

A47 North Tuddenham to Easton Dualling

Scheme Number: TR010038

Volume 6

6.3 Environmental Statement Appendices **Appendix 7.3 - Landscape Character Areas**

APFP Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed
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Infrastructure Planning

Planning Act 2008

**The Infrastructure Planning
(Applications: Prescribed Forms and
Procedure) Regulations 2009**

The A47 North Tuddenham to Easton
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ENVIRONMENTAL STATEMENT APPENDICES
Appendix 7.3 - Landscape Character Areas

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1. Landscape Character Areas

1.1. Introduction

1.1.1. The following 'assessment landscape character areas' (LCAs) have been scoped into the assessment of effects due to the Proposed Scheme on landscape character. They comprise LCAs which have been identified in the following published landscape character studies:

- Breckland Council (2007) Breckland Landscape Character Assessment
- Broadland District Council (2008 and updated 2013) Broadland Landscape Character Assessment
- South Norfolk Council (2001) South Norfolk Landscape Character Assessment

1.1.2. When describing the character areas within this appendix, the focus has been on identifying the aspects of the character description which are evident within the study area of the site and not necessarily the wider area. This is to ensure that the assessment of landscape effects focuses on the identification of change that will occur to landscape character due to the Proposed Scheme and not to a part of a character area which would have limited or no inter-visibility with the site.

1.1.3. Refer to Figure 7.3 which illustrates the location of the LCAs (**TR010038/APP/6.2**).

1.1.4. The following text summarises the baseline context, sensitivity and construction and operation effects of the Proposed Scheme on each LCA. The LCAs have been listed as they are found geographically, in west to east sequence.

1.2. Breckland LCA B6: River Wensum and Tud Tributary Farmland (Settled Tributary Farmland Type)

Figure 1-1: LCA B6 illustrative views



Source: Site photograph (November 2020)



Source: Viewpoint G (2019)

Baseline Context

- 1.2.1. Referring to Figure 7.3, LCA B6 is identified within the very western 2km of the study area, in the vicinity of North Tuddenham, and occasional extents of the north-western extent of the study area, in the vicinity of Hockering Heath and Sandy Lane (**TR010038/APP/6.2**).

- 1.2.2. The following key characteristics are selected from the published character assessment, with a focus on those aspects of the character which are most relevant to the proportion of the LCA which falls within the study area.
- The landform is gently undulating with occasional interruptions by shallow dry valleys and tributaries. The topography ranges from 20 to 50m AOD
 - Arable agriculture represents the dominant land use, although pasture is occasionally evident and is particularly associated with the minor tributaries
 - Fields are characteristically medium to large in size, although small-scale fields adjoin the drains and tributaries
 - Hedgerows and hedgerow trees bound fields of variable size. Occasional drainage systems on wetter land adjacent to tributaries create a smaller scale landscape pattern
 - Despite the general pattern of large-scale, open arable fields, there are occasional small blocks woodland (including wet woodland alongside tributaries), or larger woodland blocks associated with historic features e.g. Hockering Wood (ancient woodland)
 - Views within the area are often to a backdrop of tree lined or wooded skylines
 - Settlement pattern is characterised by frequent dispersed farmsteads and hamlets and larger villages clustered around the rural road network
 - A network of hedgerow lined rural roads characteristically connect the settlements. The A47 crosses east to west across the character area and is a notable linear feature within the landscape
 - This is described within the LCA as a “*tamed arable landscape that generally retains a tranquil rural character*”
- 1.2.3. Considering the perception of the landscape and how it is visually experienced: views are generally contained by the broadly flat nature of the landform and tree and hedge cover on field boundaries; and there are some views into shallow river valleys, however high points which afford views across the landscape are limited. Considering the scale of the landscape: it is generally large-scale, due to the predominance of open-arable farmland; however, there are some smaller scale areas, which is more noticeably smaller in and around small settlements.

Sensitivity

- 1.2.4. Key sensitivities of the entire LCA B6 which are stated within the LCA description are:
- Historic parklands/estates e.g. at Bylaugh and Sennowe Park
 - Wooded skylines, particularly those associated with the afore-mentioned estate landscapes

- The occasional large woodland blocks, a number of which include ancient woodland
- The wet woodland and wet meadow habitats associated with the tributaries;
- Areas of grazing pasture, which are less commonly found than arable farmland
- Small scale vernacular settlements

Value

1.2.5. The area doesn't associate with any overarching landscape designations and largely comprises large-scale arable farmland which has limited historic and cultural associations. There are no notable designed landscapes, including parkland, within this part of the LCA. Overall, this part of the LCA is of **Low** landscape value.

Susceptibility

1.2.6. This is a large-scale arable landscape with limited topographical variation. The part of the LCA does not include some of the aspects which are more susceptible to change and are evident elsewhere, i.e. wet meadows and historic parkland estates. The existing A47 dual carriageway passes through the LCA here and is acknowledged as being an existing feature. While it remains a tranquil, rural LCA which is susceptible to further development of linear transport infrastructure, (i.e. through the potential for change to the landscape pattern and the possible restriction of some of the more open views across the open fields towards a wooded skyline) the LCA is already affected to some extent by the presence of the existing A47, reducing its susceptibility to highway development. The susceptibility of the LCA is therefore considered to be **Medium**.

Combined judgement of sensitivity

1.2.7. Considering both the susceptibility and value of LCA B6, the overall sensitivity of has been assessed as **Medium**.

Construction effects

1.2.8. Construction operations would be limited directly within LCA B6 as there would be a limited extent of the Proposed Scheme which directly passes through this character area. There would, however, be some limited evidence of construction in three locations within LCA B6:

- The construction of the mainline at the western extent of the Proposed Scheme, however this would be visually contained from the wider LCA by Poppy's Wood
- A small extent of mainline construction directly to the west of Hockering

- Construction of the northern extent of the proposed Wood Lane junction
- 1.2.9. During construction there would be clearance of existing vegetation, particularly at the southern extent of Poppy's Wood. However, this would be relatively limited and would alter the characteristics of LCA B6 to a negligible extent.
- 1.2.10. The overall duration of the construction activity would be 23 months. Despite the scale of the works they would largely occur on the alignment of or close to the existing highway infrastructure limiting the wider effect on surrounding landscape character. The relatively low-lying position of the Site and the occasional surrounding tree and hedgerow cover, particularly beside the existing A47, would limit visibility of the works from surrounding parts of the landscape character area.
- 1.2.11. During construction the Proposed Scheme would result in a **negligible** magnitude of landscape character change and a **neutral** significance of effect on LCA B6.

Operation effects

- 1.2.12. As stated within the construction assessment, there would be a limited extent of the Proposed Scheme located directly within this character area, which would be at the western extent of the Proposed Scheme. It is also the case that the changes here would be largely centred on the existing A47 corridor. The following are aspects of the Proposed Scheme which would occur within LCA B6:
- New mainline at the western extent of the Proposed Scheme, albeit this would be visually contained from the wider LCA by Poppy's Wood
 - A small extent of mainline directly to the west of Hockering
 - The northern extent of the proposed Wood Lane junction
- 1.2.13. The Proposed Scheme would be located within a small extent of the very southern extent of LCA B6 and would give rise to limited physical change to its features. At the very western extent of the Proposed Scheme, Poppy's Wood provides visual containment to the existing A47 corridor and would screen the Proposed Scheme also. In addition, Hockering Wood and gentle landform undulations would provide a screen to another extent of the Proposed Scheme which is located slightly further east along the A47 and south of Hockering.
- 1.2.14. The most notable change within the LCA, due to the Proposed Scheme, would be directly to the north of the proposed Wood Lane junction where the associated link roads would extend the footprint of the A47 at the southern extent of Sandy Lane, increasing its influence within the wider LCA, albeit to a small extent.

- 1.2.15. At Year 1, the Proposed Scheme would give rise to a minimal change to this LCA, given the limited loss of landscape features, such as woodland cover, and the visual containment provided by gently landform undulations and retained tree cover. This is a large scale landscape which can accept some change and the changes here would be within the immediate vicinity of the existing A47 corridor, a noted feature of the LCA. The Proposed Scheme would appear to relate to the broad-scale linear form and pattern of this part of LCA B6 and, where visible, it would seem to be within an existing infrastructure corridor that includes the existing A47.
- 1.2.16. At Year 1 of operation it is considered that the Proposed Scheme would give rise to a **negligible magnitude** of change on LCA B6 and a **neutral significance** of effect on LCA B6, which is **Not Significant**.
- 1.2.17. At Year 15, mitigation planting would have established to an extent that it would assimilate further within the landscape within LCA B6. In particular, the linear belts of planting proposed to the north of the Proposed Scheme would have established to an extent that the Proposed Scheme would be largely screened from view. However, there would remain the chance for glimpsed views of the Proposed Scheme from locations in close proximity and therefore there would be remain a **negligible magnitude of change** and a **neutral level of effect** on LCA B6, which is **Not Significant**.

1.3. Breckland LCA A5: Upper Tud (River Valleys Type)

Figure 1-2: LCA A5 illustrative views



Source: Site photograph, Viewpoint 1



Source: Site photograph, Viewpoint 3



Source: Site photograph, Viewpoint F

Baseline Context

- 1.3.1. Referring to Figure 7.3, LCA A5 is identified within the majority of the western half of the study area, in the vicinity of Hockering, the River Tud and the existing A47 corridor (**TR010038/APP/6.2**).
- 1.3.2. The following characteristics are selected from the published character assessment, with a focus on those aspects of the character which are most relevant to the proportion of the LCA which falls within the study area:
- The Upper Tud Valley is an easterly draining catchment which forms a small component of the broad, contained but clearly defined valley which is bounded to the north and west by the Wensum and Tud Settled tributary farmland and to the south by the Shipdham Plateau.
 - The valley floor lies at 30m AOD and the crests at 50m AOD, there is therefore limited topographical variation within the valley.
 - Due to the containment provided by landform and by vegetation within the valley floor, views are intermittent, although church towers (e.g. East Tuddenham/Hockering) are prominent, and the skylines of the valley crests are uninterrupted.
 - Pastoral farmland comprises the predominant land cover, with areas of rough grazing and wet meadow, in addition to alder dominated strips to the river, which provide intermittent views of the watercourse. Arable farmland is more common on the higher slopes, at the periphery of the LCA.
 - The network of pastoral fields is primarily of geometric pattern and is generally small to medium in scale, with boundaries defined by both mixed native hedgerows and by field drains and tributaries.
 - A number of historic land cover elements survive such as the alder dominated carr woodlands and Warren Plantation (located at the very eastern extent of this LCA, just to the west of Honingham). The ancient woodland at Hockering Wood extends into a small part of the character area and provides part of the LCA's backdrop to the north.
 - The meandering course of the Tud and its associated tributaries and wet woodland strips form distinctive elements within the valley floor, as do the narrow, historic river crossing points.
 - Historic features include the remote church of East Tuddenham.
 - Settlement pattern is associated with the junctions of narrow rural roads and a number of isolated farmsteads occur across the landscape.
 - A textured wetland landscape, with the only views of the River Tud available from the crossing points. The Tud Valley has a peaceful, pastoral character with only localised intrusion from the A47 in the northern part of the character area. This is due mostly to the linear belt of trees and hedge beside the A47, which screen it from much of the view.

- An extensive network of rights of way intersects the character area, both along the course of the river and across the valley sides.

1.3.3. Considering the perception of the landscape and how it is visually experienced: *“The Tud Valley is a peaceful, rural landscape clearly defined by a broad shallow valley landform. Evidence of the wetland character associated with the Tud is apparent in the areas of wet meadow, grazed pasture and alder carr, although the course of the Tud is often largely concealed by wet woodland, with views of the river generally confined to crossing points”.*

Sensitivity

1.3.4. Key sensitivities of the entire LCA A5 which are stated within the LCA description are:

- Valley crests, which clearly define the extents of the character area.
- Wet woodland and carrs along the river define the character of the lowland river landscape, creating a densely wooded river corridor. Localised glimpsed views of the course of the Tud are a key sensitivity.
- Isolated churches to the valley crests and upper valley slopes create prominent and historic visual features. Key visual sensitivities are considered to be the views to the churches at Hockering and East Tuddenham.
- Narrow rural roads and river crossings, which represent historic bridging points and are illustrated on Faden’s Map.
- Gently sloping pastoral fields to the valley sides represent historic post Enclosure land use and landcover pattern.
- The inter-visibility with adjacent landscapes due to the largely open and unwooded skylines to the valley crests.

Value

1.3.5. The area doesn’t associate with any overarching landscape designations. However, there are key views of historic features such as churches and bridging points which indicate value within the LCA. Overall, this part of the LCA is of **Medium** landscape value.

Susceptibility

1.3.6. The part of LCA A5 which is within the study area is typical of the wider characteristics of the LCA, in particular: the clearly defined, wooded valley form; the intermittent, views of historic features such as church towers (e.g. East Tuddenham/Hockering); and the limited influence of urban features, such as the A47, which is well screened by tree and hedge cover through this LCA. However, the pattern and form of the LCA, a relatively narrow landscape which follows the

lower levels of the River Tud, indicates some opportunities for a well-designed linear development to assimilate within its surrounding context.

- 1.3.7. The susceptibility of the LCA to the type of development proposed, a linear transport route, is therefore considered to be **High**.

Combined judgement of sensitivity

- 1.3.8. Considering both the susceptibility and value of LCA A5, the overall sensitivity of has been assessed as **High**.

Construction effects

- 1.3.9. The majority of the western half of the Proposed Scheme would be located within LCA A5 and construction operations would therefore be evident here. The Proposed Scheme would deviate to the south from the existing A47 road corridor and as such much of the construction would be located within open countryside, directly to the south of Hockering and to the north of the River Tud.

- 1.3.10. The following would be the key construction operations located within LCA A5:

- The construction of the mainline within largely arable fields
- Minor amendments to the existing A47 corridor to the west of Hockering
- The construction of the western half of the proposed Wood Lane junction and associated earthworks
- Excavations associated with the proposed realignment of Mattishall Lane
- Construction of a new link road to the east of Mattishall Lane
- The excavation required for five new drainage basins, located close to the Proposed Scheme

- 1.3.11. During construction there would be clearance of existing vegetation, particularly on field boundaries, however the following more notable extents of clearance:

- Trees within the River Tud corridor, directly to the east of Mattishall Lane
- Woodland belts located beside the existing A47 and the east of Sandy Lane

- 1.3.12. The overall duration of the construction activity would be 23 months. Part of the works within LCA A5 would occur on the alignment of or close to the existing highway infrastructure (at the very western extent of the Proposed Scheme and at the proposed Wood Lane junction) partially limiting the wider effect on surrounding landscape character. However, the majority of the construction would be located within arable fields directly to the north of the wooded River Tud corridor.

1.3.13. The construction operations would be highly visible within their locality and would give rise to a notable change to landscape character for the duration of the works. Evidence of construction would be partially limited by the retained tree cover to the south, directly beside the River Tud, and by landform undulations, particularly a low plateau located to the north, in the vicinity of Hockering. However, construction of the Proposed Scheme would result in a **moderate adverse** magnitude of landscape character change to LCA A5 and a **moderate adverse** significance of effect on LCA A5, which is **Significant**.

Operation effects

1.3.14. The following are key aspects of the Proposed Scheme which would be evident within LCA A5:

- Approximately 4km of new mainline within largely arable fields
- Minor changes to the existing A47 corridor to the west of Hockering
- The creation of the western half of the proposed Wood Lane junction
- The realignment of Mattishall Lane (Mattishall Lane Link Road)
- A new link road to the east of Mattishall Lane
- Five new drainage basins, located close to the Proposed Scheme

1.3.15. The Proposed Scheme would deviate from the existing A47 road corridor within LCA A5. The new road would broadly be located parallel to the existing A47, and would create a wider corridor of two main roads. This would 'land-locks' a notable extent of farmland in between the road and would create a much wider transport corridor through the LCA than is evident at present.

1.3.16. The Proposed Scheme would also cut across slopes, as opposed to running along contour lines. At its western extent within this LCA it would be located on slightly higher ground beside the existing A47 and would then fall in height gradually towards the River Tud valley at its lowest point just south of Hockering. The mainline would then rise back gradually towards the A47 at Sandy Lane. This change in height would also require embankments on the southern side of the Proposed Scheme, creating new landforms. In addition, cutting would require through a low hill located just to the south of Hockering.

1.3.17. The Proposed Scheme would alter some of the key characteristics within this central extent of LCA A5, particularly given its proximity to the River Tud wooded corridor just south of Hockering. This is a reasonably enclosed, intimate landscape and the Proposed Scheme would alter this, albeit contained within a 4km extent of the river corridor. It is noted that, although acknowledged as being art of the baseline characteristics of LCA A5, the existing A47 forms a reasonably

discrete transport corridor through the landscape given its position and extent of mature roadside vegetation.

- 1.3.18. At Year 1 of operation it is considered that the Proposed Scheme would give rise to a **moderate adverse magnitude** of change and a **moderate adverse significance** of effect on LCA A5, which is **Significant**.
- 1.3.19. At Year 15, mitigation planting would have established to an extent that it would assimilated further within LCA A5. Linear belts of planting beside the Proposed Scheme would limit its visibility and replicated the mature tree cover which can be found beside the River Tud and existing A47 corridors.
- 1.3.20. At Year 15 there would remain a **minor adverse magnitude** of change and a **slight adverse significance** of effect on, which is **Not Significant**.

1.4. Broadland LCA D2 – Weston Green Tributary Farmland (Tributary Farmland Type)

Figure 1-3: LCA D2 illustrative views



Source: Viewpoint 7



Source: Viewpoint I



Source: Viewpoint L

Baseline Context

- 1.4.1. Referring to Figure 7.3, LCA D2 is identified within the majority of the eastern half of the study area, excluding the very eastern extent around Easton which is located just outside this LCA (**TR010038/APP/6.2**). It extends from Honingham to just west of Easton.
- 1.4.2. The following characteristics are taken from the published character assessment, with a focus on those aspects of the character which are most relevant to the proportion of the LCA which falls within the study area:
- LCA D2 encompasses a pocket of land, which is isolated from the rest of the district by the River Wensum.
 - Landform is gently rolling and incised to the south of the narrow valley of the River Tud. The land continues to rise between the two river valleys, forming an elevated plateau, that extends south-west beyond the boundaries of the district. This section of the character area reaches elevations of no greater than 60m AOD.
 - Mixed woodland, situated on the sand and gravel deposits above the southern slopes of the Wensum Valley, extends south and along the Tud Valley. Interspersed between these plantations, medium-scale fields are in mixed use. Some are in arable cultivation but many are turned over to pig rearing and sheep grazing. Occasional fields have been converted to residential use with associated horticulture.
 - The A47 cuts through the southern part of this character area along the lower land near the River Tud.
 - The undulating slopes, rolling hills and mature blocks of woodland in the centre and east create a small-scale and intimate landscape, with a settled and unified character. Its diversity of land cover and land uses provide a strong visual mosaic with a robust landscape structure.
 - The Tud valley is a peaceful, rural landscape clearly defined by a broad shallow valley landform. Evidence of the wetland character associated with the Tud is apparent in the areas of wet meadow, grazed pasture and alder carr, although the course of the Tud is largely concealed by wet woodland, with views of the river generally confined to crossing points.
 - In the southern extent of LCA D2, which is where the study area is located, structure is provided by the numerous close clipped hedgerows and woodland copses, whilst the top of the plateau, large-scale fields, limited tree and hedgerow cover, and the elevated nature of the area create an exposed and less structured landscape. Overall, the area's mix of land cover elements adds visual interest, creating a diverse rural landscape with a strong sense of visual integrity.
 - There are few settlements in the area. Much of the land here appears to have been enclosed to form the large estates on the adjacent valley slopes of the

Wensum. This has resulted in a limited number of small farmsteads in this area

- With the exception of some localised visual and noise intrusion from the A47, this landscape comprises a unified peaceful character. Isolated churches on the upper valley slopes create prominent and historic built features. Although there are few other features of historic or architectural interest in the area, its distinctive topography and natural features make it a valuable landscape resource.

Sensitivity

1.4.3. Key sensitivities of the entire LCA D2 which are stated within the LCA description are:

- A distinctive topography combined with mature blocks of woodland, provides a small-scale and intimate landscape
- This is a diverse rural landscape with a strong sense of place.
- Strong visual mosaic with a robust landscape structure in central and eastern parts (e.g. Honingham Park area)
- The Tud valley mosaic of wet woodland, grazing marsh and alder carr
- The sense of tranquillity and strong rural character associated with the Tud Valley
- Open skyline in plateau areas to the northwest and south
- The scarce settlement pattern
- The characteristic views to church towers

Value

1.4.4. The area doesn't associate with any overarching landscape designations. However, the views of the River Tud valley and certain historic features, such as church spires, denote a locally valued landscape. Overall, this part of the LCA is of **Medium** landscape value.

Susceptibility

1.4.5. The part of LCA D2 which is within the study area is typical of the characteristics of the wider LCA which are of higher susceptibility to change, in particular: the clearly defined, wooded River Tud valley form; the intermittent, views of historic features such as church towers; and the limited influence of urban features, which provides a sense of tranquillity. The existing A47 dual carriageway passes through the LCA here and is acknowledged as being an existing feature, partially limiting the susceptibility of the LCA to change.

1.4.6. The susceptibility of the LCA to the type of development proposed, a linear transport route, is therefore considered to be **High**.

Combined judgement of sensitivity

- 1.4.7. Considering both the susceptibility and value of LCA D2, the overall sensitivity of has been assessed as **High**.

Construction effects

- 1.4.8. The majority of the eastern half of the Proposed Scheme would be located within LCA D2 and construction operations would therefore be evident here. The Proposed Scheme would deviate slightly to the north from the existing A47 road corridor and as such much of the construction would be located within open countryside, directly to the north and north-east of Honingham. The Proposed Scheme would be located to the north of the River Tud in the western half of this LCA and to the south in the eastern half following the installation of a new bridge crossing over the river, directly to the east of Honingham.
- 1.4.9. The following would be the key construction operations located within LCA D2:
- The construction of the mainline within largely arable fields
 - Minor amendments to the existing A47 corridor to the north of Honingham
 - The construction of the eastern half of the Wood Lane junction and associated earthworks
 - The construction of the Norwich Road junction and associated earthworks
 - The excavation required for five new drainage basins, located close to the Proposed Scheme
- 1.4.10. During construction there would be clearance of existing vegetation, particularly on field boundaries, however the following more notable extents of clearance:
- Trees within the River Tud corridor, directly to the east of Honingham as the Proposed Scheme crosses over the river
 - Tree cover at the northern extent of Berrys Lane
 - Woodland belts located beside the existing A47 and the east of Sandy Lane
- 1.4.11. The overall duration of the construction activity would be 23 months. Part of the works within LCA D2 would occur on the alignment of or close to the existing highway infrastructure (in the vicinity of the proposed Wood Lane junction) partially limiting the wider effect on surrounding landscape character. However, the majority of the construction would be located within arable fields.
- 1.4.12. The construction operations would be highly visible within their locality and would give rise to a notable change to landscape character for the duration of the works. Evidence of construction would be partially limited by the retained tree cover to the south, directly beside the existing A47, and by subtle landform

undulations. However, construction of the Proposed Scheme would result in a **large adverse** magnitude of landscape character change to LCA D2 and a **major adverse** significance of effect on LCA D2, which is **Significant**.

Operation effects

- 1.4.13. The following are key aspects of the Proposed Scheme which would be evident within LCA D2:
- Approximately 3km of new mainline within largely arable fields
 - Minor changes to the existing A47 corridor to the north of Honingham
 - The creation of the eastern half of the proposed Wood Lane junction
 - The creation of the Norwich Road junction
 - Five new drainage basins, located close to the Proposed Scheme
- 1.4.14. Similar to the landscape change experienced within LCA A5, the Proposed Scheme would deviate from the existing A47 road corridor within LCA D2. The new road would broadly be located parallel to the existing A47 and would create a wider corridor of two main roads. This would 'land-locks' a notable extent of farmland in between the road, particularly to the north of Honingham, which would create a much wider transport corridor through the LCA than is evident at present.
- 1.4.15. The greatest change to the landscape here would be the introduction of two junctions, both with a large footprint and the potential to alter a wider extent of the LCA than the mainline alone. Associated link roads would extent the influence of road infrastructure beyond the existing A47 corridor to an extent that would alter the characteristics of this landscape. The Norwich Road junction would be experienced particularly from the north given its position on a north facing slope.
- 1.4.16. Similar to LCA A5, the mainline within LCA D2 would change in height as it cuts across contours either side of the River Tud which would require embankments beside the Proposed Scheme, creating new landforms. An example would be to the east of the river crossing, at which the Proposed Scheme cuts into a local rise in the landform, which would be evident in some views from east of Honingham. Woodland nearby, such as Church Plantation, would contain this change from the surrounding area
- 1.4.17. A localised change to character would occur at the River Tud Crossing. The bridge would have a reasonably wide span, limiting tree loss, however the proposed mainline would introduce a large built feature into the river corridor, creating a contrast which would change the key landscape characteristics in this

location. It is noted that this change would be relatively contained from the wider character area given the extent of tree cover within this area.

- 1.4.18. There would be some loss of woodland through this LCA, however this is relatively limited given the extent of the Proposed Scheme through this LCA and the majority of the tree cover within the River Tud corridor would be retained.
- 1.4.19. At Year 1 of operation it is considered that the Proposed Scheme would give rise to a major adverse magnitude of change and a moderate adverse significance of effect on LCA D2.
- 1.4.20. At Year 15, mitigation planting would have established to an extent that it would assimilated further within LCA D2. At Year 15 there would remain a minor adverse magnitude of change and a slight adverse significance of effect on, which is Not Significant.
- 1.4.21. At Year 1 of operation it is considered that the Proposed Scheme would give rise to a **major adverse magnitude** of change and a **large adverse significance** of effect on LCA D2, which is **Significant**.
- 1.4.22. At Year 15, mitigation planting would have established to an extent that it would assimilated further within LCA D2. Linear belts of planting beside the Proposed Scheme would limit its visibility and replicated the mature tree cover which can be found beside the River Tud and existing A47 corridors.
- 1.4.23. In particular, extensive linear belts of tree planting are proposed beside the two junctions (Wood Lane and Norwich Road). Given the limited level of undulation within the landscape, the maturity of proposed planting would successfully integrate the Proposed Scheme into LCA D2, limiting its change and balancing with the River Tud wooded corridor.
- 1.4.24. At Year 15 there would remain a **minor adverse magnitude** of change and a **slight adverse significance** of effect on, which is **Not Significant**. The establishment of mitigation proposals would successfully integrate the Proposed Scheme into LCA D2, such that the residual landscape effect would not be significant, however there would remain local change to the landscape, particularly in the vicinity of the two proposed junctions and the bridge crossing over the River Tud.

1.5. South Norfolk LCA G1: Easton Fringe Farmland (Fringe Farmland Type)

Figure 1-4: LCA G1 illustrative view



Source: Viewpoint 6

Baseline Context

- 1.5.1. Referring to Figure 7.3, LCA G1 is identified within a small extent of the eastern part of the study area and specifically surrounds Easton (**TR010038/APP/6.2**).
- 1.5.2. The following characteristics are taken from the published character assessment, with a focus on those aspects of the character which are most relevant to the proportion of the LCA which falls within the study area:
 - An undulating landscape sloping towards a distinct ridge which marks the boundary between the River Yare valley (northern extent of the LCA) and River Tud valley (southern extent of the LCA). Easton is located on the top of the low ridge, between the two rivers
 - The ridge top is highly developed and has a 'strong urban fringe' character, including: urban settlement; large retail superstores; and associated car parks
 - There are large-scale recreational uses, including golf courses and the Royal Norfolk Showground, albeit, neither of which are located within the study area
 - The settled areas have an arable and pastoral farmland surrounding context, which is evident around Easton
 - There is limited woodland cover and although field sizes within this part of the study area are medium in scale, they have intermittent hedgerow and tree cover. An exception is at the very northern extent of the LCA, and just to the north of the existing A47, where a linear belt of woodland at Longdell is located, however this associates more with the lower levels, close to the River Tud
 - The A47 is a major transportation through-route and provides a gateway route into South Norfolk from the west

Sensitivity Value

- 1.5.3. The area doesn't associate with any overarching landscape designations. However, it is considered to provide a 'gateway' to South Norfolk and as such denotes some local and regional value. Overall, this part of the LCA is of **Medium** landscape value.

Susceptibility

- 1.5.4. The urban nature of the area around Easton, which is located on the ridge top between the Yare and Tud valleys, and the A47 corridor, indicate a Low level of susceptibility to the type of development of proposed: a linear transport route.

Combined judgement of sensitivity

- 1.5.5. Considering both the susceptibility and value of LCA G1, the overall sensitivity of has been assessed as **Low**.

Construction effects

- 1.5.6. Construction operations would be limited directly within LCA G1 as there would be a limited extent of the Proposed Scheme located directly within this character area. There would, however, be some limited evidence of construction within LCA G1 directly to the west of Easton, as follows:

- The construction of the mainline at the eastern extent of the Proposed Scheme as it ties in with the existing A47 corridor through Easton, however this would be visually contained from the wider LCA by retained vegetation and the built form within Easton
- The construction of a new footbridge over the mainline, likely involving the use of cranes, albeit for a very short duration
- The construction of new local access roads to the north and south of the mainline, in particular the creation of a new road directly to the north of St Peter's Church, Easton

- 1.5.7. During construction there would be clearance of existing vegetation, particularly beside the existing A47 and directly to the north of St Peter's Church. However, in the context of the wider LCA, this would be a relatively limited change and would alter the characteristics of LCA G1 to a negligible extent.

- 1.5.8. The overall duration of the construction activity would be 23 months. Despite the scale of the works they would largely occur on the alignment of or close to the existing highway infrastructure limiting the wider effect on surrounding landscape character. The relatively low-lying position of the Site and the occasional surrounding tree and hedgerow cover, particularly beside the existing A47, would

limit visibility of the works from surrounding parts of the landscape character area.

- 1.5.9. During construction the Proposed Scheme would result in a **minor adverse** magnitude of landscape character change and a **slight adverse** significance of effect on LCA G1, which is **Not Significant**.

Operation effects

- 1.5.10. As stated within the construction assessment, there would be a limited extent of the Proposed Scheme located directly within this character area, which would be at the western extent of Easton. It is also the case that the changes here would be centred on the existing A47 corridor. The following are aspects of the Proposed Scheme which would occur within LCA G1:
- New mainline at the western extent of the Proposed Scheme as it ties in with the existing A47 corridor through Easton
 - The installation of a new footbridge over the mainline
 - New local access road to the north and south of the mainline, in particular the creation of a new road directly to the north of St Peter's Church, Easton
- 1.5.11. At Year 1, the loss of some vegetation beside the A47 and the creation of new local access roads either side of the mainline would give rise to some localised change to LCA G1. There would be a notable change to the landscape directly to the north of St Peter's Church, Easton, where vegetation clearance would change the appearance of its locality, albeit the mainline and side roads would be screened from view by earth bunds and fencing.
- 1.5.12. Overall, the changes experienced within LCA G1 at Year 1 would be very localised and would not alter the characteristics of the wider character area. The changes would be centred on the existing A47 and would be screened from the wider character area by intervening vegetation, landform undulations and built form within Easton.
- 1.5.13. At Year 1 of operation it is considered that the Proposed Scheme would give rise to a **minor adverse magnitude** of change and a **slight adverse significance** of effect on, which is **Not Significant**.
- 1.5.14. At Year 15, mitigation planting would have established to an extent that it would assimilate further within the landscape within LCA G1. In particular, the planting located beside the proposed local access roads and directly to the north of St Peter's Church would have established to an extent that the Proposed Scheme would be largely screened from view. However, there would remain the chance for glimpsed views of the Proposed Scheme, particularly the footbridge just west

of Easton and therefore there would be remain a **negligible magnitude of change** and a **neutral level of effect** on LCA G1, which is **Not Significant**.

1.6. South Norfolk LCA A3: Tud Rural River Valley (Rural River Valley Type)

Figure 1-5: LCA A3 illustrative view



Source: Viewpoint M

Baseline Context

- 1.6.1. Referring to Figure 7.3, LCA A3 is identified within a small extent of the eastern part of the study area and specifically is in the vicinity of Lower Easton and between the Rivers Yare (to the north) and Tud (to the south) **(TR010038/APP/6.2)**.
- 1.6.2. The following characteristics are taken from the published character assessment, with a focus on those aspects of the character which are most relevant to the proportion of the LCA which falls within the study area:
- A small, intimate, rural valley with confined form. There are occasional long-range views from higher ground, however generally views out are restricted
 - Valley sides reach approximately 30m AOD
 - The Tud river channel itself is small-scale and largely screened from view by tree cover, with road crossing points the most likely locations where it is visible
 - It's intricate, sinuous topography is accentuated by the wooded valley sides and narrow valley floor
 - It has a strongly wooded character, with a mix of deciduous and coniferous woodland blocks on the valley sides, plus lines of poplar trees closer to the river. Single trees and Scots pines are a distinctive feature found here
 - Mixed agricultural fields on the valley sides
 - There is limited, small-scale settlement comprising isolated farmsteads
 - It has a remote and very rural character, despite it's proximity to Easton and Norwich, which is further east, outside of the study area. It presents a

'wooded gateway' to Norwich, acting as a backdrop to adjacent character areas

- There are 'important' views into this character area from the nearby Norwich Southern Bypass

Sensitivity Value

- 1.6.3. The area doesn't associate with any overarching landscape designations. However, it is considered to provide a backdrop to the 'gateway' into South Norfolk, with locally important views into it from adjacent roads. Overall, this part of the LCA is of **Medium** landscape value.

Susceptibility

- 1.6.4. This LCA has a remote and very rural character, with limited built form or major transport routes. It is well wooded and provides an important backdrop to adjacent LCAs. It is therefore of **High** susceptibility to the type of change proposed.

Combined judgement of sensitivity

- 1.6.5. Considering both the susceptibility and value of LCA A3, the overall sensitivity of has been assessed as **High**.

Construction effects

- 1.6.6. Construction operations would not occur directly within LCA A3 as it is located 0.1km to the north of the Proposed Scheme at its very eastern extent close to Easton. There may, however, be some limited evidence of construction within LCA A3 directly to the west of Easton, as follows:
- The construction of the mainline at the western extent of the Proposed Scheme as it ties in with the existing A47 corridor through Easton, however this would be visually contained from the wider LCA by retained vegetation in the vicinity of Church Lane and by gentle landform undulations
 - The construction of a new footbridge over the mainline, likely involving the use of cranes, albeit for a very short duration
 - The construction of new WCH route to the north of the mainline, connecting into Church Lane
- 1.6.7. The overall duration of the construction activity would be 23 months. Despite the scale of the works they would largely occur on the alignment of or close to the existing highway infrastructure in the vicinity of LCA A3, limiting the wider effect on its key characteristics. The relatively low-lying position of the Site and the occasional surrounding tree and hedgerow cover, particularly the vegetation

directly located north of the existing A47 and beside Church Lane, would limit visibility of the works from the majority of LCA A3, with only glimpsed views possible, such as of cranes installing the proposed footbridge.

- 1.6.8. During construction the Proposed Scheme would result in a **negligible** magnitude of landscape character change and a **neutral** significance of effect on LCA A3.

Operation effects

- 1.6.9. As stated within the construction assessment, there would be no direct physical change to LCA A3 as it is located approximately 0.1km north of the Proposed Scheme. The following are aspects of the Proposed Scheme which are in proximity to LCA A3:

- The construction of new mainline at the western extent of the Proposed Scheme as it ties in with the existing A47 corridor through Easton
- The construction of a new footbridge over the mainline, likely involving the use of cranes, albeit for a very short duration
- New WCH route to the north of the mainline, connecting into Church Lane

- 1.6.10. At Year 1, the majority of these changes would be screened by intervening vegetation within the southern extent of the LCA. Gentle topographical undulations also provide screening of the existing A47 corridor, as would be the case for the Proposed Scheme which is located in close proximity to the existing A47 corridor. There may be glimpsed views of the Proposed Scheme, however these would be limited and there would be no change to the fundamental characteristics of LCA A3.

- 1.6.11. At Year 1 of operation it is considered that the Proposed Scheme would give rise to a **negligible magnitude** of change and a **neutral significance** of effect on, which is **Not Significant**.

- 1.6.12. At Year 15, mitigation planting would have established to an extent that it would assimilate further within the landscape in the vicinity of LCA A3. However, there would remain the chance for glimpsed views of the Proposed Scheme, particularly the footbridge just west of Easton and therefore there would be remain a **neutral level of effect** on LCA A3, which is **Not Significant**.