EVIDENCE

PROOF OF EVIDENCE OF

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OF ESSEX COUNTY COUNCIL

PUBLIC INQUIRY INTO:

Department for Transport Reference: tbc

THE ESSEX COUNTY COUNCIL (GIIDEN WAY/SHEERING ROAD (B183) IMPROVEMENT/WIDENING/REALIGNMENT, A1025 NEW LINK ROAD FROM B183 TO M11 AND GRADE SEPARATED JUNCTION/ROUNDABOUTS AT M11 JUNCTION 7A SCHEME) (PHASE 1) COMPULSORY PURCHASE ORDER 2018

Essex County Council

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1. Introduction

1.1 My name is David Sprunt and I am an Incorporated Engineer, Member of the Chartered Institution of Highways and Transportation (CIHT) and Fellow of the Institute of Highways Engineers (IHE) and I am a Principal Transportation and Infrastructure Officer with Essex County Council.

1.2 I have worked for Essex County Council for over 10 years. I lead a team through our consultants RingwayJacobs covering the West of Essex including the districts of Harlow, Epping Forest, Uttlesford and also significant cross boundary work with both East Hertfordshire and Hertfordshire County Council.

1.3 I have worked in the highways and transportation field for nearly 40 years working at a number of authorities including Dyfed, Oxfordshire and Norfolk County Council. With the last 15 years in transport planning and major infrastructure.

1.4 I have been Chair of Chartered Institution of Highways and Transportation (CIHT) East Anglian Branch and also Chair of new Eastern Region, Trustee of CIHT, Council Member and member of specialist technical panels.

2.0 Scheme Background

2.1 Harlow is part of the M11 corridor, one of four key growth areas set out in the government's 2003 Sustainable Communities Plan[1]. It was also a key centre for development under the 2008 East of England Plan[2] (revoked in 2013). The A414 connects Harlow to the M11 via the existing Junction 7. It also

2.2 In recognition of growth planned in the Harlow area Harlow and Gilston were designated a Garden Town in January 2018 by the Ministry for Homes, Communities and Local Government (MHDLG). The Garden Town is an exciting opportunity to regenerate the area and to deliver homes, jobs and infrastructure that the community needs. New development will complement the natural environment, embrace new technology and enable all residents and workers to travel by foot, bicycle and public transport in and around Harlow on high quality routes.

2.3 The pioneering New Town of Gibberd and Kao will grow into a Garden Town of enterprise, health and sculpture at the heart of the UK Innovation Corridor[3]. Harlow and Gilston will be a joyful place to live with sociable streets and green spaces; high quality homes connected to fibre optic broadband; local centres accessible by walking and cycling; and innovative, affordable public transport. It will set the agenda for sustainable living.

2.4 East Herts, Epping Forest and Harlow District Councils are working together with Hertfordshire and Essex County Councils to ensure plans for the Garden Town support sustainable living and a healthy economy; provide a good quality of life for existing and future residents; and respond

[1] https://webarchive.nationalarchives.gov.uk/20120919140956/http://www.communities.gov.uk/documents/communities/pdf/146289.pdf
[2] https://webarchive.nationalarchives.gov.uk/20100529195622/http://www.gos.gov.uk/goee/docs/Planning/Regional_Planning/Regional_Spatial_Strategy/EE_Plan1.pdf
[3] https://innovationcorridor.uk/

to local landscape and character.

2.5 Harlow currently suffers from severe congestion in peak periods, as the A414 is both the prime distributor for the town, as well as the through route between Chelmsford, Hertford and beyond. The situation is exacerbated by the location of key industrial sites on the northern and western sides of the town, which are the furthest points from the A414 and the M11 Junction 7 to the south-east of the town. This situation arose due to the original new town of Harlow being designed assuming the then alignment of the M11 was to go to the west of the town rather than to the east.

2.6 In 2010 Harlow District Council, supported by Essex County Council, was successful in achieving an Enterprise Zone for the town. This was a major success in supporting the regeneration of the town. However, during the planning process the Highways Agency (now Highways England) capped the number of jobs that could be developed on the site before additional capacity was provided onto the M11, due to the congestion at M11 J7. The impact of this was not only to limit the number of jobs on the Enterprise Zone, but also effectively to prevent any further large-scale growth in town.

2.7 Congestion in Harlow and the whole Garden Town will increase as committed development is built. Further development to support economic growth through the Local Plan process, will place additional pressure on the local and strategic road network. In addition, Harlow currently has only one connection to the strategic network, Junction 7 on the M11, accessed via the A414, which is already subject to congestion in peak periods. This single connection to the M11 also suffers from being the route traffic diverts to when incidents occur on the M25 causing severe congestion across whole town.

2.8 The overall plans for Harlow and Gilston Garden Town include for a balance of key road capacity improvements, with an emphasis on sustainable modes within the town. The provision of M11 J7a is however

the key piece of infrastructure that unlocks the future growth, regeneration and prosperity of the whole garden town. Without M11 J7a the local plans of East Herts, Harlow and Epping Forest would be unsound impacting severely economically on the town. There are no other options that would be pursued should M11 J7a not proceed and it is also likely that the significant funding package put together for the junction would be lost.

2.9 Whilst the current population of Harlow is approx 87,000, it serves a hinterland of 400,000 and in the future with all local plan growth will have a projected population of 140-150,000.

2.10 Plans announced by the Government and Highways England for the period 2015 to 2020 known as Roads Investment Strategy period one (RIS1), acknowledged that J7 needed to be improved and funding was set aside for this to happen[4]. However discussions between the Government, Highways England and the County Council have concluded that J7a should happen first, and that the funding for J7 should be awarded to J7a, leaving J7 itself to be improved in a later Roads Investment period.

2.11 The proposed M11 J7a is a priority infrastructure intervention highlighted as a priority in the Local Transport Plan[5] and the Growth and Infrastructure Framework publication[6] as well as being seen as necessary in Local Plan documents currently going through Examination in Public. The scheme achieved Preferred Route Status in December 2016. The proposed junction is located between Junction 7 and 8 of the M11 motorway and includes a grade seperated junction and link road joining the M11 with B183 Gilden Way east of Harlow, Essex. In addition to the new motorway junction and link road an upgrading of Gilden Way is required to facilitate the efficient operation of Junction 7a, and as a result the works are required to be completed simultaneously with the construction of the new junction. Gilden Way upgrading was a scheme

[4] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/408514/ris-for-2015-16-road-period-web-version.pdf
[5] https://www.essexhighways.org/uploads/docs/essex_ltp.pdf
[6] https://www.essex.gov.uk/Documents/GIF.pdf

submitted to the South East LEP and awarded funding to construct in the Local Growth Fund (LGF3) award.

2.12 The purpose of the current scheme is to provide additional access to the wider road network and alleviate the existing congestion across the town, making it a more attractive place to invest, retain existing business and to allow the town to grow and regenerate. Without an additional highway access to the town, economic vitality and growth will not happen and the potential of the town to support sub-regional growth and prosperity will be lost. The scheme will improve access to Harlow and improve network resilience to open up key development sites, provide additional access to the strategic road network, reduce congestion on the A414 and reduce congestion at M11 J7.

2.13 The key drivers for the implementation of the proposed scheme therefore are: -

2.13.1 To faciliate the future housing developments in and around Harlow (16,000 homes rising to 23,000 post 2033) and employment growth (15,000 jobs) as identified in the emerging Local Plans of Harlow, Epping Forest and East Hertfordshire. These were identified in the Objectively Assessed Housing Need (OAN) and Functional Economic Market Area (FEMA) accordingly.

2.13.2 To release the constraints that have already been placed on the development of the Local Enterprise Zone by Highways England[7]

2.13.3 To enhance connectivity to the strategic road network to support growth in and around Harlow

[7] Phasing and delivery of highways infrastructure condition PDH11, http://www.harlow.gov.uk/sites/harlow-cms/files/files/London%20Road%20North%20Order%20and%20Schedule.pdf

2.13.4 To improve network resilience

3.0 Scheme Description

3.1 The proposed M11 J7A scheme is located between Junctions 7 and 8 of the M11 motorway and includes a grade separated junction and a link road joining the M11 with B183 Gilden Way east of Harlow, Essex.

3.2 The new junction and link road are wholly situated in Epping Forest District with the improvements along Gilden Way (single carriageway to a three lane carriageway – 2 inbound and 1 outbound lanes) being primarily within Harlow District.

3.3 Harlow currently suffers from significant congestion at peak times, which will increase as committed development is built. In addition, further development to support economic growth through the Local Plan process, will place additional pressure on the local and strategic road network.

3.4 Harlow currently has only one connection to the strategic network, Junction 7 on the M11, accessed via the A414, which are both subject to congestion in peak periods.

3.5 Constraints have already been placed on the development of the Local Enterprise Zones, which can only be relieved by additional road improvements, primarily improving access to the M11. This scheme has been identified as a priority in the Essex Growth Strategy (EGS).

4.0 The Strategic Case

4.1 Introduction

4.1.1 The Strategic Case establishes the need for intervention and considers the extent to which potential options will meet the specific objectives they are intended to address, and whether they are consistent with, and will contribute to, wider policy aims and objectives in transport and in other areas. The Strategic Case is set out below.

4.2 Need for Intervention

4.2.1 The transport infrastructure of Harlow has been recognised as a major issue for both businesses and residents. The situation is exacerbated by the location of key industrial sites on the northern and western sides of the town, which are the furthest points from the single connection to the strategic road network, the M11 Junction 7 which is to the south-east of the town.

4.2.2 In July 2010, Robert Halfon, the MP for Harlow, quoted the Secretary of State for Transport as saying: "We will have to prioritise aggressively, and do the things that most promote economic growth"[8]

4.2.3 Taken from Harlow's Local Development Plan Emerging Strategy 2014 Consultation, 'A Spatial Portrait of Harlow' this provides the background to the current situation in the town:

[8] Quotation from Hansard, 7th July 2010, 11am, in relation to Road Networks (Harlow): http://www.publications.parliament.uk/pa/cm201011/cmhansrd/cm100707/halltext/100707h0001.htm

4.2.4 Since the decision to expand Stansted Airport in 1985 there has been recognition of the need for intervention, and there have been a number of studies of possible road schemes. Some of these have been in outline only, and others in more detail. Stansted has grown significantly in recent years to approx. 28mppa and has recently received planning permission to expand to 43mppa from its existing cap of 35mppa. The Princess Alexandra Hospital in Harlow is also the designated hospital for emergencies at the airport.

4.2.5 However, over the years there has been a change of focus in the drivers for change and the objectives which the schemes and proposals are intended to address. This is illustrated in the summaries of the historic studies outlined below, which forms part of the Options Assessment Report (OAR)[9].

Evaluation of Alternative A1184-M11 Connections, A414-M11 Link Road (1994)

4.2.6 The 1994 report of a study, jointly commissioned by both Hertfordshire and Essex County Councils, set out the background to its own remit and noted that, following consultation in 1988, three objectives for the comprehensive improvement of the road network in the Hertfordshire/Essex border area had been identified. These were:

- To provide a high quality access to Stansted Airport along the A414 corridor;
- To relieve the urban area of Harlow of A414 Primary Route traffic;
- To relieve Sawbridgeworth of through traffic on the A1184 without further exacerbating conditions in Bishop's Stortford.

[9] https://www.essexhighways.org/uploads/M11-Junction-7a/160510-Harlow-OR-Final-with-Appendices_Part1.pdf

4.2.7 The 1994 report noted that the early work on broad strategies led to the adoption of a scheme to provide a link connecting the A414 to the M11 north of Harlow, and a Sawbridgeworth bypass (‘Strategy E’). Strategy E comprised 3 elements:

- An Eastwick to Harlow Mill link;
- A Harlow Mill to M11 link; and
- A Sawbridgeworth bypass.

4.2.8 Following further public consultation in 1992, Hertfordshire County Council Environment Committee agreed on the optimal routes for each element (i. Route C, ii. Route D, iii. Routes A or B, both these alternatives also included a Spellbrook bypass). However, while Essex County Council members accepted Route C for the Eastwick to Harlow Mill section, they rejected all routes developed for the Harlow Mill to M11 section, taking the view that the environmental impact was unacceptable; they had no view on the Sawbridgeworth bypass element as it was wholly within Hertfordshire. As agreement had not been reached both authorities agreed that further investigation was required to try and identify a more environmentally acceptable solution.

4.2.9 This formed the remit for the 1993 Study which reported in January 1994. Three possible route corridors were identified, which would avoid significant demolition of property:

- Original Harlow Mill to M11 corridor, Route D, with vertical alignment modifications, including passing over the railway and under the M11;
- Area between Sawbridgeworth and Spellbrook; and
- Area to south-east of Bishop’s Stortford.

4.2.10 All three corridor options were to take into account the routes retained for other sections of the scheme and any consequential effects. It should be noted that the Sawbridgeworth bypass element was the subject of a separate report. Within each of these corridors specific routes were identified and these, plus one additional route, were taken forward for more detailed investigation, including the production of 1:2500 scale drawings, longitudinal sections and environmental constraint plans [also unseen]. Subsequently, additional traffic modelling was supplied for two further modifications, one of which was the replacement of the proposed dual-carriageway Harlow Mill - M11 link with single carriageway, the other being an A1184-M11 link to the north of Sawbridgeworth.

4.2.11 The report suggested the investigation of other alignments but noted that these may not permit the continuous grade separated layout of the original route.

The Harlow Transportation Study 2005

4.2.12 Later studies, however, shifted the focus to the role of transport infrastructure in facilitating growth.

4.2.13 The 2005 Harlow Transportation Study was undertaken to test the feasibility of major population and employment growth in the Harlow area against the existing transport infrastructure.

4.2.14 It noted that the London - Stansted – Cambridge corridor had been identified as a potential area for growth and economic regeneration through the Government's Sustainable Communities Plan and Regional Planning Guidance, and that the area between Epping, North Weald, Harlow and Stansted occupies a key position within this corridor.

4.2.15 The report recognised that J7 had a dual function of providing access to Harlow and the wider corridor served by the A414.

4.2.16 The study considered two main planning scenarios based around the construction of 19,000 new housing units over and above the then existing Local Plan commitments by the year 2021.

- Scenario 1 placed the additional development on a north-south axis, including significant residential development to the north of the A414 in the vicinity of Eastwick and Gilston Park.

- Scenario 2 placed the additional development on an east-west axis, with a smaller cluster of residential development along the B183 to the north east of the town.

4.2.17 The findings of the study were presented as a set of scenario and scheme appraisal matrices. The schemes were developed as outline routes rather than detailed drawings, thus there is only a high level appraisal of engineering feasibility and environmental impacts.

4.2.18 Subsequent work sought to address both the local issues around the existing J7 and the strategic value of a new motorway junction and new link roads to facilitate development.

J7 Harlow: Direct access with A414 (2005/6)

4.2.19 Irrespective of consideration of a new junction on the M11, the 2005 Report had highlighted the shortcomings of the existing J7. The slip roads from the M11 connect into a roundabout on the A414 which also connects the B1393 to Epping and a minor road to Hastingwood.

4.2.20 Work was therefore undertaken in 2005/6 to investigate the possibility of establishing a direct link between the A414 (Harlow) and the M11 southbound.

4.2.21 Four initial options were produced, including layouts which allowed free movement of northbound traffic from the M11 to the A414, but with a southbound link either restricted to 50kph or requiring an on-line junction. Two further options were then produced with fully grade separated southbound links, one with a bend restricted to 85kph.

The A414 - M11 Link Road Feasibility Report (2007)

4.2.22 The 2007 Feasibility Study noted that the A414 – M11 link had been investigated a number of times over the previous 10-20 years and looked at the feasibility of two possible solutions to address the requirements of the East of England Plan which recommended an urgent need to address the existing traffic congestion problems within Harlow.

4.2.23 As with the 1993/4 study, the main purpose of the 2007 study was to assess the feasibility of constructing a link road from the A414 dual carriageway north of Harlow to the M11. But whereas in 1993/4 the objective had been better access to Stansted and relief of through traffic, the objective was now to open up development potential around Harlow.

4.2.24 A key driver for the study was the proposal for a mixed-use development north of Harlow comprised of 10,000 homes with commercial, industrial and retail premises providing 12,000 jobs.

4.2.25 However, it was also noted that other sites had also been identified for possible development in Harlow by both the Draft East of England Plan and the Examination in Public. One of these areas, known as Newhall, is situated east of Harlow and is currently under construction and has the potential to provide approximately 2,500 dwellings. Other major sites are shortly to start construction in east Harlow including a further 1,000 homes north of Gilden Way

4.2.26 The options considered were therefore:

- Providing a link from the existing A414 north of Harlow to the M11 (A414 – M11 link)

- Providing a link from the M11 to the East of Harlow (link into East Harlow)

The Harlow Junction 7a Feasibility Study (2011)

4.2.27 During 2010/11 a suite of reports and technical notes was produced documenting work undertaken for Essex County Council (ECC) assessing the feasibility of a new junction on the M11 between junctions 7 and 8 together with a new link road connecting into the existing Harlow road network.

4.2.28 The initial package included four reports:

- Harlow Junction 7a: Feasibility Study (August 2011 and updated March 2012)
- Harlow Junction 7a: Junction Location Optimisation (June 2011)
- Harlow Junction 7a: Unlocking Harlow's Development Opportunities (June 2011, amended and reissued March 2012)
- Harlow Eastern Access – Gilden Way Extension, Technical Note (October 2011)

4.2.29 A subsequent report set out details of costing and design.

4.2.30 Whereas earlier studies had considered a new junction on the M11 in the wider context of links to the A414 and wider development strategies, the focus of the 2011 Feasibility study was much more limited.

4.2.31 A crucial difference between this study and previous schemes was the extent of the associated link road. All the previous schemes had envisaged a new link road from the M11 at least as far as the A1184 at Harlow Mill, and generally without an interchange on the B183. In complete contrast, this study envisaged that the connection to the new junction should be provided by an extension and possible upgrading of Gilden Way – the newer southern section of the B183.

4.2.32 The aim of the 2011 Development Opportunities report was to strengthen the business case for the junction and associated extension of Gilden Way, by tying the scheme into potential committed or proposed developments, and as a tool for unlocking new developments, to generate further economic benefits in line with wider long-term plans for Harlow's development.

4.3 Underlying Drivers or Causes

4.3.1 Over the past 20 years, the underlying drivers for change have shifted in priority. Whereas the priority in the early 1990's was focussed on improved road access and congestion relief, the priority has now become the value of transport schemes to the economic development both of the region as a whole and specifically to Harlow.

4.3.2 In particular, there is recognition that it will not be possible to release the residential and employment development potential of key sites around Harlow without improved motorway access and associated improvements to the local road network.

4.4 Current Transport Related Problems

4.4.1 The key current transport problems are related to the configuration of the existing J7. The junction is inadequate for current traffic volumes with congestion during the peaks.

4.4.2 As previously stated, this has been recognised by Highways England, with potential funding identified if a suitable scheme can be designed and justified.

4.5 Future Transport-related Problems

4.5.1 The issues of traffic on the A414 corridor, including access to the M11 and Stansted Airport, identified in the 1994 report, remain a potential problem for the future, especially if any further expansion of Harlow goes ahead without road improvements.

4.5.2 Other key issues are transport links to Cambridge and London, particularly in respect of the Enterprise Zone.

4.6 Impacts of Not Changing

4.6.1 The immediate impacts of not changing are:

- Limited scope for growth in housing and employment to meet the Regional, Local and Garden Town (supported by MHCLG) objectives.
  .
- Worsening congestion at J7, with consequential impacts on traffic on the A414 through Harlow and access to the M11 and Stansted Airport. Also impacting on the M11 causing additional queueing, delays and potential accidents.

- The effect on business, both retention of existing and attracting new would be impacted due to the unreliability of the road network, which would in turn impact on the ability of local residents to find employment within the town.

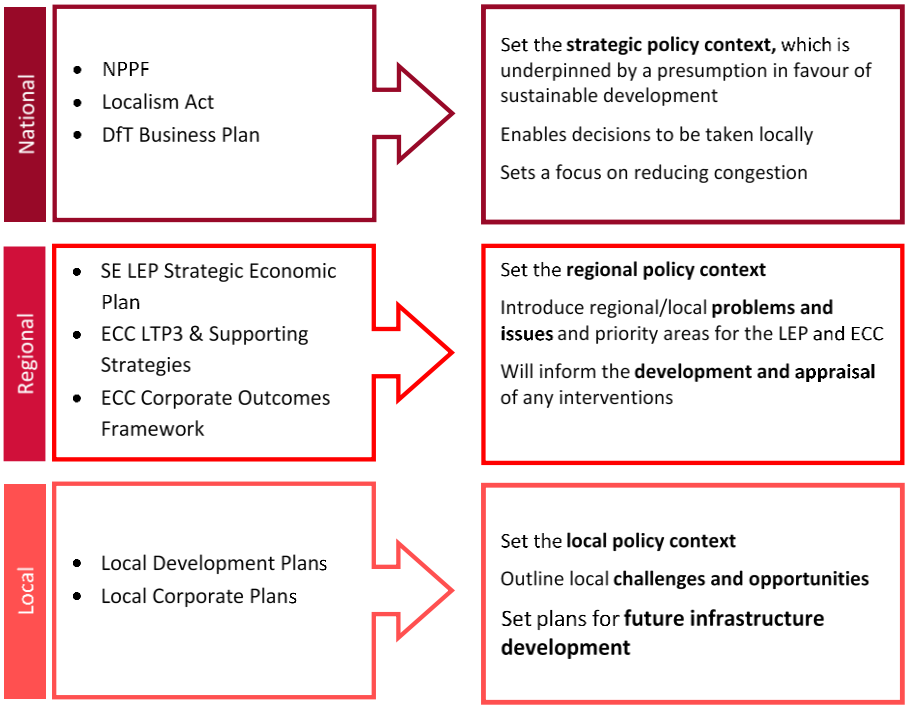
- The local plans of East Herts, Harlow and Epping Forest would be jeopardised as each of the plans identified the need for M11 J7a as the key piece of infrastructure to enable the significant housing allocations in and around Harlow to be delivered. Without this key piece of infrastructure, the plans would not deliver the OAN housing need and leave authorities open to speculative applications.

4.7 Policy Context

4.7.1 The following sections outline the key strategies and policies relating to planning and transportation within the study area, as articulated at the National, Regional and Local level.

4.7.2 In developing an understanding of the current situation, it is important to establish the strategic policy context in order to identify potential land use and plans and proposals for development that may have implications for the travel market to which any intervention may relate. Furthermore, it is important to ensure that any interventions identified and assessed are consistent with these policies.

4.7.3 The key policy documents that have been referenced in this evidence and their hierarchy are set out below:



4.8 **National Policy**

Localism Act 2011

4.8.1 The Local Growth White Paper, ‘Realising every place’s potential’, issued in 2010, focussed on planning and future development to help deliver strong, sustainable and balanced growth, whilst also being tailored to local aspirations and requirements. The Localism Act 2011 provides the legislative foundation for this. The Act decentralises power, giving local government new freedom and flexibilities, provides new rights and powers for communities and individuals, reforms the planning system, and enables decisions to be taken locally.

National Planning Policy Framework

4.8.2 In March 2012, the Department for Communities and Local Government (DCLG) published the National Planning Policy Framework (NPPF), which sets out the Government’s economic, environmental and social planning policies. The NPPF aims to reform the planning system and is underpinned by a presumption in favour of sustainable development. There is a focus on planning for prosperity, people and places, promoting increased levels of development and supporting infrastructure, whilst also protecting and enhancing the natural and historic environment. It is designed, however, to be interpreted and implemented locally, and delegates responsibility for achieving this vision to local planning authorities. Further guidance was issued in March 2014, which replaced the previous guidance documents, but did not replace the 2012 policy.

Department for Transport’s Business Plan

4.8.3 The Government’s vision for transport is also one that encourages growth, but is greener, safer and improves the quality of life in our communities. The Government’s transport priorities and key actions to deliver

this national vision are set out within the DfT Business Plan updated annually. There is a focus on improving road safety, reducing congestion and pollution and making changes at a local level. Priority three outlines the need to 'support sustainable growth by investing in local transport, decentralise funding and powers, tackle local congestion and make public transport (including light rail), walking and cycling more attractive'.

4.8.4 Priority four in the Plan, 'to invest in our roads to promote growth, while reducing congestion and tackling carbon' is of particular relevance as it calls for investment in the strategic road network to promote growth and address congestion that affects people and businesses.

Highways England

4.8.5 Highways England, formerly the Highways Agency, is a government-owned strategic highway company responsible for long term strategic planning. Funding of the strategic road network (SRN), was introduced through the Road Investment Strategy (RIS) published in December 2014 and updated in March 2015[4]. The new organisation was tasked over the next five years with:

4.8.6 "Making the network safer and improving user satisfaction, while smoothing traffic flow and encouraging economic growth."

4.8.7 A total of £15bn of capital investment has been committed, with 127 major schemes over the course of the first Road Period (2015/16-2019/20). The network is expected to directly contribute to economic growth, through improved connectivity, and users will benefit from safety improvements and reduced congestion.

4.8.8 Within the RIS there are two committed M11 schemes referenced:

- M11 Junction 7 upgrade – expansion of junction 7 on the M11 to provide better access to Harlow.

- M11 Junctions 8 to 14 – technology upgrade – addition of several elements of the Smart Motorway package on the M11 between Stansted Airport and the Girton interchange north of Cambridge to help deal with congestion.

4.9 Regional & County Policy and Guidance

South East Local Enterprise Partnership

4.9.4 LEPs have taken on the Regional Development Agencies' role in this process, with Essex forming part of the South East Local Enterprise Partnership (SELEP)[10].

4.9.5 SELEP is the business-led, public/private body established to drive new economic growth across East Sussex, Essex, Kent, Medway, Southend and Thurrock.

4.9.6 As well as being the biggest LEP outside of London, it is also one of the most local. SELEP operates a fully devolved model with increased reach into local communities through local delivery partnerships/boards in East Sussex, Kent & Medway, Greater Essex and Thames Gateway South Essex. By 2021, SELEP's aim is to:

- Generate 200,000 private sector jobs, an average of 20,000 a year or an increase of 11.4% since 2011;

- Complete 100,000 new homes, increasing the annual rate of completions by over 50% compared to recent years; and,

[10] https://www.southeastlep.com/

- Lever investment totalling £10 billion, to accelerate growth, jobs and homebuilding.

4.9.7 SELEP's Growth Deal has won £442 million of investment for the SELEP area with more to come. Matched by private and public funds, this will be invested in a programme of activities that will transform the transport and business infrastructure in the SELEP area. The Growth Deal also brings new influence over rail, skills and housing programmes.

4.9.8 SELEP has recently agreed an expansion of its Growth Deal with the government, which will see an extra £46.1m of funding invested in the area between 2016 and 2021.

Essex Transport Strategy: the Local Transport Plan for Essex

4.9.9 Essex's Local Transport Plan (LTP3)[5], consists of a Transport Strategy and an Implementation Plan. It is the third Local Transport Plan for the county, setting out policies, strategies and priorities to address transport-related issues and challenges across the 15 year period to 2026. The LTP3 is focused on achieving the following five broad outcomes, developed in parallel with those of the Council's Highways Strategic Transformation (HST) programme:

- Provide connectivity for Essex communities and international gateways to support sustainable economic growth and regeneration;
- Reduce carbon dioxide emissions and improve air quality through lifestyle changes, innovation and technology;
- Improve safety on the transport network and enhance and promote a safe travelling environment;
- Secure and maintain all transport assets to an appropriate standard and ensure that the network is available for use; and

- Provide sustainable access and travel choice for Essex residents to help create sustainable communities.

4.9.10 For each of these five outcomes, a series of challenges were identified, which will need to be met for the outcomes to be achieved. The outcome which is most pertinent to the options being assessed is that of connectivity. The challenges relating to this outcome are:

- Providing good connectivity to and within urban areas to support self-contained employment and housing growth and regeneration;
- Providing good inter-urban connectivity within Essex and with adjacent major urban areas; and
- Maximising the benefit to the local economy of Greater Essex's international gateways and strategic transport links to London, the East and South East of England and the rest of the UK.

4.9.11 It is acknowledged within the LTP that, while most journeys by car between the four main towns in Essex can be achieved in under an hour, there are specific sections of road where congestion is common, including connections from north and west Harlow to the M11.

4.9.12 The approach to this issue, to enable the economy of Essex to grow and to maintain and build on the vibrancy of Essex towns, is to ensure that centres are well connected to each other by both road and public transport. As the Essex economy is not confined to the Essex boundary, to secure growth, good connectivity with adjacent areas (including London, Cambridgeshire, Suffolk, Hertfordshire, Thurrock and Southend) is also needed.

4.9.13 The LTP3 is currently being updated, with a context document expected by the end of 2019/early 2020.

West Essex Area Implementation Plan

4.9.14 The scheme sits within the West Essex area, which comprises Harlow, Epping Forest and Uttlesford Districts.

4.9.15 The key transport priorities for the West Essex area include:

- Improving access to and from the M11 corridor;
- Tackling congestion and improving the management of traffic in Harlow town centre;
- Providing the transport improvements needed to support housing and employment growth;
- Improving the attractiveness of the bus and rail services;
- Revitalising the cycle and walking networks to promote greater use;
- Improving the attractiveness of public spaces;
- Working with Transport for London to improve the journey experience of Essex residents using Central Line underground services;
- Improving access to Stansted Airport by low carbon forms of transport.

4.9.16 Specific objectives for the Harlow area include: tackling congestion in the town centre, reducing congestion on strategic routes including A414 and J7 of the M11, improving public transport connections to major cities, continued investment in the cycle network, improving public spaces and developing a sustainable transport system to service the economic and developmental growth.

4.10 Local Policy

Harlow Council Corporate Plan

4.10.4 Harlow Council's latest Corporate Plan[11] sets out the Local Council's vision and priorities for service delivery for the next three years, with a focus on community, leadership and resource management. The five main priorities for residents, businesses and visitors to Harlow are listed below:

- More and better housing;
- Regeneration and a thriving economy – which includes a focus on securing infrastructure that is appropriate for sustainable growth;
- Wellbeing and social inclusion;
- A clean and green environment;
- Successful children and young people.

Harlow Local Development Plans

4.10.5 Harlow Council's 2006 Adopted Replacement Local Plan sets out the policies and proposals for development and land-use in Harlow for the period up until 2011.

4.10.6 In 2011 Harlow Council carried out an issues and options consultation, as part of the new Local Development Plan, the results of which were published in the Core Strategy Issues and Options Report. The consultation was part of the first stage in developing a new Local Plan for the town and documented some of the concerns of local residents.

4.10.7 In April 2014 Harlow Council published an Emerging Strategy and Further Options Consultation Report. The report documents all emerging schemes and outlines the overall strategy direction up to 2033. Some of the key points are listed below:

- Meet housing needs & continue sustainable growth;
- Regenerate the town centre and neighbourhoods;
- Continue to improve the public and private transport network;

[11] https://www.harlow.gov.uk/sites/harlow-cms/files/files/documents/files/Harlow%20Council%20Corporate%20Plan%202019%20-2022.pdf

- Mitigate the effect of climate change.

4.10.8 The Report set out five options for delivery of the growth needed to fulfil the Council's requirements, which were:

- Focussed on Priority Regeneration Areas;
- Environmental/Landscape Led;
- Passenger Transport Led;
- Regeneration and Landscape Led;
- Northern Bypass Led.

4.10.9 It is recognised that delivery of Harlow's growth will require cross-boundary co-operation with neighbouring districts, a point which was also mentioned by respondents to the Consultation12. The Options that received the most support were: 3, Passenger Transport Led, and 5, Northern Bypass Led. The main issue raised by respondents related to infrastructure capacity and whether the local infrastructure would be able to cope with the proposed levels of development. Comments regarding infrastructure capacity mostly focussed on transport infrastructure (roads and public transport provision), sewerage, health facilities and school facilities.

4.10.10 The Harlow Local Development plan Pre-Submission Publication May 2018[13] is currently being Examined in Public.

Epping Forest Local Strategic Partnership Community Strategy

[12] Harlow Local Development Plan, Emerging Strategy and Further Options, Consultation Summary Report, December 2014, http://www.harlow.gov.uk/sites/harlow.gov.uk/files/EmergingStrategyandFurtherOptionsConsultationsummaryreportv4.pdf

[13] http://www.harlow.gov.uk/sites/harlow-cms/files/files/documents/files/Harlow%20Pre-Submission%20Publication%20Local%20Plan.pdf

4.10.11 The partnership, 'One Epping Forest', originally established in 2002, comprises representatives from local councils, education, the police, health services and business and community groups. Its aim is to promote the economic, social and environmental well-being of the district and deliver the shared vision, outcomes, and values enshrined in the Community Strategy. Its function is to bring all the agencies and groups that have a role in delivering these outcomes together, with the one aim of 'Together making Epping Forest District a great place to live, work, study and do business'.

> *The Community Strategy14, published in 2010 for the period 2010-2033, is the "long term plan to deliver better quality of life and improve the economic, social and environmental well-being of the Epping Forest District over the next 20 years and beyond". It is the "cornerstone of all the other plans that affect public services and long-term planning policies in the district included in the Local Development Framework which replaces the Local Plan. It tells local people, and importantly regional and national government, on whose support and co-operation we depend, how we will achieve the outcomes in this strategy. It brings together the key plans of partners into one co-ordinated local strategy including the Essex Strategy."*

Epping Forest District Council Corporate Plan

4.10.12 Epping Forest Council's latest Corporate Plan[15] was published in 2011. It describes the district and sets out the aims and priorities of the council for the period, and the challenges it faces to improve services and local quality of life.

4.10.13 The Corporate Plan provides a description of the District, which includes:

[14] "Putting Epping Forest First" The Community Strategy, 2010-2031, August 2010, Epping Forest's Local Strategic Partnership, http://www.eppingforestdc.gov.uk/index.php/help/file-store/category/111-sustainable-community-strategy

[15] 2011-2015 Corporate Plan, Epping Forest District Council, 2011, http://www.eppingforestdc.gov.uk/index.php/home/file-store/category/374-corporate-plans?download=289:corporate-plan-2011-2015

"Much of the 131 square miles of the Epping Forest District is green and rural. 94% is within the Green Belt or in use for horticulture and farming. Approximately half of our 123,900 residents live in 5% of the area of the district, close to the boundary with London. … . The local population is set to grow over the coming years and pressure for development and the demand for homes, jobs and leisure facilities has never been greater.

The district is traversed by both the M11 and M25 motorways and is the only district in Essex that enjoys the benefits of London Underground services. It also has access to Network Rail services, both within the district at Roydon and nearby at Harlow, Broxbourne and Chingford. Stansted Airport is also only a short journey away. However, bus services to railway stations and other public service locations within the district are inadequate and traffic congestion is a problem."

4.10.14 In terms of planning growth, the Corporate Plan states:

"The local economy should be able to provide jobs and services for local residents, with high-quality and accessible employment land and premises so that there can be effective competition with adjoining areas.

The council's Strategic Housing Market Assessment for the district identified that around 4,620 affordable homes need to be provided within the district to meet current and forecast need. It is a considerable challenge for the council to increase the amount of affordable housing over the next four years.

As the population grows and changes, provision needs to be made for additional housing in a manner appropriate to the council's over-riding priority to protect and conserve the

environmental heritage of the district. This will put further pressure on available land, transport services and jobs."

Epping Forest Local Development Plan

4.10.15 Epping Forest District currently has a mixture of policies from the Adopted 1998 Local Plan and the Adopted 2006 Local Plan with alterations, all of which are set out in the Combined Policies document16, published in 2008. Its Issues and Options went out to 'Community Choices' consultation, in 2012, with the responses reported to Cabinet in June 2013.

4.10.16 The consultation presented three potential housing targets for the plan period (2011-2033), based on various population and household projections. These were: 10,200 based on governmental projections, 8,900 based on East of England Plan (EEP) and updated official projections, and 6,400 based on the original EEP target. Employment growth options were 28.5ha based on EEP, and 21.5ha based on identified need. A total of seven spatial options for distribution of growth were presented.

4.10.17 The key issues raised in the responses, as summarised in the 2013 report to Cabinet, were:

- Continuing to protect the Green Belt;
- Using "brownfield" (i.e. previously developed) land before releasing any Green Belt for development;
- Preventing London from sprawling into the district and preventing larger urban areas (egg Harlow) from merging with nearby villages (egg Roydon);
- Establishing accurate forecasts for population growth and related new housing targets;
- Establishing accurate forecasts for new numbers of jobs which would be needed;

[16] Combined Policies of Epping Forest District Local Plan (1998) and Alterations (2006), February 2008, http://www.eppingforestdc.gov.uk/index.php/home/file-store/category/168-current-policy?download=688:combined-local-plan-1998-and-alterations-2006-policy-document

- Whether local services have the capacity to cope with the current population and any future growth, e.g. schools, GP surgeries, public transport including the Central Line and rural bus services, sports, leisure and other community facilities, town centre car parking, and sewerage (in some parts of the district). Traffic congestion, the general capacity of local roads and motorway junctions, and problems with commuter parking near Central Line stations were also frequently raised issues;
- Protecting the countryside and landscape, including Epping Forest, and acknowledging the importance of agriculture in the district; and
- Protecting the heritage and character of the district's towns and villages.

4.10.18 The responses mentioning transport raised several issues, including concerns about traffic congestion and the general capacity of motorway junctions and the local road network, the impact of road traffic on Epping Forest, and the impact of HGVs on rural roads.

The Epping Forest Local Plan Submission Version December 2017[17] is currently under Examination in Public.

[17] http://www.efdclocalplan.org/wp-content/uploads/2018/03/EB114-Epping-Forest-District-Local-Plan-Submission-Version-2017.pdf

5.0 Scheme Objectives

5.1 The objectives of the scheme are to relieve congestion at M11J7 which will allow the opening up of development land on the east side and the north side of Harlow. This will unblock major commercial property investments which support the needs of business and will ensure housing growth develops appropriately to meet the needs of businesses and communities.

5.2 The scheme will improve access to Harlow and improve wider network resilience to open up key development sites, provide additional access to the strategic road network, reduce congestion on the A414 and reduce congestion at M11 J7.

5.3 Longer term objectives are to provide improved access to the M11 via the A414 and improve access to Stansted Airport and London. Traffic on the A414 in the south of the town will improve reducing congestion and pollution..

6.0 Success Criteria

6.1 The transport improvements of the intervention options will result in a range of measurable impacts on traffic and travel conditions. Impacts and measurable indicators relevant to improving conditions and sustainability could include:

- Delivery of identified housing and employment growth in line with the Core Strategy – measured by the number of homes/jobs delivered/occupied by 2036.
- Reduced congestion and improved journey reliability - measured by traffic volume and relative difference in peak/off-peak journey times.
- Improved connectivity – reflected by absolute journey times on key routes.
- High quality of life and natural environment – reflected through number of collisions, carbon emissions and level of noise (dB).

7.0 Options Considered

7.1 An initial set of transport improvement options were developed, informed by the following sources and approaches:

- Relevant policy and strategy documents
- Recent studies
- Baseline review and forecasting process
- ECC officer workshop
- Workshop and feedback from local stakeholders

7.2 Initial options identified included those specific to the M11 and A414 within or just outside Harlow. Options aimed to address strategic issues but also concerns of a more localised nature, tackling areas and facilities that could be enhanced and developed in order to reduce congestion, address safety concerns and improve the environment and urban realm.

7.3 The options considered included solutions that combined physical highway alterations, including junction modifications and various alignments of relief road. A solely sustainable transport option was not identified, due to the wide distribution of trip origin and destinations through the corridor, existing public transport provision (which are also covered by Punctuality Improvement Partnership's) and concerns related to viability.

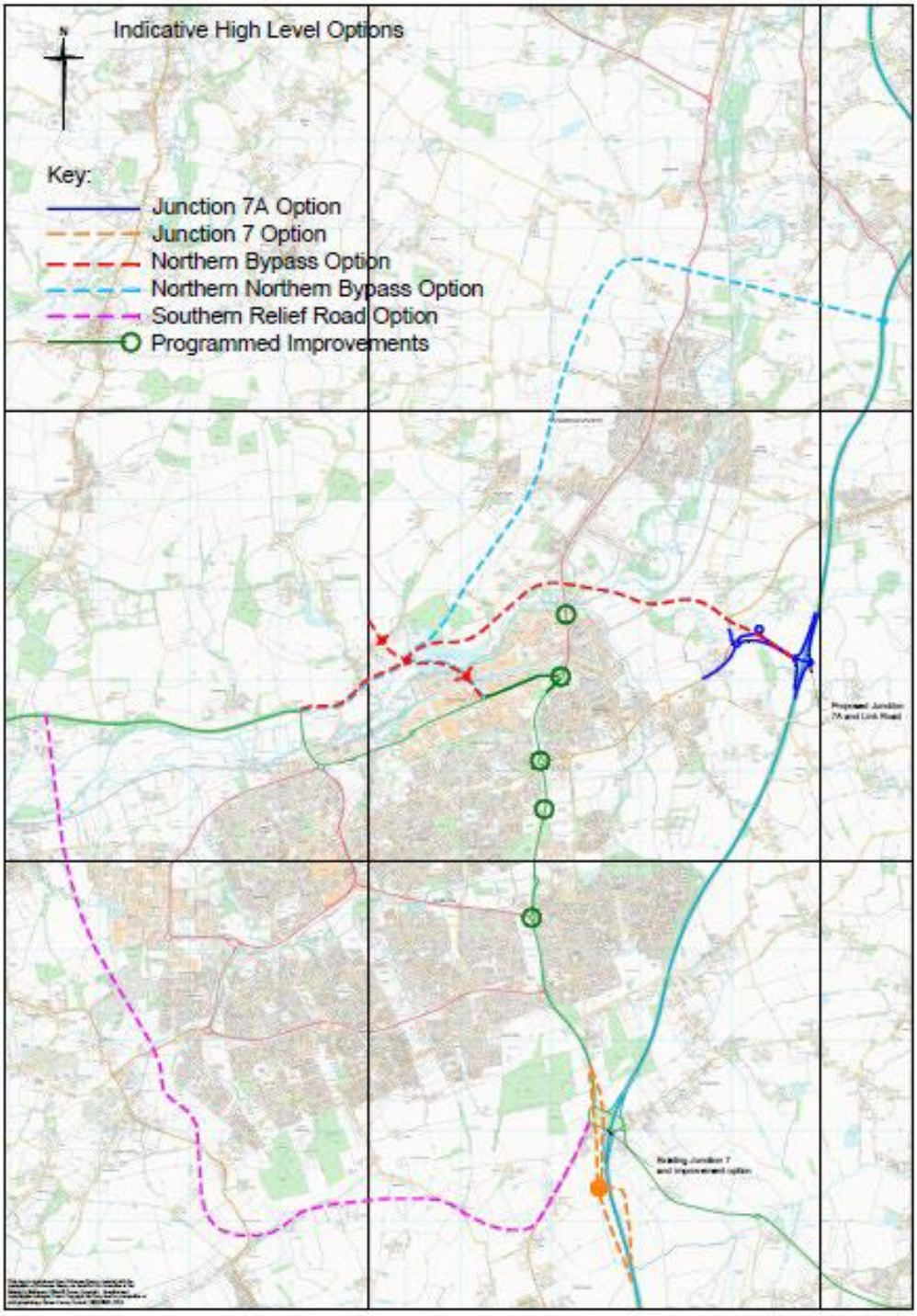
7.4 All options identified through the option development stage were considered in terms of meeting the key objectives identified for intervention; fit with existing local, regional and national programmes and strategies; and key viability and acceptability criteria to establish the appropriateness of each option for full appraisal. The DfT's Early Assessment and Sifting Tool (EAST) was utilised to inform this process.

Options Appraised

7.5 At this stage of the process the traffic model and the TUBA software were used to calculate the benefits for the preferred M11 J7a scheme and for a further five alternative schemes. These were

- M11 J7 Improvements
- M11 J7a and J7 Improvements
- A Northern Bypass
- A North Northern Bypass
- A Southern Relief Road

7.6 Descriptions of these high level intervention option schemes can be found in the Option Assessment Report[9] and illustrated indicatively in Figure 6.2 of that report, which is reproduced below:



7.7 Costs have been estimated for each of these schemes for use in the economic assessment.

8.0 **Stakeholders**

8.1 The Stage 1 scheme appraisal process was informed by the consultation and engagement strategy, this is covered in more detail in Suki Coes evidence. The strategy consisted of a number of key stages to ensure that stakeholders' views were captured and helped to inform the option generation and development process.

8.2 Key stakeholders included Harlow, Epping Forest and East Hertfordshire District Councils who all included reference to the need for the new M11 J7a in their Local plans. Hertfordshire County Council also supported the scheme. SELEP supported the scheme also allocating funding for the widening of Gilden Way.

8.3 Cadent, the providers of the gas distribution network (formerly National Grid) have engaged with ECC to move their gas pipeline, as part of the M11 J7a work last summer. If the CPO is confirmed an easement will be provided. If it isn't then the owner and provider would negotiate, and we could enter into an asset protection agreement

9.0 **Strategic Fit**

9.1 The impacts of the proposed options should be regarded in the context of the intervention-specific objectives identified for the scheme. These can be summarised as:

- Support growth
- Manage congestion hotspots and maintain or improve journey time reliability
- Improve connectivity
- Maintain a high quality of life
- Promote both social inclusion and community cohesion

9.2 The journey time benefits the relief road options, identified through the TUBA analysis strongly support the identified objectives 1-3 above. Objectives 1-3 are all complementary in that by managing the congestion hotspots and improving journey time reliability, connectivity is improved, which in turn supports growth.

9.3 The reduced journey times demonstrated through the TUBA assessment are themselves indicative of reductions in congestion, and as detailed in TAG unit A1.3 a reduction in journey times leads to improved journey time reliability. The journey time savings also suggest an improvement in connectivity, particularly north-south connectivity due to the increased capacity in the highway network to facilitate this movement. Connectivity is improved more generally in the relief road options as the inevitable reassignment of traffic from existing routes on to the new scheme frees up capacity on those routes for other trips.

9.4 Finally, the improvements in journey times and connectivity support economic growth as the reduction in time spent travelling reduces the amount of non-productive time for business travellers. Journey time reductions are

likely to have the wider impact of increasing “effective density” leading to agglomeration benefits for the local economy. The reduced travel times may also encourage more people in to work, again supporting growth.

9.5 The journey time savings and reliability improvements for private transport users (i.e. cars and goods vehicles) will similarly be experienced by public transport vehicles on the highway network. This will lead to improved connectivity and accessibility to local services for everyone, not just car owners, and will therefore promote social inclusion and community cohesion, satisfying objective 5 above. The schemes also have complementary measures to promote cycling and pedestrian accessibility, which will also contribute to meeting this objective.

9.6 In summary, the scheme options all score highly in meeting the five objectives for the scheme.

9.7 The identified scheme objectives are consistent with the wider transport policy objectives, thus by meeting the former, a scheme satisfies the latter. As detailed above, the scheme strongly contributes to:

- Leading to congestion benefits to the A414 and network resilience
- Improving accessibility and north/south connectivity
- Supporting economic and residential growth and regeneration
- Facilitating the delivery of complementary sustainable transport measures and improved local air quality which may bring minor health benefits

11.0 **Financial Costs**

11.1 The Financial Case

11.1.1 This describes the approach to assess the affordability of the Scheme. This is provided in more detail in the evidence of Mr Paul Manamike. The current estimate of the project costs are presented.

10.2 Funding Availability

10.2.1 The source of funding has been agreed whereby £41.7m would be provided by the Highways England and the remaining costs would be provided by ECC and other sources, including £10.5m provided by SELEP. No developer contribution or borrowing has been assumed.

Source of funding for the cost estimates, £, undiscounted 2016 prices as shown below:

Highway Works – Construction Costs
Project / Design Team Fees
Other Development/Project Costs
Risk
Optimism Bias
Inflation
Cost Limit (excl. VAT)
VAT
Cost Limit
Land Acquisition and Compensation Costs as LSH report dated 11th October 2017
Grand Total
Cost of Work Done to Date (COWDD)
Grand Total (incl. COWDD)

10.2.2 The source of funding only covers land acquisition costs, part claims costs and construction costs. Inflation has been included within the Highways England and ECC costs presented within Table 4-1. The cost of Operating and Maintenance (O&M) of the scheme is assumed to be funded by ECC.

11.0 **Conclusions**

11.1 The proposed M11 Junction 7A (M11 J7A) scheme is located between Junction 7 and 8 of the M11 motorway and includes a grade separated junction and a link road joining the M11 with B183 Gilden Way east of Harlow, Essex.

11.2 Harlow currently suffers from significant congestion at peak times, which will increase as committed development is built across the Garden Town.

11.3 Harlow currently has only one connection to the strategic network, Junction 7 on the M11, accessed via the A414, which are both subject to congestion in peak periods. Junction 7 will be at capacity with existing committed growth and suffers from poor network resilience.

11.4 Constraints have already been placed on the development of the Local Enterprise Zone, which can only be relieved by additional road capacity improvements, primarily improving access to the M11.

11.5 Further development to support economic growth through the Local Plan process, in Harlow and the surrounding districts of Epping Forest and East Hertfordshire which includes 16,000 new homes to 2033 (and a further 7,000 in the next plan period at Gilston) together with 12,000 new jobs. This will place additional pressure on the local and strategic road network and without the M11 J7a this planned local plan growth would at best be delayed significantly, or potentially be undeliverable during the plan period.