

# **Essex and Others level crossing reduction**

Heritage Impact Assessment Technical Note

22 September 2017



Mott MacDonald  
10 Fleet Place  
London EC4M 7RB  
United Kingdom

T +44 (0)20 7651 0300  
F +44 (0)20 7248 2698  
mottmac.com

# **Essex and Others level crossing reduction**

Heritage Impact Assessment Technical Note

22 September 2017



# Issue and revision record

Revision	Date	Originator	Checker	Approver	Description
A	22/09/17	H. Maisey PCIfA	M. Hopper MCIFA	J. Williams MCIFA	Draft
B	03/12/18	H. Maisey PCIfA	M. Hopper MCIFA	J. Williams MCIFA	Final

**Document reference:** 367516CF51 | 1 | A

**Information class:** Standard

---

This document is issued for the party which commissioned it and for specific purposes connected with the above-captioned project only. It should not be relied upon by any other party or used for any other purpose.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

This document contains confidential information and proprietary intellectual property. It should not be shown to other parties without consent from us and from the party which commissioned it.

---

# Contents

Executive summary	1
<b>1 Introduction</b>	<b>2</b>
1.1 Project background	2
1.2 Site overview	2
<b>2 Methodology</b>	<b>3</b>
2.1 Guidance	3
2.2 Assessment aims	3
2.3 Scoping	3
2.3.1 Fencing and gates	3
2.3.2 Surfaces	3
2.3.3 Foot Bridges	4
2.3.4 Culverts	5
2.3.5 Steps	5
2.3.6 Signs and bollards	5
2.4 Sites of potential impact	5
<b>3 Impact assessment</b>	<b>6</b>
3.1 E05 – Fullers End level crossing	6
3.1.1 Summary of proposed works	6
3.1.2 Baseline	6
3.1.3 Potential impacts	7
3.1.4 Recommendations	7
3.2 E16 – Maldon Road level crossing	8
3.2.1 Summary of proposed works	8
3.2.2 Baseline	8
3.2.3 Potential impacts	8
3.2.4 Recommendations	8
3.3 E26 – Barbara Close level crossing	8
3.3.1 Summary of proposed works	8
3.3.2 Baseline	9
3.3.3 Potential impacts	10
3.3.4 Recommendations	10
3.4 E28 – Whipps Farmers level crossing	10
3.4.1 Summary of proposed works	10
3.4.2 Baseline	10
3.4.3 Potential impacts	11
3.4.4 Recommendations	11
3.5 E30 – Ferry level crossing and E31 – Brickyard level crossing	12

3.5.1	Summary of proposed works	12
3.5.2	Baseline	12
3.5.3	Potential impacts	13
3.5.4	Recommendations	14
3.6	E41 – Paget level crossing	14
3.6.1	Summary of proposed works	14
3.6.2	Baseline	14
3.6.3	Potential impacts	15
3.6.4	Recommendations	15
3.7	E54 – Bures level crossing	15
3.7.1	Summary of proposed works	15
3.7.2	Baseline	16
3.7.3	Potential impacts	17
3.7.4	Recommendations	17
3.8	E56 – Abbotts level crossing	17
3.8.1	Summary of proposed works	17
3.8.2	Baseline	17
3.8.3	Potential impacts	19
3.8.4	Recommendations	19
3.9	E57 – Wivenhoe Park level crossing	19
3.9.1	Summary of proposed works	19
3.9.2	Baseline	19
3.9.3	Potential impacts	20
3.9.4	Recommendations	20
3.10	T04 – Jefferies level crossing	21
3.10.1	Summary of proposed works	21
3.10.2	Baseline	21
3.10.3	Potential impacts	21
3.10.4	Recommendations	22
4	Conclusion	23
5	References	24
	Appendices	26
A.	Scoping assessment	27

# Executive summary

This report assesses the impact of the proposed Anglia Level Crossing Reduction Strategy on heritage assets, which aims to improve safety, create a more efficient and reliable railway, reduce delays to train, pedestrian and highway journeys, and reduce maintenance requirements. There is a total of 61 level crossings included in the Essex and Others Level Crossing Reduction Strategy. The majority of these are to be closed and will require the existing infrastructure being removed and fencing being installed to prevent trespass on the railway. The installation of additional infrastructure will be required at a number of sites, to divert users from the existing routes, along new or alternative Public Rights of Way (PRoW) or Byways Open to All Traffic (BOAT), including foot and cycle paths, bridges, steps, culverts and fencing (all of which are detailed in the Essex and Others Design Guide<sup>1</sup>). Mott MacDonald have undertaken this Heritage Impact Assessment Technical Note, to investigate the potential for the proposed works and installation of new infrastructure to impact the historic environment, including both archaeological remains and built heritage assets.

An initial high-level assessment of the potential impacts of the proposed works at each of the sixty-one level crossings was carried out to scope which of the sites required further assessment. Eleven of the sixty-one level crossing sites were scoped in for a further detailed assessment due to the potential impact of the proposed works on either built heritage assets or archaeological remains. The detailed assessment included an evaluation of the historic environment record, designated heritage assets, geological information and historic maps where appropriate.

It has been concluded that overall the proposed works involved in the Essex and Others Level Crossing Reduction Strategy is minor and is unlikely to significantly impact on the historic environment. No further mitigation or investigation is required for any of the eleven sites included in the detailed assessment. This is due to the either low archaeological potential within the study area and red line boundary for the proposed works, the likelihood that archaeological remains have been truncated during previous development, the minor nature and location of the works causing negligible impacts on the setting of designated heritage assets in the vicinity. The proposed works at E56 Abbots level crossing within the scheduled monument have previously been discussed with the Inspector of Ancient Monuments at Historic England, who has confirmed that Scheduled Monument Consent will not be required, as no intrusive physical works will take place.

---

<sup>1</sup> Network Rail 2017

# 1 Introduction

## 1.1 Project background

This report assesses the impact of the proposed Anglia Level Crossing Reduction Strategy on heritage assets. The project, undertaken by Network Rail, aims to reduce the number of level crossings across Cambridgeshire, Suffolk, and Essex and Others (Hertfordshire and the unitary authority of Thurrock and Southend-on-Sea, and the London Borough of Havering). The aim of this strategy is to improve safety, create a more efficient and reliable railway, reduce delays to train, pedestrian and highway journeys, and reduce maintenance requirements. The powers to implement the reduction strategy in Essex and Others has been sought through an application under the Transport and Works Act 1992 as The Essex and Others Level Crossing Reduction Order.

Mott MacDonald has undertaken this heritage impact assessment on behalf of Network Rail, to further investigate the potential of the proposed works to impact the historic environment, both archaeological remains and built heritage assets. Further archaeological and heritage information is included in the Environment Impact Assessment Screening Report<sup>2</sup>.

## 1.2 Site overview

There is a total of 61 level crossings included in the Essex and Others Level Crossing Reduction Order. The majority of these level crossings will be closed, with the existing infrastructure being removed and fencing being installed to prevent trespass on the railway. The closure of the majority of these level crossings will require the installation of new infrastructure to divert users from the existing routes, along new or alternative Public Rights of Way (PRoW) or (BOAT). Following discussion with Local authorities, a series of proposed infrastructure types have been agreed, including foot and cycle paths, bridges, steps, culverts and fencing (all of which are detailed in the Essex and Others Design Guide<sup>3</sup>). However, a number of the level crossings require no physical works and others will be downgraded to private accessibility only.

---

<sup>2</sup> Mott MacDonald 2017

<sup>3</sup> Network Rail 2017

## 2 Methodology

### 2.1 Guidance

The following guidance has been used to inform this assessment:

- The 2015 Historic England *Conservation Principles, Policies and Guidance*
- The 2015 Historic England *Historic Environment Good Practice advice in Planning Note 2: Managing Significance in Decision-Taking in the Historic Environment (GPA2)*
- The 2015 Historic England *Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets (GPA3)*

### 2.2 Assessment aims

This main aim of this technical note is to assess the potential impact of the Anglia Level Crossing Reduction Strategy on the historic environment, including both archaeological deposits and built heritage assets. This report aims to outline the key locations for potential impacts of the proposed works, and identify if and where there is a need for any mitigation with regards to the historic environment.

### 2.3 Scoping

Due to the large number of level crossings and the varying nature of the proposed works, a scoping methodology has been devised to determine where there is the potential for an impact on the historic environment. The following Sections 2.3.1 to 2.3.5 outline the scoping methodology for each type of proposed infrastructure.

Using this method highlighted level crossing sites of concern where further investigation was required, resulting in the site being scoped in, whilst also identifying level crossings where the minimal nature of the proposed works suggest the impact will be negligible, resulting in the site being scoped out. The scoping methodology included consideration of designated heritage assets in the vicinity of the proposed works, including listed buildings, conservation areas and scheduled monuments, and the potential for new infrastructure to have either a physical or setting impact on these assets.

#### 2.3.1 Fencing and gates

It was concluded that the installation of all types of fencing or gates proposed in the Design Guide would have a negligible impact on the historic environment. The excavation required for the installation of the fencing is limited to small holes, and therefore it is unlikely significantly impact buried archaeological remains. Furthermore, the proposed locations of the fencing or gates mainly lie along the existing railways, footpaths or roads, and therefore are not anticipated to have a significant impact on the setting of any heritage assets. As a result, no sites will be scoped in for further assessment due to the proposed installation of fencing or gates alone.

#### 2.3.2 Surfaces

The construction of new surfaces to supply new pedestrian footpath and cycle routes is considered to have the potential to impact buried archaeological remains, as excavation would be required during installation. An assessment (Table 1) of the plans in the Design Guide for the proposed surface types was undertaken, to determine the likely impact of each surface

on buried archaeological remains. Those surfaces which required excavation of a depth with the potential to penetrate below the topsoil level and impact archaeological deposits were included as criteria for level crossings to be scoped in for further assessment.

**Table 1: Assessment of each new surface type; stating whether it should be included in the scoping criteria as there is the potential for an impact on archaeological remains.**

Type ID	Type	Inclusion in scoping criteria	Reasoning
P1	Unsurfaced footpath PROW	Out	The maximum depth of the surface is 100mm, which is not considered deep enough to penetrate beneath the topsoil layer and disturb buried archaeological remains. Therefore, the site should be scoped out.
P2	Unsurfaced bridleway PROW	Out	The maximum depth of the surface is 100mm, which is not considered deep enough to penetrate beneath the topsoil layer and disturb buried archaeological remains. Therefore, the site should be scoped out.
P3	Gravel/stone surface footpath PROW	In	The maximum depth of the surface is 330mm, which has the potential to disturb buried archaeological remains, and the site should be scoped in. However, if this surface is being applied to an existing path then it is likely that any archaeological remains would have been truncated. Therefore, the site should be scoped out.
P5	Tarmac planings surfaced cyclepath	In	The maximum depth of surface is 150mm, which is considered on the cusp of the base of the topsoil layer in some locations. Therefore, there is a small potential for archaeological remains to be disturbed and the site should be scoped in.
P6	Timber footpath boardwalk	Out	The path is constructed on top of the existing ground surface, and therefore is considered unlikely to disturb archaeological remains. Therefore, the site could be scoped out.
P7	Asphalt footway	In	The maximum depth of surface is 160mm, which is considered on the cusp of the base of the topsoil layer. Therefore, there is a small potential for archaeological remains to be disturbed and the site should be scoped in.
P8	Plannings footway	Out	This type of planning footway is within Network Rail or highways land and can therefore be scoped out.

Source: Mott MacDonald

Additional consideration was taken where a new footpath was being constructed through or within the vicinity of designated heritage assets, including listed buildings, conservation areas or scheduled monuments. If it was considered that the works could cause a negative physical and/or setting impact on the assets, then the site would be scoped in for further assessment.

### 2.3.3 Foot Bridges

The construction of all footbridge types proposed in the Design Guide are anticipated to have a negligible impact on the historic environment. The bridges are generally over minor watercourses and are small and lightweight excavation required for their installation if limited and shallow and unlikely to disturb archaeological remains. The location of proposed footbridges in relation to designated heritage assets has been considered to determine whether there is potential for a negative setting impact. If there is potential for a negative setting impact on designated heritage assets the site would be scoped in, however if no designated assets are located within the vicinity then the site will be scoped out due to the negligible archaeological impact.

### 2.3.4 Culverts

The construction of culverts is not anticipated to have any impact on the historic environment, as all works will take place in an existing watercourse ditches.

### 2.3.5 Steps

The construction of both types of steps proposed in the Design Guide require excavation and reach a depth that is considered a risk to archaeological deposits. However, all the steps proposed as part of the works are located on embankments constructed for highways or railways, and therefore will not impact any buried archaeology. As a result, no sites will be scoped in for further assessment due to the proposed installation of steps alone.

### 2.3.6 Signs and bollards

The construction of culverts is carried out by the installation of a pipe in an existing ditch and backfilling around the pipe. No groundworks are need and as such there is no impact on the historic environment due to the minimal nature of the works required for their installation.

## 2.4 Sites of potential impact

The full scoping assessment can be found in Appendix A, which documents a full list of level crossings included in the Essex and Others reduction strategy, a summary of the proposed works at each location, and the conclusion and reasoning for the scoping assessment.

**Table 2: List of the level crossing sites that have been scoped into the detailed assessment following the scoping criteria outlined in section 2.3.**

Unique ID	Name	Unique ID	Name
E05	Fullers End level crossing	E41	Paget level crossing
E26	Barbara Close level crossing	E54	Bures level crossing
E16	Maldon Road level crossing	E56	Abbotts level crossing
E28	Whipps Farmers level crossing	E57	Wivenhoe level crossing
E30 and E31	Ferry and Brickyard Farm level crossing	T04	Jefferies level crossing

The following actions were undertaken, where appropriate, to understand the historic environment baseline and inform the assessment of these sites:

- A search of the Essex Historic Environment Record (HER) database for archaeological sites, archaeological find spots, listed buildings, registered parks and gardens, scheduled ancient monuments, world heritage sites, archaeological priority areas, and archaeological event locations within a 1km study area around the proposed works;
- An examination of local authority conservation area appraisal documents and statements;
- Use of the online National Heritage List for England;
- An examination of relevant published and unpublished archaeological and historic sources;
- An examination of historic maps to determine previous land use; and,
- An examination of topographical and geological evidence.

## 3 Impact assessment

### 3.1 E05 – Fullers End level crossing

#### 3.1.1 Summary of proposed works

The existing PRoW over the level crossing is to be extinguished, the current level crossing infrastructure will be removed, and 1.8m high chain link fencing will be installed on both sides of the railway to prevent trespass. Users will be diverted to cross the railway at an existing underpass via existing routes and new Type P1 and Type P5 footpaths, which require excavations to a depth of 100mm and 150mm respectively. The proposed new Type 5 tarmac footpath will have directional, fold-down lighting columns and will lead users to the existing underpass that will have new lighting installed.

#### 3.1.2 Baseline

The HER includes a record of *Fullers End Crossing* (MEX16445), which covers the area surrounding the level crossing and overlapping with the red line boundary for the proposed works as well as an additional point outside of the red line boundary to the east. The record documents that there was “*supposedly*” an early 19<sup>th</sup> century railway station at this location known as Elsenham Station in 1843. The HER suggests an extant station building remains in the area, however the location of the building is unclear. The earliest historic OS map for the area dates to 1881, which shows Elsenham Station to be further north at its present location. However, online secondary sources<sup>4</sup>, including the local village website<sup>5</sup>, state that the original station was located at Fullers End but was moved due to the steep gradient of the line preventing trains from pulling away without the help of a second engine. Photographs taken during a site visit to Fullers End level crossing show no obvious signs of railway infrastructure of heritage value.

An area of previous archaeological investigation (MEX1049124) is located 110m west of the proposed works, known as the *Land south of Stanstead Road, Elsenham*. The archaeological evaluation comprised 40 evaluation trenches across which uncovered and identified two undated linear features, one medieval field boundary and two possible prehistoric pits. Although the finds suggest human activity in the area during the prehistoric and medieval period, the interpretation of the prehistoric pits were tentative and considering the scale of the works few features or additional finds are recorded in the HER.

Another area of previous archaeological excavation (EEX59063) took place approximately 110m north-east of the proposed works. The excavations uncovered a late Neolithic to early Bronze Age curvilinear feature, interpreted as a barrow, along with finds including a flint flake and pottery dating to this period (MEX1049435). An early medieval pit was also identified during excavation, and was subsequently interpreted to indicate a brief period of Saxon activity focused around the earlier barrow feature. A post-medieval farmstead building complex and strip field system were also uncovered during these excavations (MEX1049436).

Approximately 95-120m south-east of the proposed works on Tye Green Road, are three grade II listed buildings known as Broomfield Cottage (List entry number: 1112329), Spring Cottage

---

<sup>4</sup> BBC 2017

<sup>5</sup> Franklin 2017

(List entry number: 1171144) and White Cottage (List entry number: 1322534). Broomfield Cottage is a small 17<sup>th</sup>-18<sup>th</sup> century timber-framed and plastered house that has had a subsequent extension and later renovation in the 20<sup>th</sup> century<sup>6</sup>. Spring Cottage was constructed later, and is an 18<sup>th</sup> century timber-frames and plastid cottage, with a weather-boarded plinth<sup>7</sup>. White Cottage originally dated to the 17<sup>th</sup>-18<sup>th</sup> century and is also a timber-framed and plastered cottage, however it has undergone substantial alteration and renovation which has altered the external appearance of the property<sup>8</sup>. further series of four grade II listed buildings are located approximately 140-150m north of the proposed works, along the east of Robin Hood Road. These include the 18<sup>th</sup>-19<sup>th</sup> century timber-framed and plastered Robin Hood Public House (List entry number: 1171219) and 17<sup>th</sup>-19<sup>th</sup> century Wells Cottages (List entry numbers: 1112342, 1171224, 1322497).

### 3.1.3 Potential impacts

Following an assessment of the available historic environment record, it is considered that there is low archaeological potential within the red line boundary for the proposed works. The record of the supposed location of the former Elsenham Station and extant building overlaps with the red line boundary of the proposed works. However, the record is speculative and even if remains were present they would be probably be fairly substantial and, as such given the nature of the proposed works it is unlikely that there will be any damage to any associated remains.

Former archaeological evaluations and excavations within 150m of the proposed works suggest that the area contains evidence of post-medieval agricultural activity, including the remains of field systems and boundaries, and that there is potential for similar archaeological features to be located within the red line boundary. In addition, there is also potential for archaeological finds associated with the prehistoric and Saxon periods, as sporadic finds dating to these periods have previously been identified in the vicinity of the proposed works, although not in the evaluation works. The proposed route of the Type P5 footpath runs along the western side of the railway within a deeply ploughed field, and the depth of topsoil is likely to be at least double the 150mm excavation depth for the new path, and the potential for impacts to archaeological remains is low.

The grade II listed Robin Hood Public House and Wells Cottages are considered too far from the proposed works, and screened by other properties and trees, to be impacted by the proposed works. Furthermore, it is not anticipated that there will be any impact on the setting of the grade II listed Broomfield, Spring and White Cottages located south-east of the proposed works. The proposed works are minor and are located adjacent to the existing railway that has already altered the original setting of the properties. Additionally, the properties are screened from the proposed works by an area of land set aside for housing development, and therefore it is unlikely that the works will impact the setting of these assets.

### 3.1.4 Recommendations

Due to the low archaeological potential and no impact being anticipated for built heritage assets in the vicinity, it is recommended that no further archaeological or built heritage mitigation is required.

---

<sup>6</sup> Historic England 2017a

<sup>7</sup> Historic England 2017f

<sup>8</sup> Historic England 2017g

## 3.2 E16 – Maldon Road level crossing

### 3.2.1 Summary of proposed works

The existing PRoW over the level crossing will be extinguished, the existing level crossing infrastructure will be removed and 1.8m high chain link fencing will be installed on both sides of the railway. Users will be diverted along both existing footpaths and a proposed new Type P2 bridleway will be installed to cross beneath the railway. The unsurfaced bridleway will be 3m wide and will require excavations of up to 100mm in depth for installation. It will also be fenced on one side with Type F1 1.35m high concrete post and wire fencing. There is no potential for archaeological disturbance due to the minor nature of the proposed works, however the works lie in close proximity to a grade II listed building and therefore has been scoped in for further assessment.

### 3.2.2 Baseline

The grade II listed Whitebridge Cottages (List entry number: 1338506)<sup>9</sup> are located approximately 30m east of an area of Type P2 footpath construction and Type F1 fencing. The Whitebridge Cottages are located on the south side of Maldon Road, facing north onto the road and being surrounded by fields to the west and south, with a footpath to the east. The cottages were constructed in the late 18<sup>th</sup> to early 19<sup>th</sup> century and are timber-framed and plastered houses that were formerly known as The Barracks, potentially used as officers' quarters in the Napoleonic Wars.

### 3.2.3 Potential impacts

It was considered that there is potential for the construction of the new Type P2 footpath and PRoW and the installation of the Type F1 fencing to have a negative impact on the setting of this listed building. The impact of the new footpath and fencing on the setting of the asset is likely to be negligible considering that the building is already bordered to the east by an existing PRoW and high vegetation surrounding the property will screen the 1.35m high fencing and footpath from the property.

### 3.2.4 Recommendations

Due to the minimal nature of the works, no further mitigation is recommended with regards to the built heritage assets in close proximity to the proposed works.

## 3.3 E26 – Barbara Close level crossing

### 3.3.1 Summary of proposed works

The existing PRoW over the level crossing will be extinguished, and users will be diverted along an existing footpath and BOAT to an existing underpass where users can cross the railway. A new Type P7 asphalt footway will be installed inside the underpass, which will require excavations of up to 160mm in depth for installation. The existing PRoW in Barbara Close will be extinguished, however access will be maintained for private landowners via a gate within a 1.8m high close boarded timber fence at the entrance to Barbara Close. A 1.8m high chain link fence and NR pedestrian access gate will also be installed on the west side of the railway.

---

<sup>9</sup> Historic England 2017h

### 3.3.2 Baseline

No designated heritage assets or historic environment records overlap with the red line boundary for the proposed works. Approximately 75m west of the proposed work is the location of a previous archaeological evaluation (MEX1042224) that consisted of 117 trenches across a 22.6-hectare area, and a strip, map and record investigation of 1.382-hectares. The archaeological investigations uncovered three distinct phases of activity: early Neolithic, middle to late Bronze Age and medieval. Prehistoric pits and postholes were identified during the evaluation and prehistoric pottery was found across the whole site suggesting there was no central focus during this stage of human activity. A middle to late Bronze Age field system, and evidence for paddocks or defined arable fields, was identified. In addition, finds of charcoal, fired clay, animal bone, fire-cracked flint and pottery was recovered, and middle Iron Age pottery was recovered in the central area of the site. Interpretations of the site have included that either it was the site of temporary occupation by herdsmen or a permanent farmstead. Remains of an enclosed medieval farmstead on Ironwell Lane was recorded during the strip, map and record investigation, which dated to the 11-13<sup>th</sup> century. To the north of this area of archaeological investigation, is a further site of 17<sup>th</sup> century cottages and possible medieval occupation. Evidence for this is present as below ground deposits and lies approximately 375m west of the proposed works.

A watching brief was carried out for the Oakwood/Stevens Farm link mains reinforcement and published in 1993. The route begins 75m west of the proposed works and runs north-east to south-west through the area recorded as MEX1042224. Only one, undatable, archaeological feature was identified during the work (MEX1035935): a narrow (0.6m wide) and shallow (0.10m deep) gully running east to west across the route approximately 950m south-west of the proposed works. There were no archaeological finds and very little pottery or tile in topsoil, suggesting that the land was not cultivated until recently.

Approximately 85m east of the proposed works is the location of the post-medieval to modern Rochford Union Workhouse (MEX1035087) and subsequent modern Rochford Hospital (MEX1034568). The workhouse was constructed in 1837, with later additions including an infirmary, chapel and parallel ward blocks, of which only the chapel and central administration block survive. Other 20<sup>th</sup> century buildings were added as part of the Hospital Extension Scheme between 1938 and 1941, many of which are now form the grade II listed buildings within the hospital (Listed entry numbers: 1227532, 1328839, 1227588, 1112593). The HER documents that the site has slight archaeological potential, as many of the original buildings have been demolished.

The Rochford Conservation Area<sup>10</sup> is located approximately 150m south of the red line boundary for the proposed works, and encompasses the main settlement of Rochford. Rochford and the surrounding area contains evidence of occupation since the prehistoric period, with subsequent evidence of Roman and Saxon settlement within the town. It was first recorded in Domesday Book, and the Domesday manor is speculated to have been located on the site of Rochford Hall built in 1540-50, the uninhabited portion of which is designated a scheduled monument (SMR number: 13591) approximately 430m south of the proposed works. The town prospered in the 18<sup>th</sup>-19<sup>th</sup> century, and buildings from this period form 80% of the listed buildings within the conservation area.

---

<sup>10</sup> Rochford District Council 2007

### 3.3.3 Potential impacts

Following an assessment of the available historic environment record, it is considered that there is a medium archaeological potential within the study area. The large scale archaeological evaluation and strip, map and record approximately 75m to the west of the proposed works uncovered a range of finds and features dating between the prehistoric and medieval periods, suggesting that further similar deposits could be located in the wider area. However, it is considered unlikely that the proposed works will have an impact on buried archaeological remains as the Type P7 footpath, that was considered as having the potential to penetrate beneath the topsoil layer, would be installed along an existing PRow within an existing underbridge. It is therefore likely that archaeological deposits at this location were truncated during the construction of the railway and underbridge, and that the archaeological potential within the red line boundary is low.

The Rochford Conservation Area, scheduled monument, and listed buildings within the former Rochford Union Workhouse and subsequent Rochford Hospital are considered too far from the proposed works, and screened by other buildings and development, to be impacted by the proposed works.

### 3.3.4 Recommendations

Due to the likelihood that archaeological remains would have been truncated at the proposed location for the Type P7 footpath, and no impact being anticipated for built heritage assets in the vicinity, it is recommended that no further archaeological or built heritage mitigation is required.

## 3.4 E28 – Whipps Farmers level crossing

### 3.4.1 Summary of proposed works

The existing PRow and private accommodation rights over the level crossing will be extinguished, the level crossing infrastructure will be removed, and 1.35m high strained wire fence with stock proof fencing will be installed to prevent trespass on the railway. Users will be diverted via a series of new Type P1 surface footpaths, a new pedestrian road crossing and existing bridleway to use Puddle Dock level crossing 250m west of Whipps Farm level crossing. To enable the extinguishment of the accommodation rights, a 3.5m wide crushed concrete access track (categorised as Type P5) will be installed from St Marys Lane to provide private land access. The Type P1 footpath requires excavations of up to 100mm in depth for installation, however the Type P5 access track will require slightly deeper excavations of up to 150mm.

### 3.4.2 Baseline

There are no designated heritage assets within the red line boundary for the proposed works. However, archaeological field walking was undertaken along the route of the Epping-Horndon Gas Pipeline which overlaps with the western portion of the works at the location of a proposed Type P1 footpath. A number of isolated finds of undated pottery and flint were recovered along the route, however the majority of these were not considered significant archaeological deposits and little detail is given in the HER. Significant finds were recorded individually, however none are present within the study area.

The M25 runs north-south at the westernmost end of the red line boundary for the proposed works, and previous works associated with the M25 have recovered archaeological deposits. These included a post-medieval boundary ditch, six small fragments of ceramic building material, a modern post-hole, a single struck flint and other natural features in an area

(MEX1049367) 5m north of the westernmost point of the red line boundary. In addition, on the western side of the M25 approximately 110m from the proposed works, further archaeological investigations (MEX1049366) identified a pit alignment containing fragments of Bronze Age or Early Iron Age pottery are thought to form a prehistoric boundary. These archaeological investigations also uncovered a cremation burial in poor condition to the east of the pit alignment, medieval to post-medieval ridge and furrow, and post-medieval field boundaries.

On the west side of the M25 is Warley Franks Manor (MEX1032840), approximately 120m from the proposed works, which dates to the early medieval to medieval period. The present building at the site of the manor is Franks Farmhouse, which is a grade II listed building of 15<sup>th</sup> century origin, with subsequent additions up to 19<sup>th</sup> century in date (List entry number: 1079879).

Approximately 320m north of the red line boundary for the proposed works, is a possible Domesday settlement at Great Warley (MEX1032841). The location of this late Saxon settlement is uncertain, however based on comparison with other similar sites it is believed that the settlement would focus around the main church or hall at Great Warley Hall. Records of the settlement state a total of 20 households were attached to Great Warley manor, which may have included isolated farms further afield.

Historic OS maps dating between 1872 and 1946 suggest that prior to the construction of a factory shown at the location of the Upminster trading park on the 1946 OS map, the area within and immediately adjacent to the red line boundary for the proposed works was undeveloped agricultural land. The 1798 East Tilbury and 1799 Purfleet maps illustrate how many of the field boundaries within the study area have remained the same since the post-medieval period, including that where the proposed Type P5 3.5m wide trackway is to be installed.

### 3.4.3 Potential impacts

The assessment of the historic environment record has shown that no previous archaeological investigation has taken place towards the eastern end of the proposed works, where the proposed Type P5 trackway would be installed, resulting in the archaeological potential here being largely unknown. However, historic mapping suggests that prior to the mid-20<sup>th</sup> century the land within and immediately adjacent to the red line boundary for the proposed works remained undeveloped. Additionally, the field boundary and adjacent fields where the proposed Type P5 surface would be installed, has been present on historic maps since at least 1799. The HER data gives an indication of some prehistoric activity and early medieval to post-medieval settlement and agricultural activities within the wider study area, suggesting there is a limited potential for further associated archaeological deposits within the study area.

The installation of the 3.5m wide Type P5 crushed concrete access track within an existing field boundary has the potential to penetrate beneath the topsoil layer and disturb the top of the buried field boundary. The field boundary contains dense vegetation around an existing PRow and has remained undeveloped and apparently undisturbed by the ploughing of adjacent fields. Therefore, should remains of the 18<sup>th</sup> century field boundary be present, there is a high chance of good preservation.

The designated heritage assets within the study area are considered either too far from the proposed works or screened from the works by the M25, to be impacted.

### 3.4.4 Recommendations

It has been concluded that there is low potential for archaeological deposits associated with medieval to post-medieval agricultural activity and the prehistoric period across the study area. The proposed new footpath is located over an 18<sup>th</sup> century field boundary, a heritage asset of

low value. The proposed works are minor in scale, and if present, the remains of a field boundary are likely to be substantial and will suffer limited damage from the works. As such it is recommended that no further archaeological mitigation is necessary, although this will require confirmation from the local authority planning archaeologist before any excavation works take place. No further built heritage mitigation is recommended as all designated heritage assets are too far from the proposed works to be impacted.

### 3.5 E30 – Ferry level crossing and E31 – Brickyard level crossing

#### 3.5.1 Summary of proposed works

The existing PRoW over both level crossings will be extinguished, the level crossing infrastructure will be removed, and a 1.8m high chain link fencing will be installed along the railway to prevent trespass. Users will be diverted from both level crossings via either or both of an existing footpath and footway along the B1014 Ferry Road, to an existing underpass to cross the railway. On the north side users will be diverted via a new Type P5 asphalt footway with 2m high palisade fencing on the south side and a 1.3m high wood post and rail fence on the car park side. The new footpath then extends into a Type P1 footpath once past the car park. The Type P1 footpath requires excavations of up to 100mm for installation, however the Type P5 surface requires slightly deeper excavations of up to 150mm.

#### 3.5.2 Baseline

The red line boundary for the proposed development site is located along the north bank of East Haven Creek before it flows into the Hadleigh Ray estuary. There is evidence of successive operations to raise the level of the ground surface though to probably be in response to the flooding of the surrounding waterways (MEX10381). Evidence of flooding has been revealed during previous archaeological investigations across Benfleet, as many sites record finding a layer of alluvium, or silty and estuarine clays (MEX1039713, MEX1039714, MEX1040147, MEX23652). The dates of these deposits are unknown and may be relatively recent, however, at a number of sites it was recorded that archaeological features and artefacts dating to the Roman, medieval and post-medieval periods were found within or placed on top of the alluvial layer. Furthermore, a borehole log<sup>11</sup> taken within approximately 50m of the red line boundary for the proposed works, indicates that layers of peaty clay and pockets of organic material are present in the soil layers. There is potential that these deposits could contain paleoenvironmental remains of archaeological interest.

A series of earthworks (MEX23597) have been recorded approximately 40m north of the red line boundary for the proposed works. However, these are undated and appear irregular in fashion, and therefore have been interpreted as the likely result of a landslip rather than an archaeological feature, perhaps another natural feature resulting from flooding and saturated ground.

Evidence of Saxon activity is recorded in the HER. The Anglo-Saxon Chronicle records a Danish Camp at Benfleet in 894, belonging to Hastes (also known as Hestein or Hasten), which is believed to be located approximately 70m north-west of the western end of the proposed works. The surmised location of the South Benfleet Danish Camp lies within the churchyard and surrounding land and is supported by early medieval earthworks present at this location (MEX23266). Furthermore, a record of conjectural evidence for the site of a battlefield, in which King Alfred's army captured the camp in the Battle of Benfleet<sup>12</sup>, human remains and the wrecks

---

<sup>11</sup> Essex River Authority Thames Tidal Defences 1976

<sup>12</sup> Essex County Council 2017

of vessels (MEX23503) overlaps with the western end of the red line boundary for the proposed works. It is recorded that in 1885 workmen reported finding the remains of charred ships and multiple human skeletons during the construction of the railway bridge. This is documented by Spurrell<sup>13</sup> who wrote *“I have carefully examined the whole country side; there is no other spot suitable to the need of the Danes or which shews even the semblance of earthworks. The valiant Londoners destroyed all Hasten’s work and so we find no remains. Of his fleet, the sunken ships remain in the fleet close to the camp to this day, for during the construction of the railway bridge there, some thirty odd years ago, the navvies came upon the ships, many of which were charred, and in and about them lay great quantities of human skeletons.”* However, it is highlighted in the HER that this evidence is both uncertain and conjectural, and no physical evidence for human remains or wreck is recorded.

Approximately 50m south of the proposed works a Roman Samian bowl or platter (MEX23258) and Roman bronze stylus (MEX23506) were recovered. However, it is noted that the location of the Samian bowl may not be accurate. Further evidence of Roman activity has been found across Benfleet, including a spring associated with large tiles that has been interpreted as a well (MEX23258), building materials and pottery (MEX1039714, MEX1039713), Roman rubble filled pits (MEX1038567), and evidence of reused building materials within the Church of St Mary (MEX23271, MEX23274, MEX23277), all of which lie between 30-300m north of the red line boundary for the proposed works.

There is also substantial evidence for medieval to post-medieval activity within 300m of the proposed works. This includes 10<sup>th</sup>-11<sup>th</sup> and 15<sup>th</sup>-16<sup>th</sup> century evidence for back yard activity (MEX1038568), a 15<sup>th</sup>-16<sup>th</sup> century area of hard standing to aid beaching boats, with a ditch or channel of a similar date and a 17<sup>th</sup> century metalled roadway (MEX10381), timber remains of a 15<sup>th</sup>-16<sup>th</sup> century mooring station (MEX1039713), former buildings (MEX23652), and a linear ditch feature forming a medieval boundary marker (MEX39444, MEX39445).

The South Benfleet Conservation Area overlaps with the westernmost end of the red line boundary for the proposed works by approximately 50m. The conservation area encompasses a mix of residential and commercial buildings, including the main High Street and the Church of St Mary. One grade I, one grade II\* and eleven grade II listed buildings are also included in the conservation area. Ferry Road and the railway are noted as busy transport links that have a *“significant visual impact on the southern part of the conservation area”*<sup>14</sup>.

### 3.5.3 Potential impacts

The previous archaeological investigations within the study area suggest that there is medium potential for archaeological remains associated with the Roman, Saxon, medieval and post-medieval periods and palaeoenvironmental deposits of archaeological interest across the wider study area, although the majority of these archaeological investigations have taken place to the north of the western end of the red line boundary. The proposed works involve the installation of a 1.5m Type P7 footpath that is considered to have the potential to penetrate the topsoil layer and disturb buried archaeological remains. However, the new footpath is to be installed along the strip of land between the railway and the adjacent carpark, with parking spaces requiring adjustment to fit the new footpath. Therefore, it is not anticipated that the installation of the Type P7 footpath will impact any palaeoenvironmental or archaeological remains, as the required excavation will be within made ground produced during the construction of the railway and car park that would have truncated any previously existing archaeological deposits.

---

<sup>13</sup> Spurrell 1885

<sup>14</sup> Essex County Council 2017

The listed buildings within the study area are considered too far from the proposed works to be impacted. A section of the proposed new Type P7 footpath and fencing at the western end of the red line boundary will be constructed partially within the South Benfleet Conservation Area, however, it is not considered that the footpath will have an impact on the setting of the conservation area and it will not significantly alter the current views as it will lie between the existing railway and carpark, that already contains fencing.

### 3.5.4 Recommendations

Due to the likelihood that archaeological remains would have been truncated at the proposed location for the Type P7 footpath, and no impact being anticipated for built heritage assets in the vicinity, it is recommended that no further archaeological or built heritage mitigation is required.

## 3.6 E41 – Paget level crossing

### 3.6.1 Summary of proposed works

The existing PRoW over the level crossing will be extinguished, existing level crossing infrastructure will be removed, 1.8m high chain link fencing will be installed along the south side of the railway, and 2m high steel palisade fencing will be installed on the north side to prevent trespass. On the south side of the railway, users will be diverted via the existing Paget Road, Anglesea Road and Queens Road. Queens Road will have a new handrail in steep areas and will be reprofiled to create a flatter area for a bench. Users will cross the railway at an existing road bridge. On the north side of the railway, users will be diverted via a new Type P3 surface footpath and new wooden footbridge over an existing water course. The new Type P3 footpath will require excavations of up to 330mm for installation, and will be fenced off with 2m high steel palisade fencing. Widening of the footway on High Street over the road bridge is also proposed.

### 3.6.2 Baseline

The red line boundary for the proposed works lies within the small port town of Wivenhoe, on the north bank of the River Colne. The Wivenhoe Conservation Area<sup>15</sup> encompasses most of the southern portion of the town and waterfront, including the red line boundary for the proposed works. Wivenhoe has Saxon origins, and the conservation area is characterised by its earlier medieval core and later 19<sup>th</sup> century development. There are a large number of listed buildings within the conservation area, particularly in the area along The Avenue and in the area south of the railway line. There are a number of listed buildings in the immediate vicinity of the western end of the red line boundary for the proposed works, the majority of which date to the 19<sup>th</sup> century and form part of the Victorian landscape of Wivenhoe, although some have earlier 18<sup>th</sup> century origins. These include Nos.37, 38, 41, 51, 53, 55, 55a, 56 and 57 High Street (List entry numbers: 1266403, 1225316 and 1225322), Little Wick (List entry number: 1225320), The Old Manse (List entry number: 1225321), No.64 High Street and No.2 Queens Road (List entry number: 1225340), The Greyhouse Public House (List entry number: 1225324). However, 58 High Street (List entry number: 1225323) is dated to the 16<sup>th</sup> century or earlier, forming part of the earlier medieval landscape within Wivenhoe.

No archaeological investigations are recorded to have taken place in the town of Wivenhoe, other than a watching brief in 1991 at the site of the Congregational Church (MEX43156) that took place following a report of a 2.5m deep pit containing high levels of oyster shell. The conservation area appraisal states that all medieval and post-medieval areas of Wivenhoe are of archaeological interest, especially those near the river where remnants of the medieval wharf

---

<sup>15</sup> Colchester Council 2007

or water-logged deposits may survive. The HER data for the area surrounding the red line boundary for the proposed works, largely consists of designated and undesignated built heritage assets and former structures, including the Phillip Road Elementary School (MEX1038914) approximately 5m north of the red line boundary for the proposed works, that is considered to be of local interest and value in the wider Victorian landscape. Further recorded heritage assets and features include the grade II\* listed St Marys Church (MEX8918) that contains Roman brick fabric in the structure (MEX8919), 19<sup>th</sup> century gas works (MEX1035251), the locations of former anti-tank cubes (MEX1038698-9), a post-medieval windmill (MEX8290), Wivenhoe Hall that was formerly the medieval great hall (MEX1034589), the location of the medieval market place (MEX1034587) and the medieval to post-medieval Quay (MEX1034588) that forms the southern boundary of the town.

### 3.6.3 Potential impacts

Although the proposed works lie within the Wivenhoe Conservation Area and in close proximity to a number of listed buildings, the works are minor and mainly consist of altering existing footpaths and roads. Therefore, it is not considered that the installation of the new private Network Rail road along the alignment of the current Phillip Road, or the installation of the railing and reprofiling of the paved area between Queens Road and Anglesea Road will have a significant impact on the setting of the conservation area or listed buildings in the vicinity. There is potential for a minor temporary setting impact on the conservation during the reprofiling along Queens Road and Anglesea Road, but this is considered negligible.

An assessment of the historic environment record has shown that there has been a lack of archaeological investigations within Wivenhoe, and therefore the archaeological potential of the area is largely unknown. However, built heritage and documentary evidence suggests occupation since the Saxon period and the conservation area appraisal states that there is potential for archaeological deposits within the medieval to post-medieval areas of the town. The installation of the Type P3 and Type P7 surfaces have the potential to penetrate the topsoil and disturb archaeological remains. The new Type P3 footpath has a depth of 330mm which has the potential to penetrate the topsoil layer and disturb buried archaeological remains. However, the new footpath is located adjacent to the railway in the railway cutting. The potential for the survival of archaeological remains at this location is considered low due to the disturbance caused by railway cutting which is likely to have removed any remains. In addition, the reprofiling works and installation of the Type P7 surface between Queens Road and Anglesea Road is unlikely to disturb buried archaeological remains as the area has previously been developed and any archaeology is likely to have been truncated.

### 3.6.4 Recommendations

Due to the minor nature of the proposed works it is not considered that there will be a significant impact on the setting of the Wivenhoe Conservation Area and listed buildings in the vicinity. Additionally, it is not anticipated that archaeological remains will be disturbed by the works. Therefore, no further archaeological or built heritage mitigation is recommended.

## 3.7 E54 – Bures level crossing

### 3.7.1 Summary of proposed works

The existing PRoW over the level crossing will be extinguished, existing level crossing infrastructure will be removed, and existing fencing on the west side of the railway will be removed and replaced with 1.8m high chain link fencing either side of the railway. Users will be diverted via a series of existing carriageways and footways, a new Type P7 asphalt footway,

and a new crossing point on Station Hill. The proposed Type P7 surface will require excavations of up to 160mm in depth for installation. Users will cross the railway at an existing underbridge on Station Hill.

### 3.7.2 Baseline

The red line boundary for the proposed works lies within the village of Bures, which straddles the Essex to Suffolk border. Bures Hamlet is the civil parish located in Essex, and the proposed works lie within the Bures Hamlet Conservation Area<sup>16</sup>, although the Conservation Area Appraisal is unavailable. There are a number of grade II listed buildings within the conservation area and in the vicinity of the proposed works. Approximately 30m south-east are 16 and 18 (List entry ID: 1122846), and 20 and 22 (List entry ID: 1166227) Station Hill. These properties form a single building that originated in the later medieval period 14<sup>th</sup>-15<sup>th</sup> century, before being altered in the 17<sup>th</sup>-18<sup>th</sup> century. The 19<sup>th</sup> century White House (List entry number: 1122847) and its accompanying wall (List entry number: 1166247) are located approximately 70m north to north-east, and The Railway Maltings (List entry number: 1166247) is located approximately 30m east of the proposed works.

The HER data includes a cluster of Portable Antiquities Scheme findspots between 55-600m north of the red line boundary for the proposed works, however the main cluster lies within a ploughed field to the north of Water Lane, approximately 140-270m north. The majority of the finds date from the medieval to post-medieval period, and include a range of artefacts: a copper alloy brooch, a scabbard, strap end, coins and tokens, vessels, buckles, copper alloy and enamel mounts, a dress hook and a spoon, as well as many other unidentified objects. A number of flint flakes and blades that have been dated to the early Mesolithic to late Neolithic periods were also recorded, along with several vessels dating across the late Iron Age, Roman and early medieval periods.

The same field, above Water Lane, is also noted to contain cropmarks of two undated parallel linear features about 20m (MEX41060), which run perpendicular to the modern field boundaries. Cropmarks are recorded across the 1km study area around the proposed works, indicating features such as D-shaped enclosures, ring ditches, circular enclosures and linear features (MEX29190, MEX29454, MEX30142), however all of these are undated. Approximately 800m north-west of the proposed works, a circular cropmark at Ferriers Farm has been designated a scheduled monument (List entry number: 1010501)<sup>17</sup> and added to the Heritage at Risk register due to its vulnerability to ploughing<sup>18</sup>.

An archaeological evaluation was undertaken approximately immediately adjacent to Bures level crossing on the western side of the railway near Windy Ridge. A total of five evaluation trenches were explored, uncovering four undated ditches and a single post-medieval ditch.

The HER also records the former location of a 19<sup>th</sup> century brickworks (MEX1035310) approximately 130m north-west of the proposed works, a 19<sup>th</sup> century gas works (MEX1035219) approximately 65m south-east of the proposed works, and 19<sup>th</sup> century The Railway Maltings (MEX29386) approximately 20m west of the proposed works, that was converted to housing in 1984.

There is documentary evidence for former World War II (WWII) defensive infrastructure within the village, including road barriers (MEX1034871, MEX1034865), spigot mortar emplacements (MEX1034873, MEX1034863, MEX1034866) and concrete anti-tank 'pimples' (MEX1034864).

---

<sup>16</sup> Braintree District Council 2017

<sup>17</sup> Historic England 2017b

<sup>18</sup> Historic England 2017c

These features were located on Station Hill approximately 95m east of the proposed works, and along the B1508 between 150-180m south-east of the proposed works.

### 3.7.3 Potential impacts

Following an assessment of the available historic environment record, it is considered that there is medium archaeological potential within the study area. The HER indicates that there has been human activity in and around Bures since the prehistoric period, with findspots indicating activity since the Mesolithic through to the post-medieval period. The proposed Type P7 footpath is considered to reach a depth that could penetrate the topsoil and disturb buried archaeological remains. However, in this instance the proposed footpath is to be created in an existing underbridge where the previous construction of the bridge, railway and road would have likely truncated archaeological deposits. Therefore, it is concluded that the potential for impact to buried archaeological remains is low.

The red line boundary for the proposed works lies within the Bures Conservation Area, however it is considered that there will be a negligible impact on the setting of the conservation area due to the minor nature of the works and their location beneath the railway on an existing road beneath the underbridge. Additionally, most of the listed buildings are screened from the proposed minor works by the railway, trees and other properties, and therefore it is unlikely that the works will impact the setting of these assets.

### 3.7.4 Recommendations

Due to the minor nature and location of the proposed work it is not considered that there will be a significant impact on the setting of the Bures Hamlet Conservation Area and listed buildings in the vicinity. Additionally, it is not anticipated that archaeological remains will be disturbed by the works. Therefore, no further archaeological or built heritage mitigation is recommended.

## 3.8 E56 – Abbots level crossing

### 3.8.1 Summary of proposed works

The existing PRoW over the level crossing will be extinguished, existing level crossing infrastructure will be removed, and 1.35m high post and wire stock proof fencing will be installed along the railway. Users will be diverted along a series of existing footways and new Type P1 footpath. Although the Design Guide states that the installation of Type P1 footpaths may require excavation of up to 100mm in depth, it has been confirmed that no intrusive works or ground disturbance will take place in this instance. Users will be able to cross the railway at either Ardleigh Road level crossing or at an existing road bridge depending on the route taken. New signs will be required however these lie within a scheduled monument and therefore will be erected on existing features to remove the need for ground disturbance.

### 3.8.2 Baseline

A scheduled monument known as the Cropmark site south of Ardleigh (List entry number: 1002146) overlaps with the southern portion of the red line boundary of the proposed works. These cropmarks are considered valuable and delicate, and as such they are listed on the Heritage at Risk Register due to the risk of arable ploughing<sup>19</sup>. Details are not given about the cropmarks as this monument record was generated from an 'Old County Number' which were not reviewed under the Monuments Protection Programme. These scheduled monuments are

---

<sup>19</sup> Historic England 2017e

some of the oldest designations and therefore the modern counterparts do not yet have full descriptions on the Historic England National Heritage List<sup>20</sup>. However, the HER data records a larger area of cropmarks (MEX12738) that encompasses the scheduled monument and describes a series of cropmarks including a ditch, field system, pit, and trackway. The cropmarks are recorded as undated in the HER, however it is stated that some have been dated to the prehistoric period. Further findspots and records in the HER suggest that this area dates to the Bronze Age to Iron Age period, with occupation debris suggesting the cropmarks indicate house plots rather than agricultural activity (MEX12697). Some Roman pottery sherds were also evident in plough scatter at this location, suggesting occupation into this period (MEX12717).

The HER also records a further area of cropmarks (MEX8700) overlapping with the red line boundary for the proposed works on the western side of the railway, which show evidence for a linear feature, ring ditches, pit and trackway. Three ring ditches were identified and the central one was excavated and dated to the early Bronze Age, however no trace of the others was found. Further cropmarks indicating former trackways, enclosures, pits, linear features and field boundaries are located across the 1km study area, most of which are recorded as undated, although some are thought to date to the prehistoric period.

Approximately 40m south of the proposed works, a cropmark indicating a ring ditch was excavated in 1979-1980 and yielded evidence of a barrow and a single primary cremation without an urn or grave goods (MEX12169). Radiocarbon dating indicated that the feature and cremation dated to the early Bronze Age. During these excavations, a further six 4<sup>th</sup> century inhumations (MEX12160) was discovered in the area around an early Bronze Age barrow during excavations in 1979. The burials were accompanied by beads, brooches, bracelets, and iron work associated with coffins. Two further cremation burials were found during excavations approximately 110m south of the proposed works in the grounds of Elm Park, and within the scheduled monument. One (MEX1035874) was an unurned cremation burial of possible prehistoric date and the other (MEX12180) was dated more specifically to the Iron Age. Further evidence of prehistoric activity was located across the site at Elm Park, including further calcined bone, struck flint and pottery, along with some Roman features, pottery and coins.

A number of findspots have been recorded across the study area indicating multiphase human activity and occupation. The most notable of these in the vicinity of the proposed works include three Palaeolithic hand-axes (MEX8935, MEX9000), a Roman to early medieval pin (MEX1047973), a post-medieval coin (MEX1046867), a post-medieval token (MEX1046317), an area of dense prehistoric Belgic pottery (MEX12705, MEX12697).

There are a number of listed buildings in Ardleigh, the main cluster of these lie along Colchester Road and Dedham Road over 175m from the proposed works, including the grade II\* listed Church of St Mary (List entry number: 1112060, MEX8440). Closer to the proposed works, the 19<sup>th</sup> century New Hall (list entry number: 1112056) is a grade II listed building located approximately 90m south-west and lies within large gardens. The 19<sup>th</sup> century Phoenix Steam Mill and Engine House (List entry number: 1322634, MEX1009961) and Mill House (List entry number; 1322634) is located approximately 185m south-west of the proposed works. In addition, the Ardleigh Conservation Area encompasses most of the settlement and lies immediately adjacent with the westernmost point of the red line boundary for the proposed works.

---

<sup>20</sup> Historic England 2017d

### 3.8.3 Potential impacts

There archaeological potential within the study area is considered high. Recorded cropmarks and findspots covered a substantial amount of the study area, indicating multiphased human activity and occupation within the area, particularly during the prehistoric and Roman periods. Additionally, a large area overlapping with the red line boundary for the proposed works has been designated a scheduled monument and placed on the Heritage at Risk Register, highlighting the value of the archaeological deposits in this area.

The proposed works includes the introduction of a new PRow through the scheduled monument, however it has been confirmed that no intrusive works or ground disturbance will take place. Therefore, there will be no impact on buried archaeological remains. Additionally, the design guide has already considered the scheduled monument with regards to new signage, and therefore it is not considered that this will have an impact.

It is not anticipated that there will be any impact on the setting of the Ardleigh Conservation Area, due to the minor nature of the proposed work. Furthermore, the listed buildings in the vicinity are all screened from the proposed works by trees and other properties, and therefore will not be impacted.

### 3.8.4 Recommendations

Previous consultation with the Inspector of Ancient Monuments at Historic England has confirmed that Scheduled Monument Consent will not be required, as no physical works are proposed. No further mitigation is recommended with regards to built heritage assets or buried archaeological remains as it is not anticipated that these will be impacted by the proposed works.

## 3.9 E57 – Wivenhoe Park level crossing

### 3.9.1 Summary of proposed works

Private vehicular rights of way over the level crossing will be extinguished and the associated level crossing infrastructure will be removed. However, the existing PRow will remain for foot users and a cycle friendly Type P5 path and gates will be installed. The proposed new Type P5 surface will require excavations of up to 150mm in depth for installation. Private vehicles will be diverted via existing public roads.

### 3.9.2 Baseline

The HER depicts an area of earthworks (MEX8402) immediately adjacent to the to the east of the red line boundary for the proposed works. These earthworks were identified as cropmarks and subsequently excavated, revealing at least four ring ditches, two of which are concentric. Excavations revealed that one of these low-lying barrow features was man-made, however the excavated material suggests an ambiguous date. However, comparison with the other three ring ditches and mounds suggest a Bronze Age barrow date, with subsequent secondary use from the Iron Age, Roman and later periods. This HER area overlaps within another area to the east (MEX1037685) which contains further archaeological features dating from the prehistoric to Roman periods. These include a number of late Iron Age and Roman ditches and postholes, and residual Bronze Age pottery and Neolithic worked flint. Located to the south of these features, approximately 110m east of the proposed works, another set of undated cropmarks are recorded (MEX8414).

A linear ditch feature (MEX1037988) running south-west to north-east across the study area, crosses the red line boundary of the proposed works. The feature was marked on a pencil copy of the National Mapping Programme for the area, but was not plotted in ink. It has been loosely interpreted as a potential WWII anti-tank ditch or military feature, however there does not seem to be any associated pillboxes.

The westernmost end of the red line boundary for the proposed works overlaps with the location of the former 20<sup>th</sup> century Colchester brick works known as The Molar Works (MEX1037148), which were originally erected in 1919 and closed in the 1970s. Documentary evidence supports that 205m west of the proposed works is the location of The Hythe Maltings (MEX1034263), that were previously grade II listed in 1968 before being demolished in 1976. However, both of these areas are now characterised by modern builds along the quay, many of which are high-rise.

A number of Portable Antiquities Scheme findspots have also been identified in the vicinity of the proposed works. Most date to the medieval to post-medieval period, including tokens, coins and a mount, however several coins dated to the Late Iron Age to Roman period.

The grade II Registered Park and Garden known as Wivenhoe Park (List entry number: 1000371) is located immediately adjacent to the red line boundary of the proposed works, but in an area where no physical works are proposed. The private Wivenhoe estate originated in the early 18<sup>th</sup> century, and comprised the main grade II\* listed Wivenhoe House (List entry number: 1225229, MEX20929), grade II listed stable block (list entry number: 1266476), grade II gate lodge (List entry number: 1266477), pleasure gardens and deer park (MEX20927). However, now the land is owned by the University of Essex Colchester and western half of the park (outside of the registered area) now forms the campus is covered in the number of university buildings. The grade II listed Wivenhoe Lodge (List entry number: 1266475) and accompanying grade II barn (List entry number: 1225227) are also in the vicinity, approximately 80m south of the red line boundary. Immediately adjacent to the lodge and south of the red line boundary is another area of cropmarks (MEX9341) indicating a possible undated enclosure and medieval field boundary.

### 3.9.3 Potential impacts

Following the assessment of the available historic environment record, it is considered that there is low archaeological potential within the red line boundary and wider study area. The HER indicates crop mark and artefact evidence of multiphased activity in the area dating between the Neolithic and post-medieval periods. The proposed Type P5 footpath is considered to reach a depth that could penetrate the topsoil and disturb buried archaeological remains. However, the proposed location of this minor work lies on an existing surfaced track within an area of modern development. Therefore, it is likely that the previous development would have truncated archaeological deposits and the potential for impact to buried archaeological is considered low.

The red line boundary for the proposed works lies immediately adjacent to the grade II Wivenhoe Park registered park and garden, and in close proximity to the grade II Wivenhoe Lodge and accompanying barn. However, no physical works are proposed along this section of the red line boundary and therefore it is not anticipated that there will be any impact on built heritage assets.

### 3.9.4 Recommendations

Due to the low archaeological potential and no impact being anticipated for built heritage assets in the vicinity, it is recommended that no further archaeological or built heritage mitigation is required.

## 3.10 T04 – Jefferies level crossing

### 3.10.1 Summary of proposed works

The existing PRow over the level crossing will be extinguished, the existing level crossing infrastructure will be removed and 1.8m high chain link fencing will be installed on both sides of the railway, with NR pedestrian access gates on the east side. Users will be diverted via new Type P1 footpaths and new stepped access to cross the railway on the A1014 Manorway Way bridge. Additionally, a new continuous footpath link between the stepped access on the west side of the railway and a new Type P1 and Type P3 footpath underneath the bridge will be created. The surface of the Type P3 footpath beneath the bridge will be gravel or stone. The installation of the new Type P1 surface will require excavations of up to 100mm in depth, however the Type P3 surface will require deeper excavations of up to 330mm.

### 3.10.2 Baseline

The HER depicts several areas of cropmarks across the study area, including a series of undated cropmarks (MEX41046) indicating a ring ditch, semi-circular feature and several linear features are located 50m west of the red line boundary for the proposed works, on the opposite side of the A13 road. Further cropmarks across the study area indicate a series of linear features boundaries (MEX43499) approximately 660m west and field boundaries (MEX1037768, MEX39951, MEX39953) over 250m to the north of the proposed works.

A number of records in the HER indicate Roman activity within the study area, including a possible Roman road and pot (MEX17868) approximately 10m west of the proposed works and Roman timbers and pottery approximately 140m west. In addition, a Roman cremation burial (MEX17716, MEX17887) was found as a large amphora containing a glass vessel full of burnt bone, approximately 255m east of the proposed works, although the exact location seems unknown. Both a possible Roman cemetery and Anglo-Saxon cemetery are also recorded in the HER as conjectural evidence (MEX17887, MEX17886) over 400m away from the proposed works.

Several sites related to WWII activity are also recorded in the study area. This includes a former military camp (MEX1041227) 885m east of the proposed works, a heavy anti-aircraft battery site (MEX31847) and multiple pillboxes, road barriers and Spigot mortar sites.

### 3.10.3 Potential impacts

The assessment of the historic environment record has indicated a series of undated cropmarks and evidence for some Roman and WWII activity in the area, however overall the archaeological potential is considered low. The proposed Type P3 footpath can reach a depth of 330mm which is considered enough to potentially penetrate the topsoil and disturb buried archaeological remains. However, the proposed location of this minor work lies beneath an existing main road bridge and adjacent to the railway, in an area where it is likely that previous works would have truncated archaeological deposits. Furthermore, previous archaeological monitoring of works approximately 65m west at the A13 to A1014 junction yielded no archaeological features or finds (MEX1049091). Therefore, the potential for impact of the proposed works to buried archaeological is considered low.

There are no designated heritage assets within the vicinity of the red line boundary for the proposed work, with the closest listed buildings being approximately 250m to the west. These assets are screened from the proposed works by several streets of housing, and therefore it is not anticipated that there will be any impact on built heritage assets.

#### 3.10.4 Recommendations

Due to the low archaeological potential and no impact being anticipated for built heritage assets in the vicinity, it is recommended that no further archaeological or built heritage mitigation is required.

## 4 Conclusion

Overall the proposed works involved in the Essex and Others level crossing reduction strategy is minor and is unlikely to significantly impact on the historic environment. However, following the scoping evaluation of all of the sixty-one level crossings included in the strategy, further assessment of ten level crossing sites was undertaken due to the potential impact of the proposed works on either built heritage assets or archaeological remains. Further investigation included an evaluation of the historic environment record, designated heritage assets, geological information and historic maps where appropriate.

Following this further assessment, it has been concluded that no further mitigation or investigation is required for any of the ten sites. This is due to the either low archaeological potential within the study area and red line boundary for the proposed works, the likelihood that archaeological remains have been truncated during previous development, the minor nature and location of the works causing negligible impacts on the setting of designated heritage assets in the vicinity. The proposed works at E56 Abbots level crossing within the scheduled monument have previously been discussed with the Inspector of Ancient Monuments at Historic England, who has confirmed that Scheduled Monument Consent will not be required, as no intrusive physical works will take place.

## 5 References

- BBC. 2017. Domesday Reloaded: Elsenham Railway. Accessed on 06/10/17:  
<http://www.bbc.co.uk/history/domesday/dblock/GB-552000-225000/page/6>
- Braintree District Council. 2017. Listed buildings and conservation areas map. Accessed on 04/10/17:  
[https://braintree.maps.arcgis.com/apps/webappviewer/index.html?id=83db4230bb5046e6bc\\_a72169e40b3266](https://braintree.maps.arcgis.com/apps/webappviewer/index.html?id=83db4230bb5046e6bc_a72169e40b3266)
- Colchester Council. 2007. Wivenhoe conservation area appraisal and management guidelines: draft. Accessed on 04/10/17: [http://wivenhoeneighbourhoodplan.org.uk/wp-content/uploads/2013/10/Wivenhoe\\_Conservation\\_Area\\_Appraisal\\_and\\_Management\\_Guidelines.pdf?\\_sm\\_au\\_=ijVsP7T0qVHJMrPN](http://wivenhoeneighbourhoodplan.org.uk/wp-content/uploads/2013/10/Wivenhoe_Conservation_Area_Appraisal_and_Management_Guidelines.pdf?_sm_au_=ijVsP7T0qVHJMrPN)
- Essex County Council. 2017. South Benfleet conservation area appraisal and management plan. Accessed on 04/10/17: <https://www.castlepoint.gov.uk/south-benfleet-conservation-area>
- Essex River Authority Thames tidal defences. 1976. Contract No.7 Borehole No. 168. Accessed on 04/10/17: [http://scans.bgs.ac.uk/sobi\\_scans/boreholes/16087891/images/15769688.html](http://scans.bgs.ac.uk/sobi_scans/boreholes/16087891/images/15769688.html)
- Franklin, R. 2017. Elsenham: The history of Elsenham. Accessed on 06/10/17:  
<http://www.recordinguttlesfordhistory.org.uk/elsenhams/elsenhams.html>
- Historic England. 2017. Broomfield Cottage. Accessed on 03/10/17:  
<https://historicengland.org.uk/listing/the-list/list-entry/1112329>
- Historic England. 2017. Circular cropmark at Ferriers Farm, 190m south-west of Hill Farm. Accessed on 04/10/17: <https://historicengland.org.uk/listing/the-list/list-entry/1010501>
- Historic England. 2017. Circular cropmark at Ferriers Farm, 190m south west of Hill Farm, Bures Hamlet - Braintree. Accessed on 04/10/17:  
<https://historicengland.org.uk/advice/heritage-at-risk/search-register/list-entry/1982170>
- Historic England. 2017. Crop mark site S of Ardleigh. Accessed on 04/10/17:  
<https://historicengland.org.uk/listing/the-list/list-entry/1002146>
- Historic England. 2017. Crop mark site south of Ardleigh, Ardleigh - Tendring. Accessed on 04/10/17: <https://historicengland.org.uk/advice/heritage-at-risk/search-register/list-entry/1687810>
- Historic England. 2017. Spring Cottage. Accessed on 03/10/17:  
<https://historicengland.org.uk/listing/the-list/list-entry/1171144>
- Historic England. 2017. White Cottage. Accessed on 03/10/17:  
<https://historicengland.org.uk/listing/the-list/list-entry/1322534>
- Historic England. 2017. Whitebridge Cottages. Accessed on 03/10/17:  
<https://historicengland.org.uk/listing/the-list/list-entry/1338506>

Mott MacDonald 2017. Anglia level crossing reduction strategy: EIA screening request: Essex and Others order. Network Rail.

Network Rail. 2017. The Network Rail (Essex and Others level crossing reduction) Order: Design Guide. Network Rail.

Rochford District Council. 2007. Rochford conservation area appraisal and management plan. Accessed on 04/10/17:

[https://www.rochford.gov.uk/sites/default/files/planning\\_historic\\_environment\\_conservation\\_areas\\_rochford\\_final.pdf](https://www.rochford.gov.uk/sites/default/files/planning_historic_environment_conservation_areas_rochford_final.pdf)

Spurrell, F. C. J. 1885. Early sites and embankments on the margins of the Thames Estuary. *Archaeological Journal*, Vol.42, 269-302.

# Appendices

A.	Scoping assessment	27
----	--------------------	----

## A. Scoping assessment

**Table 3: Detailed heritage scoping by Level Crossing**

Level crossing no.	Name, Parish	Category	Summary of proposed works	Scoping reasoning	Scoping decision
E01	Old Lane, Roydon Parish	2	The PRoW over the level crossing will be extinguished, the existing level crossing infrastructure will be removed and a 1.8m high chain link fence will be installed for a max. of 100m either side of the railway. Users will be diverted via existing footpaths and will cross the railway via Wildes level crossing to the north-east.	No new surfaces being added, with users being diverted onto an existing footpath. Fencing not considered to have an impact on any heritage assets. Level crossing material being removed; however, these are not considered of heritage value.	Out
E02	Camps, Non Civil Parished Area	3	The existing PRoW over the level crossing will be extinguished and private vehicular rights will be maintained. Infrastructure associated with pedestrian crossing will be removed. Users will be diverted to Wildes level crossing to the west or Sadlets level crossing to the east to cross the railway via existing footpaths and a new Type P1 footpath.	Only a P1 surface is being installed and existing footpaths are being used. This and the installation of fencing will not impact buried archaeological remains due to the limited or shallow nature of the excavation required for installation. The new footpath runs within 180m of the listed Roydon Lea Farmhouse and Barn (List Entry ID: 1111666 and 11697370), however the addition of the footpath and users is not considered an impact on the heritage asset. No fencing is being installed as private vehicular access is being retained. Some level crossing infrastructure associated with pedestrian crossing is being removed, however these are not considered of heritage value.	Out
E04	Parndon Mill, Non Civil Parished Area	3	There is currently no infrastructure to facilitate the crossing of the railway at this location, with this proposal being to formalise the closure of the level crossing. Users would be diverted via a Type P1 footpath and existing footways to Parndon Mill lane to use an existing overbridge to cross the railway.	Only a P1 surface is being installed as part of the works which will have no impact on any buried archaeological remains or heritage assets due to the shallow nature of the excavations required. Little Parndon Moated Site and site of Parndon Hall are Scheduled Monuments located 20m east of the proposed works, however it is unlikely that these will be impacted due to the minor nature of the works. The diversion route will also pass next to the grade II listed Parndon Mill House (LE ID: 1169613), Little Parndon Watermill (LE ID: 1337045) and Church of St Mary. However, the diversion is via an existing PRoW and therefore will not impact the setting of these heritage assets.	Out
E05	Fullers End, Elsenham Parish	4	The existing PRoW over the level crossing is to be extinguished, the current infrastructure will be removed and 1.8m high chain link fencing will be installed on both sides of the railway. Users will be diverted via a new Type P1 footpath, 2m wide tarmac Type 5 footpaths and existing highway and footpath to cross the railway at an existing underpass. The tarmac footpath will have directional, fold-down lighting columns and will lead users to an underpass with new lighting.	The installation of the P1 surface footpath and fencing will only require limited or shallow excavation and therefore the impact on archaeological is considered negligible. The P5 tarmac path will involve earth removal up to a depth of 150mm. There is potential that excavations at this depth may surpass the topsoil layer and impact archaeological deposits. The new footpath will run 70m north of three listed buildings, however the path will run through an area of industrial land which has been set aside for housing development. Therefore, it is not considered that the creation of the footpath in this context will have an impact on the setting of these listed buildings.	In

Level crossing no.	Name, Parish	Category	Summary of proposed works	Scoping reasoning	Scoping decision
E06	Elsenham Emergency Hut Henham Parish	3	The existing PRoW over the level crossing will be extinguished, the existing infrastructure will be removed from the crossing, 1.8m high chain link fencing will be installed on the east side of the railway, and 1.35m high stained wire and stock proof fencing will be installed on the west side with an NR pedestrian access gate. Users will be diverted via Type P1 footpaths, existing roads and footways to cross the railway at the existing level crossing or footbridge at Elsenham Station.	Only a P1 surface is being installed. This and the fencing will have a negligible impact on archaeological remains due to the limited or shallow excavation required for their installation. The grade II listed Old Mead is approximately 100m east of a proposed new footpath, however this is the opposite side of the railway and it is therefore considered unlikely that the footpath will impact the setting of this heritage assets. The current infrastructure is being removed however this is minor and has no heritage value.	Out
E07	Ugley Lane, Henham Parish	2	There is no PRoW over this level crossing. The existing private rights over the level crossing is to be extinguished, the existing infrastructure removed and 1.8m high chain link fencing will be installed on the west side. A vehicular access gate and decking will be retained for NR use only on the east side. Private users will be diverted to 3m high underpass to the south-east or to the M11 underbridge at Ugley Green 2.3km away.	No new surfaces are being installed and the installation of fencing will have a negligible impact on buried archaeological deposits due to the limited nature of excavation required. Designated heritage assets are considered too far from the works to be impacted. The existing level crossing infrastructure is to be removed, however this has no heritage value.	Out
E08	Henham, Widdington Parish	4	The existing PRoW over the level crossing will be extinguished, the existing level crossing infrastructure will be removed, 1.8m high chain link fencing will be installed on the east side of the railway, and 1.35m strained wire and sock proof fencing will be install on the west side, with a NR pedestrian gate. Users will be diverted to cross the railway at an existing underbridge via a new set of P1 style footpaths and existing footpaths. A timber footbridge is required to cross a highway ditch on the west side of the railway.	Only a P1 footpaths are being installed. This and the fencing and Type E-B1 timber bridge will have a negligible impact on archaeological remains due to the limited or shallow excavation required for their installation. There are two listed buildings in the vicinity however these are both over 200m from the works and therefore it is considered that there will be no setting impact on these assets. The existing infrastructure is to be removed, however this has no heritage value.	Out
E09	Elephant, Newport Parish	4	The existing PRoW over the level crossing is to be extinguished, the current infrastructure will be removed and a 1.8m high chain link fence will be installed either side of the closed crossing. Users will be diverted along existing footpaths to the existing footway on High Street to Debden Road and up to a railway bridge. New traffic signals and a Type P7 footpath are proposed over the bridge. The new P7 footpath will connect to a further new Type P1 footpath to the east of the railway which will run for 180m.	The P1 surface and fencing will have a negligible impact on buried archaeological remains due to the limited or shallow nature of the excavations required for installation. The Type P7 footway will be located on an existing bridge and therefore, in this instance it is not considered that this surface type will have an impact on archaeological remains. The proposed diversion route will pass directly through the Newport Conservation Area and past several listed buildings. However, the diversion is on existing roads/PRoW and will not require additional changes within the conservation area. Therefore, no negative impacts are anticipated on the CA or setting of listed buildings. The existing infrastructure is to be removed, however this has no heritage value.	Out
E10	Dixies, Newport Parish	2	The existing Public Rights of Way over the level crossing will be extinguished, the existing level crossing infrastructure will be removed and 1.8m high chain link fencing will be installed on both sides of the railway. Users will be diverted along existing footpaths and footways to Cambridge Road where users can cross beneath the railway.	There are no new surfaces being installed. The installation of fencing will have a negligible impact on buried archaeological deposits due to the limited or shallow nature of excavations required. There are several listed buildings and the Newport Conservation Area within 1km of the works, however users are diverted to existing PRoWs and therefore no impact is anticipated on the setting of these. The existing level crossing infrastructure is to be removed, however this has no heritage value.	Out

Level crossing no.	Name, Parish	Category	Summary of proposed works	Scoping reasoning	Scoping decision
E11	Windmills, Newport Parish	3	The existing PRow over the level crossing will be extinguished, the existing infrastructure will be removed, 1.35m strained wire fence with stock proof fencing will be installed on the west side of the railway, and 1.8m high chain link fencing will be installed on the east side between Windmills and Trees level crossing. Users will be diverted via existing footpaths and Type P1 footpaths to Trees (CCTV) level crossing to cross the railway.	Only P1 surfaces are being installed. These and the proposed fencing will have a negligible impact on buried archaeological remains due to the limited or shallow nature of the excavations required. All designated assets within 1km of the works are over 200m away and the minor work is considered to have no impact on the setting of these assets. The existing infrastructure is to be removed, however this has no heritage value.	Out
E12	Wallaces, Wendens Ambo Parish	2	This is currently a private level crossing and the existing private rights over the crossing are to be removed. The current infrastructure will be removed and 1.3m high stained wire fence with stock proof fencing will be installed on both sides of the railway. Private users will use private tracks to access either Chestnut Avenue to the north or the existing private underbridge to the south.	There are no new surfaces being installed as part of the works with private users using existing private tracks to access alternative routes. The fencing being installed is not considered to have an impact on buried archaeology due to limited excavation required for the works. Due to the minor nature of the work no impact on built heritage is expected. The existing infrastructure is to be removed, however this has no heritage value.	Out
E13	Littlebury Gate, Littlebury Parish	3	The existing PRow over the level crossing will be extinguished, the level crossing infrastructure is to be removed and 1.8m chain link fencing will be installed. An existing Byway Open to All Traffic (BOAT) to the west of the railway is being downgraded to a Type P1 footpath and at the transition point between BOAT and footpath wooden posts, a wooden gate and three rail fencing are being installed. Users would be diverted via the new Type P1 footpaths to cross the railway at a railway tunnel to the east.	Only P1 surfaces are being installed. This and the installation of fencing, wood posts and a wooden gate will have a negligible impact on buried archaeological remains due to the limited or shallow nature of excavations required. The Littlebury Conservation Area lies adjacent to an area of footpath creation. However, the footpath runs along a field boundary and behind a large hedge and will not have an impact on the setting of the CA. The existing level crossing infrastructure is to be removed, however this has no heritage value.	Out
E15	Parsonage, Margaretting Parish	3	The existing pedestrian PRow will be extinguished, however private authorised vehicular rights will be granted over the level crossing. Pedestrian level crossing infrastructure will be removed and a chain and padlock added to the vehicular gates for private access. A 1.35m high strained wire fence with stock proof fence will be installed on both sides of the railway. Pedestrians will be diverted via existing footpaths to cross the railway at the existing underpass to the north-east.	There are no new surfaces being installed as part of the works and pedestrians will be diverted via existing footpaths. The proposed fencing will have a negligible impact on buried archaeological remains due to the limited excavation required for installation. The existing pedestrian infrastructure will be removed; however, this is not of heritage value.	Out
E16	Maldon Road, Margaretting Parish	3	The existing PRow over the level crossing will be extinguished, the existing level crossing infrastructure will be removed and 1.8m high chain link fencing will be installed on both sides of the railway. Users will be diverted along both existing footpaths and a proposed new Type P2 bridleway to cross beneath the railway. The unsurfaced bridleway will be 3m wide and will be fenced on one side with 1.35m high concrete post and wire fencing.	Only P2 surfaces are being installed. This and the installation of fencing will have a negligible impact on buried archaeological remains due to the limited or shallow excavation required. The grade II listed Whitebridge Cottage (LE ID: 1338506) is located adjacent to an area of footpath creation and the setting of this asset will be temporarily impacted during construction, however this is not considered significant and will not extend into the operation period of the footpath. The existing pedestrian infrastructure will be removed; however, these have no heritage value.	In

Level crossing no.	Name, Parish	Category	Summary of proposed works	Scoping reasoning	Scoping decision
E17	Boreham, Boreham Parish	3	The existing PRow over the level crossing will be extinguished, the level crossing infrastructure will be removed and 1.8m high chain link fencing will be installed on both sides of the railway. No diversion route over the railway has been proposed, due to severance caused by the A12. Instead a circular Type P2 bridleway route is proposed and formed between an existing footpath and bridleway. A concrete culvert will be constructed along the proposed bridleway to allow users to cross an existing watercourse.	Only P2 surfaces are being installed. This and the proposed fencing will have a negligible impact on buried archaeological remains due to the limited or shallow excavation required. The construction of the concrete culvert will not impact archaeological deposits as the work will take place in an existing ditch. All designated assets within 1km of the works are over 450m away and therefore their settings will not be impacted. The existing level crossing infrastructure will be removed; however, this is not of heritage value.	Out
E18	Noakes, Boreham Parish	3	The existing PRow over the level crossing will be extinguished, the existing level crossing infrastructure will be removed and 1.8m high chain link fencing will be installed on both sides of the railway. No diversion route over the railway has been proposed, due to severance caused by the A12. Instead a circular Type P2 bridleway route is proposed and formed between an existing footpath and bridleway. A concrete culvert will be constructed along the proposed bridleway to allow users to cross an existing watercourse.	Only P2 surfaces are being installed. This and the proposed fencing will have a negligible impact on buried archaeological remains due to the limited or shallow excavation required. The construction of the concrete culvert will not impact archaeological deposits as the work will take place in an existing ditch. All designated assets within 1km of the works are over 450m away and therefore their settings will not be impacted. The existing level crossing infrastructure will be removed; however, this is not of heritage value.	Out
E19	Potters, Rivenhall Parish	3	The existing PRow over the level crossing will be extinguished, the level crossing infrastructure will be removed, and 1.8m high chain link fencing will be installed either side of the railway. Users will be diverted via existing footpaths and a new Type P1 footpath to an existing underpass on Oak Road to cross the railway.	Only a P1 footpath surface and fencing are being installed, both of which will have no or a negligible impact on buried archaeology due to the limited or shallow nature of the excavation required. There are several designated heritage assets within 1km of the works, however the majority are considered too far to be impacted by the works. There are two grade II listed buildings at Hoo Hall (LE ID: 1122596 and 1169797) 130m north of the footpath creation works, however these are visually shielded and considered too far from the works and therefore no impact on the setting of these assets is expected. The existing level crossing infrastructure will be removed; however, this is not of heritage value.	Out
E20	Snivellers, Kelvedon Parish	3	The existing PRow over the level crossing will be extinguished, the level crossing infrastructure will be removed and 1.8m high chain link fencing will be installed either side of the railway. Users will be diverted via a Type P2 bridleway which will connect to Cranes Lane to allow users to cross the railway via an existing overbridge.	Only a P2 bridleway and fencing are being installed as part of the Scheme, both of which will have either no or a negligible impact on buried archaeology due to the limited or shallow nature of the excavation required. There are several designated heritage assets within 1km of the works, however all are over 200m from the works and therefore their settings will not be impacted. The existing level crossing infrastructure will be removed; however, this is not of heritage value.	Out
E21	Hill House 1, Feering Parish	4	The existing PRow over the level crossing will be extinguished, the level crossing infrastructure will be removed, and 1.35m high strained wire fence with stock proof fencing will be installed on both sides of the railway. Users will be diverted via a new Type P1 footpath along the field boundary that will connect to an existing BOAT. Users will be able to cross the railway at Hill House 2 footpath level crossing.	Only a P1 footpath surface and fencing are being installed, both of which will have no or a negligible impact on buried archaeology due to the limited or shallow nature of the excavation required. There are several designated heritage assets within 1km of the works, however all are over 350m away and therefore their settings will not be impacted. The existing level crossing infrastructure will be removed; however, this is not of heritage value.	Out

Level crossing no.	Name, Parish	Category	Summary of proposed works	Scoping reasoning	Scoping decision
E22	Great Domsey, Feering Parish	4	The existing PRow over the level crossing will be extinguished, the level crossing infrastructure will be removed, and 1.35m high strained wire fence with stock proof fencing will be installed on both sides of the railway. Users will be diverted via a new Type P1 footpath along the field boundary to connect with Domsey Chase along which users will be able to cross the railway via an existing bridge to connect to the A12 London Road.	Only a P1 footpath surface and fencing are being installed, both of which will have no or negligible impact on buried archaeology due to the limited or shallow nature of the excavation required. There are several designated heritage assets within 1km of the works, however all are over 400m away and therefore their settings will not be impacted. The existing level crossing infrastructure will be removed; however, this is not of heritage value.	Out
E23	Long Green, Marks Tey Parish	1	The work here involves legally dedicating the footbridge here as PRow.	No physical works are required at this level crossing, therefore no impact on the historic environment is anticipated.	Out
E25	Church 2, Starway Parish	4	The existing PRow over the level crossing will be extinguished, the level crossing infrastructure will be removed, 1.25m high strained wire fencing will be installed on the south side of the railway and a 1.8m high close boarded timber fencing will be installed on the north side. Users will be diverted via a new Type P1 footpath through a wooded area to Turkey Cock Lane, where users can continue over the railway using an existing underbridge via both carriageway and verge way walking.	Only a P1 footpath surface and fencing are being installed, both of which will have no or negligible impact on buried archaeology due to the limited or shallow nature of the excavation required. There are several designated heritage assets within 1km of the works, however all are over 150m away from the areas of footpath creations and the closest are separated by the A12 carriageway. The diversion route passes 3 grade II listed buildings; however, this is on an existing PRow. Therefore, it is not anticipated that the settings of none of the nearby designated heritage assets will be impacted by the works. The existing level crossing infrastructure will be removed.	Out
E26	Barbara Close, Hankwell Parish	2	The existing PRow over the level crossing will be extinguished, and users will be diverted along an existing footpath and BOAT to an existing underpass where users can cross the railway. A new Type P7 asphalt footway will be installed inside the underpass. The existing PRow in Barbara Close will be extinguished, however access will be maintained for private landowners via a gate within a 1.8m high close boarded timber fence at the entrance to Barbara Close. A 1.8m high chain link fence and NR pedestrian access gate will also be installed on the west side of the railway.	The installation of the Type P7 asphalt footpath has the potential to impact archaeological remains as it will require excavation to a depth of 160mm which may surpass the topsoil layer. Designated heritage assets are all over 450m away from the works and diversion routes all remain on existing PRows, and therefore these assets will not be impacted by the works. The installation of the fencing and gates is not considered to have the potential to impact archaeological remains due to the limited or shallow nature of the excavation required.	In
E28	Whipps Farmers, Non Civil Parished Area	4	The existing PRow and private accommodation rights over the level crossing will be extinguished, the level crossing infrastructure will be removed, and 1.35m high strained wire fence with stock proof fencing will be installed. Users will be diverted via a series of new Type P1 surface footpaths, a new pedestrian road crossing and existing bridleway to use Puddle Dock level crossing 250m west of Whipps Farm level crossing. To enable the extinguishment of the accommodation rights, a 3.5m wide crushed concrete access track (categorised as Type P5) will be installed from St Marys Lane to provide private land access.	The Type P1 surface footpaths and the fencing that are being installed will have no or negligible impact on buried archaeology due to the limited or shallow nature of the excavation required. However, the installation of the Type P5 crushed concrete access track has the potential to impact archaeological deposits as excavation will reach up to 150mm which may surpass the topsoil layer. All designated heritage assets are over 250m from the works and the closest of these are separated by the railway line and therefore it is anticipated that their settings will not be impacted by the works. The level crossing infrastructure will be removed; however, this is not of heritage value.	In

Level crossing no.	Name, Parish	Category	Summary of proposed works	Scoping reasoning	Scoping decision
E29	Brown and Tawse, West Horndon Parish	4	The existing PRoW over the level crossing will be extinguished, the level crossing infrastructure will be removed, and 2m high palisade fencing will be installed on the north side of the railway at the level crossing. Users will be diverted via a new Type P1 footpath, along the field boundary in NR land, to Childerditch Lane, that will be accessed via a set of wooden steps. 1.8m high chain link fencing will be installed along the length of the footpath to prevent access to the railway. Users can cross the railway via the existing overbridge on Childerditch Lane and will be diverted along another new Type P1 footpath and wooden steps.	Only Type P1 footpaths are being installed. Both these and the proposed fencing will not impact buried archaeological remains due to the limited or shallow nature of the excavation required. Excavations are required for the installation of the Type S2 steps; however, these will lie within an existing embankment and will therefore not impact buried archaeological remains. Designated heritage assets in the area are all over 550m from the works and will therefore not be impacted. The level crossing infrastructure will be removed; however, this is not of heritage value.	Out
E30	Ferry, Non Civil Parished Area	4	The existing PRoW over the level crossing will be extinguished, the level crossing infrastructure will be removed, and a 1.8m high chain link fencing will be installed along the railway. Users will be diverted via an existing footway along the B1014 Ferry Road to an existing underpass to cross the railway. On the north side users will be diverted via a new Type P5 asphalt footway with 2m high palisade fencing on the south side and a 1.3m high wood post and rail fence on the car park side. The new footpath then extends into a Type P1 footpath once past the car park.	The Type P1 surface footpath and fencing will have no or negligible impact on buried archaeology due to the limited or shallow nature of the excavation required. However, the installation of the Type P5 asphalt footway may impact buried archaeological deposits as excavation will reach up to 150mm which may surpass the topsoil layer. Additionally, excavations will be required to install the new footpath within the carpark, however these will be within made ground and are unlikely to impact archaeology. A section of the newly created footpath and fencing lies within the South Benfleet Conservation Area; however, the work lies within the existing station car park which already contains fencing and therefore will not impact on the setting of the CA or the close by listed buildings (100m away). The level crossing infrastructure will be removed; however, these are not of heritage value.	In
E31	Brickyard Farm, Non Civil Parished Area	4	The existing PRoW over the level crossing will be extinguished, the level crossing infrastructure will be removed, and 1.8m high chain link fencing will be installed along the railway. Users will be diverted via an existing footpath and then a footway along the B1014 Ferry Road to an existing underpass to cross the railway. On the north side users will be diverted via a new Type P5 asphalt footway with 2m high palisade fencing on the south side and a 1.3m high wood post and rail fence on the car park side. The new footpath then extends into a Type P1 footpath once past the car park.	The Type P1 surface footpath and fencing will have no or negligible impact on buried archaeology due to the limited or shallow nature of the excavation required. However, the installation of the Type P5 asphalt footway may impact buried archaeological deposits as excavation will reach up to 150mm which may surpass the topsoil layer. Additionally, excavations will be required to install the new footpath within the carpark, however these will be within made ground and are unlikely to impact archaeology. The new footway lies 250m away from the nearest designated heritage asset and therefore will not have an impact on these. The level crossing infrastructure will be removed; however, these are not of heritage value.	In

Level crossing no.	Name, Parish	Category	Summary of proposed works	Scoping reasoning	Scoping decision
E32	Woodgrange Close, Non Civil Parished Area	2	The existing PRoW over the level crossing will be extinguished, the level crossing infrastructure will be removed and 2m high palisade fencing will be installed along the railway. A NR vehicular access gate will be installed in the fencing on the north side. Users will be diverted via existing footways and footpaths to an existing underbridge to cross the railway.	No new surfaces are being installed causing no impact on buried archaeology. The installation of fencing is considered to have a negligible impact on archaeological deposits due to the limited nature of the excavation required. There is a Scheduled Monument within 1km of the works, however the works involve using existing PRoWs and will therefore have no impact on designated assets. The existing level crossing infrastructure will be removed; however, this is not of heritage value.	Out
E33	Motorbike, Non Civil Parished Area	4	The existing PRoW over the level crossing will be extinguished, existing level crossing infrastructure will be removed, and 1.8m chain link fencing will be installed on either side of the railway. Users will be diverted via new Type P1 footpaths, an existing footbridge over a ditch, and a new Type P6 wooden boardwalk footpath and a new footway crossing point on the existing highway Pitsea Hall Road. Users will be able to cross the railway at Pitsea Road level crossing. The new footpath on the south side of the railway will have a 1.3m high wooden post and three rail fencing on the north side and a 1.275m high stained wire fence on the south side. A 1.8m high chain link fence will also be installed at the end of this new footpath.	The P1 and P6 footpath surface and fencing are being installed, both of which will have no or negligible impact on buried archaeology due the limited or shallow nature of the excavation required. The listed Pitsea Hall (LE ID: 122236) is located within 150m of the construction of an additional PRoW, however due to the current setting of the assets near to the railway and road, an impact is considered unlikely. Within 150m of the works there is also an area of non-designated unidentified circular earthwork enclosure. However, the limited excavation required for the works is not sufficient to impact archaeological remains. The existing level crossing infrastructure will be removed; however, this is not of heritage value.	Out
E35	Cranes No.1, Cressing Parish	3	The existing PRoW over the level crossing will be extinguished, existing level crossing infrastructure will be removed, and 1.35m stained wire fence with stock proof fencing will be installed along the railway. Users will be diverted via new Type P1 footpaths and can cross the railway at an existing underpass.	Only Type P1 footpaths are being installed. Both these and the proposed fencing will not impact buried archaeological remains due to the limited or shallow nature of the excavation required. There are several designated heritage assets within 1km of the works, however these will not be impacted due to the nature of and their distance from the works. The level crossing infrastructure will be removed; however, this is not of heritage value.	Out
E36	Cranes No.2, White Notley Parish	2	The existing PRoW over the level crossing will be extinguished, existing level crossing infrastructure will be removed, and 1.35m stained wire fence with stock proof fencing will be installed along the railway. Users will be diverted via existing footpaths to an existing underbridge.	No new surfaces or footpaths are being installed or constructed. The proposed fencing will not impact buried archaeological remains due to the limited or shallow nature of the excavation required. There are several designated heritage assets within 1km of the works, however these will not be impacted due to the minimal nature of the works. The level crossing infrastructure will be removed; however, this is not of heritage value.	Out
E37	Essex Way, White Notley Parish	3	The existing PRoW over the level crossing will be extinguished, existing level crossing infrastructure will be removed, and 1.35m stained wire fence with stock proof fencing will be installed along the railway. Users will be diverted via proposed Type P1 footpaths through a wooded area and along field boundaries and will be able to cross the railway at an existing underpass to the south-west.	Only Type P1 footpaths are being installed. Both these and the proposed fencing will not impact buried archaeological remains due to the limited or shallow nature of the excavation required. There are several designated heritage assets within 1km of the works, some of which are only 150m away from the works, including Crossing Temple Scheduled monument. However, these will not be impacted due to the minor nature of the works. The level crossing infrastructure will be removed; however, this is not of heritage value.	Out

Level crossing no.	Name, Parish	Category	Summary of proposed works	Scoping reasoning	Scoping decision
E38	Battlebridge, Rettendon Parish	4	The existing PRoW over the level crossing will be extinguished, existing level crossing infrastructure will be removed, and 1.8m high chain link fencing will be installed along both sides of the railway, with a NR pedestrian access gate will be provided on the south side. Users will be diverted via Type P1 footpaths, wooden steps, and the wide grass verge adjacent to the A1245. Users will be able to cross the railway on the road bridge.	The footpaths and fencing being installed will not impact buried archaeological remains due to the limited or shallow nature of the excavation required. Excavations are required for the installation of the Type S2 steps; however, these will lie within an existing embankment and will therefore not impact buried archaeological remains. There are no designated heritage assets within a distance that would have an impact on their settings. The level crossing infrastructure will be removed; however, these are not of heritage value.	Out
E41	Paget, Wivenhow Parish	4	The existing PRoW over the level crossing will be extinguished, existing level crossing infrastructure will be removed, 1.8m high chain link fencing will be installed along the south side of the railway, and 2m high steel palisade fencing will be installed on the north side. On the south side of the railway, users will be diverted via the existing Paget Road, Anglsea Road and Queens Road. Queens Road will have a new handrail in steep areas and will be reprofiled to create a flatter area for a bench. Users will cross the railway at an existing road bridge. On the north side of the railway, users will be diverted via a new Type P3 surface footpath and new wooden footbridge over an existing water course. The new footpath will be fenced off with 2m high steel palisade fencing. Widening of the footway on High Street over the road bridge is also proposed.	The installation and reprofiling of the footpaths and existing roads to type P3 and P7 surfaces may have an impact on buried archaeological remains, as the excavations required will reach a depth of up to 330m which could surpass the topsoil layer. The fencing and footbridge being installed will not impact buried archaeological remains due to the limited or shallow nature of the excavation required. The level crossing and construction of the new PRoW are within Wivenhoe Conservation Area where there are also several listed buildings. Therefore, the works could have a negative impact on the setting of the conservation area. The level crossing infrastructure will be removed; however, this is not of heritage value.	In
E42	Sand Pit, Elmstead Parish	3	The existing PRoW over the level crossing will be extinguished, existing level crossing infrastructure will be removed, and 1.8m high chain link fencing will be installed along both sides of the railway. Users will be diverted via existing footways, verges and carriageways and new Type P1 footpaths to cross the railway at an existing bridge.	The proposed fencing will not impact buried archaeological remains due to the limited or shallow nature of the excavation required. The new PRoW pathways lie within an area of known archaeological assets in the form of linear cropmarks and potential rectangular enclosures. However, the depth of excavation required for the Type P1 footpaths is not sufficient to impact archaeological remains. There are several designated heritage assets within 1km of the works, however these will not be impacted due to the nature of and their distance from the works. The level crossing infrastructure will be removed; however, this is not of heritage value.	Out
E43	High Elm, Alresford Parish	4	The existing PRoW over the level crossing will be extinguished, existing level crossing infrastructure will be removed, and 1.8m high chain link fencing will be installed along both sides of the railway. Users will be diverted via existing footways along the B1027 and new pedestrian crossings to cross the railway at an existing road bridge and footway.	There are no new surfaces being installed, therefore archaeological remains will not be disturbed. The installation of fencing will not impact archaeological remains due to the limited or shallow nature of the excavations required, and the installation of two new pedestrian crossings will not impact archaeological remains as they lie on existing road surfaces. There are several listed buildings within 1km of the works, however users are diverted to existing PRoWs and therefore there will be no impact on the setting of these. The existing infrastructure is to be removed, however this is not of heritage value.	Out

Level crossing no.	Name, Parish	Category	Summary of proposed works	Scoping reasoning	Scoping decision
E45	Great Bentley Station, Great Bentley Ward	4	The existing PRoW over the level crossing will be extinguished, existing level crossing infrastructure will be removed, and 1.8m high chain link fencing will be installed along both sides of the railway. Users will be diverted via a new Type P1 footpath along the edge of allotments, and a new 1.8m high chain link fence will be installed along the west side to prevent trespass into the allotments. Users will connect to the existing footway on Plough Road and cross the railway via the Great Bentley (CCTV) level crossing or adjacent footbridge, before continuing on existing footways and verges on Plough Road and Station Road.	The new PRoW is located within an area of known archaeological assets in the form of linear crop marks and rectangular enclosures. However, it is unlikely that the Type 1 footpaths or fencing will impact buried archaeological remains due to the limited or shallow nature of the excavation required. There are several listed buildings and the Great Bentley Conservation Area within 1km of the works. However, the new footpath is located outside of the conservation area (30m away) and is separated by a building and business park. Additionally, the rest of the diversions routes lie on existing PRoW and therefore it is considered that there will be no impact on the designated heritage assets. The level crossing infrastructure will be removed; however, these are not of heritage value.	Out
E46	Lords No 1, Great Bentley Ward	4	The existing PRoW over the level crossing will be extinguished, existing level crossing infrastructure will be removed, and 1.8m high chain link fencing will be installed along both sides of the railway. Users will be diverted via a new Type P1 footpath along the edge of allotments, and a new 1.8m high chain link fence will be installed along the west side to prevent trespass into the allotments. Users will connect to the existing footway on Plough Road and cross the railway via the Great Bentley (CCTV) level crossing or adjacent footbridge, before continuing on existing footways and verges on Plough Road, Station Road, Birch Avenue and Pine Close.	The new PRoW is located within an area of known archaeological assets in the form of linear crop marks and rectangular enclosures. However, the Type 1 footpaths Both these and the proposed fencing will not impact buried archaeological remains due to the limited or shallow nature of the excavation required. There are several listed buildings and the Great Bentley Conservation Area within 1km of the works. However, the new footpath is located outside of the conservation area (30m away) and is separated by a building and business park. Additionally, the rest of the diversions routes lie on existing PRoW and therefore it is considered that there will be no impact on the designated heritage assets. The level crossing infrastructure will be removed; however, these are not of heritage value.	Out
E47	Bluehouse, Holland and Kirby Ward	3	The existing PRoW over the level crossing will be extinguished, existing level crossing infrastructure will be removed, and 1.8m high chain link fencing will be installed along the north side of the railway, with and 1.35m high post and wire stock proof fencing on the south side. Users will be diverted via an existing verge alongside Pork Lane, new Type P1 footpath within a field margin and existing footpaths. Users will cross the railway via Pork Lane crossing. 1.35m strained wire fence with stock proof mesh and concrete posts will be installed between the proposed Type P1 footpath and the adjacent third party field.	Only a Type P1 footpath is being installed. Both this and the proposed fencing will not impact buried archaeological remains due to the limited or shallow nature of the excavation required. There are several designated heritage assets within 1km of the works, however these will not be impacted due to the minor nature of the works and the distance of the assets from the new footpath. The level crossing infrastructure will be removed; however, these are not of heritage value.	Out
E48	Wheatsheaf, Wrabness Parish	3	The existing PRoW over the level crossing will be extinguished, existing level crossing infrastructure will be removed, and 1.35m high post and wire stock proof fencing will be installed on the north side of the crossing, with 1.35m high post and wire fencing being installed on the south side. Users will be diverted via along a new Type P1 footpath within field margins, an existing footway on Church Road, and verge on Station Road. Users will cross the railway at the existing Church Road bridge.	Only a Type P1 footpath is being installed. Both this and the proposed fencing will not impact buried archaeological remains due to the limited or shallow nature of the excavation required. There are several designated heritage assets within 1km of the works, however these will not be impacted due to the minor nature of the works and the distance of the assets from the new footpath. The level crossing infrastructure will be removed; however, this is not of heritage value.	Out

Level crossing no.	Name, Parish	Category	Summary of proposed works	Scoping reasoning	Scoping decision
E49	Maria Street, Harwich Parish	2	The existing PRow over the level crossing will be extinguished, existing level crossing infrastructure will be removed, and 2m high steel palisade fencing will be installed on either side of the railway. Users will be diverted via existing footways to cross the railway at Alexandra Road level crossing.	No new surfaces or footpaths are being installed or constructed. The proposed fencing will not impact buried archaeological remains due to the limited or shallow nature of the excavation required. There are several designated heritage assets, including 5 Scheduled Monuments and 2 Conservation Areas, within 1km of the works. However, the works involve using existing PRowS and will therefore not have an impact on designated heritage assets in the area. The level crossing infrastructure will be removed; however, this is not of heritage value.	Out
E51	Thornfield Wood, Wakes Colne Parish	4	The existing PRow over the level crossing will be extinguished, existing level crossing infrastructure will be removed, and 1.35m high post and wire stock proof fencing will be installed on either side of the railway. Additionally, the existing footbridge over a ditch on the west side of the level crossing will be removed. Users will be diverted via new Type P1 surface footpaths within a field margins to cross the railway at an existing road bridge.	Only a Type P1 footpath is being installed. Both this and the proposed fencing will not impact buried archaeological remains due to the limited or shallow nature of the excavation required. Archaeological remains in close proximity to the works are the WWII Eastern Command Line at the Chappel Viaduct scheduled monument. The railway is the focus of the 'stop line' however the monument does not encompass the railway and the works are too far from and too minor to impact any remains associated with the monument. There are several other designated heritage assets within 1km of the works, however these will not be impacted due to the minor nature of the works and the distance of the assets from the new footpath. Additionally, most of the listed buildings are screened from the proposed new route by the railway embankment. The level crossing infrastructure will be removed; however, this is not of heritage value.	Out
E52	Golden Square, Mount Bures Parish	3	The existing PRow over the level crossing will be extinguished, existing level crossing infrastructure will be removed, and 1.35m high post and wire stock proof fencing will be installed on either side of the railway. Users will be diverted via new Type p1 footpaths within field margins and existing footpaths and will be able to cross the railway via either of two existing road bridges.	Only a Type P1 footpath is being installed. Both this and the proposed fencing will not impact buried archaeological remains due to the limited or shallow nature of the excavation required. Several listed buildings have a visual link with the proposed footpath, however considering the low footfall of the path, limited nature of the work and Type P1 surface, it is not anticipated that there will be any impact on the setting of these assets. However, there may be a temporary impact during construction work. The level crossing infrastructure will be removed; however, this is not of heritage value.	Out

Level crossing no.	Name, Parish	Category	Summary of proposed works	Scoping reasoning	Scoping decision
E54	Bures, Bures Hamlet Parish	2	The existing PRoW over the level crossing will be extinguished, existing level crossing infrastructure will be removed, and existing fencing on the west side of the railway will be removed and replaced with 1.8m high chain link fencing either side of the railway. Users will be diverted via a series of existing carriageways and footways, a new Type P7 asphalt footway, new crossing point on Station Hill. Users will cross the railway at an existing underbridge on Station Hill.	The installation of the Type P7 asphalt footpath is considered as having the potential to impact archaeological remains when newly constructed on previously undeveloped land. However, in this instance the Type P7 surface is being installed on an existing road surface and will therefore not have an impact on archaeological remains in this instance. The installation of the fencing is not considered to have the potential to impact archaeological remains due to the limited or shallow nature of the excavation required. The proposed works will pass through the Bures Hamlet Conservation Area, however it is not anticipated that the works will impact the setting of the CA or the listed buildings within it, as the proposed diversion route follows existing roads. The level crossing infrastructure will be removed; however, this is not of heritage value.	In
E56	Abbotts, Ardleigh and Little Bromley Ward	3	The existing PRoW over the level crossing will be extinguished, existing level crossing infrastructure will be removed, and 1.35m high post and wire stock proof fencing will be installed along the railway. Users will be diverted along a series of existing footways and new Type P1 footpath. Users will be able to cross the railway at either Ardleigh Road level crossing or at an existing road bridge depending on the route taken. New signs will be required however these lie within an area designated an Ancient Monument and will be erected on existing features to remove the need for ground disturbance.	Areas of Type P1 footpath construction lie within the Scheduled Monument - Crop Mark site south of Ardleigh (LE ID: 1002146) and Scheduled Monument Consent will be required for any form of excavation work. These remains are delicate and can be impacted by shallow excavations in the topsoil, however the field shows evidence of ploughing and therefore it is unlikely that the works will impact these remains. Additionally, the Ardleigh Conservation Area lies directly adjacent to the works, however due to the minor nature of the work it is not anticipated that there will be an impact on the CA or listed buildings in the area. However, there may be a temporary impact during construction work. The level crossing infrastructure will be removed; however, these are not of heritage value.	In
E57	Wivenhoe, Wivenhoe Parish	6	Private vehicular rights of way over the level crossing will be extinguished and the associated level crossing infrastructure will be removed. However, the existing PRoW will remain for foot users and cycle friendly gates and path will be installed. Private vehicles will be diverted via existing public roads.	The Type P5 cycle path has the potential to impact archaeological remains as excavation required for the installation can reach up to 150mm in depth, which may surpass the topsoil layer. However, there are no other likely impacts from the minor works at this level crossing.	In
H01	Trinity Lane, Non Civil Parished Area	6	This level crossing will be downgraded to a public bridleway level crossing with private vehicular rights. Pedestrian users will be diverted to the adjacent footbridge to cross the railway.	No physical works are required at this level crossing, therefore no impact on the historic environment is anticipated.	Out
H02	Cadmore Lane, Non Civil Parished Area	2	All private and public rights of way over the level crossing will be extinguished. Users will be diverted to an existing accessible footbridge 50m south of the crossing. The level crossing infrastructure will be removed.	Few physical works are required at this level crossing and therefore no impact on the historic environment or archaeological remains is anticipated. The existing infrastructure will be removed; however, this is not of heritage value.	Out

Level crossing no.	Name, Parish	Category	Summary of proposed works	Scoping reasoning	Scoping decision
H03	Slupe Lane, Non Civil Parished Area	2	The existing private vehicular rights over the level crossing will be removed and the public footpath rights will be retained. Vehicles will be diverted via existing to Warf Road level crossing. The existing level crossing infrastructure for vehicular access and existing gates on the east side will be removed, and a 1.8m high fence will be installed. The gates on the west side will remain for NR access.	Few physical works are required at this level crossing and therefore no impact on the historic environment or archaeological remains is anticipated. The existing infrastructure will be removed; however, this is not of heritage value.	Out
H04	Tednambury, Sawbridgeworth Parish	4	The existing PRoW over the level crossing will be extinguished, the existing level crossing infrastructure will be removed and 1.8m high chain link fencing will be installed on with side of the level crossing (extending to the overbridge on the south side). Users will be diverted via newly created Type P1 footpaths, a newly created timber footbridge, a set of timber board steps, and existing footpaths. Users will cross the railway at an existing private track.	Only a Type P1 footpath is being installed. Both this and the proposed fencing will not impact buried archaeological remains due to the limited or shallow nature of the excavation required. The excavations required for the installation of the timber footbridge and timber board steps are located along the edge of the railway embankment where there is little potential to impact buried archaeological remains. The proposed Type P1 footpath runs within 100m south of the three grade II listed buildings (LE ID: 1101655; 1101656; 1347829). However, the path follows the route of an existing private track and it is not anticipated that any setting impact will be temporary during construction. The existing level crossing infrastructure will be removed; however, this is not of heritage value.	Out
H05	Pattens, Thorley Parish	4	The existing PRoW over the level crossing will be extinguished, the existing level crossing infrastructure will be removed and 1.8m high chain link fencing will be installed on with side of the level crossing, with a NR pedestrian access gate. Users will be diverted via newly created Type P1 footpath to an existing underpass to cross the railway and then through a local nature reserve. New soffit boarding will be installed to create a suitable footpath route through the underpass for users to cross the railway.	Only a Type P1 footpath is being installed. Both this and the proposed fencing will not impact buried archaeological remains due to the limited or shallow nature of the excavation required. There are several designated heritage assets, including a scheduled monument, within 250m of areas of footpath creation. However, due to the minor nature of the works it is not anticipated that this work will have an impact on the settings of these assets. The existing level crossing infrastructure will be removed; however, this is not of heritage value.	Out
H06	Gilston, Thorley Parish	4	The existing PRoW over the level crossing will be extinguished, the existing level crossing infrastructure will be removed and 1.8m high chain link fencing will be installed on with side of the level crossing. Users will be diverted via new Type P1 footpaths and existing footpaths to cross the railway at an existing underpass. New soffit boarding will be installed to create a suitable footpath through the underpass for users.	Only a Type P1 footpath is being installed. Both this and the proposed fencing will not impact buried archaeological remains due to the limited or shallow nature of the excavation required. There are several designated heritage assets, including a scheduled monument, within 250m of areas of footpath create. However, due to the minor nature of the works it is not anticipated that this work will have an impact on the settings of these assets. The existing level crossing infrastructure will be removed; however, this is not of heritage value.	Out
H08	Johnsons, Bishop's Shortford Parish	1	The existing PRoW over the level crossing will be extinguished and the existing level crossing infrastructure will be removed. Users will be diverted to the existing adjacent accessible footbridge over the railway.	No new structures or surfaces are required for the closure of this level crossing. Therefore, no heritage impacts are anticipated.	Out
H09	Fowlers, Thorley Parish	4	The existing PRoW over the level crossing will be extinguished, the existing level crossing infrastructure will be removed and 1.8m high chain link fencing will be installed on with side of the level crossing. Users will be diverted via existing footpaths and a new Type P1 footpath to cross the railway at an existing underpass. New soffit boarding will be installed to create a suitable footpath through the underpass for users.	Only a Type P1 footpath is being installed. Both this and the proposed fencing will not impact buried archaeological remains due to the limited or shallow nature of the excavation required. There are several designated assets within 1km of the works however due to the minor nature of the works and the use of existing PRoWs within the diversion it is not anticipated that this work will have an impact on the settings of these assets. The existing level crossing infrastructure will be removed; however, this is not of heritage value.	Out

Level crossing no.	Name, Parish	Category	Summary of proposed works	Scoping reasoning	Scoping decision
HA01	Butts Lane, Non Civil Parished Area	2	The existing PRoW over the level crossing will be extinguished, the existing level crossing infrastructure will be removed and 2m high steel palisade fencing will be installed on both sides of the railway. Users will be diverted via existing footways to cross the railway at an existing footbridge. Boundary fencing will be installed at the railway boundary where the current footpath will be extinguished and gates will be installed to allow private access to properties.	No new surfaces are to be installed as part of the works and the proposed fencing will not impact buried archaeological remains due to the limited or shallow nature of the excavation required. There are two conservation areas within 500m of the works and an Archaeological Priority Zone covering the site of the works. However, no excavation work is taking place and the CA are screened from the works area by a 20th century housing estate. Therefore, these assets will not be impacted. The existing level crossing infrastructure will be removed; however, this is not of heritage value.	Out
HA02	Woodhall Crescent, Non Civil Parished Area	2	The existing PRoW over the level crossing will be extinguished, the existing level crossing infrastructure will be removed and 2m high steel palisade fencing will be installed on both sides of the railway. Users will be diverted via existing footways to cross the railway at an existing footbridge. Boundary fencing will be installed at the railway boundary where the current footpath will be extinguished and gates will be installed to allow private access to properties.	No new surfaces are to be installed as part of the works and the proposed fencing will not impact buried archaeological remains due to the limited or shallow nature of the excavation required. There are two conservation areas within 500m of the works and an Archaeological Priority Zone covering the site of the works. However, no excavation work is taking place and the CA are screened from the works area by a 20th century housing estate. Therefore, these assets will not be impacted. There may be some inter-visual views between the works and the grade I listed St Andrews Church, however the work is minor and is therefore not considered to have a negative impact on the church setting. The existing level crossing infrastructure will be removed; however, this is not of heritage value.	Out
HA03	Manor Farm, Non Civil Parished Area	1	This level crossing has been out of use since the construction of the M25. The works will be legally extinguishing the residual PRoW over the level crossing.	No physical works are required at this level crossing, therefore no impact on the historic environment is anticipated.	Out
HA04	Eves, Non Civil Parished Area	3	The existing PRoW over the level crossing will be extinguished, the existing level crossing infrastructure will be removed and 1.35m high post and wire stock proof fencing will be installed on both sides of the railway, with NR pedestrian access gates on the south-west side. Users will be diverted via existing footways and the verge on Dennis Road, and via newly created Type P1 footpaths to an existing road bridge on Ockendon Lane to cross the railway. Where existing footpaths are to be extinguished, boundary fencing will be installed at the railway boundary.	Only a Type P1 footpath is being installed. Both this and the proposed fencing will not impact buried archaeological remains due to the limited or shallow nature of the excavation required. There are two conservation areas, two scheduled monuments and an Archaeological Priority Zone within 1km of the works, however these are considered too far from away to be impacted by the minor works. The existing level crossing infrastructure will be removed; however, this is not of heritage value.	Out
T01	No 131, Non Civil Parished Area	3	The existing PRoW over the level crossing will be extinguished, the existing level crossing infrastructure will be removed and 1.8m high chain link fencing will be installed on both sides of the railway. Users will be diverted via existing footways to an existing bridge to cross the railway, and along a new Type P1 footpath on the west side of the railway.	Only a Type P1 footpath is being installed. Both this and the proposed fencing will not impact buried archaeological remains due to the limited or shallow nature of the excavation required. There are several designated heritage assets within 1km of the works. However, due to the minor nature of the works and the use of existing PRoWs for diversion routes, it is not anticipated that this work will have an impact on the settings of these assets. The existing level crossing infrastructure will be removed; however, this is not of heritage value.	Out

Level crossing no.	Name, Parish	Category	Summary of proposed works	Scoping reasoning	Scoping decision
T04	Jefferies, Non Civil Parished Area	4	The existing PRow over the level crossing will be extinguished, the existing level crossing infrastructure will be removed and 1.8m high chain link fencing will be installed on both sides of the railway, with NR pedestrian access gates on the east side. Users will be diverted via new Type P1 footpaths and new stepped access to cross the railway on the A1014 Manorway Way bridge. Additionally, a new continuous footpath link between the stepped access on the west side of the railway and a new Type P1 and Type 3 footpath underneath the bridge will be created. The surface of the Type P3 footpath beneath the bridge will be gravel or stone.	The P1 surface and fencing will not have an impact on buried archaeological remains due to the limited or shallow nature of the excavation required for installation. However, the Type 3 footpath beneath the bridge may require deeper excavation (up to 330mm) which could surpass the topsoil layer and impact buried archaeological remains. Additionally, the installation of steps will also require excavation which could impact archaeological remains. However, due to previous construction of the bridge, there is potential that any archaeological deposits here have previously been truncated. There are several listed buildings within 1km of the works, however due to the built-up nature of the area and the location of the minor works adjacent to existing roads, it is not anticipated that the works will have a negative impact on the setting of these assets. The existing infrastructure is to be removed, however these are not of heritage value.	In
T05	Howells Farm, Non Civil Parished Area	4	The existing PRow over the level crossing will be extinguished, the existing level crossing infrastructure will be removed and 1.8m high chain link fencing will be installed on both sides of the railway, with NR pedestrian access gates on the north side. Users will be diverted via either proposed Type 1 footpath and stepped access on to Southend Road and bridge over the railway using an existing footway, or via existing footpaths to Fobbing (Automatic Half Barrier) level crossing.	The P1 surface and fencing will not have an impact on buried archaeological remains due to the limited or shallow nature of the excavation required for installation. There are several listed buildings within 1km of the work, however these are over 300m from the works and it is not considered that nature of the works will have an impact on the setting of any heritage assets. The existing infrastructure is to be removed, however these are not of heritage value.	Out

Source: <Insert Notes or Source>

