

ENVIRONMENTAL ALERT FORM
To be completed by the Design Engineer

Select and fill in spaces to make your assessment. Please submit a further page with extra information if needed.

	Kier Design Team Lead	HE SPM/Sponsor	Project Number (HE PIN and Kier WO number):	HE Pin: 569243 WON: 1610210
Project Manager:	██████████	██████████		
Scheme Name & Location (inc. marker posts and/or Grid Reference):	A46 Ratcliffe on the Wreake Junction Geotechnical (slip roads)		Date form submitted:	24/07/2019
			EAF required by Date:	15/08/2019
	Grid Reference:		Design Completion Date:	TBC
CRITICAL!	Start: 462516, 314056	End: 462657, 314553		
Expected project cost and budget type:	██████████	██████████	Expected works start date:	15/09/2019
	Type of Scheme:	Renewals		
	Scheme Stage:	Technical Survey/ Investigation		
Does this scheme form part of another scheme?				No
If "YES" what is the scheme (PIN/ WO) No that this scheme is in relation to?				
Scheme area (in hectares) (including, access and storage areas):	Ratcliffe: 2.94	Expected duration of works:	6 days	During what periods are the works expected to be executed: Day
Who is the Principal Contractor?			To be appointed	
Brief description of project: (please provide relevant drawings/maps/photos etc)				
<p>Site location:</p> <p>A defective junction on the A46 has been identified on the north and southbound slip roads (between grid ref: Start: 462516, 314056 End: 462657, 314553), The southbound off-slip hosts two significant defects comprising of two slipped sections due for slope repair and the surrounding earthworks host minor defects for possible renewal.</p> <p>Scheme purpose:</p> <p>The purpose of this scheme is to:</p> <ul style="list-style-type: none"> Identify the likely cause of the defects Develop an understanding of the local geology, geomorphology, hydrology and hydrogeology in context with the surrounding area Identify any environmental constraints that may need to be considered in the development of a scheme Identify the requirement for any surveys that may be required within the defective section of the network Design remedial works and stabilise the earthworks. <p>Construction activities to be executed (On site only):</p> <p>Site walkover survey (Environmental and Topographical), and repair works on the earthwork and verge.</p>				

At this stage it is believed that the major defects are likely caused by a shallow slip plane within the made ground. As a result, the remedial actions proposed at this stage include either granular replacement of the slipped material or soil nailing on the SB offslip. At present, a topographical survey is required to aid in the design of potential remediation works and therefore vegetation clearance is also required on the junction.

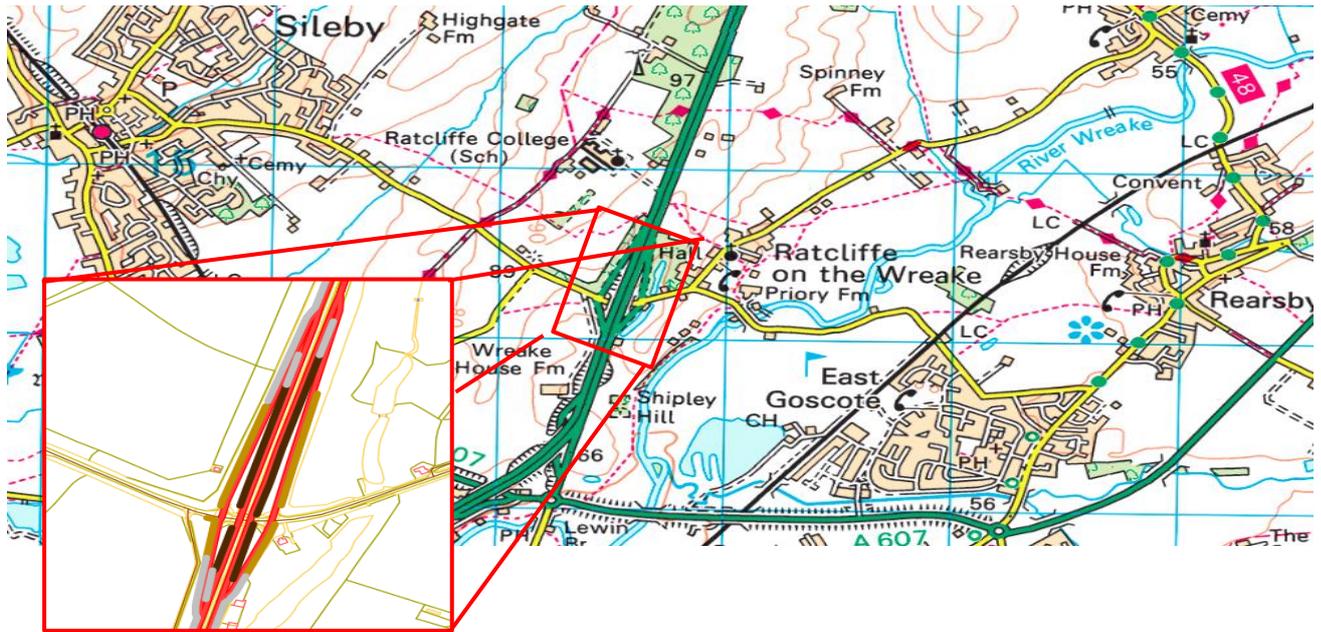
Construction activities to be executed (Off site only):

None

Summary of Alternative Design Options Considered:

How will the site be accessed? (attach plan)

Access from A46 slip roads pertaining to Ratcliffe junction.



Will access from 3 rd party land be required?	No
Will the scheme affect any access? e.g. to residence, farmland, public rights of way.	No
If required, where will the site compound be located?	N/A for Topo
Are the works entirely within the Highway Boundary (including compound etc)?	Yes
If NO, how much and what type of land is being expected to be acquired/leased?	-
What part of the Highways estate will the works be carried out in?	Soft estate
Will sub-contractors be involved?	yes
Is any part of the scheme or associated traffic management going to disturb the soft estate (including use of SPECS, storage of machinery or material on the verge and including trial holes)?	Yes
What traffic management is likely to be required?	Slip road closures
Are traffic diversions anticipated for this scheme?	Yes
Has any previous Environmental Assessment been undertaken within the scheme extent or form part of the handover pack?	No
Is the site likely to be contaminated?	No

If YES, with what?	-					
Does the work involve excavation?	No					
If yes, approximately how much?						
If YES, has it been excavated in the past?	No					
If YES, what material will be excavated and where will it be retained?						
Does the scheme involve construction or excavation under the canopy or within 5m of the canopy of any trees?	No					
What wastes will be produced?						
Waste Type	Soft Veg Clearance	Hard Veg Clearance			Choose an item.	Choose an item.
Approximate Qty	<1500m ^{3**}	<200m ^{3**}				
If other please list:	**Well established trees do not need to be removed. Only vegetation clearance with branch trimming to leave cleared ground for topo survey. Full clearance is required for construction phase.					
What recycling/reuse options could be adopted for any waste produced?	All waste materials must be removed from site in order to carry out the topo					
Is there an Asbestos Survey for this section of carriageway/structure?	Yes					
Will hazardous wastes be produced as part of this works?	No					
If YES, what types?						
Where will material (including waste) and machinery be stored onsite? (attach plan)	confirmed following site visit					
Where in the design process has a sustainability option been included/considered?	Throughout					
Has or will the Sustainable Highway Design Toolkit been utilised in this design?	Yes					
How will this improve sustainability in the design?	TBA					
Have carbon savings options have been considered for this scheme?	No					
If YES, please summarise. Construction phase:						
Are the works within 20m of a watercourse or flood defence structure?	No					
Will the works include concrete barrier?	No					
Does the scheme include drainage works?	No					
If YES, please summarise.						
Will there be any discharge of water from construction activities?	No					
If YES, where to?						
Are there properties which have a view of the site?	Yes - Permanent					
Are any of the following locations within close proximity to the site?	Other					
	Choose an item.					
	Choose an item.					
	Choose an item.					

If other, please list: Ratcliffe: Large estate adjacent to SB off-slip and "Van Dealership" on SB on-slip. NOTE: avoid interaction or survey on outside of SB on-slip. A lot of ongoing dispute with van dealership owner and HE.											
Will the scheme affect noise, vibration, air quality or odour levels?						No					
Is there any evidence of wildlife? e.g. badger or rabbit holes.						Yes					
If yes, describe:		Will advise following site visit									
Are there any highway structures within 20m of the works? (e.g. bridges, culverts, etc)						Yes					
Please list Culvert/ Bridge ID no's within close proximity to the site:						Structure Number: /A46//192.30// Structure Name: Ratcliffe Cross Roads Structure ID: 9918 Structure Type: Bridge and Large Culvert Bridge Type: Highway Underbridge					
Does the scheme involve removing/disturbing vegetation? e.g. concreting/paving over the soft estate, tree clearance, severance of tree roots, trial holes etc.						Yes					
If YES, how much and what type:		Grassland:		Yes	Trees:		Yes	Hedgerow (linear metre):	No	Wetland (m ²):	No
Other:		The above to be identified during walkover survey. Estimated in waste produced section.									
Is there any anticipated environmental mitigation required? e.g. replanting of trees, grass seeding etc.						No					
If yes describe:											
Please list any additional relevant Information in the box below:											
Additional information – local clearance to facilitate the Topo survey. Only ground vegetation clearance and branch trimming.											
Please describe the biodiversity gain opportunities that have been or will be considered for incorporation into the design (click link for more info):											
1.	<u>Amphibian Tunnels</u>	No	11.	<u>Butterfly Scrapes</u>	No						
2.	<u>Trees</u>	No	12.	<u>Bee Banks</u>	Yes						
3.	<u>Wildlife Ponds/Ground Scrapes</u>	No	13.	<u>Bee/Insect Hotels</u>	Yes						
4.	<u>Grassless greensward</u>	Yes	14.	<u>Species Rich Grasslands</u>	Yes						
5.	<u>Natural Materials Support Methods</u>	No	15.	<u>Otter Ledge/Ramps</u>	No						
6.	<u>Nest Boxes</u>	Yes	16.	<i>If other please list:</i>	Choose an item.						
7.	<u>Canopy Linkage</u>	No	17.		Choose an item.						
8.	<u>Dead Wood Habitats</u>	No	18.		Choose an item.						
9.	<u>Improving Wildlife Corridors</u>	Yes	19.		Choose an item.						
10.	<u>Wildlife Kerbs</u>	No	20.		Choose an item.						

Provide a description if you have answered 'Yes' for any of the opportunities above Will take advice from environment team about potentially viable options					
Please forward completed form along with an appropriately sized plan indicating location and extent of works, and any other relevant information (e.g. photographs if available, proposed designs) to the Environment Team.					
Details of Project scope provided and EAF requested by:					
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Author: Environmental Team	Issue Date: July 2019	Version: 2.1
As part of our system review, this document is valid until July 2020		



SCREENING ASSESSMENT

To be completed by the Environment Team in response to all Environmental Alert Forms

Note: When looking at each topic, consider the vulnerability of the project to risks of major accidents and/or disasters and any consequential changes in the predicted effects of that project on each topic listed below. Furthermore, any impacts of the project on national and local Policies and Plans should be considered on a topic by topic basis. Will the project be impacted by heat and radiation? If so make a note in Geology and Soils and scope in as a separate topic. Additional Guidance: [SHEMS-GUI-HIG-025-MPI-57-052017 Environmental Impact Assessment](#)

	Considerations	Scoping Required?		Reasons
		Yes	No	
Air Quality	<p>Will the scheme affect atmospheric particulate levels (e.g. dust) permanently?</p> <p>Are there any areas which are already subject to pollution e.g. AQMAs?</p> <p>Will there be any impact to human health?</p>	No		<p>Air Quality Management Areas There are no Air Quality Management Areas (AQMAs) within 1km of the survey extents.</p> <p>Receptors The following receptors are located within 200m of the work area: <i>Residential properties</i></p> <ul style="list-style-type: none"> • Ratcliffe Hall (No. 27 Broom Lane) • Ratcliffe Hall Lodge (No. 25, Broom Lane) • Saint Madeline House • Property adjoined to SH Autos Garage <p><i>Industrial and businesses</i></p> <ul style="list-style-type: none"> • SH Autos Garage, including Ratcliffe Light Commercials <p><i>Other (e.g. bus stops)</i> None.</p> <p>The following work activities may contribute to reduced local air quality on a temporary basis:</p> <ul style="list-style-type: none"> • The use of machinery and vehicles which produce emissions • Vegetation disturbance and clearance, such as strimming, could lead to debris mobilisation under dry conditions • Traffic Management requirements may impact the movement and flow of traffic through the local area <p>It is expected there will be a short term, small scale impact on local air quality for the duration of the survey. See required actions.</p>



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			<p>Due to the nature of the works as a survey only, air quality will not be permanently affected by the works.</p> <p>See Required Actions. No significant impact is expected, no further assessment is required.</p>
<p>Cultural Heritage</p>	<p>Impacts on designations and any other potential archaeology and heritage.</p> <p>Cultural heritage within 300m incl. Scheduled Ancient Monuments; registered historic parks and gardens, battlefields; conservation areas; world heritage sites.</p>	<p>No</p>	<p>Designated assets</p> <p>There are statutory designated historic assets within 300m of the proposed survey area:</p> <ul style="list-style-type: none"> • Ratcliffe Hall, Grade II Listed Building, 1278779, 180m from works • Stable block at Number 27 (Ratcliffe Hall), Grade II Listed Building, 1230030, 260m from works <p>Non-designated assets</p> <p>Query of the Leicestershire and Rutland Historic Environment Record returns non-designated cultural heritage records or historical finds of importance within 300m of the works extent:</p> <ul style="list-style-type: none"> • MLE857 Monument, Fishponds west of Ratcliffe Hall • MLE856 Monument, Undated mound south-west of Ratcliffe Hall • MLE7418 Find Spot, Possible prehistoric finds from south-west of Ratcliffe Hall • MLE849 Monument, Possible mill site, Millstone Furlong • MLE23739 Building, Lodge to Ratcliffe Hall (No 25 Broome Lane) <p>There is no statutory protection associated with these records. All records were identified outside of the highway boundary.</p> <p>Work activity will be conducted on previously disturbed ground, confined to highway verges. The works will not involve breaking ground and will be restricted to handheld equipment and vegetation removal therefore it is unlikely that the survey works would encounter any previously unidentified archaeology and heritage artefacts.</p> <p>As such, there are no anticipated significant impacts to cultural heritage assets.</p> <p>No significant impact is expected, no further assessment is required.</p>

Landscape	<p>Impact to designated areas.</p> <p>Visual impacts on Local properties or landscape.</p> <p>Identify landscape designations within 500m incl. AONB, National Parks, Natural Area, and Joint Character Areas. Area of Great Landscape Value (AGLV).</p> <p>Offsite Land use.</p>	No	<p>Landscape</p> <p>The works do not impact a Conservation Area. There are no other landscape designations within the scheme extent.</p> <p>The local National Character Area (NCA) is Trent Valley Washlands, characterised by river floodplain corridors of the Trent, with a generally linear and low-lying arable landscape which is limited in woodland cover.</p> <p>The surrounding land uses to the works area is predominantly agricultural, with enclosed field systems, country roads and sparse villages, with the Built Up Areas of East Goscote, Sileby/Barrow-upon-Soar and Syston further from the scheme extent. Beedles Lake Golf Course, East Goscote, provides a large nearby land use and the River Wreake with ponds and tributaries also provides a strong landscape feature.</p> <p>Works involve technical (topographical) surveys only restricted to the highway estate. No new landscape features will be introduced as part of the works. Surrounding land use will not change as a result of these works.</p> <p>Vegetation clearance has been proposed as a part of the survey works in order to facilitate access. This will likely consist of ground vegetation / bramble briar strimming and tree branch trimming where required. As such, this will affect overall proportion of ground vegetation / scrub cover on the highway verges, however, this will be selective and will not involve wholesale clearance. <u>Trees over 150mm dbh (Diameter Breast Height) must be retained and must not be removed without prior consent of the overseeing organisation.</u> Ground vegetation cutting will be to temporary effect only (natural regeneration will occur) and will not significantly reduce integrity or provision of roadside screening.</p> <p>Visual</p> <p>There are no residential receptors with an immediate view of the carriageway. Works will be undertaken during the daytime; no task lighting is required.</p> <p>Strimming of vegetation will remove provision of vegetation on the verges, however natural regeneration will occur, and existing scrub is</p>
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			<p>in poor condition. Any vegetation cutting to facilitate access to the verge will be minor and will not significantly detract from the baseline greenspace provision along the road corridor – vegetation will not be permanently removed and will re-establish. <u>No permanent tree or hedge removal is permitted.</u></p> <p>The scheme will not result in permanent negative changes to the visual experience of the proposed location.</p> <p>No significant impact is expected, no further assessment is required.</p>
<p>Nature Conservation</p>	<p>Potential for impact on recorded or unrecorded protected species.</p> <p>Potential for impact on designated sites and sites with ecological value.</p>	<p>No</p>	<p>Designated sites There are no designated sites for nature conservation within 1km of the works extent:</p> <p>There are no European Designated Sites within 2km, or 30km where bats are a qualifying feature.</p> <p>Soft estate The highway soft verges consist of unmanaged semi-mature mixed woodland adjacent to the slip roads. The inner slip roads/splitters which are the focus of this scheme consist of bramble thicket, sparse trees and some areas of semi-improved grassland and tall ruderal.</p> <p>Extensive vegetation clearance is not anticipated as part of the scheme works, however, some minor clearance may be required to facilitate access and visibility for the topographical survey. This will not impact the availability of these habitat types on a local scale.</p> <p>Suitability for protected and notable species Historic species records available on NBN Gateway and EnvIS were queried within a 1km radius of the proposed survey work extents. The soft estate was appraised for its suitability to support species of interest during a site walkover on 29/07/19; full details available in the Ecological Report (HE569243-KIER-EGN-A46_RATCLIFFE-RP-LE-02_ECOLOGICAL_SITE_VISIT_REPORT). A synopsis is provided below:</p> <ul style="list-style-type: none"> • <i>Badger</i>

			<p>There are 9 records of roadkill (2008 – 2011) and records of setts (1986 - 2011) within 1km of the scheme. The work does not involve excavation and no setts were found within the proposed scheme extent on the inner slip road splitters.</p> <p>Areas surrounding the scheme provides suitable habitat and any linear belts of woodland may be used by transient animals. If the timing of works changes to night-time, animals may be disturbed. See required actions.</p> <ul style="list-style-type: none"> • <i>Bats</i> Two historic records of common pipistrelle within 1km (1986, 1990). No mature trees will be removed or affected under the survey scope. Structures will also not be impacted. <p>Bat activity in the local vicinity would likely be limited to foraging and commuting along the wooded belts of the verges. Due to daytime scheduling of the survey works, no disturbance is anticipated. If the timing of surveys changes to night-time, habitual flight paths may be disturbed; see required actions.</p> <ul style="list-style-type: none"> • <i>Birds</i> 53 bird species have been recorded within 1km of the scheme. Suitable habitat is present adjacent to the scheme and along the slip roads in the form of woodland and scrub. <p>Under the current scope, extensive vegetation clearance is not required, however, minor scrub clearance may be required to facilitate surveys. The current timing of works does not coincide with the breeding bird season (March – August inclusive), however, should the timing of works change the risk to this group must be mitigated. See required actions.</p> <ul style="list-style-type: none"> • <i>Widespread reptiles</i> Grass snake (2016), over 400m from the scheme, and historic grass snake record (1971) within 1km. No suitable habitat is located within the survey scheme extents; given the current nature of works as a topographical survey with no extensive vegetation removal required, there are no impacts to this group anticipated.
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			<ul style="list-style-type: none"> • <i>Great crested newts (GCN)</i> No records within 1km. There are fish/angling and landscaping ponds within surrounding third party land, however, as no ponds to be affected due to nature of works as a topographical survey only, these ponds were not surveyed as part of the walkover. <p>Suitable terrestrial habitat exists adjacent to the scheme, but no impacts are anticipated under the current work scope.</p> <ul style="list-style-type: none"> • <i>Water vole, otter, white clawed crayfish, dormice</i> No records present within 1km and no suitable habitat on site. No impacts anticipated. <ul style="list-style-type: none"> • <i>Other mammals</i> Historical records of rabbit and fox within 1km. No impacts anticipated due to the scope of works and highly transient nature of any mammals likely to be encountered in the local landscape. <p>Biosecurity <i>Invasive species</i> There are no records of invasive plant species within 1km of the proposed scheme extent. No invasive species were noted during site surveys.</p> <p><i>Pests and diseases</i> Ash dieback has been noted within 10km (Forestry Commission, 2015). Ash trees are present in the verges. Best practice for biosecurity to be adhered to; see required actions.</p> <p>See Required Actions. No significant impact is expected, no further assessment required.</p>
<p>Geology and Soils</p>	<p>Identify soil resources that could be impacted by the project incl. designated sites, RIGS (Regionally important geological sites), organic matter, erosion, compaction and sealing.</p>	<p>No</p>	<p>Geology The scheme will not impact upon any Regionally Important Geological Sites (RIGS).</p> <p>Soils The natural soil resources throughout the area are lime-rich loamy and clayey soils with impeded drainage.</p> <p>The works do not require any disturbance of soil and are restricted to topographical surveys only.</p>

			<p>There is a historic landfill within 500m of the survey work extents:</p> <ul style="list-style-type: none"> EAHLD28170 Beedles Quarry, Broome Lane, Charnwood, East Goscote (1967 – 1991), 430m from works on the opposing side of the River Wreake <p>Due to the distance from this record and presence of large river between, lack of disturbance of soil during the technical survey, and nature of the landfill as an inert and industrial disposal site, no impact is anticipated.</p> <p>No significant impacts to soil and geological resources are therefore expected.</p> <p>No significant impact is expected, no further assessment required.</p>
<p>Materials</p>	<p>To include both machinery and material use including disposal (waste).</p> <p>Consider asbestos, and resource efficiency.</p>	<p>No</p>	<p>Any vegetation arisings (i.e. vegetation strimmed or trimmed branches) to facilitate access to the verges / topographical survey to be removed from site.</p> <p>No soils or items likely to contain asbestos (ACMs) will be disturbed under the survey scope.</p> <p>No wastes other than green waste anticipated. Waste management is the responsibility of the Principal Contractor; See required actions.</p> <p>See required actions. No significant impact is expected, no further assessment required.</p>
<p>Noise & Vibration</p>	<p>Noise and vibration disturbance on local community.</p> <p>Are there any noise sensitive receptors in close vicinity?</p> <p>Will human health be affected?</p>	<p>No</p>	<p>Noise Important Areas</p> <p>There are Noise Important Areas within proximity to the scheme:</p> <ul style="list-style-type: none"> Covering property adjoining SH Autos, Highways England Asset ID 7918 <p>Survey works will produce minimal noise and will be largely undertaken by hand; noise will be associated with any vegetation cutting required for access (e.g. strimming). The Local Authority (Charnwood Borough Council) to be notified of works within proximity to a Noise Important Area as best practice. See required actions.</p>

			<p>Baseline Receptors to 200m are detailed within Air Quality.</p> <p>Surveys works are currently scheduled for daytime working. Baseline noise levels on the A46 during daytime hours (07:00 - 23:00) are 75.0+ in the inner carriageway, reducing to 60.0 – 74.9dB towards the closest residences (DEFRA, 2012). Works are expected to produce temporary impacts only associated with equipment and vehicle noise, restricted to working hours only. Noise will produce less nuisance to local receptors through daytime working.</p> <p>Noise associated with equipment to be minimised as far as practicable; See required actions.</p> <p>There will be no long-term / permanent impacts to local baseline noise levels.</p> <p>See required actions. No significant impact is expected, no further assessment required.</p>
<p>People and Communities</p>	<p>Will the work impact on physical, mental and social wellbeing?</p> <p>Are there sensitive land uses e.g. schools?</p> <p>Are the works in previously undeveloped land (greenfield)?</p> <p>Will the works result in social changes and/or result in changes to population and human health?</p> <p>Are there plans for any future land use on or near the works?</p> <p>Impacts to vehicle travellers and pedestrians through journey time, route alterations, amenity value and PRowS.</p>	<p>No</p>	<p>Road accessibility <i>General</i> Traffic Management requirements to facilitate the survey works will involve slip road closure with appropriate short diversion / alternatives via nearby Seagrave Road and the A607 interchange. Due to daytime working, this has the potential for delays and disruption, however this will be minimal as compared to road closures.</p> <p>Appropriate Traffic Management procedures are to be followed; see required actions.</p> <p>There will be no permanent changes to routes or journey times as a result of the survey works.</p> <p><i>Local travel</i> There are residential dwellings within proximity to the scheme extent. Any requirements for Traffic Management may result in some delays to local travellers accessing/egressing the A46 and travelling to/from Ratcliffe on the Wreake, Sibleby or East Goscote, however this impact is reduced due to diversions.</p>

			<p>Access There are no properties with direct access/egress to the A46 affected by slip road closures to require dedicated Traffic Management considerations.</p> <p>Non-motorised users (NMUs) <i>Public Rights of Way (PRoW)</i> There are no Public Rights of Way (PRoW) affected by the works; no footpaths will require closure as part of the works.</p> <p>Pavements There are no dedicated footways to be affected by works, therefore no requirements for NMU provisions.</p> <p>Amenity value There will be no change in land use as a result of the works. Amenity value will not be affected.</p> <p>See Required Actions. No significant impact expected. No further assessment required.</p>
<p>Road Drainage and the Water Environment</p>	<p>Identify water courses and floodplains that could be impacted by the project incl. rivers, ditches, and ponds etc. that are linked to/within 10m of the proposed works area.</p> <p>Pollution to water resources/soil contamination, quality and quantity.</p> <p>Impact on designated sites via water supply.</p> <p>Are there any areas which are already subject to pollution?</p> <p>Will there be any impact to human health?</p>	<p>No</p>	<p>Water features Water features within 300m of works:</p> <ul style="list-style-type: none"> • <i>Primary (Main) rivers</i> None. The closest is the River Wreake >360m from works. • <i>Ordinary watercourses</i> None. • <i>Ditches and drains</i> There is one drain, fed by a spring, which feeds the fish ponds at Ratcliffe Hall. There may be small field drains present in the surrounding arable landscape. <p>There were no ditches (wet/dry) noted during site walkover.</p> <ul style="list-style-type: none"> • <i>Ponds and reservoirs</i> There are large landscaping/fish ponds located to the west of Ratcliffe Hall within the Hall estate, joined by a series of weirs. The ponds are fed by a spring. The ponds are located 75m from the survey area at the closest point. • <i>Highway drainage</i>

			<p>There is roadside drainage present, consisting of gullies and pipework, and additional edge channels on the main A46 carriageway. Occasional manholes are also present in the verges. See required actions.</p> <p>There will be no alteration to road drainage or discharge of water as a result of the works.</p> <p>Flood Risk The survey extent is not located within a Flood Zone (Flood Zone 1 – Lowest probability). There is Flood Zones 2 and 2 associated with the River Wreake and its floodplains outside of the survey extents.</p> <p>Survey works will not impact baseline flood risk or vulnerability at this site. No discharges of water will be made.</p> <p>Groundwater / Pollution The bedrock and superficial deposits at this location holds secondary aquifer features. The A46 and verges are not classed as having any groundwater pollution vulnerability, however to the east of the scheme extents following the course of the River Wreake there is minor aquifer with intermediate to high vulnerability to groundwater pollution.</p> <p>The works are not located within a Groundwater Source Protection Zone or Drinking Water Safeguard Zones.</p> <p>Suitable pollution prevention measures must be in place to protect roadside drainage and ensure debris/arising from vegetation cutting do not end up in the highway drainage system and subsequent aquatic pollution risk is minimised; See required actions.</p> <p>See required actions. No significant impact is expected, no further assessment required.</p>
<p>Climate</p>	<p>What effects will the work have on climate (e.g. GHG) and how vulnerable is the project to climate change (e.g. predict change that the project will introduce in comparison to the baseline)?</p>	<p>No</p>	<p>Emissions produced by operational vehicles and equipment will be temporary and restricted to the work (construction) phase only. The works will not lead to net long-term emissions (operational phase) and therefore will not impact baseline climate vulnerability.</p> <p>Habitat complexity and connectivity will not be significantly impacted by any vegetation</p>

			<p>cutting proposals, and therefore the works are not anticipated to have any bearing on the ability of protected species to adapt to climate change. Vegetation strimmed will regenerate.</p> <p>No significant impact is expected, no further assessment required.</p>
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<p>Required Actions</p>	<p><i>This assessment is based on the scope as described in the Brief Project Description (Environmental Alert Form, Page 1). Any change to the scope which may constitute a new impact, or increase the significance of identified impacts, will render this Environmental Screening Assessment invalid and a re-assessment will be required. Should a re-assessment be required, please contact the Kier Environment Team.</i></p> <p>All below required actions must be integrated into the Principal Contractor's RAMS: these must be submitted for review and approved prior to works by the overseeing organisation.</p> <p><u>Kier Design Team to inform Principal Contractor of the following actions:</u></p> <p>Air Quality</p> <ul style="list-style-type: none"> • Odour and other emissions must be minimised using best practice methods, including minimal idling of vehicles on site. • Where possible, materials which minimise emissions, in accordance with the most recent British Standard, must be integrated into the scheme's design and followed up by the Principal Contractor. <p>Nature Conservation</p> <p><u>No trees and shrubs over >150mm Diameter Breast Height (dbh) to be cleared or permanently removed – if required, the Contractor must gain prior consent from Highways England Asset Team.</u></p> <p><i>General</i></p> <ul style="list-style-type: none"> • No parking allowed on soft estate at any time due to the potential impacts upon protected species or tree roots via compaction. The soft estate must not be used for refuelling, storage of materials or equipment. • A site induction must be conducted for all onsite workers. This will detail those protected species that may be found on site and the protocols which are to be followed if protected species be encountered. • Report any sightings of protected / invasive species to Highways England Environment Team to update their records. • Branches and ground vegetation may be hand cut where access is required for personnel or equipment only. • No tree or shrub over 150mm Diameter Breast Height (DBH = 1.5m above ground level) removal is permitted. Trees or shrubs must not be felled and removed unless by specific instruction from Highways England. • Best practice biosecurity measures in order to reduce ash dieback spread to be adhered to on site, as per Forestry Commission guidelines. <p><i>Species-specific actions</i></p> <p><i>Nesting birds</i></p>
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- Localised woody vegetation branch trimming works is currently scheduled to take place outside of the main bird nesting season in September. However, some species can breed all year round. Contractors should remain vigilant for active nests during clearance of trees and scrub. If any are observed within the works area, the Overseeing Organisation should be contacted.
- Where possible any tree/shrub clearance required should be undertaken outside of the bird nesting season. Bird nesting season is from March to August inclusive.
- If vegetation clearance works scheduled coincide with the nesting season, an ecologist must check the impacted vegetation for active bird nests prior to removal and this must be undertaken within 24 hours prior of the vegetation clearance.
- If an active bird's nest is found on site during the works, works in the area must cease and a 5m buffer zone around the nest must be applied to prevent disturbance. The exclusion zone must be maintained until any young have fledged and left the area; overseen by an appointed ECoW. Should this occur the overseeing organisation's environment team must be contacted for advice.
- Within areas of dense bramble briar and scrub, where visibility is limited, it is recommended that the ecologist continues to check for nests as vegetation is removed and accessibility improves during cutting.

Badger/bats (nocturnal species):

- Work activities are currently scheduled for the day, so no impacts from lighting disturbance are anticipated to nocturnal species. If this changes and work is required at night, task lighting should be appropriately hooded and directed away from the soft estate.

Noise and Vibration

- All site operatives must adhere to the British Standard 5228 Parts I/II - *Noise in relation to construction*.
- Best practical means to minimise the likelihood of nuisance caused by the scheme, and reduce the impact of noise and vibration, should be enacted wherever safety considerations permit.

People and Communities / Effects on All Travellers

- Appropriate TTRO and Traffic Management procedures are to be followed.
- Signing prior to works should inform road users of possible delays on the route across specified dates. Signing during works should be adequate to inform users of temporary alterations to: speed limits, diversion routes and/or road layout. This should include any necessary details to inform members of the public as to the reasons for restrictions.
- Communication must be upheld with Local Authorities throughout to ensure smooth delivery of the scheme, including necessary diversions.

Road Drainage and the Water Environment

- All works must be carried out in accordance with site-specific Risk Assessments, CIRIA documents and Environment Agency Pollution Prevention Guidelines (PPGs), in particular *PPG1 General*.
- Legal compliance in relation to pollutants through the aquatic environment must be strictly adhered to.
- The contractors' site-specific RAMS must be reviewed and approved by the overseeing organisations' Environment Team to ensure the risks to surface and groundwater pollution and the wider drainage environment have been adequately considered prior to works commencing.

	<ul style="list-style-type: none"> The contractor must ensure that they have a robust Pollution Response Plan in place before works start. Adequately sized spill kits must be made available on site at all times in the instance oil or fuel are spilled near watercourses. Any pollution incident must be contained and cleaned up on the carriageway and reported. No storage of oils or chemicals allowed within 10m of an exposed drain or watercourse. <p>Materials</p> <ul style="list-style-type: none"> Any vegetation arisings (i.e. vegetation strimmed to facilitate access to the verges, including potential for branch trimming) to be removed from site. It is the responsibility of the waste producer to carry out testing of waste to determine appropriate waste streams and legal disposal of any waste products generated. It is the responsibility of the waste producer to comply with any relevant legislation and duty of care with regards to waste. Where legal, practicable and safe to do so, materials must be considered for recycling or reusing on site to reduce waste going to landfill. This includes vegetation; Principal Contractor to recycle non-hazardous vegetation (green waste) within a legally compliant waste stream where practical. Any Highways England (HE) delivery contractors will be required to comply with HE waste reporting requirements.
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Required Actions	Time Required	Target Response time/ date
None.		

Requirement for additional documentation			Reason
Is this deemed to be a "Project" and require an Appropriate Assessment Screening Matrix? As defined by DMRB Volume 11, Section 4, Chapter 2, Part 1 HD 44/09	Yes	No	The works are a technical survey only and are not deemed to be a 'Project'. The survey works are not located within 2km, or 30km where bats are a qualifying interest, of a European Designated Site.
Is a Record of Determination required?	Yes	No	The survey works are not an improvement scheme and are not deemed to be either an Annex II relevant project or Annex II projects likely to cause significant effects under Annex III.
Does the Principal Contractor require a Construction Environmental Management Plan?	Yes	No	The survey works are not considered to have the potential for environmental impacts during construction. Responsibility of the Principal Contractor.

Will the Principal Contractor require a Material Resources Assessment?	Yes	No	The survey value is not estimated to be above £300K and therefore requires an assessment of material resources in accordance with DMRB Vol 11 IAN153/11. Responsibility of the Principal Contractor.
Is an Environmental Permit or a Land Drainage Consent & Water Management Plan required?	Yes	No	The survey works are not considered to have the potential for environmental impacts on a main watercourse (i.e. is not within 16 metres of a tidal watercourse or 10 metres of a non-tidal watercourse). Responsibility of the Principal Contractor.
Is an Options Report required?	Yes	No	The survey works are not considered to have the potential for significant environmental impacts.

Summary of Assessment findings
(to be completed by the Environment Team)

Air Quality

- No Air Quality Management Areas (AQMAs) within 1km.
- Residential properties within 200m (Nos. 25, 27 Broom Lane, Saint Madeline House, SH Autos Garage adjoining property), only likely to be temporarily affected by emissions associated with localised vegetation clearance works and Traffic Management.
- Best practice measures to be followed to maintain air quality.
- No further assessment required.

Cultural Heritage

- Grade II Listed Buildings 180-260m from works; no impacts anticipated due to distance and nature of works as surveys only. Additional non-statutory records/finds of historical importance within 300m, but located outside of the scheme extents. No excavation requirements, therefore no impact on any unidentified artefacts or archaeology.
- No required actions.
- No further assessment required.

Landscape and Visual

- Loss of ground vegetation and potential for branch trimming and minor clearance will not remove screening integrity and will naturally regenerate (temporary impact).
- No required actions.
- No further assessment required.

Nature Conservation

- No designated sites within 2km of works.
- Records of badger (including setts), birds, bats and reptiles within 1km. Many are historic records.
- No evidence of invasive species identified during site visit.
- Works are currently scheduled outside of bird nesting season. If vegetation clearance works are to be undertaken during nesting season (March – August inclusive), a competent ecologist will be required under watching brief to ensure no active bird nests are destroyed or animals are harmed.
- Refer to document **HE569243-KIER-EGN-A46_RATCLIFFE-RP-LE-02 ECOLOGICAL_SITE_VISIT_REPORT** for full details of the site visit.
- No further assessment required.

Noise and Vibration

- Noise Important Areas within proximity to scheme extent (covering property adjoining SH Autos). Survey works do not involve noisy operations; any noise associated with localised vegetation clearance will be temporary only. Daytime working reduces nuisance to any local receptors. Local Authority to be contacted as best practice.
- Best practice working methods to reduce noise to be adhered to on site.
- No further assessment required.

People and Communities / Effects on All Travellers

- Traffic Management (slip road closure) to be in place, with necessary diversions. Communications with Local Authority to be upheld to ensure smooth delivery of scheme and minimisation of disruption.
- No Public Rights of Way or footways will be affected by the scheme; no Pedestrian Traffic Management required.
- No further assessment required.

Road Drainage and the Water Environment

- Survey works will occur in a Flood Zone 1 area [Low risk].
- There are no Main Rivers within the works extent. No Flood Activity Permit is required.
- Roadside drainage (gullies) present. Protection measures to ensure water quality is maintained to be included in scheme specification. Best practice to be upheld throughout works; the contractor must ensure that they have a robust Pollution Response Plan in place before works start.
- No further assessment required.

Materials

- Vegetation arisings to be removed from site. Waste disposal is the duty of the Principal Contractor.
- No further assessment required.

Geology and Soils

- No further assessment required.
- No required actions.

Climate

- No further assessment required.
- No required actions.

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]



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