumination of the hedgerows and habitat features. Chapter 10 of the ES includes details on the impact on different species and the mitigation strategies for those impacts.
EQ4 Air Quality Development should minimise potential impacts on local air quality both during construction and operation.	Following implementation of best practice dust management on the site there would be no significant effect during construction. Best practice dust management measures are outlined in the CEMP. Residential receptors in Little Hadham next to the existing A120 will experience an improvement in air quality. The largest improvements are seen close to the junction, where traffic congestion is expected to reduce to give a moderate beneficial effect on air quality. As the proposed development does not result in any significant adverse effects on local air quality during operation no mitigation for the operational phase is necessary.

5.4.3 Landscape Character Assessment SPD 2007

The Landscape Character Assessment (LCA) SPD was adopted in 2007 and supplements Policy GBC14 of the Local Plan Second Review.

The purpose of the SPD is to identify and evaluate the distinct landscapes within East Hertfordshire to provide a framework for assessing planning applications and other landscape planning, regulation, conservation and management activities. The LCA will be taken into account as a material consideration when determining planning applications. Table 4 below demonstrates the consideration taken into local landscape character areas within or near the Proposed Scheme.

Table 8 - Consideration of Landscape Character Areas within the Proposed Scheme

Local Landscape Character Area	Consideration in the Proposed Scheme
Perry Green Uplands Only the southern edge of the proposed Hadham Park Roundabout enters this LCA in the east of the scheme. The existing A120 forms the northern boundary of the LCA. It is described as 'undulating settled upland with meandering lanes linking hamlets and small villages of varying ages'.	The Proposed Scheme would not affect the physical landscape or people's perception of this area. The landscape mitigation proposals include the following: • All planting to be native species that are of local provenance and appropriate to the site species and habitat in the area. • Roadside verges would incorporate ditches, hedges, trees and wildflowers where possible. Seeding is to be specialist species mixes to

Local Landscape Character Area	Consideration in the Proposed Scheme
	create suitable grassland specific to the site, e.g. chalky grasslands on embankments / cuttings. • The proposed hedgerows would use native species consistent with existing hedgerows and include semi-mature trees at irregular spacing, every 10-15 m, in groups of one, three or five. The hedgerows will form new field boundaries and replace hedgerows removed due to construction. Further information on the Landscape Character Assessment can be found in Chapter 9 of the ES.
Wareside / Braughing Uplands This is a large LCA to the west and south of the Proposed Scheme, with the proposed route crossing the western tip of this LCA. The description notes that this is the 'largest uninterrupted plateau area in south Hertfordshire'. On site the level ground provides a stark contrast to the low lying Upper Ash Valley to the east.	The Proposed Scheme passes through a section of this LCA in cutting and on embankment resulting in localised landscape effects. The Proposed Scheme would not detract from or change the overall perception of the wider LCA, however, the road alignment may redefine the perceived boundary line between this LCA and Hadhams Valley LCA. The landscape mitigation proposals include the following: • All planting to be native species that are of local provenance and appropriate to the site species and habitat in the area. • Roadside verges would incorporate ditches, hedges, trees and wildflowers where possible. Seeding is to be specialist species mixes to create suitable grassland specific to the site, e.g. chalky grasslands on embankments / cuttings. • The proposed hedgerows would use native species consistent with existing hedgerows and include semi-mature trees at irregular spacing, every 10-15 m, in groups of one, three or five. The hedgerows will form new field boundaries and replace hedgerows removed due to construction. Further information on the Landscape Character Assessment can be found in Chapter 9 of the ES.
Hadhams Valley 'Marked valley formation with flat valley floor, within which the river Ash is marked only by linear wetland vegetation rather than as a visible watercourse. It is edged by steep undulating slopes, some densely vegetated, some in arable cultivation, with little pasture. It is characterised chiefly by ancient settlements with historic houses: Much Hadham and	This LCA would experience local adverse effects during construction due to the position of the main temporary works area changing the perception of the LCA, but it limited by topography, built form and vegetation. The presence of a new section of road, Tilekiln Roundabout and lighting columns would contribute to this, but the inclusion of new planting would limit these effects. Therefore, the Proposed Scheme would not detract from or change the overall perception of the wider LCA. Landscape and visual mitigation measures would be built into the scheme throughout the design process and specific measures undertaken are described below:

Local Landscape Character Area	Consideration in the Proposed Scheme
Little Hadham, which merit sub-areas'. Little Hadham is a significant historic valley bottom settlement and seems to have evolved from a medieval village at Church End, which moved in the 16th century. Little Hadham is now at the staggered crossroads of the large, modern A120, contrasting with the narrow, minor road of the B1004, Albury Road. At the crossroads is a notable group of timber-framed farmhouses and cottages. The LCA also includes a designated Conservation Area for Little Hadham Village and the locally important historic park known as The Park of the Bishop's of Ely. The area contains small patches of semi natural woodland.	• Selected bridge designs that have a lower physical mass / footprint than other options, making them less visually intrusive. • Positioning Albury Road Bridge to the west of the existing alignment, rather than the east, to reduce the amount of earthworks required and retain more vegetation in the view for receptors located to the east. Additional to this influence on the engineering design, the landscape mitigation proposals would include the following: • All planting to be native species that are of local provenance and appropriate to the site species and habitat in the area. • Roadside verges would incorporate ditches, hedges, trees and wildflowers where possible. Seeding is to be specialist species mixes to create suitable grassland specific to the site, e.g. chalky grasslands on embankments / cuttings. • The proposed hedgerows would use native species consistent with existing hedgerows and include semi-mature trees at irregular spacing, every 10-15 m, in groups of one, three or five. The hedgerows will form new field boundaries and replace hedgerows removed due to construction. Further information on the Landscape Character Assessment can be found in Chapter 9 of the ES.
Upper Ash Valley 'At the southern end of the character area, between Gravesend and Little Hadham, the valley sides are steeper and the route twists to create a more pronounced and enclosed valley feature'. There are small to medium scale arable fields on the valley slopes. There is a similarity between the opposing valley slopes. Within the valley, field sizes are typically small to medium, with some localised areas of larger amalgamation. Flint towers and Hertfordshire spires of the churches in the surrounding area are a characteristic feature in distant views.	The Proposed Scheme would pass through this LCA on embankment and cutting. The creation of a large embankment over the River Ash, excavation of cuttings to the east and west and construction of Albury Road and Mill Mound bridges would change the perception of this area from a natural valley landscape to one that is much less tranquil and rural. Landscape and visual mitigation measures would be built into the scheme throughout the design process and specific measures undertaken are described below: • Selected bridge designs that have a lower physical mass / footprint than other options, making them less visually intrusive. • Positioning Albury Road Bridge to the west of the existing alignment, rather than the east, to reduce the amount of earthworks required and retain more vegetation in the view for receptors located to the east. Additional to this influence on the engineering design, the landscape mitigation proposals would include the following: • All planting to be native species that are of local provenance and appropriate to the site species and habitat in the area.

Local Landscape Character Area	Consideration in the Proposed Scheme
	• Roadside verges would incorporate ditches, hedges, trees and wildflowers where possible. Seeding is to be specialist species mixes to create suitable grassland specific to the site, e.g. chalky grasslands on embankments / cuttings. • The proposed hedgerows would use native species consistent with existing hedgerows and include semi-mature trees at irregular spacing, every 10-15 m, in groups of one, three or five. The hedgerows will form new field boundaries and replace hedgerows removed due to construction. Further information on the Landscape Character Assessment can be found in Chapter 9 of the ES.
Hadhams Plateau 'A plateau area with an open rural character and few roads or settlements. The plateau is generally flat with some areas gently undulating and with a gentle fall towards the Ash valley. The area is predominantly used for arable farming in large geometric fields interspersed with occasional woodland blocks. The area incorporates … several large halls including Hadham Hall and Hadham Park'. At Hadham Hall the rectilinear fields are the result of dividing up the former deer park into farmland in the late 17th century. Scattered woodland blocks are common, including Bloodhounds Wood and High Wood which form a strong enclosing feature to the east edge of the scheme. High voltage power lines and pylons run north to south along the side of the woodland. The Hertfordshire Way long distance footpath weaves across this character area.	The construction process would result in the removal of some sections of hedgerow and mature trees within the area across the corner of Hadham Hall and Hadham Park Medieval Park. The construction and presence of a highway would be a new feature, which would affect the setting of the Scheduled Monument, and Hadham Park Bridge within this relatively flat landscape would be a distinctive feature locally. Landscape and visual mitigation measures would be built into the scheme throughout the design process and specific measures undertaken are described below: • Selected bridge designs that have a lower physical mass / footprint than other options, making them less visually intrusive. • Positioning Albury Road Bridge to the west of the existing alignment, rather than the east, to reduce the amount of earthworks required and retain more vegetation in the view for receptors located to the east. Additional to this influence on the engineering design, the landscape mitigation proposals would include the following: • All planting to be native species that are of local provenance and appropriate to the site species and habitat in the area. • Roadside verges would incorporate ditches, hedges, trees and wildflowers where possible. Seeding is to be specialist species mixes to create suitable grassland specific to the site, e.g. chalky grasslands on embankments / cuttings. • The proposed hedgerows would use native species consistent with existing hedgerows and include semi-mature trees at irregular spacing, every 10-15 m, in groups of one, three or five. The hedgerows will form new field boundaries and replace hedgerows removed due to construction. Further information on the Landscape Character Assessment can be found in Chapter 9 of the ES.

6. Conclusion

This Planning Statement supports an application for full planning permission of a single lane bypass of the A120 and flood alleviation works at Little Hadham, East Hertfordshire. The Planning Statement has considered the proposals against relevant local and national planning policy.

The aim/objective of the scheme would be to remove congestion from the village of Little Hadham, resulting in large journey time savings. This would improve the travelling experience, reduce driver stress, provide more consistent journey times and reduced vehicle emissions. The removal of traffic from the village centre would improve the environmental quality and setting of the Conservation Area and listed buildings. Community severance within the village would be reduced with the removal of through traffic, thereby providing a safer environment for pedestrians and cyclists. The Proposed Scheme has been designed to integrate with the existing landform and landscape as far as possible. The loss of existing vegetation and trees would be minimised and compensatory planting and habitat provided. In addition, a key benefit is the opportunity for flood alleviation afforded by the scheme. At present, many properties within Little Hadham are at risk of flooding. With the implementation of the Proposed Scheme, the risk to property would be substantially reduced, with associated long term environmental, social and economic benefits.

The Proposed Scheme is identified in Hertfordshire County Council's Local Transport Plan and is fully compliant with its policies and vision to promote sustainable transport, address climate change and support economic growth.

The NPPF encourages planning to consider multiple benefits from the development of the land and enshrines sustainable development at the centre of planning decisions. The Proposed Scheme complies with the overall policies of the NPPF and would deliver a sustainable scheme, with the dual benefits of transport improvement, flood alleviation and climate change mitigation. Similarly, the Proposed Scheme complies with the policies of the adopted development plan for the area and with the emerging policies of the East Herts District Plan.

The Proposed Scheme was supported by the local community during pre-application consultation, with the majority of respondents supporting the proposed location, layout and format of the Proposed Scheme. In conclusion, the Proposed Scheme accords with the objectives of national and local planning and transport policy, providing a significant improvement to the travel experience within and surrounding Little Hadham and essential flood alleviation works. As such, the Applicant considers that the Proposed Scheme is an acceptable form of development and that full planning permission should be granted.

Appendix A – Glossary

Phrase	Definition
Archaeological Interest	There will be archaeological interest in a heritage asset if it holds, or potentially may hold, evidence of past human activity worthy of expert investigation at some point.
Compulsory Purchase Order	A legal order issued by the government or a local authority to acquire land or buildings for public interest purposes.
Cost-benefit analysis	An assessment method that is sometimes used to compare the benefits and costs of a development proposal, such as a major infrastructure project.
Cut	Sections of roadway or rail where the roadway is lower in elevation than the surrounding terrain.
Design Freeze	The point at which the design of the project is frozen in order to continue with the planning application process.
Drainage Attenuation	Sites where water is retained and slowly released in a controlled discharge to a surface water or combined drain or watercourse.
Dredging	Removing sediments and debris from the bottom of lakes, rivers and other water bodies.
Environmental bund	Within this planning application, an environmental bund consists of earthworks at a certain height providing mitigation of visual and noise impacts from the proposed scheme.
Environmental Impact Assessment	A procedure to be followed for certain types of projects to ensure that decisions are made in full knowledge of any likely significant effects on the environment.
Environmental Statement	The findings of the EIA are reported in this document and consider the following areas: ecology and nature conservation, landscape, cultural heritage, geology and soils, road drainage and the water environment, noise and vibration, air quality, effect on pedestrians, cyclists, drivers, and community and private assets.
Fill	Sections of roadway or rail where the roadway is higher in elevation than the surrounding terrain.

Flood alleviation	Measures to minimise the risk of flooding.
Flood Risk Assessment	An assessment of the likelihood of flooding in a particular area so that development needs and mitigation measures can be carefully considered.
Fluvial	River
Hoarding	High solid temporary fencing, which is used to provide security and protect passers-by.
Infill development	The development of a relatively small gap between existing buildings.
Landscape and Visual Impact Assessment	An assessment used in the decision-making process to help determine the extent of long-term landscape and visual impacts.
Planning Statement	A report accompanying the planning application demonstrating how the proposed scheme is suitable to the site and its setting.
Public right of way	A highway over which the public have a right of access along the route.
Red line drawing	The extent of the area of the project.
Road embankment	A road is raised onto an embankment in order to avoid a level change required by terrain.
Scheduled Ancient Monument	Nationally important monuments usually archaeological remains, that enjoy greater protection against inappropriate development through the Ancient Monuments and Archaeological Areas Act 1979.
Scoping Opinion Report	A report detailing what information needs to be included in the Environmental Impact Assessment.
Side Road Order	A legal order issued by the government which authorises a highways authority to make alterations to roads or other highways affected by a trunk road scheme.
Statutory consultees	Planning law requires consultation to take place between a local planning authority and certain organisations before the decision-making process on an application.

Tie-in	The sites at which the new A120 bypass would meet the old A120 to allow access to and from the bypass through designed roundabouts.
Topography	A description (or visual representation on a map) of the shape of the land, for example, contours or changes in the height of land above sea level.
Traffic Regulation Order	A legal order issued by a highways authority that can place restrictions on traffic within their areas.
Transport Assessment	A procedure where it is agreed the transport issues arising out of development proposals are limited and a full transport assessment is not required.
Verges	Narrow strips of grass or planting alongside the road to provide separation from the road surface, curb and footpath. The proposed scheme would incorporate ditches, hedges, trees and wildflowers where possible.

Appendix B – Abbreviations

Abbreviation	Definition
CA	Conservation Area
CEMP	Construction Environmental Management Plan
CPO	Compulsory Purchase Order
DfT	Department for Transport
EA	Environment Agency
EH	English Heritage
EHC	East Herts Council
EIA	Environmental Impact Assessment
FRA	Flood Risk Assessment
HA	Highways Authority
HCC	Hertfordshire County Council
LCA	Local Landscape Character Assessment
LPA	Local Planning Authority
LTP	Local Transport Plan
NCA	National Character Area
NMU	Non-Motorised Users
NPPF	National Planning Policy Framework
PPG	Planning Practice Guidance
PPS	Planning Policy Statement

PRoW	Public Rights of Way
PS	Planning Statement
SCI	Statement of Community Involvement
SOC	Statement of Consultation
SPD	Supplementary Planning Document
SSSI	Site of Specific Scientific Interest
SuDS	Sustainable Urban Drainage Systems
TA	Transport Assessment