

# A12 Chelmsford to A120 widening Scheme

TR010060

## 9.43 TECHNICAL NOTE ON DE-TRUNKING PROPOSALS

Rule 8(1)(k)

Planning Act 2008 Infrastructure Planning (Examination Procedure) Regulations 2010

April 2023



Infrastructure Planning

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The Infrastructure Planning (Examination Procedure) Rules 2010

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#### Assessment of Alternative De-trunking Proposals

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## 1 Executive Summary

- 1.1.1 This Technical Report has been developed to document the consideration of de-trunking proposals for the A12 Chelmsford to A120 Widening scheme, specifically in the Rivenhall End area and between Feering and Marks Tey.
- 1.1.2 The Applicant has proposed interventions that allow these lengths of the current A12 to be used as part of the local highway network, to serve journeys between Witham, Rivenhall End, Kelvedon, Feering and Marks Tey. The principles which The Applicant seeks to agree with Essex County Council regarding the safe and serviceable nature of these assets are outlined.
- 1.1.3 This report also considers the reassignment of an existing carriageway of each section of existing A12 proposed to be de-trunked as suggested by Essex County Council against the paragraphs of the National Networks National Policy Statement (NNNPS) that have been referred to by Essex County Council.

## 2 Introduction

- 2.1.1 The A12 Chelmsford to A120 Widening scheme aims to improve the accessibility and linkage between the regional towns of Essex and London, with the significant growth being projected in the region. The A12 scheme will aim to relieve traffic congestion on the A12 by increasing the capacity to three-lane all-purpose dual carriageway (D3AP) and improving the flow of traffic.
- 2.1.2 As part of the A12 scheme, there are two sections of offline widening, where the proposed trunk route is remote from the existing A12, specifically in the vicinity of Rivenhall End, and between Feering and Marks Tey. These existing sections are proposed to be de-trunked and handed to Essex County Council (ECC) as the local highway authority.
- 2.1.3 The purpose of this technical report is to present,
  - present the Applicant's proposals for the detrunked section
  - consideration of the safety aspects of the Applicant's proposals,
  - the chronology of engagement with ECC,

- how the nature of the de-trunking proposed by National Highways and how this differs from the requests of ECC,

- the Applicant's proposed enhancements to WCH provision on the detrunked sections, and

-the implications for the proposed scheme in terms of delivering the enhanced de-trunked asset proposed by ECC. and

2.1.4 For compatibility with the naming convention of the A12 carriageways throughout the proposed scheme, the A carriageway, namely away from London, will be referred to as northbound and the B carriageway, namely towards London, will be referred to as southbound in line with the maintenance nomenclature of the A12 itself.

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## 3 Background Information

## 3.1 Existing Conditions

- 3.1.1 The existing A12 through Rivenhall End, and between Feering and Marks Tey is two-lane all-purpose dual carriageway in nature (D2AP). As described in the Case for the Scheme [APP-249] the proposed scheme provides two lengths of offline widening in these areas and aside from a number of roundabouts to tie-in to the existing local road network, or new construction proposed as part of the scheme, these lengths of existing D2AP are proposed to remain in-situ, in a safe and serviceable condition.
- 3.1.2 Recent Google Street View imagery showing the typical nature of the existing A12 in these areas is shown in Plate 3.1 to Plate 3.4 below.



Plate 3.1 – Existing D2AP A12 south of Rivenhall End looking north





Plate 3.2 – Existing D2AP A12 north of Rivenhall End looking south



Plate 3.3 – Existing D2AP A12 north of Feering looking north





Plate 3.4 – Existing D2AP A12 south of Marks Tey looking south

3.1.3 There are a number of residential and commercial frontages (including petrol stations) on both sides of the existing A12 which currently take access from the carriageway of the A12 that adjoins the properties in the length proposed to be de-trunked. In addition, there is a significant level difference between the north and southbound carriageways, up to 750mm, in this area. The northbound carriageway is typically higher than the southbound carriageway.



## 4 De-trunking proposals set out by the Applicant

- 4.1.1 The extent of existing A12 proposed to be de-trunked is shown in Part 2 of the De-Trunking and Stopping Up Plans [AS-015]. In line with Department for Transport Local Authority Circular 1/97, where there is no new construction proposed the existing A12 is shown to be de-trunked, and where there is new construction proposed, the existing A12 is shown to be stopped-up with new highway shown in Part 2 of the Streets, Rights of Way and Access Plans [AS-027].
- 4.1.2 Whilst roundabouts are proposed south and north of Rivenhall End, in the vicinity of the existing Junction 24, Junction 25 and at the junctions with Easthorpe Road and the private road serving a number of properties east of the A12, the overall nature of the A12 to be de-trunked is not proposed to be changed as part of the DCO. The overall scheme, including the nature of the de-trunked assets is subject to the prescribed independent Road Safety Audit procedure as set out in National Highways' Design Manual for Roads and Bridges (DMRB) document GG 119 and Project Control Framework. As such, the proposed scheme was subject to a Stage 1 Road Safety Audit during preliminary design and will be further Road Safety Audited: upon completion of detailed design; after construction; and twice as part of post-opening monitoring. If problems are found at one of these later audits which cannot be rectified whilst still according with the preliminary design, it will be the Applicant's responsibility to resolve the problems or demonstrate that the residual risk is acceptable for an exception to be granted.
- 4.1.3 National Highways' Operations Directorate East has developed a set of principles for the standard of de-trunked roads that National Highways will seek to agree with ECC. The principles have been applied to the A47 and A428 schemes, and are as follows:
  - 1. The de-trunked assets will meet the standard of safe and serviceable operation, as set out in the Design Manual for Roads and Bridges.
  - The condition of the de-trunked roads will be similar to other comparable roads on the Strategic Road Network as measured by the Pavement Condition Key Performance Indicator in Roads Investment Strategy 2: 2020-2025 (or any relevant replacement from time to time in force).
  - 3. Prior to de-trunking, maintenance will have been undertaken in accordance with an intelligence-led system designed to achieve optimum intervention for each individual asset by improving asset quality and customer satisfaction whilst offering greater value for money.
  - 4. Maintenance schemes for de-trunked assets which have previously been identified for delivery through funding in Road Investment Strategy 3: 2025 to 2030 will be completed or funding by National Highways.
- 4.1.4 The Applicant is not aware of any precedent of existing D2AP routes being substantially physically altered when bypassed by DCO schemes, indeed the

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Applicant is only aware of one DCO which bypassed existing dual carriageways, namely the A14 Cambridge to Huntington Improvement Scheme; this did not include substantial physical alterations to the bypassed routes.

### 4.2 Safety Case of De-Trunking Proposals

- 4.2.1 For every option for configuration of the de-trunked elements there are beneficial and adverse effects in operational safety.
- 4.2.2 Where dual carriageway is retained without other changes or enforcement such as between Feering and Marks Tey this would have high levels of surplus capacity and this has the potential to result in higher speeds of vehicles, which elevates some aspects of risk relating to the likelihood and severity of consequence of accidents. In the proposed scheme, this risk is mitigated by the use of the proposed appropriately sized and designed roundabouts, which provide for safe turning manoeuvres, and force traffic to slow, thereby mitigating the risks associated with higher speeds.
- 4.2.3 A road in a dual carriageway form includes features which mitigate the risk of accidents. The segregation of opposing flows of traffic and removal of the ability to make a right-turn across the opposing carriageway at accesses removes the risk of conflicts which exist with a single carriageway road. This provides a higher inherent safety level than a single carriageway where turning movements and overtaking both present a higher potential collision likelihood and severity, as collisions involving opposing directions and perpendicular movements have significantly higher differential speeds compared to collisions on dual carriageways.
- 4.2.4 International Road Assessment Programme (iRAP) Star Ratings are used for road safety inspection, road safety impact assessments, and in road design. Star Ratings are an objective measure of the level of safety which is 'built-in' to the road through more than 50 road attributes that influence risk for vehicle occupants, motorcyclists, bicyclists, and pedestrians. For the reasons stated above iRAP route safety scores for dual carriageways reflect higher scores for road user protection than single carriageways.
- 4.2.5 The de-trunked route would carry local traffic, and all the classes of road users prohibited from A12, including mopeds, pedestrians, cyclists, ridden horses, horse-drawn carriages, and slow-moving vehicles including agricultural vehicles, as well as traffic diverted off the A12 during closures due to incidents/maintenance. This increases the levels of hazards due to speed differentials and a higher proportion of vulnerable user groups.
- 4.2.6 Overall, the Applicant considers the proposals for the sections of de-trunked dual carriageway to be safe and serviceable in operational safety terms, and that the conversion of the de-trunked sections of the A12 to a single carriageway operation would be likely, overall, to provide a less safe asset compared to the proposed interventions to the dual carriageway operation.
- 4.2.7 The proposed link between Rivenhall End and Kelvedon is a proposed link road where none exists at present as this local journey is served by the A12. As third-party land is required to provide this link, it is proposed as single carriageway reflecting forecast traffic flow and low numbers of conflicting

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movements such as right-turns because there are only a few very lightly used accesses such as Sniveller's Lane and Cranes Lane.



## 5 Engagement with Essex County Council

- 5.1.1 Extensive engagement and consultation has taken place with Essex County council as highways authority as outlined in the draft Statement of Common Ground [REP2-018]. This has included several workshops on de-trunking.
- 5.1.2 Prior to the pre DCO submission Statutory Consultation, two workshops took place on 4 February 2021 and 24 May 2021 at which the Applicant gave an overview of the case for retaining both carriageways, as well as providing options for how the carriageways could be repurposed in future. While there was agreement that a written response to these ideas would be provided by the council, the Applicant did not receive this. Instead, a response was provided at the Statutory Consultation. This is reported within Annex N of the Consultation Report reference OQ/54 [APP-062] and noted strong support for repurposing nearside carriageways for cycling and public transport improvements, joint collaborative work, accurate asset records and the right to consider this further and make detailed suggestions for inclusion in the final design.
- 5.1.3 Following the Statutory Consultation, a meeting was held with Essex County Council on 9 November 2021 where a draft Heads of Terms was presented to the council and run through by legal representatives of the A12 project. A copy of this draft can be found in Appendix A.
- 5.1.4 In November 2021, Essex County Council reaffirmed its position expressed in the Statutory Consultation. Again, further information can be found in Annex N of the Consultation Report reference OS/003 and OS/005 [APP-062].
- 5.1.5 As outlined in Appendix A of the Applicant's Response to Relevant Representations [PDA-004], the Essex County Council wrote to the Applicant on 31 March 2022 outlining its requirements of the project. As noted in the Applicant's response to Issue Specific Hearing 1 [REP3-012], this included detailed requirements for de-trunking which were extensive.
- 5.1.6 Since that letter there have been several written exchanges captured in PDA-004 as well as Statement of Common Ground meetings. This included a meeting on 15 July 2022 and on 16 January 2023 (postponed from 16 December 2022) both of which were attended by a representative of National Highways Operations team.
- 5.1.7 In a letter from Essex County Council on 31<sup>st</sup> October 2022, the Council said it had been investigating options for the de-trunked sections and requested the Applicant's engagement to further develop these options. These options were not provided to National Highways until the 16 January 2023 when the Council provided a presentation.
- 5.1.8 On 26<sup>th</sup> February 2023 the Applicant provided the requested asset condition data to Essex County Council.
- 5.1.9 The Applicant intends to continue to engage through the established working groups with Essex County Council on de-trunking. However, the Council has to recognise the limits of the DCO process and the limits of what is justified, proportionate and fundable.

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## 6 Consideration of Alternative Proposals

#### 6.1 Introduction

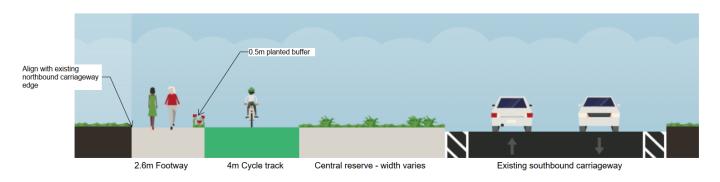
- 6.1.1 In the 31<sup>st</sup> October 2022 letter, ECC stated its belief that "the most pragmatic solution [for de-trunking of the A12] is to retain one side of the dual carriageway as highway (likely to be the current southbound carriageway) and to repurpose the other side with green infrastructure and provision for pedestrians and cyclists."
- 6.1.2 The Applicant has thoroughly considered the feasibility of the solution suggested by Essex County Council in its letter of 31 October, in line with the National Policy Statement for National Networks (NNNPS) paragraph 5.205 to consider reasonable opportunities to support other transport modes in developing infrastructure. The Applicant has undertaken a design exercise to develop a considered design of the enhancements proposed by ECC as stated in its 31<sup>st</sup> October 2022 letter, to understand the implications of the enhancement proposal when compared with the proposals included within the DCO Application.

## 6.2 Applicant's interpretation of ECC's proposal

- 6.2.1 The Applicant has investigated the works required to convert the existing southbound carriageway to a single carriageway and repurpose the northbound carriageway to an active travel corridor. The Applicant agrees that, if the detrunked A12 is to be reduced to a single carriageway, the southbound carriageway is preferable to retain as a single carriageway as it reduces the number of pedestrian and cyclist crossing points required at junctions compared to using the northern carriageway. With this arrangement, the proposed roundabouts at Easthorpe Road, Wishingwell Farm and Rivenhall End West can be converted to priority T-junctions, removing the southern crossing points at these junctions as pedestrians and cyclists will be travelling on the existing northbound carriageway. In the proposed de-trunked section at Rivenhall End there are three private property accesses and one business with direct access to the existing northbound A12, and one direct business access to the existing southbound A12. In the proposed de-trunked section between Feering and Marks Tey there are six private properties and one business with direct accesses to the existing northbound A12 and seven private properties and one business with direct access to the existing southbound A12.
- 6.2.2 The illustrative cross section considered by the Applicant consists of a segregated footway and cycle track on the existing northbound carriageway alignment and a wide central reserve to avoid affecting the existing drainage infrastructure as far as possible. The illustrative cross section for the de-trunked section between Feering and Marks Tey is shown in Plate 6.1. Note the surface levels and cross falls have not been shown on these indicative cross sections, therefore the level difference between carriageways described in paragraph 3.1.3 is not shown.







#### Plate 6.1 - Indicative proposed cross section between Feering and Marks Tey

- 6.2.3 In this illustrative proposal, it is assumed that the already existing shared use cycle and foot way would be removed to provide additional green space for planting adjacent to the travel corridor. The existing road safety barriers in the central reserve is also proposed to be removed. The cross section of the southbound carriageway remains largely unchanged with some works required to change the line marking and signage to suit the new single carriageway arrangement. It is proposed to retain the existing drainage infrastructure along the southern corridor therefore the Applicant is not proposing any changes to the vertical alignment. Further details of the works required at property accesses is described in Section 6.3.
- 6.2.4 As described in paragraph 6.2.1, the proposed roundabouts at Easthorpe Road and Wishingwell Farm would instead be priority T-junctions which would reduce the footprint of these junctions. (The roundabouts at these locations were proposed to facilitate right turns in the dual-carriageway operation, as well as to act as traffic calming features).
- 6.2.5 Between the Rivenhall End West and Rivenhall End East roundabouts, the existing shared use path would be retained for use as a footway, and Lane 1 of the existing northbound carriageway would be converted to a 3m cycleway. Lane 2 is proposed to be converted to a planting strip to create a separation width between the cycleway and carriageway of approximately 9.4m. The proposed cross section for the de-trunked section between Rivenhall End West and Rivenhall End East roundabouts is shown in Plate 6.2. This arrangement has been proposed to accommodate the varying level difference up to 750mm between the north and southbound carriageways to ensure that access to properties can be maintained. This is explained further in Section 6.3.

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2m Footway Existing verge 3m Cycle track

Central reserve - width varies

Existing southbound carriageway

#### Plate 6.2 - Indicative proposed cross section in Rivenhall End

## 6.3 Practical Implications of ECC's Proposal

- 6.3.1 Moving vehicle traffic from the northbound carriageway onto the southbound carriageway changes how the properties on the northern side of the road can access the de-trunked road.
- 6.3.2 There are three property accesses and one business with separate entry and exit accesses onto the northern side of the existing travel corridor in Rivenhall End. There are six private property accesses, one business with separate entry and exit accesses and one local road (Domsey Chase) that connect with the northern side of the existing travel corridor between Feering and Marks Tey.
- 6.3.3 Works would be required to connect these existing accesses and the local road to meet the new vehicular route on the southbound single carriageway. These works would include the construction of new at grade priority junctions to allow for acceptable vehicle swept paths in and out of the property accesses. New full depth pavement construction would be required to construct the priority junctions within the existing central reserve and in some locations the level difference between the existing northbound and southbound carriageways would require additional earthworks to provide safe and compliant driveway access. This is particularly significant in Rivenhall End where there is up to 750mm level difference between the two carriageways in places. New drainage infrastructure would also be required at the property accesses, which would need to connect to the existing highway drainage infrastructure.
- 6.3.4 At the property accesses, DMRB CD123 Geometric design of at-grade priority and signal-controlled junctions, Chapter 4, provides guidance on the appropriate gradient for a direct access onto roads of this nature. The gradient of the access approach should not exceed 2% immediately adjacent to the road and should not exceed 4% over a distance of 10 metres. The crossfall of cycleways cannot exceed 2.5% in accordance with Local Transport Note (LTN 1/20) which although not statutory standard on National Highways schemes, has been adopted the agreed standard between National Highways and ECC for new cycling provision on the proposed scheme. This arrangement presents a significant challenge to appropriately grade the property accesses and the cycleway to tie into the existing southbound carriageway levels whilst conforming to the relevant design standards within the existing northbound carriageway footprint. The extent of works for the property accesses will increase to accommodate the grading works over the minimum conforming length. Localised regrading of the pedestrian and cyclist facilities will also be



required on the approach and departure of the property access crossing points to provide a smooth surface without sharp changes in grade. Regrading of the southbound carriageway may also be required to achieve compliant property access and cycleway grades, particularly in Rivenhall End.

### 6.4 **Provision for Walking, Cycling and Horse Riding**

#### **Existing Provision**

- 6.4.1 The existing walking, cycling and horse riding (WCH) provision along the proposed de-trunked corridor consists of an off carriageway shared use path on the northern side of the carriageway from Witham to Kelvedon. Between Junction 22 and Rivenhall End there is approximately 2m separation from the live carriageway to the shared use path, within Rivenhall End itself this increases significantly, and between Rivenhall End and the proposed link road to Kelvedon there is approximately 2m separation from the live carriageway to the shared use path. There is currently no pedestrian access across the A12 between the north and south sides of Rivenhall End.
- 6.4.2 Between Feering and Marks Tey, the existing WCH provision also consists of an off carriageway shared use path on the northern side of the carriageway. This asset is set back on average 3.3m from the live carriageway until it reaches Old London Road, which is a short cul-de-sac residential road where the walking and cycling provision is on carriageway. Again, there is currently no pedestrian access across the A12 dual carriageway.
- 6.4.3 The existing horizontal separation between the carriageway and shared routes outlined in paragraphs 6.4.1 and 6.4.2, in the context of the proposed speed limits, are compliant with the desirable minimum horizontal separation requirements of Table 6.1 of LTN 1/20. Additionally, a potential barrier to non-motorised users is the proximity of the existing A12 including the weight, noise and emissions of vehicles, especially heavy goods vehicles, using it. This figure is forecasted to significantly decrease (by 76% in the vicinity of Rivenhall End, and by 92% between Feering and Marks Tey in the proposed scheme's design year).
- 6.4.4 Regarding the width of the existing provision, the Applicant maintains that this existing provision, although not in accordance with the most recent guidance contained within LTN 1/20, it does not in terms of width, is not act as barrier to the demand for non-motorised users in this area. , and

#### Applicant's proposed enhancements

- 6.4.5 It is important to note the Applicant has included enhancements to the WCH network in this area in the proposed scheme:
  - In Rivenhall End, a new 3m wide shared use cycle track is proposed to the north of the de-trunked A12, connecting with the existing cycle tracks and the proposed Snivellers Lane Bridge. A new crossing of the detrunked A12 is also proposed to connect with Oak Road (south) to address severance issues.



- In Feering, a new 3m wide shared use cycle track is also proposed to connect the existing cycle track to the north of the de-trunked A12 to Prested Hall Overbridge.
- In Marks Tey, new cycle tracks and footways are proposed at junction 25, including the Marks Tey Bridge replacement and crossing points at London Road roundabout, Coggeshall Road and Old Rectory Junction.
- 6.4.6 These proposed improvements enhancements improve the connectivity of the WCH network in Rivenhall End and from Feering to Marks Tey and is considered reasonable in accordance with paragraph 5.2015 of the National Policy Statement for National Networks (NPSNNNNPS). Given the proposed scheme retains non-motorised user shared walking and cycling provision adjacent to the de-trunked A12 and removes the current barrier to non-motorised users undertaking journeys between Witham, Rivenhall End, Kelvedon, Feering and Marks Tey, the Applicant considers that the policy tests are met.
- 6.4.7 The further enhancement above the measures outlined in paragraph 6.4.5 proposed by ECC go well beyond what would be considered a reasonable opportunity in the context of paragraph 5.205 of the NNNPS.
- 6.4.8 Whilst the proposed scheme does not substantially alter the nature of the detrunked A12, it does not preclude future alterations such as dedication of road space for active travel; public transport or other purposes. For instance, the retention of a dual-carriageway cross-section allows ECC the ability to reassign general traffic lanes for active travel modes in the future, should they wish to do so.

### 6.5 Scheme Delay

- 6.5.1 Redesign of the proposed scheme to include the proposals for a single carriageway road with a new active travel corridor as proposed by ECC is a fundamental change to the de-trunked sections of road within the DCO application.
- 6.5.2 Assuming the additional works proposed by ECC would be associated development linked to the A12 Nationally Significant Infrastructure Project and applied for as part of the overall A12 scheme, the Applicant would be required to withdraw the current DCO application. Substantial work would need to be undertaken to prepare a new Transport Assessment, Environmental Statement and application plans before a new application can be made by the Applicant.
- 6.5.3 The draft DCO, Land Plans, Book of Reference and Statement of Reasons would also have to be substantially redrafted. There would be significant costs consequences arising from the Applicant withdrawing the current application.
- 6.5.4 At a minimum, one round of pre-application consultation would be required, along with substantial engagement with affected parties and local authorities.
- 6.5.5 New utility searches would be required and a new scheme of substantial utility work devised.
- 6.5.6 It is expected that the time required for the new application to be prepared and consulted on would be a minimum of 12-15 months. On the basis that the

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current application was submitted in August 2022 and is now approaching halfway through its examination, it can be considered that withdrawing the current application and submitting a new scheme would mean a two-year delay to the consenting process.

6.5.7 This would also delay the works to the A12 to provide much needed additional capacity by the same amount of time, impacting local road users and the performance of the A12.

#### 6.6 Cost Estimate

- 6.6.1 The Applicant has undertaken a high-level cost estimate to understand the cost difference between the DCO proposal and the additional works to meet the requests from ECC, based on the Applicant's understanding of ECC's requests made in its letter of 31 October 2022.
- 6.6.2 The cost estimate has been based on the following assumptions:
  - The existing horizontal and vertical alignment of the carriageways, including cross fall, will remain unchanged.
  - The existing drainage infrastructure is of suitable condition to remain in use, and indeed any defects would be rectified prior to handover to ECC in either the current DCO proposal and the alternative proposals.
  - The existing southbound carriageway pavement does not require significant repairs or resurfacing, and indeed any defects would be rectified prior to handover to ECC in either the current DCO proposal and the alternative proposals.
  - No structural works are required on the existing Memorial Bridge or Rivenhall Bridge.
  - All businesses along the de-trunked lengths of the A12 will remain in operation.
- 6.6.3 The cost estimate includes provision for planing and resurfacing of the existing northbound carriageway with a 6mm aggregate surface course appropriate for the surfacing of a cycleway and footway; earthworks and full depth pavement construction at the extended property accesses and new priority junctions; dedicated turning lanes to allow HGV access to businesses (including petrol stations); maintenance bays, signage and line marking; and landscaping of the central reserve and reclaimed road space.
- 6.6.4 A length of 4.3km has been considered between Feering and Marks Tey, and 1.3km between Rivenhall End West and Rivenhall End East roundabouts.

#### This active travel corridor proposal has been compared to the forecast estimate of the DCO proposal to handover the de-trunked sections of the A12 to ECC as described in Section 4. A summary of the preliminary cost estimate based on the concept design is shown in

6.6.5 Table 61.



#### Table 61 Preliminary Cost Estimate of Alternative Detrunking Proposals

Section	DCO Proposal	Alternative Proposal
Rivenhall End	£1.1 million	£2.3 million
Feering to Marks Tey	£2.9 million	£7.1 million
Total	£4.0 million	£9.4 million

- 6.6.6 The above table is an initial high-level assessment of potential costs prepared to assist the Examination and are not assured figures. The table indicates that the alternative proposal by the Applicant as described in Section 6.2 costs significantly more than the proposed DCO design. No allowance has been made for costs arising from disruption to properties and businesses or additional land acquisition or accommodation works.
- 6.6.7 There would also be a substantial cost associated with the delay to the scheme, for additional design to be undertaken and exposure to inflation, and additional traffic growth impacting the proposed scheme's design year. Additionally, the substantial scheme benefits outlined in the Case for the Scheme [APP-249] would not be realised for the period of the delay.
- 6.6.8 The Applicant does not consider this additional cost to be reasonable or justified given that the proposals already in the DCO application are acceptable, justified and do not give rise to any conflict with policy as set out in the NNNPS. The proposed DCO design is considered to be safe and serviceable in operational safety terms, and includes considerable improvements to the walking, cycling and horse riding (WCH) facilities in the area to address severance as further detailed in Section 6.4.

### 6.7 ECC's Most Recent Proposal

- 6.7.1 Essex County Council submitted an alternative de-trunking proposal and technical note "Alternative De-trunking Proposals Technical Note" at Deadline 3 on 9<sup>th</sup> March 2023 [REP3-082]. This design proposal presented two cross sections:
  - Junction 22 to Rivenhall End West Roundabout retain two lanes in the southbound direction and reduce the northbound carriageway to one 4m wide lane with a 1m hardstrip. Widen the existing shared use facility on the northern side of the dual carriageway into the northbound carriageway to achieve a width of 3m and use the remaining width between the shared use facility and the reduced northbound carriageway to construct a planted bund.
  - 2. Rivenhall End West Roundabout to Rivenhall End East Roundabout and Feering to Marks Tey – convert the southbound carriageway to a twoway single carriageway and utilise the existing northbound carriageway as a 4.5m shared use facility. The existing shared facility is proposed to



be repurposed as a bridleway with planting bunds constructed between the bridleway, shared use facility and retained carriageway.

The proposals from ECC are not dissimilar to the design considered by the Applicant in Section 6.2 to Section 6.6, however the notable difference is the addition of earthworks required to construct proposed planting bunds and a bridleway to the active transport corridor. ECC also proposes the resurfacing the southbound carriageway in addition to the northbound carriageway and the inclusion of sustainable drainage systems (SuDS) along the active travel corridor. The environmental impact of the inclusion of SuDS will need to be considered in more detail in the Environmental Statement and mitigated where necessary to reduce the impact.

- 6.7.2 The additional enhancements included in ECC's proposal will require further detailed design beyond that proposed by the Applicant, which will add to the programme delay and cost to the scheme, as well as the construction cost.
- 6.7.3 The latest proposals do not address the matters already set out above in Section 6.3 regarding the works associated with extending the property accesses. ECC has not proposed how to provide compliant driveway grades to tie into the southbound carriageway levels.
- 6.7.4 Given the issues highlighted by the Applicant and the additional cost and delay to the scheme, the Applicant does not believe the proposal from ECC is reasonable for the Applicant to be required to provide, when considering the relevant paragraphs of the NNNPS.

## 7 Conclusion

- 7.1.1 The Applicant has assessed Essex County Council's request the request from Essex County Council to convert the existing southbound carriageway of the de-trunked section of the A12 to a single carriageway and redesign the northbound carriageway as an active travel corridor.
- 7.1.2 The dual carriageway proposed to be retained provides a higher inherent safety level compared to a single carriageway as it separates opposing traffic flows and removes right-turns at accesses. The addition of appropriately sized roundabouts also provides safer turning manoeuvres and a measure of speed-reduction effect. On this basis, the sections of the de-trunked A12 are considered to be safe and serviceable in operational safety terms, and conversion to a single carriageway is not necessary for road safety reasons
- 7.1.3 This assessment of that request included undertaking a high-level design and cost estimate of the alternative proposal to understand the implications on the design submitted in the DCO Application. the Applicant undertook a design exercise to allow for an initial estimate of costs. The cost estimate indicated that the requested alternative proposal for the de-trunked sections of the A12 would cost significantly more than the proposed design in the DCO Application.
- 7.1.4 ECC's proposal would require the withdrawal and resubmission of the current application for development consent. This would be expected to delay the delivery of the proposed scheme by approximately two years. The additional



costs due to increased works and caused by the ensuing delay are disproportionate to the benefits expected to be realised from the enhancements.

- 7.1.5 Considerable improvements to walking, cycling and horse riding facilities have already been included in the proposed scheme, including in Rivenhall End, Feering and Marks Tey. These improvements, in combination with the design for the de-trunked sections of the A12 presented in the DCO Application and the wider considerations for the well-being of road users and communities affected by the proposed scheme, means the Applicant's scheme before the Examination already accords with the NNNPS, specifically paragraph 5.205. The existing non-motorised provision adjacent to the A12 will benefit from the reassignment of strategic traffic, in particular Heavy Goods Vehicle movements, to the new alignment of the A12.
- 7.1.6 The enhancements suggest by ECC are not considered to represent a reasonable opportunity to address existing severance issues that act as a barrier to non-motorised user to include in the DCO Application. They are not justified in policy terms and present significant and unnecessary costs as well as disruption to frontage owners. Their inclusion in the A12 Scheme would lead to significant additional costs and a lengthy delay to the provision of a modern trunk road between Chelmsford and Colchester.



# Appendix A Draft Heads of Terms sent to Essex County Council



#### [DRAFT] HEADS OF TERMS

#### DE-TRUNKING AND LOCAL HIGHWAY HANDOVER AGREEMENT

#### A12 CHELMSFORD TO A120 WIDENING SCHEME

These Heads of Terms are to be agreed between the parties and secured within a Deed.

Parties	Essex County Council (as the local highway authority) (the Council)	
	National Highways (as the promoter of the A12 Chelmsford to A120 Widening Scheme (the <b>Scheme</b> ))	
EXISTING ROADS TO	) BE DE-TRUNKED	
De-Trunked Roads	The specific roads to be de-trunked will be as set out in the Development Consent Order ( <b>Order</b> ).	
	For the purposes of discussion the roads to be de-trunked are:	
	<ul> <li>Between existing Junctions 22 and 23 (approximately 1km)</li> <li>Between existing Junctions 24 to 25 (approximately 5.3km)</li> </ul>	
	As shown on the attached plan.	
De-Trunked Road Standard		
	[10 years free from major intervention]	
Records	National Highways will provide the following records within [6 months of completion of the Deed] and on an ongoing basis as records become available:	
	(a) Asset GIS shape File to show extent of handover boundaries and associated assets	
	(b) Asset condition grading survey ;	
	(c) Forward programme for this <b>road investment period</b> ;	
	(d) [any significant maintenance anticipated for [5 years] after the De- Trunking Date].	
	(e) [Maintenance and inspection regime and cyclical maintenance programme;]	
	(f) [Records of defects and remedies or rectifications.]Structural GI and PIs	
Maintenance Liability	National Highways will retain the maintenance liability for the De-Trunked Roads until the De-Trunking Date.	
De-Trunking Date	A date to be determined by National Highways pursuant to and in accordance with the Order.	
Handover Plan	National Highways will consult with the Council in developing the Handover Plan.	
	National Highways will submit the Handover Plan to the Council for approval prior to the date proposed as the De-Trunking Date.	

	The Handover Plan will incorporate a range of details related to the De- Trunked Roads to be agreed including:
	<ul> <li>(g) [the existing condition of the carriageway and structure, assessed having regard to the [De-Trunked Road Standard];</li> </ul>
	(h) the age and condition of the carriageway surfacing;
	(i) drainage facilities, to include outfalls, pollution control and attenuation measures;
	(j) signage and road marking;
	(k) lighting;
	(I) fencing;
	<ul> <li>(m) vehicle restraint systems, to include type, condition and compliance with specifications;</li> </ul>
	(n) extent of the highway boundary;
	(o) removal of equipment not required by the Council; and
	(p) all available records, including works drawings and design specifications, maintenance records and ongoing guarantees and warranties (where the benefit of which is proposed to be assigned to the Council)].
	The Handover Plan will also include details of any works to be carried out by National Highways before the De-Trunking Date.
	National Highways may, in lieu of carrying out the works itself, pay the Council the cost of carrying out the works.
	The Council have [20 Business Days] (unless otherwise agreed) to approve or refuse the Handover Plan .
	No response after [20 Business Days] of receipt of the Handover Plan will mean the Handover Plan is approved by the Council.
Handover Plan Compliance Certificate	Following approval of the Handover Plan, National Highways will serve notice on the Council that it has complied with the Handover Plan in all material respects ( <b>Notice</b> ).
	Upon receipt of the Notice the Council must:
	<ul> <li>(q) carry out an inspection appropriate to the works delivered and perceived risks;</li> </ul>
	(r) if satisfied, issue a Compliance Certificate with the Handover Plan
	(s) if unsatisfied, notify National Highways with details of the defects.
	If the Council is unsatisfied and provides a list of defects National Highways is to consider this and:
	(t) if National Highways agrees with the defects, the defects will be rectified and National Highways will serve Notice again; or
	(u) if National Highways disagrees with the defects, this may be treated as a dispute.
	If the Council does not respond to the Notice within [20 Business Days] the Council will be taken to have accepted compliance with the Handover Plan.
	Upon issuing of the Compliance Certificate the Handover Plan will be satisfied and the Handover Date can occur.
Defects	Any works that have been delivered under the Handover Plan will be covered by a [12 month] defect period from the De-Trunking Date will apply.

NEW OR APPROVE	D LOCAL HIGHWAYS		
Local Highways	A Local Highway will be any highway [(including public right of way)] to be constructed or improved as part of the Scheme, that will become the maintenance responsibility of the Council as highway authority;		
Local Highway Standard	[This will be a set of standards agreed between the parties to cover the standard that the detailed design for the carriageway [and public rights of way] must comply with.]		
Detailed Design	National Highways are to prepare the detailed design for the Local Highways in accordance with the Local Highway Standard.		
	National Highways will consult the Council on whether the detailed design substantially accords with the Local Highway Standard.		
	The details to be submitted to the Council for consultation will include:		
	(v) [detailed design drawings, specifications and schedules;		
	(w) draft approvals in principle for structures;		
	(x) design and check certificates for structures;		
	(y) road safety audit reports and any exception reports; and		
	(z) the precise extent and boundaries of the relevant Local Highways [including public rights of way].]		
Inspections	The Council is entitled to inspect the carrying out of the works the subject of the Deed on [3 Business Days'] notice.		
	The Council must be accompanied by a representative of National Highways.		
Handover Process	National Highways will notify the Council upon completion of each Local Highway (or package of Local Highways as agreed).		
	National Highways and the Council will jointly inspect the completed Local Highway/s within [20 Business Days] (unless otherwise agreed).		
	[20 Business Days] following the inspection, Council will confirm whether the Local Highway/s is substantially in accordance with the Local Highway Standard (Handover Date).		
	If confirmed by the Council, the Local Highway/s will become the responsibility of the Council as local highway authority.		
	If the Council do not accept that the Local Highway/s is substantially in accordance with the Local Highway Standard then the parties will discuss and agree within [10 Business Days] the actions required to be taken.		
	If no response is received from the Council within [20 Business Days] of the inspection the Council will be taken to have accepted the Local Highways/s.		
Handover Date	The Handover Date is the date on which the Council confirms it is satisfied that the Local Highway/s are substantially in accordance with the Local Highway Standard.		
Defect Period	A [12 month] defect period from the Handover Date will apply.		
PAYMENT OF COST	'S		
Council's Costs	(aa) Costs will be discussed in the context of the Planning Performance Agreement.		

DISPUTE RESOLUTION		
Dispute Resolution Usual dispute resolution provisions will apply.		
THE ORDER		
The Order	The terms of the Deed will override the terms of the Order.	