



Northamptonshire Highways



Northamptonshire
County Council

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NORTHAMPTON NORTH WEST RELIEF ROAD

Environmental Statement

Volume I: Non-Technical Summary





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Environmental Statement

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1 INTRODUCTION

1.1 OVERVIEW

- 1.1.1. Northamptonshire County Council is seeking to obtain full planning permission for the construction of the Northampton North-West Relief Road (hereafter referred to as the 'Proposed Scheme'), located on land approximately 1.2km south-east of Church Brampton and immediately east of the Brampton Heath Golf Centre. The Site location is identified in **Figure 1.1: Site Location Plan (Volume IV of the Environmental Statement (ES))** and described further in **Chapter 2: The Existing Site (Volume II of the ES)**.
- 1.1.2. This document is a Non-Technical Summary (NTS) of the ES, submitted in support of the planning application for the Proposed Scheme.

1.2 PURPOSE OF THIS DOCUMENT

- 1.2.1. The purpose of the NTS is to present a summary of the findings of the ES in non-technical language as required under the Town and Country Planning (Environmental Impact Assessment) Regulations 2017, herein referred to as the 'EIA Regulations 2017'. The EIA Regulations 2017 require an Environmental Impact Assessment (EIA) be carried out for certain developments prior to receiving planning permission. The purpose of the EIA is to identify the likely significant effects of a proposed development on the environment. Where likely significant environmental effects are identified, recommendations for the prevention and mitigation measures for the effect(s) are made, where practicable.
- 1.2.2. Information on the Proposed Scheme is provided in **Section 3** of this NTS and full details (including drawings) on the Proposed Scheme are provided within the ES.
- 1.2.3. The EIA considered the potential for significant environmental effects of the construction and operation of the Proposed Scheme. The ES describes the existing environmental conditions at the Site and surrounding area, details the technical assessments undertaken, and the findings of those assessments.

2 THE SITE AND THE EXISTING ENVIRONMENT

2.1 CURRENT LAND USE

GENERAL

- 2.1.1. The Site largely consists of arable agricultural fields which are intersected by small areas of woodland, hedgerows and drainage channels that feed into the Brampton arm of the River Nene, which runs from north to south through the Site boundary.

POPULATION AND SETTLEMENTS

- 2.1.2. The site is located to the north-west of Northampton, the villages of Church Brampton and Chapel Brampton are located approximately 1km to the north-west of the Site. The nearest private residential properties are located along or off A5199 Welford Road. The closest residential properties to the Proposed Scheme are Dallington Grange Farm, approximately 200m west of the Proposed Scheme and Boughton Crossing House, approximately 35m north of the existing road junction between Brampton Lane and A5199 Northampton Road / Welford Road.

TOPOGRAPHY

- 2.1.3. The Site lies at roughly the same elevation from the north to the south, with only the section crossing the Rugby to Milton Keynes railway line increasing from approximately 65m above ordnance datum (AOD) in an upward gradient to 80m AOD. The Site is situated at the lowest gradient of a valley with steep upwards gradients from the Site to both the east and west.

2.2 ENVIRONMENTAL CHARACTERISTICS

STATUTORY DESIGNATIONS

- 2.2.1. There are no statutory environmental designations within or adjacent to the Site. The Upper Nene Valley Gravel Pits Special Protection Area (SPA), which also has a Ramsar designation and a designation as a Site of Special Scientific Interest (SSSI), lies approximately 6.1km to the south-east of the site boundary. It is primarily designated for its breeding and overwintering birds.

NON-STATUTORY DESIGNATIONS

- 2.2.2. There is a total of 27 non-statutory designated sites within 2 km of the Site boundary, these designations consist of eight Potential Wildlife Sites (PWS) and 19 Local Wildlife Sites (LWS), two of which are also a Country Park (CP), two Wildlife Trust Reserves (WTR) and one a Pocket Park.

NATURAL RESOURCES

- 2.2.3. The Brampton arm of the River Nene is located immediately east of the Site. The Brampton arm flows in a southerly direction to its confluence with the larger arm of River Nene approximately 4.3km downstream of the Site. Brampton Brook flows immediately to the north of the Rugby to Milton Keynes railway line. The watercourse flows in an easterly direction to its confluence with the Brampton arm of the River Nene.
- 2.2.4. The Environment Agency's Flood Map for Planning (Rivers and Sea) indicates that the Site is located within the high-risk Flood Zone 3. The Environment Agency's Risk of Flooding from Surface Water map indicates a similar flood extent to the fluvial flood risk for both the River Nene and Brampton Brook.



- 2.2.5. The Site contains high quality mature oak trees which contribute to the rural landscape character. One high quality oak tree has been identified as a veteran tree on the basis that it exhibits characteristics of ancientness.

HISTORIC ENVIRONMENT

- 2.2.6. There are no World Heritage Sites, Scheduled Monuments, Registered Parks and Gardens, or Battlefields within 1km of the Site. There is one Grade I Listed Building, nine Grade II Listed Building and one Conservation Area within 1km of the Site.
- 2.2.7. The River Nene valley is rich in evidence for prehistoric settlement activity and a review of the available online Historic Environment Records identifies the potential for buried archaeological sites in and around the site ranging in date from the Neolithic period through to the Iron Age.

3 THE PROPOSED SCHEME

3.1 INTRODUCTION

- 3.1.1. The Proposed Scheme comprises the construction and operation of a new relief road measuring approximately 1.9km in length. To the north, the Proposed Scheme will connect into the Sandy Lane Roundabout (part of the A5199 Northampton Road) before connecting into Brampton Lane Roundabout (part of the A5199 Welford Road). To the south, the Proposed Scheme will connect into the Dallington Grange Roundabout, a new roundabout east of Grange Farm which will provide access to the proposed Dallington Grange residential development which received outline planning consent in 2018.
- 3.1.2. The main components of the Proposed Scheme are described below. Please refer to **Figure 3.1: General Arrangement Design (Volume IV of the ES)** which provides a layout of the Proposed Scheme.

PROPOSED CARRIAGEWAY

- 3.1.3. A single two-lane carriageway connecting Dallington Grange Roundabout to Sandy Lane Roundabout. A railway overbridge will carry a short section of the carriageway over the Milton Keynes to Rugby railway line. The carriageway includes a shared cycleway/footway along the entire length of the western edge of the carriageway. The carriageway will be on embankment with landscape earthworks and planting on both sides of the embankment to help integrate the Proposed Scheme into the existing landscape.
- 3.1.4. Single two-lane carriageway connecting Sandy Lane Roundabout and Brampton Lane Roundabout. The carriageway includes street lighting along the entire length, on each side of the road. The carriageway will be on embankment with landscape earthworks and planting on both sides of the embankment to help integrate the Proposed Scheme into the existing landscape.

PROPOSED ROUNDABOUTS

- 3.1.5. The proposed Sandy Lane Roundabout will be located approximately 10m west of the River Nene and 20m south of the existing Sandy Lane Junction which connects into the A5199 Northampton Road. The proposed roundabout will directly replace the existing junction arrangements that connect Sandy Lane with the A5199 Northampton Road. Footway / cycleway provisions will be included on the western and northern arms of the proposed Sandy Lane Roundabout to ensure there is connectivity to existing non-motorised user (NMU) provisions. Lighting will be provided on the roundabout and approaches to the roundabout.
- 3.1.6. The proposed Brampton Lane Roundabout will be located approximately 10m south-west of the Windhover Public House. The proposed roundabout will directly replace the existing junction arrangements that connect Brampton Lane with the A5199 Northampton Road / A5199 Welford Road. Foot/cycleway provisions will be included on the western, northern and eastern arms of the roundabout to ensure there is connectivity to existing non-motorised user provisions. Lighting will be provided on the roundabout and approaches to the roundabout.

ALTERATIONS TO EXISTING A5199 NORTHAMPTON ROAD

- 3.1.7. A short section of the A5199 Northampton Road, approximately 250m in length, will be permanently closed from motorised use once the Proposed Scheme is operational. This short section runs from west to east, starting at the Sandy Lane / A5199 Northampton Road junction to the Brampton Mill Equestrian Centre side road access.
- 3.1.8. This carriageway section will be connected to the footway and cycleway provisions for both Sandy Lane Roundabout and Brampton Lane Roundabout. This short section of the A5199 Northampton Road will only be open to NMUs.

HIGHWAY DRAINAGE AND FLOOD STORAGE

- 3.1.9. The Proposed Scheme will include three highway balancing ponds. The highway balancing ponds serve two main functions; to temporarily store water during and after storm event, and control the discharge of water into existing watercourse via drainage channels. The highway balancing ponds provide an opportunity to create new areas of aquatic and marginal planting, including floodplain grazing marsh and reed beds.
- 3.1.10. The Proposed Scheme will include four flood storage replacement areas. These areas will replace part of the floodplain lost to the construction of the Proposed Scheme. These areas provide an opportunity to create areas of marginal planting, including floodplain grazing marsh and reed beds, as well as marshy grassland at the base of the storage areas.

NON-MOTORISED USERS

- 3.1.11. The following Public Rights of Way (PRoW) alterations will be required because of the Proposed Scheme:
- Permanent closure of Public Footpath CC6;
 - Permanent diversion of Public Footpath HW44; and
 - Permanent diversion of Bridleway HW6:
- 3.1.12. A permanent diversion National Cycle Route 6 is required to accommodate the proposed Brampton Lane Roundabout. The proposed diversion will divert the cycle route approximately 15m west of its existing alignment to ensure users of National Cycle Route 6 can safely cross the proposed roundabout.
- 3.1.13. Liaison with landowners, business owners and farmers is ongoing to ensure access is maintained through construction and appropriate permanent access arrangements are built into the accommodation works designs.

MITIGATION

- 3.1.14. Environmental mitigation that has been developed and designed to form part of the Proposed Scheme. The mitigation measures identified are the product of an iterative design process, with the overall objective of avoiding and reducing significant adverse environmental effects. Please refer to **Chapter 3: Description of the Proposed Scheme (Volume II of the ES)**, Section 3.2, for further details.

3.2 OVERVIEW OF THE CONSTRUCTION PROCESS

3.2.1. Building and preparing the Proposed Scheme for operation will comprise the following general stages:

- Advance works including: site investigations, further environmental surveys, preliminary mitigation works (including where appropriate – habitat creation, landscape planting), advance site access works;
- Civil engineering works including: extraction of material from borrow pits; establishment of construction compounds; site haul routes, site preparation and enabling works; main earthworks and structure works; and
- Site finalisation works, including restoration.

3.3 WHEN WILL THE DEVELOPMENT BE BUILT

3.3.1. An indicative construction programme illustrating the key stages for each of the core construction activities is provided in Table 3.1 below.

Table 3-1: Indicative construction programme

Activity	Programme
Site clearance	Q1 2020
Site mobilisation	Q2 2020
Construction of Railway Overbridge	Q3 2020 – Q1 2021
Construction of South Embankment	Q3 2020 – Q4 2020
Construction of Sandy Lane Roundabout	Q3 2020 – Q1 2021
Construction of River Nene Crossing and Carriageway (<i>Sandy Lane Roundabout to Brampton Lane Roundabout</i>)	Q3 2020 – Q1 2021
Construction of Brampton Lane Roundabout	Q3 2020 – Q1 2021
Construction of North Embankment	Q3 2020 – Q3 2021
Construction of Carriageway (Sandy Lane Roundabout to Railway Overbridge)	Q4 2020 – Q3 2021
Construction of Carriageway (Railway Overbridge to Dallington Grange Roundabout)	Q2 2021 – Q3 2021

3.4 ENVIRONMENTAL MANAGEMENT DURING CONSTRUCTION

The environmental management of the construction works for the Proposed Scheme will be delivered through the development of a Construction Environmental Management Plan (CEMP). The CEMP will be the means of controlling the construction works and set out monitoring requirements, with the objective of ensuring that the effects of the construction works on people and the natural environment are reduced insofar as reasonably practicable.

3.4.1. To support the planning application, an Outline CEMP has been prepared and is published as part of this ES, please see **Appendix 3.1: Outline Construction Environmental Management Plan (CEMP) (Volume III of the ES)**. The aims of the Outline CEMP are to reduce the risk of likely significant negative effects on sensitive receptors because of construction activities, and to minimise disturbance to residents.

4 ENVIRONMENTAL IMPACT ASSESSMENT METHODOLOGY

4.1 INTRODUCTION

EIA SCREENING REQUEST

- 4.1.1. An EIA Screening Request was submitted to Northamptonshire County Council in January 2018, please refer to **Appendix 5.1: EIA Screening Request (Volume III of the ES)**. An EIA Screening Request is submitted to the Local Planning Authority to determine whether a proposed project falls within the remit of the EIA Regulations, whether it is likely to have a significant effect on the environment, and therefore, requires an assessment.
- 4.1.2. A response was received from Northamptonshire County Council on 22 February 2018 which determined that the Proposed Scheme will require an Environmental Impact Assessment (EIA) and advised on the topic areas that should be covered as part of the ES, please refer to **Appendix 5.2: EIA Screening Opinion (Volume III of the ES)**.

EIA SCOPING OPINION

- 4.1.3. An EIA Scoping Report was submitted to Northamptonshire County Council on 07 August 2019, please refer to **Appendix 5.3: EIA Scoping Request (Volume III of the ES)**. An EIA Scoping Report is prepared and submitted to the relevant Local Planning Authority to determine the extent of the environmental issues to be considered in the assessment and reported in the ES.
- 4.1.4. To inform the EIA Scoping Opinion, Northamptonshire County Council undertook consultation with the following internal and external consultees:
- Northamptonshire County Council Environmental Health officer
 - Northamptonshire County Council County Archaeologist;
 - Daventry District Council;
 - Northampton Borough Council;
 - Highways England;
 - Environment Agency;
 - Natural England;
 - National Grid;
 - Western Power Distribution;
 - Wildlife Trust;
 - Network Rail;
 - Highways England; and
 - Historic England.
- 4.1.5. A formal Scoping Opinion was subsequently received from Northamptonshire County Council on 18 September 2018, please refer to **Appendix 5.4: EIA Scoping Opinion (Volume III of the ES)**.

ENVIRONMENTAL TOPICS

4.1.6. In line with the EIA Scoping Report and EIA Scoping Opinion received from Northamptonshire County Council, the following environmental topic areas have been taken forward and assessed

- Air quality;
- Biodiversity;
- Climate change;
- Cultural heritage;
- Geology and soils;
- Landscape and visual;
- Material assets and waste;
- Noise and vibration;
- Population and human health;
- Road drainage and the water environment; and
- Cumulative effects.

4.2 KEY OBJECTIVES OF EIA

4.2.1. The key objectives of the EIA are as follows:

- Set out the legal framework;
- Document the consultation process;
- Consider the alternatives to the Proposed Scheme;
- Establish baseline environmental conditions at the Site and within the surrounding area;
- Identify likely significant effects during the design process so that some effects can be avoided, prevented, reduced or, if possible, offset prior to the assessments within the ES;
- Identify, predict and assess the environmental effects associated with the Proposed Scheme: beneficial and adverse; permanent and temporary; direct and indirect and short / medium / long term; significant or not significant;
- Identify, predict and qualitatively assess the cumulative effects of the Proposed Scheme including those associated with the other developments;
- Identify suitable mitigation measures to avoid, prevent, reduce or, if possible, offset likely significant adverse effects on the environment and identify the likely significant residual effects following the implementation of these measures; and
- Identify monitoring measures where likely significant residual adverse effects are identified.

4.3 APPROACH TO THE ASSESSMENT

4.3.1. The Proposed Scheme has been assessed against the description and supporting plans as detailed in **Chapter 3: Description of the Proposed Scheme (Volume II of the ES)**. The maximum extent of the Proposed Scheme has been assessed as the worst-case situation. There is therefore some degree of flexibility to allow the Proposed Scheme to evolve (i.e. reduce in size) if necessary.

4.3.2. The initial assessment takes primary (embedded) mitigation into account in determining potential significant effects. Proposed mitigation measures (secondary and tertiary) and/or monitoring arrangements is then set out. An assessment of residual effects, during the construction and operational phases, taking account of all mitigation (primary, secondary and tertiary) is then undertaken. The findings are reported within **Technical Chapters 6 – 15 (Volume II of the ES)**.

4.4 WAS THERE ANY CONSIDERATION OF ALTERNATIVES?

- 4.4.1. The development of a relief road to the North-West of Northampton is identified as one of the eight key actions to support the growth of Northampton and regeneration of its town centre as part of a programme of highway improvements included in the Northampton Town Transport Strategy. Following public consultation between June to August 2017, Northamptonshire County Council announced a preferred route for the Northampton North-West Relief Road (linking the A428 Harlestone Road with the A5199 Northampton Road) in October 2018.
- 4.4.2. Since October 2018, as part of the design development process, a series of potentially feasible amendments to the Proposed Scheme have been identified and reviewed within workshops and meetings attended by engineering, construction, planning, and environmental specialists.
- 4.4.3. As part of this process, route alignment option and design alternatives have been considered against the following criteria:
- Engineering requirements: The degree of design complexity of the alternatives and the impact this would have on construction durations, construction processes, and operational costs;
 - Costs: Whether the alternatives would be more cost effective or incur additional costs; and
 - Potential environmental impact: Whether the alternatives would have (more or less) environment impacts (e.g. noise and vibration, landscape and visual).
- 4.4.4. Further information is reported in **Chapter 4: Consideration of Alternatives (Volume II of the ES)**.

4.5 CONSULTATION

- 4.5.1. In addition to the formal consultation undertaken in conjunction with the scoping process, technical and public consultation has been undertaken.
- 4.5.2. As part of the EIA process, technical consultation with a range of statutory and non-statutory consultees has been ongoing. Details of the technical consultation undertaken for each topic area is provided in the respective **Technical Chapters 6 – 15 (Volume II of the ES)**.
- 4.5.3. Details of public consultation are provided within the **Statement of Community Involvement** which supports the Planning Application.

5 ENVIRONMENTAL EFFECTS OF THE PROPOSED SCHEME

5.1 INTRODUCTION

- 5.1.1. This section outlines the types of impacts (changes) as a result of the Proposed Scheme (during both the construction and operation stage), the proposed measures to avoid, prevent or reduce the likely adverse effects (otherwise known as 'mitigation') and the resultant (residual) effects.
- 5.1.2. Some mitigation measures are built into the design of the Proposed Scheme to ensure that adverse effects are avoided in the first instance (where feasible). Other mitigation measures are put in place as the Proposed Scheme progresses.

5.2 AIR QUALITY

CONSTRUCTION

- 5.2.1. Construction works have the potential to give rise to dust and particulate matter generated during earthworks and general construction activities, as well as from the trackout¹ of dust material by vehicles onto public highways. Dust emissions can cause annoyance through the soiling of buildings and surfaces and/or adversely impact human health ecological health.
- 5.2.2. Measures to control dust emission on-site will be implemented through good site practice and the Construction Environmental Management Plan (CEMP). Following the appropriate implementation of the CEMP, which will be continually monitored and updated during the construction process, the risk of local dust impacts at sensitive receptors will be low.

OPERATION

- 5.2.3. The design of the Proposed Scheme has given due consideration to measures that can be incorporated to minimise potential air quality impacts. The alignment of the main carriageway has been routed in a westerly direction which maximises the distance between the Proposed Scheme and residential areas to the east (those areas accessed off A5199 Welford Road).
- 5.2.4. The Proposed Scheme will introduce an improvement in annual mean nitrogen oxide levels for residential properties in Chapel Brampton and Church Brampton adjacent to Sandy Lane, Harlestone Road, and Pitsford Road. This is due to a reduction in traffic flows because of the Proposed Scheme. Conversely, residential properties located near the Proposed Scheme will experience a worsening in annual mean nitrogen oxide levels. This is due to an increase in traffic flows on the local road network close to, and along, the Proposed Scheme.
- 5.2.5. The Proposed Scheme will introduce an improvement in annual mean particulate matter levels for residential properties in Chapel Brampton and Church Brampton. This is due to a reduction in traffic flows because of the Proposed Scheme. Conversely, residential properties located near the Proposed Scheme will experience a worsening in annual mean particulate matter levels. This is due to an increase in traffic flows on the local road network close to, and along, the Proposed Scheme.

¹ Trackout is material that gathers on vehicle tires / exterior surfaces and is deposited on a public road.

- 5.2.6. An assessment of changes in air quality at The Upper Nene Valley Gravel Pits SPA/Ramsar/SSSI has been used to inform the Biodiversity assessment (**Chapter 7: Biodiversity, Volume II of the ES**) and a Habitats Regulation Assessment (HRA). An HRA Stage 1 Screening Report has been submitted as part of the planning application.

5.3 BIODIVERSITY

CONSTRUCTION

- 5.3.1. Construction works and activities has the potential temporarily effect protected species and habitats that have been identified on-site, including; badgers, bats, and barn owls, and permanently effect areas of protected habitat, including grassland and hedgerows. In addition, construction activities can directly or indirectly effect any recognised statutory designated sites or non-statutory designated, as identified in **Chapter 2**.
- 5.3.2. The design of the Proposed Scheme has evolved to reduce impacts on notable habitats and protected species identified through baseline surveys. This includes the proposed clear span bridges/culverts crossing the River Nene and Brampton Brook, which will reduce the impacts on the riverbeds and reduce the amount of shading. Additionally, landscaping will take all protected species into consideration to compensate for the loss of notable, foraging and breeding habitat that will result from Site clearance. This will include the use of native species mixes to be used in the planting of habitats such as hedgerows, woodland, species rich grassland and wetland areas.
- 5.3.3. A Landscape Mitigation and Preliminary Design (**Figure 12.6: Landscape Mitigation and Preliminary Design (Volume IV of the ES)**) has been prepared which includes a number of habitat creation areas which compensation for the predicted loss of habitats as a result of the Proposed Scheme. The design includes broad-leaved woodland, semi-improved neutral grassland, new waterbodies (in the form of highway balancing ponds and flood storage replacement areas), drainage ditches, marginal vegetation and marshy grassland, and hedgerows.
- 5.3.4. The environmental management of the construction works for the Proposed Scheme will be delivered through the CEMP. All construction activities will follow general environmental best practice measures to avoid or reduce the detrimental effects of construction activities on biodiversity. In addition, a Habitat Management Plan will be prepared for areas of habitat creation, management and monitoring as part of the Proposed Scheme. The Habitat Management Plan will be prepared in consultation with Northamptonshire County Council, Daventry District Council, Northampton Borough Council, and the Bedfordshire, Cambridgeshire and Northamptonshire Wildlife Trust.
- 5.3.5. Following the appropriate implementation of the mitigation and design measures outlined above, the risk of any adverse effects on protected species, protected habitats, statutory designated sites, and non-statutory designation will be minor.

OPERATION

- 5.3.6. The operation of the Proposed Scheme has the potential to permanently effect protected species and habitats because of road traffic collisions, noise disturbance, damage to habitats from surface water run-off. The design of the Proposed Scheme has evolved to reduce the impacts on notable habitats and protected species during the operational phase. This has included proposed mammal ledges within culverts, and/or dry tunnels adjacent to the culverts, to enable safe passage of animals under the Proposed Scheme.

- 5.3.7. The assessment identified a potential adverse effect on barn owls because of the risk of traffic collisions, severance of suitable foraging habitats, and lighting. Any barn owl nest sites moved or created, as well as those, retained nest sites within 100m of the Proposed Scheme, will be monitored for two years post-construction, to ascertain up-take and to determine the success of the mitigation.

5.4 CLIMATE CHANGE

CONSTRUCTION

- 5.4.1. The construction assessment considered the potential effects of the Proposed Scheme on the climate (e.g. greenhouse gases) and the vulnerability and resilience of the Proposed Scheme to climate change (e.g. extreme weather). The assessment reported limited effects on the climate because of construction activities. However, the assessment did identify the need to consider mitigation measures in relation to the impact of extreme weather on construction workers and the management of dust and equipment on site. Therefore, in advance of construction works taking place, a full CEMP, incorporating a Site Waste Management Plan (SWMP) and Materials Management Plan (MMP), will be prepared and delivered.

OPERATION

- 5.4.2. The operation assessment considered the potential effects of the Proposed Scheme on the climate (e.g. greenhouse gases) and the vulnerability and resilience of the Proposed Scheme to climate change (e.g. extreme weather). The assessment reported limited effects on the climate, and the Proposed Scheme will not be vulnerable to climate change.

5.5 CULTURAL HERITAGE

CONSTRUCTION

- 5.5.1. During construction, anything that would cause ground disturbance, such as preliminary ground works, topsoil/subsoil removal, demolition, remediation, landscaping, planting, excavation for foundations, services, drainage and lighting, could potentially have an impact on known or potential buried heritage assets. Above ground heritage assets may also be indirectly affected from vibration (e.g. piling), dust and noise. There can be an impact upon the setting of above ground heritage assets. There will be no temporary effects on below ground assets. The construction of the Proposed Scheme will permanently affect below ground assets that are present on the site. Archaeological trial trenching excavations are being carried out in May and June 2019 to establish the presence/absence, character and date of any archaeological remains. Following the results of the trial trenching, a mitigation strategy will be agreed with the County Archaeological Advisor.

OPERATION

- 5.5.2. Any impacts on buried heritage assets are scoped out for the operational phase on the basis that once the Proposed Scheme has been completed, no further ground disturbance would occur and consequently no additional impact would result. The Proposed Scheme will have an impact on built heritage assets (Grade I Listed Church of St John the Baptist and Grade II Listed Windmill Inn) in the wider landscape, due to changes to their setting, and how the asset is understood and experienced. The effects on the setting of built heritage assets during the operation phase will be permanent. However, due to the distance of these assets from the Proposed Scheme and restricted view, the effects are deemed to be minor.

5.6 GEOLOGY AND SOILS

CONSTRUCTION

- 5.6.1. The geology and soils assessment focuses on the potential effects of the Proposed Scheme on geology, sensitive soils (including agricultural soils), and areas of contamination. Baseline data for the relevant study area has been sought from desk based research alongside an initial phase of ground investigation. As the detailed design progresses it is anticipated that additional ground investigation will be completed on the site.
- 5.6.2. During construction of the Proposed Scheme, agricultural land will be temporarily affected (soil erosion, reduction of soil quality, and over-compaction) and permanently affected (construction of carriageways and other infrastructure). Most of the agricultural land that will be affected is classed as Grade 3 (good to moderate quality), therefore, construction activities will look to minimise the use of agricultural land. Given the amount of permanent land take required, there are likely to be long term effects on the agricultural land. Land will be reinstated back to existing use where possible.
- 5.6.3. The disturbance of contaminated ground and the storage of fuel/oils onsite has the potential to mobilise and release contaminants into existing watercourses and drainage channels, and expose construction workers to pollutants. Measures to control contamination and pollution will be implemented through good site practice and the CEMP. Following the appropriate implementation of the CEMP, which will be continually monitored and updated during the construction process, the risk of releasing contaminants and pollution will be low.

OPERATION

- 5.6.4. The main operational risk to geology and soil quality is the potential for leaks and spills on the carriageway and the resultant pollutant run-off. There is also the potential for the reduction in soil quality because of major accidents resulting in the release of significant volumes of potential contaminants (e.g. fuels, vehicle loads, fire water). The Proposed Scheme includes a suitable drainage design to reduce the likelihood of potential surface contaminants entering surface watercourses and underlying groundwater.

5.7 LANDSCAPE AND VISUAL

CONSTRUCTION

- 5.7.1. The site is a relatively enclosed tranquil rural landscape, a mixture of water meadow and arable fields, with small fields divided by hedges and trees. The landscape and visual assessment considered the potential impacts of the Proposed Scheme on the landscape character and visual amenity. The landscape assessment considers the effects of change and development on landscape as a resource. The character of the landscape derives from a combination of physical factors, natural processes, and human intervention. Visual assessment is concerned with the views that are available to people who may be affected by the Proposed Scheme, and their perception and responses to changes in these views.
- 5.7.2. The construction works and activities associated with the Proposed Scheme will have a temporary adverse effect on the local landscape. The construction works will introduce detrimental views of the site to residential receptors and recreational receptors (such as those using the Brampton Valley Way and local footpaths) for the duration of the construction period.

OPERATION

- 5.7.3. The Proposed Scheme would introduce a new road, with roundabouts and a rail overbridge with associated high embankments into a pocket of rural landscape, albeit one that is indirectly affected by adjacent urban development. It would introduce the movement of traffic and lighting at night (from both highway and vehicle lights) into a currently relatively dark environment.
- 5.7.4. As part of the Proposed Scheme, a landscape mitigation design has been developed to substantially reduce views of the Proposed Scheme, and traffic on it, from many sensitive visual receptors. The design includes:
- Woodland planting;
 - Hedgerow (with hedgerow trees); and
 - Clumps of woodland to act as a visual buffer to the golf courses.
- 5.7.5. The main area of residential receptors is to the east of the Proposed Scheme. The Proposed Scheme would be clearly visible from the houses that back on to or face the Brampton Valley Way, those houses currently benefit from a peaceful rural view. The Proposed Scheme would introduce a large busy element into this view. Landscape mitigation planting will, over time, substantially reduce views of the traffic on the new road and help integrate it into the landscape.
- 5.7.6. The Brampton Valley Way, a footpath and cycle route (National Cycle Network Route 6) follows the line of the former Market Harborough branch line railway along the eastern edge of the valley floor. There would be clear views of the Proposed Scheme from approximately 2.5km of the Brampton Valley Way, from Boughton Mill to near Mill Lane.

5.8 MATERIAL ASSETS AND WASTE

CONSTRUCTION

- 5.8.1. The material assets and waste assessment consider potential effects arising from the construction and first year of operation of the Proposed Scheme upon the consumption of material resources (which includes recovered site arisings), and the generation and disposal of waste. During construction, the Proposed Scheme has the potential to consume material resources, and produce and dispose of waste during site preparation and construction activities. The associated potential environmental impacts are associated with the production, processing, consumption and disposal of material resources.
- 5.8.2. Measures to manage material resources and waste will be implemented through good site practice and the CEMP. Following the appropriate implementation of the CEMP, which will be continually monitored and updated during the construction process, any construction impacts from the Proposed Scheme will be low.

OPERATION

- 5.8.3. Any potential operational lifecycle environmental impacts associated with the Proposed Scheme beyond the first year of operation are expected to be minimal and were not considered in the assessment. During the first year of operation, some maintenance activities may be required. As such, there is the potential for environmental impacts associated with the production, processing, consumption and disposal of material resources. Given the small volume of materials and waste anticipated for the first year of operation, any environmental impacts associated with the Proposed Scheme are expected to be minimal.

5.9 NOISE AND VIBRATION

CONSTRUCTION

- 5.9.1. Noise and vibration effects during the construction phase have the potential to adversely impact sensitive receptors such as residents, commercial facilities, and schools. These effects would be associated with construction activities, the operation of plant vehicles, and the increased noise levels on the road network because of construction traffic movements.
- 5.9.2. Noise control measures set out in the Construction Environmental Management Plan agreed with Northamptonshire County Council will reduce the impact on local sensitive receptors. These measures will include; appropriate timing of noisy works and deliveries to and from the site, ensuring construction machinery/plant adheres to noise emission standards, and implementing screening/hoarding around noisy works etc. With proper implementation and management of these mitigation measures, the effects of construction noise and construction traffic noise will be short-term and not significant.

OPERATION

- 5.9.3. During the operational phase, the Proposed Scheme is likely result in an increased level of noise to the local area. Operational noise effects are predicted at a number of receptors (including residential properties and recreational facilities) located to the east of the Proposed Scheme, along the A5199 Welford Road and Brampton Lane.

5.10 POPULATION AND HUMAN HEALTH

CONSTRUCTION

- 5.10.1. The population and human health assessment considered impacts on; physical assets and land use, community amenity and access, economy and employment, and human health.
- 5.10.2. Land-take required for the Proposed Scheme will interfere with existing uses of that land, and in some locations, preclude existing land uses Land may be required for the Proposed Scheme from holdings temporarily, during the construction phase, or permanently.
- 5.10.3. National Cycle Route 6 (Brampton Valley Way) is located approximately 300m east of the Proposed Scheme. National Cycle Route 6 is part of a national network and is a route used by cyclists in Northampton to get to areas of employment and education. It is anticipated that National Cycle Route 6 will remain open during the construction phase, except when the proposed Brampton Land Roundabout is being constructed. As such, a temporary diversion or partial closure of National Cycle Route 6 will be required. This will disrupt access and restrict use, which is also likely to increase journey times and may require cyclists to find alternative routes.
- 5.10.4. In addition, construction activities associated with the Proposed Scheme will result in a temporary reduction of visual amenity for users of National Cycle Route 6, and therefore use and enjoyment of the recreational resource.

OPERATION

- 5.10.5. Residential properties within the suburbs of Kingsthorpe and Kings Heath will be closer to a road with traffic compared to the existing environment which is agricultural land. A combination of noise effects and visual effects will affect the amenity of residential properties, particularly for those houses that back onto Brampton Valley Way.

- 5.10.6. The Windhover Country Pub is located adjacent to the eastern arm of Brampton Lane Roundabout. There is likely to be an increase in traffic numbers due to the operation of the Proposed Scheme which will reduce amenity for those users of the pub from increased traffic volumes.
- 5.10.7. Improved connectivity for cyclists and walkers to existing public rights of way following the introduction of shared footways / cycleways along the carriageway between Dallington Grange Roundabout and Sandy Lane Roundabout, as well as the exclusive non-motorised user (NMU) access to the alterations to the A5199 Northampton Road, will introduce significant benefits.

5.11 ROAD DRAINAGE AND THE WATER ENVIRONMENT

CONSTRUCTION

- 5.11.1. Construction activities can increase the risk of sediment and pollutants entering existing watercourse, such as the River Nene and Brampton Brook, from surface water run-off, and groundwater sources. In addition, there is an increased flood risk associated with temporary works within the floodplain of existing watercourses, works to existing watercourse alignments and culverts, and associated with changes to river catchment hydrology.
- 5.11.2. Measures to control pollution, sedimentation, and flood risk will be implemented through good site practice and the CEMP, this will include an effective construction phase plan, to ensure overall floodplain storage is minimised throughout the duration of the construction period. Following the appropriate implementation of the CEMP, which will be continually monitored and updated during the construction process, the risk of releasing contaminants and pollution will be low.

OPERATION

- 5.11.3. The Proposed Scheme has been designed to reduce any impacts during a flood event, measures include flood relief culverts and flood replacement storage areas. The drainage design will use sustainable drainage principles to prevent a reduction in water quality whilst providing habitat features such as ditches and ponds.
- 5.11.4. The Proposed Scheme will result in an increase in water levels upstream of the Site. Further consultation with the Environment Agency and Northamptonshire County Council will be undertaken through detailed design to confirm any future monitoring requirements.
- 5.11.5. There is a potential for a long-term adverse effect on groundwater flow and groundwater levels from the construction of below ground structure, including bridge foundations. Further Ground Investigation will be required in the areas with proposed below ground structures.

5.12 CUMULATIVE ASSESSMENT

- 5.12.1. A cumulative assessment has been undertaken across all technical topics which assessed two types of cumulative effects; the interaction of residual effects of all the environmental topics which form part of this ES; and the effects of the Proposed Scheme with other committed developments, currently within the planning system and located within the surrounding area.
- 5.12.2. Other developments which have been considered alongside the Proposed Scheme include:
- To the south of the Proposed Scheme, Dallington Grange Development; and
 - Adjacent to the Proposed Scheme to the east, Buxton Fields Development and Welford Road Development.

6 FURTHER INFORMATION

6.1 WHAT HAPPENS NEXT?

- 6.1.1. The Environmental Statement (ES) has been submitted together with other planning application documents and drawings to Northamptonshire County Council to assist planning officers in the determination of the planning application.
- 6.1.2. The Planning Officers must take the environmental information contained in the ES, and any other environmental information, into account in their determination of the planning application and make a recommendation to the Northamptonshire County Council planning committee who will ultimately approve or refuse the planning application.
- 6.1.3. Copies of the ES have been provided to Northamptonshire County Council who will send the application to statutory consultees and upload, along with the other planning documents onto their planning portal. Members of the public will have the opportunity to make comments on the application during the statutory determination period which is 16 weeks. The consultation feedback will be taken into consideration by the planning officers in their determination of the planning application.

6.2 WHO CAN I CONTACT FOR MORE INFORMATION?

- 6.2.1. The ES may be inspected during the consultation period at the NCC offices below, during normal opening hours.
- 6.2.2. Further information about the progress of the planning application (including a reference number) will be available at the following website:

<https://www3.northamptonshire.gov.uk/councilservices/northamptonshire-highways/major-highway-projects/Pages/northampton-north-west-relief-road.aspx>

6.3 CAN I HAVE A COPY OF THE ENVIRONMENTAL STATEMENT OR THIS NON-TECHNICAL SUMMARY?

- 6.3.1. Hard copies of the Non-Technical Summary and electronic copies of the ES (CD) are available free of charge, upon written request, from Northamptonshire County Council. A hard copy of the ES is available from the addresses listed below for a fee for the ES.

Location where the Environmental Statement can be viewed at the Council office:

Northamptonshire County Council

One Angel Square
Angel Street
Northampton
NN1 1ED



1 Capital Quarter
Tyndall Street
Cardiff
CF10 4BZ

wsp.com

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