



West Winch Housing Access Road

Environmental Statement - Chapter 18: Summary

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18 Summary

18.1 Introduction

18.1.1 This chapter reports a summary of the outcome of the assessment of likely significant environmental effects arising from the Proposed Scheme from the Technical Chapters 6-16. The residual effects of the demolition and construction effects are temporary in nature whereas the effects of the operation of the Proposed Scheme are generally permanent in nature. This chapter is intended to be read as part of the wider Environmental Statement (ES), with particular reference to the introductory chapters (chapters 1 - 5) and technical chapters 6-16.

18.2 Summary of the EIA report

18.2.1 Table 18.1 presents a summary of the residual effects, together with any proposed secondary mitigation, for each technical discipline assessed within the ES (Chapters 6-16). The full assessment can be found within the relevant technical chapters of this ES. Specifically, the summary presents:

- likely significant environmental effects considered (for the demolition, construction and operational stages);
- sensitive receptors considered;
- significance and nature of effects prior to mitigation / enhancement (pre-secondary mitigation / enhancement effects);
- any proposed secondary mitigation / enhancement measures;
- monitoring requirements; and
- significance and nature of effects following mitigation enhancement (residual effects).

Table 18.1 – Summary of EIA Report

Table key: P / T = Permanent or Temporary, D / I = Direct or Indirect, ST / MT / LT = Short Term, Medium Term or Long Term, N/A = Not Applicable

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Chapter 6 - Air Quality	Chapter 6 - Air Quality	Chapter 6 - Air Quality	Chapter 6 - Air Quality
Construction Phase	Construction Phase	Construction Phase	Construction Phase
There are 335 residential properties (human receptors) and one ecological receptor (Sheep's Course Wood CWS) with 200m of the Red Line Boundary.	Negligible (Not significant) T / D / ST	No additional mitigation is required.	Negligible (Not significant) T / D / ST
Operational Phase	Operational Phase	Operational Phase	Operational Phase
Human receptors (residential properties)- A total of 58 representative human receptors have been included in this assessment.	Negligible (Not significant) P / D / LT	No additional mitigation is required.	Negligible (Not significant) P / D / LT
Ecological receptors- There are six ecological sites and four veteran trees within 200m of roads that are expected to experience increased or reduced traffic levels as a result of the Proposed Scheme. Of the six ecological sites, several are affected by the changes on the affected road network in different locations, for example Sheep's Course Wood CWS which is bordered by both the Proposed Scheme and the A47 on opposite sides of the site.	Changes in ambient concentrations of NO _x and NH ₃ , and nitrogen deposition. Beneficial and adverse impacts have been predicted.	Refer to Chapter 8: Biodiversity section of this table.	Refer to Chapter 8: Biodiversity section of this table.
Chapter 7 –Archaeology and Heritage	Chapter 7 –Archaeology and Heritage	Chapter 7 –Archaeology and Heritage	Chapter 7 –Archaeology and Heritage
Construction Phase	Construction Phase	Construction Phase	Construction Phase

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Features identified during trial trenching 2014 (A1e) Medium heritage value	Moderate Adverse effect (Significant) P / D / LT	Post-determination field evaluation leading to a programme of mitigation agreed by the Local Planning Authority's archaeology officer, if required.	Negligible (Not significant)
Features identified during geophysical survey 2023 (A1d). Low heritage value	Slight Adverse effect (Not significant) P / D / LT	Post-determination field evaluation leading to a programme of mitigation agreed by the Local Planning Authority's archaeology officer, if required.	Negligible (Not significant)
Undated Linear Ditches (A1g) Low heritage value	Slight Adverse effect (Not significant) P / D / LT	Post-determination field evaluation leading to a programme of mitigation agreed by the Local Planning Authority's archaeology officer, if required.	Negligible (Not significant)
Possible medieval ditches and pits (A1I) Low heritage value	Slight Adverse effect (Not significant) P / D / LT	Post-determination field evaluation leading to a programme of mitigation agreed by the Local Planning Authority's archaeology officer, if required.	Negligible (Not significant)
Operational Phase	Operational Phase	Operational Phase	Operational Phase
18th Century Milestone (A1c) Low heritage significance	Slight adverse effect (Not significant) P / D / LT	No additional mitigation is required.	Minor Adverse (Not significant) P / D / LT
Church of All Saints (Listed Grade I) High heritage significance	Slight Adverse effect (Not significant) P / D / LT	No additional mitigation is required.	Minor Adverse (Not significant) P / D / LT
Church of Saint Mary (Listed Grade II*) High heritage significance	Slight Adverse effect (Not significant) P / D / LT	No additional mitigation is required.	Minor Adverse effect (Not significant) P / D / LT
The Old Rectory (Listed Grade II) Medium heritage significance	Moderate Adverse effect (significant) P / D / LT	No additional mitigation is required.	Moderate Adverse effect (Significant) P / D / LT

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
North Runcton Lodge (Listed Grade II) Medium Heritage significance	Minor Adverse effect (Not significant) P / D / LT	No additional mitigation is required.	Minor Adverse effect (Not significant) P / D / LT
Two Listed Buildings (Grade II) Medium Heritage significance	Minor Adverse effect (Not significant) P / D / LT	No additional mitigation is required.	Minor Adverse effect (Not significant) P / D / LT
Medieval moated enclosure within site of Fincham Manor (Non-designated, under consideration of scheduling) High heritage significance Manor Farm Low heritage significance	Minor Adverse effect (Not significant) P / D / LT	No additional mitigation is required.	Minor Adverse effect (Not significant) P / D / LT
Chapter 8 – Ecology	Chapter 8 – Ecology	Chapter 8 – Ecology	Chapter 8 – Ecology
Construction Phase	Construction Phase	Construction Phase	Construction Phase
Statutory designated sites of international importance	N/A	No additional mitigation is required.	N/A
Statutory designated sites of national importance	N/A	No additional mitigation is required.	N/A
Non-statutory designated sites - Sheep's Course Wood CWS	Local	Dust management plan	Not significant

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Habitats	Local	Refinement of the Scheme Boundary and construction area Additional habitat creation included at detailed design stage Production of landscape and ecological management plan	Local
Veteran Trees	Local	Tree protection measures	Not significant
Ancient Woodlands	N/A	No additional mitigation is required.	N/A
Invasive Non-Native Species (INNS)	N/A	Removal or burial of Japanese Knotweed and measures implemented to avoid spread outlined within a Construction Environment Management Plan (CEMP).	N/A
Aquatic macroinvertebrates	Not significant	No additional mitigation is required.	Not significant
Fish	Not significant	No additional mitigation is required.	Not significant
Macrophytes	Not significant	No additional mitigation is required.	Not significant
Barn Owl	Local	Update surveys to inform detailed design and pre-construction surveys for active nest sites. Provision of compensatory nest boxes and removal/exclusion of barn owl (if required) Provision of a CEMP	Negligible

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Breeding birds	Local	Vegetation clearance outside of the nesting period or following mitigation measures under supervision of Environmental Clerk of Works (ECoW) Further habitat creation at detailed design Production of a Landscape and Ecological Management Plans (LEMP)	Negligible
Wintering birds	Local	Further habitat creation at detailed design Production of a LEMP	Negligible
Terrestrial Invertebrates	Local	Additional habitat features and planting plans to be developed	Negligible
Badgers	Local	Update surveys to inform requirement for sett closure/avoidance Sett closure under licence (if required) Provision of a CEMP detailing mitigation measures	Negligible

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Bats – All species	Local	<p>Update surveys as required</p> <p>Provision of a CEMP detailing mitigation measures</p> <p>Soft felling/inspection of trees with suitability for roosting bats</p> <p>Replacement roost features</p> <p>Landscaping/habitat compensation</p> <p>Lighting mitigation to be detailed in CEMP</p>	Local
Water Vole	Local	<p>Avoidance measures detailed within CEMP</p> <p>Licensed translocation/displacement if required.</p> <p>Update surveys to inform detailed design and mitigation measures</p>	Negligible
Otter	N/A- Scoped out of assessment	N/A	N/A
Reptiles	Local	<p>Production of a reptile mitigation strategy detailing measures to translocate reptiles to an offsite receptor area.</p> <p>Reptile receptor site to be identified, surveyed and secured</p>	Negligible
Great Crested Newt	Local	Direct Level Licensing (DLL)	Negligible
Operational Phase	Operational Phase	Operational Phase	Operational Phase
Statutory designated sites of international importance	N/A	No additional mitigation is required.	N/A
Statutory designated sites of national importance	N/A	No additional mitigation is required.	N/A

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Non-statutory designated sites - Sheep's Course Wood CWS	Local	No additional mitigation is required.	Local
Habitats	N/A – scoped out of assessment	No additional mitigation is required.	N/A
Veteran Trees	Not significant	No additional mitigation is required.	Not Significant
Ancient Woodland	Not Significant	No additional mitigation is required.	Not Significant
INNS	N/A – scoped out of assessment	No additional mitigation is required.	N/A
Aquatic macroinvertebrates	Not significant	No additional mitigation is required.	Not significant
Fish	Not significant	No additional mitigation is required.	Not significant
Macrophytes	Not significant	No additional mitigation is required.	Not significant
Barn Owl	Not significant	No additional mitigation is required.	Not Significant
Breeding birds	Not Significant	No additional mitigation is required.	Not Significant
Wintering birds	Not Significant	No additional mitigation is required.	Not Significant
Terrestrial Invertebrates	Not Significant	No additional mitigation is required.	Not Significant
Badgers	Not Significant	Additional surveys will be undertaken to inform detailed design and the requirement for wildlife underpasses and fencing to reduce road collision risk.	Not Significant
Bats – All species	Local	Landscape mitigation features to reduce collision risk. Lighting strategy to reduce lighting impacts upon bat roosting, foraging and commuting routes.	Local
Water Vole	N/A	N/A	N/A
Otter	N/A	N/A	N/A
Reptiles	N/A	N/A	N/A

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Great Crested Newt	Local	Optional mitigation to include: Extension of DLL impact area, or Detailed design measures including permanent exclusion fencing and wildlife/amphibian underpasses	Neutral
Chapter 9 – Landscape and Visual	Chapter 9 – Landscape and Visual	Chapter 9 – Landscape and Visual	Chapter 9 – Landscape and Visual
Construction Phase	Construction Phase	Construction Phase	Construction Phase
West Norfolk Landscape Character Assessment: E2: Saddlebow and Wormegay	Moderate- Minor (Not Significant)	No additional mitigation proposed or available.	Moderate- Minor (Not Significant)
West Norfolk Landscape Character Assessment: G1: Bawzey and Leziate	Minor (Not Significant)	No additional mitigation proposed or available.	Minor (Not Significant)
West Norfolk Landscape Character Assessment: G2: Middleton	Moderate (Not Significant)	No additional mitigation proposed or available.	Moderate (Not Significant)
West Norfolk Landscape Character Assessment: G4: West Winch	Moderate (Not Significant)	No additional mitigation proposed or available.	Moderate (Not Significant)
Users of the Nar Valley Way and Cross Norfolk Trail	Moderate-Minor (adverse) (Not Significant)	No additional mitigation proposed or available.	Moderate-Minor (adverse) (Not Significant)
Users of CL433 - Land abutting the A47 and CL110 - Hardwick Narrows and CL311 – Land additional to Hardwick Narrows	Major-Moderate (adverse) (Significant)	No additional mitigation proposed or available.	Major-Moderate (adverse) (Significant)
Users of CL111- Sheepscourse	Moderate (adverse) (Not Significant)	No additional mitigation proposed or available.	Moderate (adverse) (Not Significant)

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Users of CL113 – Setchey Common & CL58 – West Winch Common	Minor (adverse) (Not Significant)	No additional mitigation proposed or available.	Minor (adverse) (Not Significant)
Users of North Runcton Footpath FP1, West Winch Footpath FP5, Wormegay Footpath FP4, Wormegay Footpath FP5, King's Lynn Footpath FP26	Negligible (Not Significant)	No additional mitigation proposed or available.	Negligible (Not Significant)
Users of West Winch Footpath FP2	Minor-Negligible (adverse) (Not Significant)	No additional mitigation proposed or available.	Minor-Negligible (adverse) (Not Significant)
Users of North Runcton Bridleway BR4, North Runcton Restricted Byway RB3,	Major-Moderate (adverse) (Significant)	No additional mitigation proposed or available.	Major-Moderate (adverse) (Significant)
Users of North Runcton Restricted Byway RB6	Moderate (adverse) (Not Significant)	No additional mitigation proposed or available.	Moderate (adverse) (Not Significant)
Users of North Runcton Restricted Byway RB2	Negligible (Not Significant)	No additional mitigation proposed or available.	Negligible (Not Significant)
Users of the A10 through West Winch, Westland Chase, Watering Lane, Mill Lane, Millfield Lane to the east of the A10, Beveridge Way, roads in North Runcton including Common Lane and New Road	Minor (adverse) (Not Significant)	No additional mitigation proposed or available.	Minor (adverse) (Not Significant)
Users of Gravelhill Lane, Long Lane, West Winch, Rectory Lane, North Runcton, the A47 at Hardwick, the A47 (Constitution Hill), A149 (Hardwick Road) and A149 (Queen Elizabeth Way)	Moderate-Minor (adverse) (Not Significant)	No additional mitigation proposed or available.	Moderate-Minor (adverse) (Not Significant)
Users of Hall Lane, Chapel Lane and Scania Way	Minor-Negligible (adverse) (Not Significant)	No additional mitigation proposed or available.	Minor-Negligible (adverse) (Not Significant)

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
<p>Residents in properties and residential cul de sacs to the east of the A10 through West Winch, including Babingley Place, Willow Drive and Hunters Rise</p> <p>Residents of properties on Mill Lane and Millfield Lane and no's 95-131 to the east of the A10</p> <p>Residents of No's 139 – 163 along the eastern side of the A10 / Main Road through West Winch</p> <p>Residents of 263 Lynn Road along the eastern side of the A10 through West Winch</p> <p>Residents of No's 331 - 365 along the eastern side of the A10 / Main Road through West Winch.</p> <p>Residents of properties at the eastern end of Gravelhill Lane, West Winch</p> <p>Residents of The Coach House on Rectory Lane</p> <p>Residents of Glendawn and Orchard House on Rectory Lane</p> <p>Residents of Brook Farm on Rectory Lane</p> <p>Residents of Burwick House on Rectory Lane</p> <p>Residents of properties on Coronation Avenue and Freebridge Haven, which have an easterly or southerly aspect</p> <p>Residents of Field View on Rectory Lane</p> <p>Residents of 48 and 50 Rectory Lane</p> <p>Residents of 44 Rectory Lane</p> <p>Residents of 42 Rectory Lane</p> <p>Residents of 57 and 59 Rectory Lane</p> <p>Residents of 'Headlands', 55 Rectory Lane</p> <p>Residents of properties at Grange farm, Rectory Lane, Including Grange Farm, Grange Farm Bungalow, The Cottage</p> <p>Residents of High Orchard on Chequers Lane</p> <p>Residents of Manor Farm Estate on Chequers Lane, including Manor Farm Bungalow, Manor Farm and Manor Farm House.</p>	<p>Major (adverse) (Significant)</p>	<p>No additional mitigation proposed or available.</p>	<p>Major (adverse) (Significant)</p>

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Residents of No's 217 - 221 along the eastern side of the A10 through West Winch. Residents of Winchley Home on Rectory Lane Residents of No's 1 and 2 Rectory Lane Residents of No's 19 - 24 Rectory Lane Residents of Lilac Cottage and Rosendell on Rectory Lane Residents of properties at the southern edge of Fairstead, including Savage Close, Beechan Drive, Anthony Nolan Road, Fred Ackland Drive, Clement Atlee Way, Dukes Place and Tasburgh Close	Moderate (adverse) (Not Significant)	No additional mitigation proposed or available.	Moderate (adverse) (Not Significant)

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Residents of properties on Long Lane, West Winch Residents of properties on Chapel Lane, West Winch Residents of Ivy Cottage on Rectory Lane Residents of 26 Rectory Lane Residents of properties to the west of the A10/West Winch Road, north of Willow Drive Residents of properties on Willow Drive to the east of the A10 Residents of Manor Farm Cottages Residents of No's 6 – 26 Chequers Lane Residents of Southfork Manor, Chequers Lane Residents of No's 52 - 56 Common Lane Residents of cottages that comprise No's 42 - 50 Common Lane Residents of No's 30 - 40 Common Lane Residents of properties to the east of New Road between School Lane and Cedar Grove	Moderate-Minor (adverse) (Not Significant)	No additional mitigation proposed or available.	Moderate-Minor (adverse) (Not Significant)
Residents of 24 - 22 Rectory Lane Residents of No's 35 - 43 Common Lane	Negligible (Not Significant)	No additional mitigation proposed or available.	Negligible (Not Significant)
Visitors to The Dragonfly Hotel, Beveridge Way, King's Lynn	Major-Moderate (adverse) (Significant)	No additional mitigation proposed or available.	Major-Moderate (adverse) (Significant)
Players and spectators at North Runcton Cricket Club	Minor (adverse) (Not Significant)	No additional mitigation proposed or available.	Minor (adverse) (Not Significant)

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Visitors to William Burt Social Club, West Winch	Moderate (adverse) (Not Significant)	No additional mitigation proposed or available.	Moderate (adverse) (Not Significant)
Employees at Cool Stak, West Winch Employees at businesses along the southern boundary of Hardwick Industrial Estate / Retail Park to the north of the A47 / A149, including Argos, Sainsbury's, Pinguin Foods	Moderate-Minor (adverse) (Not Significant)	No additional mitigation proposed or available.	Moderate-Minor (adverse) (Not Significant)
Operation Phase	Operation Phase Year 1	Operation Phase	Operation Phase Year 15
West Norfolk Landscape Character Assessment: E2: Saddlebow and Wormegay	Minor (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Minor-Negligible (Not Significant)
West Norfolk Landscape Character Assessment: G1: Bawzey and Leziate	Minor-Negligible (Not Significant)	No additional mitigation proposed or available.	Negligible (Not Significant)
West Norfolk Landscape Character Assessment: G2: Middleton	Minor (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Minor-Negligible (Not Significant)
West Norfolk Landscape Character Assessment: G4: West Winch	Minor (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Minor-Negligible (Not Significant)
Users of the Nar Valley Way and Cross Norfolk Trail	Moderate-Minor (adverse) (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Minor (adverse) (Not Significant)
Users of CL433 - Land abutting the A47 and CL110 - Hardwick Narrows and CL311 – Land additional to Hardwick Narrows	Moderate (adverse) (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Minor (adverse) (Not Significant)

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Users of CL111- Sheepscourse	Minor (adverse) (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Minor-Negligible (adverse) (Not Significant)
Users of CL113 – Setchey Common & CL58 – West Winch Common	Minor-Negligible (adverse) (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Neutral (Not Significant)
Users of North Runcton Footpath FP1, West Winch Footpath FP5, Wormegay Footpath FP4, Wormegay Footpath FP5, King's Lynn Footpath FP26 and West Winch Footpath FP2	Minor-Negligible (adverse) (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Neutral (Not Significant)
Users of North Runcton Bridleway BR4,	Major-Moderate (adverse) (Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Minor (adverse) (Not Significant)
Users of North Runcton Restricted Byway RB3,	Major-Moderate (adverse) (Significant)	No additional mitigation proposed or available.	Major-Moderate (adverse) (Significant)
Users of North Runcton Restricted Byway RB6	Minor (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Minor-Negligible (adverse) (Not Significant)
Users of North Runcton Restricted Byway RB2	Minor-Negligible (adverse) (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Neutral (Not Significant)
Users of Watering Lane, West Winch	Minor-Negligible (adverse) (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Neutral (Not Significant)
Users of the A10 through West Winch, Westland Chase, Mill Lane, Millfield Lane to the east of the A10, Beveridge Way, roads in North Runcton including Common Lane and New Road	Minor-Negligible (adverse) (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Negligible (Not Significant)
Users of Gravelhill Lane, Long Lane, West Winch, the A47 (Constitution Hill), A149 (Hardwick Road)	Minor (adverse) (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Minor-Negligible (adverse) (Not Significant)
Users of Long Lane, West Winch, the A47 at Hardwick	Minor- Negligible (adverse) (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Negligible (Not Significant)

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Users of Rectory Lane, North Runcton	Moderate-Minor (adverse) (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Minor (adverse) (Not Significant)
Users of A149 (Queen Elizabeth Way)	Moderate-Minor (adverse) (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Neutral (Not Significant)
Users of Hall Lane, Chapel Lane and Scania Way	Negligible (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Neutral (Not Significant)

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
<p>Residents of properties on Mill Lane and Millfield Lane and no's 95-131 to the east of the A10</p> <p>Residents of No's 139 – 163 along the eastern side of the A10 / Main Road through West Winch</p> <p>Residents of properties at the eastern end of Gravelhill Lane, West Winch</p> <p>Residents of Glendawn and Orchard House on Rectory Lane</p> <p>Residents of Burwick House on Rectory Lane</p> <p>Residents of properties on Coronation Avenue and Freebridge Haven, which have an easterly or southerly aspect</p> <p>Residents of Field View on Rectory Lane</p> <p>Residents of 48 and 50 Rectory Lane</p> <p>Residents of 42 Rectory Lane</p> <p>Residents of 57 and 59 Rectory Lane</p> <p>Residents of 'Headlands', 55 Rectory Lane</p> <p>Residents of Manor Farm Estate on Chequers Lane, including Manor Farm Bungalow, Manor Farm and Manor Farm House.</p>	<p>Major (adverse) (Significant)</p>	<p>No additional mitigation proposed or available.</p> <p>Growth of embedded landscape planting.</p>	<p>Moderate (adverse) (Not Significant)</p>
<p>Residents of No's 331 - 365 along the eastern side of the A10 / Main Road through West Winch.</p>	<p>Moderate-Minor (adverse) (Not Significant)</p>	<p>No additional mitigation proposed or available.</p> <p>Growth of embedded landscape planting.</p>	<p>Negligible (Not Significant)</p>

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Residents of Brook Farm on Rectory Lane	Major (adverse) (Significant)	No additional mitigation proposed or available.	Major (adverse) (Significant)
Residents of The Coach House on Rectory Lane Residents of 44 Rectory Lane	Moderate (adverse) (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Moderate-Minor (adverse) (Not Significant)
Residents in properties and residential cul de sacs to the east of the A10 through West Winch, including Babingley Place, Willow Drive and Hunters Rise Residents of 263 Lynn Road along the eastern side of the A10 through West Winch Residents of properties at Grange farm, Rectory Lane, Including Grange Farm, Grange Farm Bungalow, The Cottage Residents of High Orchard on Chequers Lane	Major (adverse) (Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Moderate-Minor (adverse) (Not Significant)

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Residents of No's 217 - 221 along the eastern side of the A10 through West Winch. Residents of Winchley Home on Rectory Lane Residents of No's 1 and 2 Rectory Lane Residents of No's 19 - 24 Rectory Lane Residents of Lilac Cottage and Rosendell on Rectory Lane	Moderate-Minor (adverse) (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Negligible (Not Significant)
Residents of properties at the southern edge of Fairstead, including Savage Close, Beechan Drive, Anthony Nolan Road, Fred Ackland Drive, Clement Atlee Way, Dukes Place and Tasburgh Close	Moderate (adverse) (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Negligible (Not Significant)
Residents of 26 Rectory Lane Residents of properties to the west of the A10/West Winch Road, north of Willow Drive Residents of properties on Willow Drive to the east of the A10	Moderate-Minor (adverse) (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Negligible (Not Significant)
Residents of Ivy Cottage on Rectory Lane	Neutral (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Neutral (Not Significant)
Residents of No's 30 - 40 Common Lane	Neutral (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Negligible (Not Significant)

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Residents of properties on Long Lane, West Winch Residents of properties on Chapel Lane, West Winch Residents of Manor Farm Cottages Residents of No's 6 – 26 Chequers Lane Residents of Southfork Manor, Chequers Lane Residents of No's 52 - 56 Common Lane Residents of cottages that comprise No's 42 - 50 Common Lane Residents of properties to the east of New Road between School Lane and Cedar Grove	Negligible (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Neutral (Not Significant)
Residents of 24 - 22 Rectory Lane Residents of No's 35 - 43 Common Lane	Negligible (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Neutral (Not Significant)
Visitors to The Dragonfly Hotel, Beveridge Way, King's Lynn	Neutral (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Neutral (Not Significant)
Players and spectators at North Runcton Cricket Club	Minor (adverse) (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Minor- Negligible (adverse) (Not Significant)
Visitors to William Burt Social Club, West Winch	Minor (adverse) (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Neutral (Not Significant)
Employees at Cool Stak, West Winch	Minor (adverse) (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Minor- Negligible (adverse) (Not Significant)
Employees at businesses along the southern boundary of Hardwick Industrial Estate / Retail Park to the north of the A47 / A149, including Argos, Sainsbury's, Pinguin Foods	Neutral (Not Significant)	No additional mitigation proposed or available. Growth of embedded landscape planting.	Neutral (Not Significant)

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Chapter 10 – Noise and Vibration	Chapter 10 – Noise and Vibration	Chapter 10 – Noise and Vibration	Chapter 10 – Noise and Vibration
Construction Phase	Construction Phase	Construction Phase	Construction Phase
C2 – Brook Farm (day) (site clearance and earthworks)	Moderate adverse (Significant) T / D / ST	No additional mitigation is possible beyond embedded best practicable means	Moderate adverse (Significant) T / D / ST
C1 – East Anglia House (night)	Moderate adverse (Significant) T / D / ST	No additional mitigation is possible beyond embedded best practicable means	Moderate adverse (Significant) T / D / ST
Receptors at Cranfield (and other properties at an equivalent distance) within 20m of Proposed Scheme carriageways	Minor adverse (Not significant) Twin drum roller has been utilised for the assessment. T/D/ST	No additional mitigation is possible beyond embedded best practicable means	Minor adverse (Not significant) (Not significant provided a twin drum roller with low amplitude setting is used at the closest approach) T/D/ST
Operational Phase	Operational Phase	Operational Phase	Operational Phase
314 residential receptors, 4 other sensitive receptors (group 1)	Moderate or major beneficial (Significant) P/D/LT	No additional mitigation is proposed or available.	Significant beneficial effect P/D/LT
857 residential receptors, 6 other sensitive receptors (Groups 2 and 3)	Minor beneficial and negligible change (Not significant) P/D/LT	No additional mitigation is proposed or available.	Negligible effect (Not significant) P/D/LT
179 residential receptors, 3 other sensitive receptors (groups 4-6)	Minor/moderate adverse (Not significant) P/D/LT	No additional mitigation is proposed or available.	Minor adverse (Not significant) P/D/LT

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
16 Residential receptors, 1 other sensitive receptor (groups 7 and 8)	Moderate/major adverse (Significant) P/D/LT	No additional mitigation is proposed or available.	Moderate/major adverse (Significant) P/D/LT
Chapter 11 – Water Environment	Chapter 11 – Water Environment	Chapter 11 – Water Environment	Chapter 11 – Water Environment
Construction Phase	Construction Phase	Construction Phase	Construction Phase
Unnamed Field Drains	Slight Adverse (not significant) D / T / ST - LT	Measures regarding surface water management during the construction of the Proposed Scheme are detailed in the Surface Water Drainage Strategy in Appendix 11.2: Flood Risk Assessment . Further consultation with the LLFA during the development of the ordinary watercourse consent application would reduce the risk of increased sedimentation and potential effects to the unnamed field drains.	Slight Adverse residual effect (not significant)
The Country Drain	Neutral (not significant) I / T / ST - LT	Measures regarding surface water management during the construction of the Proposed Scheme are detailed in the Surface Water Drainage Strategy in Appendix 11.2: Flood Risk Assessment .	Neutral (not significant) I / T / ST - LT
Middleton Stop Drain	Neutral (not significant) I / T / ST - LT	Measures regarding surface water management during the construction of the Proposed Scheme are detailed in the Surface Water Drainage Strategy in Appendix 11.2: Flood Risk Assessment .	Neutral (not significant) I / T / ST - LT

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
River Nar	Neutral (not significant) I / T / ST - LT	Measures regarding surface water management during the construction of the Proposed Scheme are detailed in the Surface Water Drainage Strategy in Appendix 11.2: Flood Risk Assessment .	Neutral (not significant) I / T / ST - LT
Surface Water Abstractions	Neutral (not significant) I / T / ST - LT	Measures regarding pollution management during the construction of the Proposed Scheme will be detailed in the CEMP.	Neutral (not significant) I / T / ST - LT
Principal bedrock aquifer (Sandringham Sands)	Moderate Adverse (significant) D / T / ST	The CEMP will set out requirements for activities such as refuelling, storage of fuels and emergency procedures regarding an oil spillage during construction.	Slight Adverse (not significant) D / T / ST
Bedrock Secondary Aquifer – Lowestoft Formation	Slight Adverse (not significant) D / T / ST	The CEMP will set out requirements for activities such as refuelling, storage of fuels and emergency procedures regarding an oil spillage during construction.	Slight Adverse (not significant) D / T / ST
Superficial deposits	Slight Adverse (not significant) D / T / ST	The CEMP will set out requirements for activities such as refuelling, storage of fuels and emergency procedures regarding an oil spillage during construction.	Slight Adverse (not significant) D / T / ST
Third party flood risk	Neutral (not significant) D / T / ST	Measures regarding surface water management during the construction of the Proposed Scheme are detailed in the Surface Water Drainage Strategy in Appendix 11.2: Flood Risk Assessment . Additional mitigation measures in relation to flood risk are found in Appendix 11.2: Flood Risk Assessment .	Neutral (not significant) D / T / ST

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Flood risk to the Proposed Scheme	Neutral (not significant) D / T / ST	Measures regarding surface water management during the construction of the Proposed Scheme are detailed in the Surface Water Drainage Strategy in Appendix 11.2: Flood Risk Assessment . Additional mitigation measures in relation to flood risk are found in Appendix 11.2: Flood Risk Assessment .	Neutral (not significant) D / T / ST
Operation Phase	Operation Phase	Operation Phase	Operation Phase
Unnamed Field Drains	Slight Adverse (not significant) D / P / LT	Additional mitigation measures in relation to the unnamed field drains in relation to the proposed culverts is available in Appendix 11.2: Flood Risk Assessment .	Slight Adverse (not significant) D / P / LT
The Country Drain	Neutral (not significant) I / P / LT	Not applicable	Neutral (not significant) I / P / LT
Middleton Stop Drain	Neutral (not significant) I / P / LT	Not applicable	Neutral (not significant) I / P / LT
River Nar	Neutral (not significant) I / P / LT	Not applicable	Neutral (not significant) I / P / LT
Surface Water Abstractions	Neutral (not significant) I / P / LT	Not applicable	Neutral (not significant) I / P / LT
Principal bedrock aquifer (Sandringham Sands)	Moderate Adverse (significant) D / P / LT	Filtration within the surface water drainage system to filter out the physical and chemical contaminants. Also, ensuring that spillages can be contained prior to discharging to the receiving watercourses.	Slight Adverse (not significant) D / P / LT

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Bedrock Secondary Aquifer – Lowestoft Formation	Slight Adverse (not significant) D / P / LT	Filtration within the surface water drainage system to filter out the physical and chemical contaminants. Also, ensuring that spillages can be contained prior to discharging to the receiving watercourses.	Slight Adverse (not significant) D / P / LT
Superficial deposits	Slight Adverse (not significant) D / P / LT	Filtration within the surface water drainage system to filter out the physical and chemical contaminants. Also, ensuring that spillages can be contained prior to discharging to the receiving watercourses.	Slight Adverse (not significant) D / P / LT
Third party flood risk	Neutral (not significant) D / T / ST	Measures regarding surface water management during the construction of the Proposed Scheme are detailed in the Surface Water Drainage Strategy in Appendix 11.2: Flood Risk Assessment . Additional mitigation measures in relation to flood risk are found in Appendix 11.2: Flood Risk Assessment .	Neutral (not significant) D / T / ST
Flood risk to the Proposed Scheme	Neutral (not significant) D / T / ST	Measures regarding surface water management during the construction of the Proposed Scheme are detailed in the Surface Water Drainage Strategy in Appendix 11.2: Flood Risk Assessment . Additional mitigation measures in relation to flood risk are found in Appendix 11.2: Flood Risk Assessment .	Neutral (not significant) D / T / ST
Chapter 12 – Geology and Soils	Chapter 12 – Geology and Soils	Chapter 12 – Geology and Soils	Chapter 12 – Geology and Soils
Construction Phase	Construction Phase	Construction Phase	Construction Phase

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Human Health – Construction Workers, Current and adjacent users	Negligible (Not significant) P/D/LT	Ground Investigation and Generic Quantitative Risk Assessment (GQRA) Remediation and validation works (if required) Materials Management Plan	Neutral (Not significant)
Controlled Waters - Groundwater – Secondary (A) and Principal Aquifers Surface waters, ponds and small streams	Negligible (Not significant) T/I/LT	Ground Investigation Piling Risk Assessment	Neutral (Not significant)
Below Ground Services – Potable Water Supply Pipes, Buried Concrete and Foundations	Negligible (Not significant) P/D/LT	Ground Investigation Potable water supply pipes in accordance with UK Water Industry Research (UKWIR) Appropriate concrete in accordance with BRE Digest 1. 3rd Edition guidance (including February 2018 amendments)	Neutral (Not significant)
Agricultural Land	Large Adverse (Significant) P/D/LT	Agricultural assessment	Large Adverse (Significant) P/D/LT
Operational Phase	Operational Phase	Operational Phase	Operational Phase
Human Health – Maintenance workers Human Health – Future users and adjacent users	Negligible (Not significant) P/D/LT	None providing all recommended remediation / validation works as outlined within Chapter 12 (where required) have been completed.	Neutral (Not significant)

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Controlled Waters – Groundwater – Secondary (A) and Principal Aquifers Surface waters, ponds and small streams.	Negligible (Not significant) T/I/LT	None providing all recommended remediation / validation works as outlined within Chapter 12 (where required) have been completed	Neutral (Not significant)
Chapter 13 - Material Assets and Waste	Chapter 13 - Material Assets and Waste	Chapter 13 - Material Assets and Waste	Chapter 13 - Material Assets and Waste
Construction Phase	Construction Phase	Construction Phase	Construction Phase
Material resources	Slight Adverse (Not significant) P / D / LT	No additional mitigation is required.	Slight Adverse (Not significant) P / D / LT
Landfill void capacity	Large Adverse (Significant) P / D / LT	The Principal Contractor will be required to produce a SWMP, Material Management Plan (MMP) and adhere to a non-hazardous material recovery target of at least 90%.	Slight Adverse (Not significant) P / D / LT
Chapter 14 - Climate	Chapter 14 - Climate	Chapter 14 - Climate	Chapter 14 - Climate
Construction Phase	Construction Phase	Construction Phase	Construction Phase
Climate	Moderate adverse (Significant) T / D / LT	Construction emissions could be minimised through design optimisation to reflect the carbon reduction hierarchy as well as other measures detailed in Section 14.6.5 .	Minor Adverse (Not significant) T / D / LT
Operational Phase	Operational Phase	Operational Phase	Operational Phase

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Climate	Moderate adverse (Significant) T / D / LT	Operational emissions could be minimised by identifying opportunities to sequester carbon through increased tree planting Using low carbon road surface options, informed using the carbon reduction hierarchy. Using road surface options with greater longevity, to reduce frequency of replacements, as well as other measures detailed in Section 14.6.14.	Moderate Adverse (Significant) T / D / LT
Chapter 15 – Population and human health	Chapter 15 – Population and human health	Chapter 15 – Population and human health	Chapter 15 – Population and human health
Construction Phase	Construction Phase	Construction Phase	Construction Phase
Hill Cottages (two dwellings), A47 and Orchard Cottage, Chequers Lane	Very Large Adverse (Significant) effects P/D/LT	Assuming a 'worst case' scenario, both dwellings will be acquired under Compulsory Purchase powers. Mitigation in the form of compensation would be provided by the Applicant to the residents of the properties, paid at a rate equal to market value.	Slight Adverse (Not significant) P/D/LT
Frankie Lodge, Chequers Lane	Slight adverse (Not significant) T/I/MT	No additional mitigation is required.	Slight adverse (Not significant) T/I/MT
c.2,000 dwellings to the east and west of the A10, and c.300 dwellings in South Lynn	Slight adverse (not significant) T / I / MT	No additional mitigation is required.	Slight adverse (not significant) T / I / MT
Properties in Hardwick, north of Hardwick Road Cemetery, and in Setchey	Neutral (Not significant) T/I/MT	No additional mitigation is required.	Neutral (Not significant) T/I/MT

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
4,000 dwellings at the WWGA land allocation	Neutral (Not significant) T/MT	No additional mitigation is required.	Neutral (Not significant) T/MT
Hardwick Narrows, Sheep's Course Wood, and North Runcton Common	Slight adverse (not significant) T / D / MT	No additional mitigation is required.	Slight adverse (not significant) T / D / MT
North Runcton Scout Hut	Slight adverse (not significant) T / D / MT	No additional mitigation is required.	Slight adverse (not significant) T / D / MT
West Winch Primary School	Neutral (not significant) T / I / MT	No additional mitigation is required.	Neutral (not significant) T / I / MT
Other community assets including shops, places of worship, sports and recreational facilities	Neutral (not significant) T / I / MT	No mitigation required.	Neutral (not significant) T / I / MT
Indigo Flamingo Home Furniture	Very large adverse (significant) P / D / LT	Mitigation in the form of compensation would be provided by the Applicant to business owner.	Slight adverse (not significant) P / D / LT
Cool Stak	Slight adverse (not significant) T / D / MT	No additional mitigation required.	Slight adverse (not significant) T / D / MT
Dragonfly Hotel	Slight adverse (not significant) T / D / MT	No additional mitigation required.	Slight adverse (not significant) T / D / MT
King's Lynn Caravan and Camping Park	Slight adverse (not significant) T / D / MT	No additional mitigation required.	Slight adverse (not significant) T / D / MT
Yew Cottage B&B	Slight adverse (not significant) T / D / MT	No additional mitigation required.	Slight adverse (not significant) T / D / MT
Hardwick Retail Park and Hardwick Industrial Estate	Slight adverse (not significant) T / D / MT	No additional mitigation required.	Slight adverse (not significant) T / D / MT

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
The Warehouse Antique Shop and Restaurant; Norfolk Leisure outdoor furniture warehouse; and D&H Direct Agricultural Product Manufacturing	Slight adverse (not significant) T / D / MT	No additional mitigation required.	Slight adverse (not significant) T / D / MT
Other businesses including car sales and repair premises; and warehouse, storage, and haulage premises	Slight adverse (not significant) T / D / MT	No additional mitigation applicable.	Slight adverse (not significant) T / D / MT
North Runcton RB3 and North Runcton BR4	Moderate adverse (significant) P / D / LT	No additional mitigation applicable.	Moderate adverse (significant) P / D / LT
West Winch FP 2, West Winch FP 3, West Winch FP 4, West Winch FP 6, West Winch RB 1, North Runcton FP 1, North Runcton RB 2, and North Runcton RB 6	Neutral (not significant) T / D / MT	No additional mitigation required.	Neutral (not significant) T / D / MT
Human Health- Air quality effects on amenity	Moderate adverse	Contractor will use best management practices as well as requirements set out in the CEMP to mitigate dust impacts.	Negligible
Human Health-Visual impacts	Moderate adverse	No mitigation measures required.	Moderate adverse
Human Health- Construction noise impacts	Moderate adverse	No mitigation measures required.	Moderate adverse
Operation Phase	Operation Phase	Operation Phase	Operation Phase
Hill Cottages (two dwellings), A47 and Orchard Cottage, Chequers Lane	Neutral (not significant) P / D / LT	No mitigation required.	Neutral (not significant) P / D / LT
Frankie Lodge, Chequers Lane	Slight adverse (not significant) P / D / LT	No mitigation required.	Slight adverse (not significant) P / D / LT

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
c.2,000 dwellings to the east and west of the A10, and c.300 dwellings in South Lynn	Slight beneficial (not significant) P / D / LT	No mitigation required.	Slight beneficial (not significant) P / D / LT
Properties in Hardwick, north of Hardwick Road Cemetery, and in Setchey	Slight beneficial (not significant) P / D / LT	No mitigation required.	Slight beneficial (not significant) P / D / LT
4,000 dwellings at the WWGA land allocation	Very large beneficial (significant) P / D / LT	No mitigation required.	Very large beneficial (significant) P / D / LT
Hardwick Narrows, Sheep's Course Wood, and North Runcton Common	Neutral (not significant) P / D / LT	No mitigation required.	Neutral (not significant) P / D / LT
North Runcton Scout Hut	Slight adverse (not significant) P / D / LT	No mitigation required.	Slight adverse (not significant) P / D / LT
West Winch Primary School	Neutral (not significant) P / D / LT	No mitigation required.	Neutral (not significant) P / D / LT
Other community assets including shops, places of worship, sports and recreational facilities	Slight adverse (not significant) P / D / LT	No mitigation required.	Slight adverse (not significant) P / D / LT
Indigo Flamingo Home Furniture	Neutral (not significant) P / D / LT	No mitigation required.	Neutral (not significant) P / D / LT
Cool Stak	Slight beneficial (not significant) P / D / LT	No mitigation required.	Slight beneficial (not significant) P / D / LT
Dragonfly Hotel	Neutral (not significant) P / D / LT	No mitigation required.	Neutral (not significant) P / D / LT
King's Lynn Caravan and Camping Park	Neutral (not significant) P / D / LT	No mitigation required.	Neutral (not significant) P / D / LT
Yew Cottage B&B	Neutral (not significant) P / D / LT	No mitigation required.	Neutral (not significant) P / D / LT

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Hardwick Retail Park and Hardwick Industrial Estate	Neutral (not significant) P / D / LT	No mitigation required.	Neutral (not significant) P / D / LT
The Warehouse Antique Shop and Restaurant; Norfolk Leisure outdoor furniture warehouse; and D&H Direct Agricultural Product Manufacturing	Neutral (not significant) P / D / LT	No mitigation required.	Neutral (not significant) P / D / LT
Other businesses including car sales and repair premises; and warehouse, storage, and haulage premises	Neutral (not significant) P / D / LT	No mitigation required.	Neutral (not significant) P / D / LT
North Runcton RB3 and North Runcton BR4	Neutral (not significant) P / D / LT	No mitigation required.	Neutral (not significant) P / D / LT
West Winch FP 2, West Winch FP 3, West Winch FP 4, West Winch FP 6, West Winch RB 1, North Runcton FP 1, North Runcton RB 2, and North Runcton RB 6	Neutral (not significant) P / D / LT	No mitigation required.	Neutral (not significant) P / D / LT
Human Health- Air quality effects on amenity	Negligible	No mitigation required.	Negligible
Human Health- Visual impacts	Moderate adverse	Proposed mitigation planting as stated in Chapter 9: Landscape and Visual	Minor adverse
Human Health- Construction noise impacts	Minor adverse to minor beneficial	No mitigation required.	Minor adverse to minor beneficial
Chapter 16- Traffic and Transport	Chapter 16- Traffic and Transport	Chapter 16- Traffic and Transport	Chapter 16- Traffic and Transport
Construction Phase	Construction Phase	Construction Phase	Construction Phase

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Severance	Minor Adverse (Not significant) T / D / ST	Construction access, traffic and temporary diversions will be controlled through the CEMP. Construction traffic will be routed mainly via A and B Roads and avoid local roads where possible.	Negligible to Minor Adverse (Not significant) T / D / ST
Driver Delay	Minor Adverse (Not significant) T / D / ST	Construction access, traffic and temporary diversions will be controlled through the CEMP	Negligible to Minor Adverse (Not significant) T / D / ST
Pedestrian and Cyclist Delay	Minor Adverse (Not significant) T / D / ST	CEMP, Diversion of Non-Motorised Users, advisory signage on approach routes.	Negligible to Minor Adverse (Not significant) T / D / ST
Pedestrian and Cyclist Amenity	Minor Adverse (Not significant) T / D / ST	CEMP, Public Rights of Way closures and diversions to prevent conflicts of Non-Motorised Users with construction vehicles.	Negligible to Minor Adverse (Not significant) T / D / ST
Fear and Intimidation	Minor Adverse (not significant) T / D / ST	CEMP, Diversion of Non-Motorised Users, advisory signage on approach routes.	Negligible to Minor Adverse (not significant) T / D / ST
Accidents and Safety	Minor Adverse (not significant) T / D / ST	CEMP, advisory signage on approach routes.	Negligible to Minor Adverse (not significant) T / D / ST

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Hazardous/abnormal Load	NA	Hazardous/abnormal loads require specific permission from National Highways via the ESDAL (Electronic Service Delivery for Abnormal Loads) system and notification will be made for any Abnormal Loads which can be dealt with on a case by case basis. Specific permission and notifications would be made to the Local Planning Authority (LPA) and National Highways. Details of the access routing, timings and number of abnormal load movements would be discussed and agreed with the LPA. A specific abnormal loads assessment would be carried out by a competent contractor. However, routes to be considered on approach to site would include A47 and A10. Appropriate Traffic Management Measures would be in place on relevant roads to prevent conflicts with public vehicles. This may include temporary road closures on minor rural roads of short duration in accordance with the New Roads and Street Works Act 1991. This is consistent with the approach taken by other DCO applications within the local area. Co-operation agreements will be in place to manage in-combination effects with other major schemes.	NA
Operation Phase(2027_DS1/DS2)	Operation Phase(2027_DS1/DS2)	Operation Phase(2027_DS1/DS2)	Operation Phase(2027_DS1/DS2)
Severance	Moderate Adverse (Significant) T / D / LT	NMU Provision (See Sustainable Transport Strategy (STS) Document Reference 4.02.00).	Minor Adverse (Not significant) T / D / LT

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Driver Delay	Minor Adverse (Not significant) T / D / LT	Proposed Scheme + mitigation including junction capacity improvement at Beveridge Way and A47 approaches to A47 / WWHAR	Negligible to Minor Adverse (Not significant) T / D / LT
Pedestrian and Cyclist Delay	Minor Adverse (Not significant) T / D / LT	NMU Provision (See Sustainable Transport Strategy (STS) Document Reference 4.02.00).	Negligible to Minor Adverse (Not significant) T / D / LT
Pedestrian and Cyclist Amenity	Minor Adverse (Not significant) T / D / LT	NMU Provision (See Sustainable Transport Strategy (STS) Document Reference 4.02.00).	Negligible to Minor Adverse (Not significant) T / D / LT
Fear and Intimidation	Minor Adverse (Not significant) T / D / LT	NMU Provision (See Sustainable Transport Strategy (STS) Document Reference 4.02.00).	Negligible to Minor Adverse (Not significant) T / D / LT
Accidents and Safety	Minor Adverse (Not significant) T / D / LT	NMU Provision (See Sustainable Transport Strategy (STS) Document Reference 4.02.00).	Negligible to Minor Adverse (not significant) T / D / LT

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Hazardous/abnormal Load	NA	Hazardous/abnormal loads require specific permission from National Highways via the ESDAL (Electronic Service Delivery for Abnormal Loads) system and notification will be made for any Abnormal Loads which can be dealt with on a case by case basis. Specific permission and notifications would be made to the Local Planning Authority (LPA) and National Highways. Details of the access routing, timings and number of abnormal load movements would be discussed and agreed with the LPA. A specific abnormal loads assessment would be carried out by a competent contractor. However, routes to be considered on approach to site would include A47 and A10. Appropriate Traffic Management Measures would be in place on relevant roads to prevent conflicts with public vehicles. This may include temporary road closures on minor rural roads of short duration in accordance with the New Roads and Street Works Act 1991. This is consistent with the approach taken by other DCO applications within the local area. Co-operation agreements will be in place to manage in-combination effects with other major schemes.	NA
Operation Phase(2042_DS1)	Operation Phase(2042_DS1)	Operation Phase (2042_DS1)	Operation Phase (2042_DS1)
Severance	Moderate Adverse (Significant) T / D / MT	NMU Provision (See Sustainable Transport Strategy (STS) Document Reference 4.02.00).	Negligible to Minor Adverse (not Significant) T / D / LT

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Driver Delay	Minor Adverse (not Significant) T / D / MT	Proposed Scheme + mitigation including junction capacity improvement at Beveridge Way and A47 approaches to A47 / WWHAR	Negligible to Minor Adverse (not Significant) T / D / LT
Pedestrian and Cyclist Delay	Minor Adverse (Not significant) T / D / MT	NMU Provision (See Sustainable Transport Strategy (STS) Document Reference 4.02.00).	Negligible to Minor Adverse (Not significant) T / D / LT
Pedestrian and Cyclist Amenity	Minor Adverse (Not significant) T / D / MT	NMU Provision (See Sustainable Transport Strategy (STS) Document Reference 4.02.00).	Negligible to Minor Adverse (Not significant) T / D / LT
Fear and Intimidation	Moderate Adverse (Significant) T / D / MT	NMU Provision (See Sustainable Transport Strategy (STS) Document Reference 4.02.00).	Negligible to Minor Adverse (Not significant) T / D / LT
Accidents and Safety	Minor Adverse (Not significant) T / D / MT	NMU Provision (See Sustainable Transport Strategy (STS) Document Reference 4.02.00).	Negligible to Minor Adverse (Not significant) T / D / LT

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Hazardous/abnormal Load	NA	Hazardous/abnormal loads require specific permission from National Highways via the ESDAL (Electronic Service Delivery for Abnormal Loads) system and notification will be made for any Abnormal Loads which can be dealt with on a case by case basis. Specific permission and notifications would be made to the Local Planning Authority (LPA) and National Highways. Details of the access routing, timings and number of abnormal load movements would be discussed and agreed with the LPA. A specific abnormal loads assessment would be carried out by a competent contractor. However, routes to be considered on approach to site would include A47 and A10. Appropriate Traffic Management Measures would be in place on relevant roads to prevent conflicts with public vehicles. This may include temporary road closures on minor rural roads of short duration in accordance with the New Roads and Street Works Act 1991. This is consistent with the approach taken by other DCO applications within the local area. Co-operation agreements will be in place to manage in-combination effects with other major schemes.	NA
Operation Phase(2042_DS2)	Operation Phase(2042_DS2)	Operation Phase (2042_DS2)	Operation Phase (2042_DS2)
Severance	Significant Adverse (Significant) T / D / LT	NMU Provision (See Sustainable Transport Strategy (STS) Document Reference 4.02.00). Housing development will provide additional mitigation on Long Lane	Significant Adverse (Significant) T / D / LT

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Driver Delay	Minor Adverse (Not significant) T / D / LT	Proposed Scheme + mitigation including junction capacity improvement at Beveridge Way and A47 approaches to A47 / WWHAR	Negligible to Minor Adverse (Not significant) T / D / LT
Pedestrian and Cyclist Delay	Minor Adverse (Not significant) T / D / LT	NMU Provision (See Sustainable Transport Strategy (STS) Document Reference 4.02.00).	Negligible to Minor Adverse (Not significant) T / D / LT
Pedestrian and Cyclist Amenity	Moderate Adverse (Significant) T / D / LT	NMU Provision (See Sustainable Transport Strategy (STS) Document Reference 4.02.00). Housing development will provide additional mitigation on Long Lane	Minor Adverse (Not significant) T / D / LT
Fear and Intimidation	Moderate Adverse (Significant) T / D / LT	NMU Provision (See Sustainable Transport Strategy (STS) Document Reference 4.02.00).	Negligible to Minor Adverse (Not significant) T / D / LT
Accidents and Safety	Minor Adverse (Not significant) T / D / LT	NMU Provision (See Sustainable Transport Strategy (STS) Document Reference 4.02.00).	Negligible to Minor Adverse (Not significant) T / D / LT

Sensitive Receptor	Significance of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement Measures	Significance of Residual Effects (i.e. After the Implementation of Mitigation / Enhancement)
Hazardous/abnormal Load	NA	<p>Hazardous/abnormal loads require specific permission from National Highways via the ESDAL (Electronic Service Delivery for Abnormal Loads) system and notification will be made for any Abnormal Loads which can be dealt with on a case by case basis. Specific permission and notifications would be made to the Local Planning Authority (LPA) and National Highways. Details of the access routing, timings and number of abnormal load movements would be discussed and agreed with the LPA. A specific abnormal loads assessment would be carried out by a competent contractor. However, routes to be considered on approach to site would include A47 and A10. Appropriate Traffic Management Measures would be in place on relevant roads to prevent conflicts with public vehicles. This may include temporary road closures on minor rural roads of short duration in accordance with the New Roads and Street Works Act 1991. This is consistent with the approach taken by other DCO applications within the local area. Co-operation agreements will be in place to manage in-combination effects with other major schemes.</p>	NA



18.3 Summary of Cumulative effects

18.3.1 In terms of cumulative effects, the assessment of effect interactions of construction and operational stages has concluded that no additional mitigation over and above that stated in **Technical Chapters 6 - 16** has been considered of value.

18.3.2 The assessment of in-combination effects has identified that the significance of effects remains as outlined at the project level (i.e. that concluded in **Technical Chapters 6 – 16**).

18.4 Monitoring Obligations

18.4.1 A summary of monitoring obligations is summarised in Table 18.2

Table 18.2 – Summary of Monitoring Obligations

Technical Discipline	Monitoring Obligation
Biodiversity	<p>A post-construction monitoring programme should be carried out during the first five years after construction. This will focus on the establishment of the ecological mitigation measures, including offsite compensation areas, help inform future management and, if necessary, allow for the implementation of remedial measures.</p> <p>Ecological monitoring surveys are required to assess the efficacy of the mitigation for significant effects stated in Section 9 and confirm the findings of this impact assessment. The monitoring would be secured by planning conditions and through the provision of a LEMP.</p> <p>An aftercare plan will be included as part of the LEMP. The Strategy would provide an auditable record of the mitigation commitments identified and the requirements for regular maintenance. It is anticipated that the following monitoring activities will be required to ensure implemented mitigation is successful.</p> <p>Habitats</p> <p>Surveys of landscape and habitat creation and mitigation areas should be completed following completions of the construction phase. This would assess the success of habitat mitigation measures and ensure that any remedial management and planting is identified and completed.</p> <p>Should any ecological mitigation measures be identified as failing by the monitoring exercises, the Ecology Management Plan will be reviewed and remedial works to ensure that the objectives are achieved may be necessary.</p> <p>Bats</p> <p>Site surveys of reinstated, created and enhanced habitats on and off-site to assess suitability for foraging and commuting bats should be completed. Monitoring of any bat boxes or roost features installed for mitigation should also be undertaken if required for licensing purposes.</p> <p>Badger</p> <p>Monitoring of underpasses and fencing will be carried out to ensure that fencing and underpasses remain effective. This monitoring will use a combination of site visits to check fencing and underpasses for signs of use and condition, as well as camera traps where required to monitor for longer periods of time.</p> <p>Reptiles</p> <p>Monitoring of translocated populations and habitat assessments will need to be carried out to ensure that reptile populations remain stable post translocation and to ensure that management interventions are carried out where required.</p>
Water and Flood Risk	Any monitoring requirements during construction will be set out in the CEMP.