

Funding for Local Transport: Safer Roads Fund



Department
for Transport

Application Form

The level of information provided should be proportionate to the size and complexity of the scheme proposed. As a guide, we would suggest around 10 to 15 pages including annexes would be appropriate.

A separate application form should be completed for each scheme.

Applicant Information

Local authority name(s)*: Lincolnshire County Council

Bid Manager Name and position:

Graeme Butler, Accident Investigation and Prevention Manager, Lincolnshire Road Safety Partnership, Lincolnshire County Council

Contact telephone number: 01522 805800

Email address:

Postal address: Lincolnshire Road Safety Partnership, Witham House, Pelham Centre, Canwick Road, Lincoln. LN5 8HE

Please specify the web link where this bid will be published:

<https://www.lincolnshire.gov.uk/transport-and-roads/major-projects/a1084/a631-safer-roads-fund-improvements/>

SECTION A - Scheme description and funding profile

A1. Scheme name: A631 Louth to Middle Rasen, Road Safety Improvements

A2. Headline description:

This bid is for safety improvements along the A631 between Louth and Middle Rasen based on the iRAP and VIDA assessments. This route has been identified as one of the highest risk roads in the Country.

The proposed scheme includes measures suggested by the VIDA software along with alternative measures where more appropriate.

The intention of the scheme is to reduce the risk to road users at a requested cost of £ 2.725 M

The Benefit Cost Ratio (BCR) of this scheme is expected to be greater than 2 offering high value for money.

This will enable a proactive approach to the reduction of collisions along the route which will run alongside our educational and training strategy.

The aim is to achieve a reduction in collisions and casualties, specifically a 40% reduction in the number killed or seriously injured, and an improvement in the EuroRap rating for the route from 'high risk' in the 2016 assessment to 'low-medium risk' following completion of the scheme

A3. Geographical area:

The A631 is a single carriageway road and runs between Louth Bypass A16 and Middle Rasen (A46). It generally runs east to west for 22.3 km.

It is predominantly rural in nature with the exception of several rural villages and the town of Market Rasen. With the exception of the villages and town, the road is subject to a 60 mph speed limit.

Length of eligible road section: 22.3 KM

OS Grid Reference: **530922 387195**
509341 389124

Postcode: LN8 6AJ

Appendix 1 - Shows a map of the local area and KSi accidents 2012-16

A4. Equality Analysis

Has any Equality Analysis been undertaken in line with the Equality Duty?

YES - See Appendix 2

In line with the Public Sector Equality Duty (April 2011) it is considered that the project and its outcomes will not have a disproportionate positive or negative impact.

SECTION B – The Business Case

B1. The Scheme – Summary/History (Maximum 200 words)

The proposed scheme consists primarily of conventional safety engineering measures. These reference a suggested programme of countermeasures produced by VIDA software, following an assessment of the road by iRAP engineers. The improvement measures in the proposed scheme reflect the principles of the VIDA countermeasures, and address specific accident risks identified by the iRAP assessment. The proposed scheme includes alternative measures where these are felt to be more appropriate or practicable, based on local knowledge and assessment by experienced road safety engineers employed by the Lincolnshire Road Safety Partnership.

In summary, the measures include the provision of a roundabout, the lowering of speed limits, an average speed camera system, skid resistance upgrades, shoulder widening, shoulder rumble strips and a reactive sign. This will assist with unlocking growth and providing connectivity.

The Road Safety Foundation has identified this section of the A631 as one of 50 'A' roads where the risk of a KSi is highest and it is therefore considered to be one of the worst sections of road in the Country when looking at the number of collisions per kilometre. Between 2012 and 2016, 5 Fatais, 13 Serious and 48 Slight injury collisions have occurred.

The iRAP Road Safety Toolkit indicates an expected reduction in casualties of around 40% (see <http://toolkit.irap.org/default.asp?page=casestudy&id=17>).

Appendix 3 Outlines the proposed measures and our estimated costs.

Appendix 4 Indicates the existing collision & casualty data (2012-2016) & expected 40% reduction targets.

B2. The Strategic Case (Maximum 350 words)

The A631 is one of 50 'A' roads where the risk of a KSi is highest and it is therefore considered to be one of the worst sections of road in the Country when looking at the number of collisions per kilometre. The iRAP Risk Rating of 2016 takes into account accidents between 2012 and 2014. Within this period, 4 Fatal and 10 Serious collisions occurred along the overall length of 22.3 km.

Generally, the road runs East to West to East and is typical rural single carriageway road linking the A16 Louth Bypass to the A46 at Middle Rasen. The AADT indicates approx. 4000 vehicles and is a route frequented by motorcyclists.

Lincolnshire Road Safety Partnership's Strategy is to make "Lincolnshire's Roads Safer For All" by making significant year on year reductions in those killed or injured on Lincolnshire's roads through a sustainable, co-ordinated road safety partnership delivering targeted interventions focussed on education, engineering and enforcement. The Safer Roads Fund would therefore provide a positive impact on this vision.

This project will enable a proactive approach to reducing the engineering risk along a route, rather than the traditional reactive approach. Without this funding, such an approach is not likely to be possible on this scale.

Based on an analysis of the proposed measures using the VIDA software, it is anticipated that significant Fatal and Serious injury collisions would be saved over the 20 year analysis period following implementation.

B3. The Financial Case – Project Costs

Before preparing a scheme proposal for submission, bid promoters should ensure they understand the financial implications of developing the scheme (including any implications for future resource spend and ongoing costs relating to maintaining and operating the asset), and the need to secure and underwrite any necessary funding outside the Department for Transport's maximum contribution.

Please complete the following tables. Figures should be entered in £000s (i.e. £10,000 = 10).

Table A: Funding profile (Nominal terms)

£000s	2017-18	2018-19	2019-20	2020-21	Total
<i>DfT Funding Sought</i>		£ 60	2,665		£ 2,725
<i>LA Contribution</i>					
<i>Other Third Party Funding</i>					

Notes:

(1) Department for Transport funding will not be provided beyond 2020/21 financial year.

B4. The Financial Case – Local Contribution / Third Party Funding

The schemes identified in this bid do not have a total cost of more than the threshold of £0.2m/km of eligible road section. Consequently, there is no LA contribution or Third Party Funding identified.

However, the County Council's Surfacing Team is likely to programme works along this length as part of ongoing maintenance and this will complement the bid and improve safety along the overall length.

The above figures include for Traffic Management, which may be high bearing in mind the classification of road and the likelihood of road closures and diversions during certain works. It also includes for the likelihood of night-working rates. **See Appendix 3.**

B5. The Financial Case – Affordability and Financial Risk (maximum 300 words)

Please provide evidence on the following points (where applicable):

a) What risk allowance has been applied to the project cost?

Detailed information from the VIDA model has been used alongside engineering experience when preparing the costs of delivery. This authority has a robust understanding / experience of costs, based on previous schemes and term contracts. An element of risk has therefore been applied to reflect external price fluctuations and other delivery risks. All estimated costs include a 10% allowance for preliminaries to cover any elements not currently identified, and a 20% uplift for contingencies.

b) How will cost overruns be dealt with?

Lincolnshire County Council is confident that the project can be delivered within the timescales set out in the guidance and that any cost overruns will be the responsibility of this Council. The Section 151 Offices accept responsibility for meeting any costs over and above the DfT allocation.

c) What are the main risks to project delivery timescales and what impact this will have on cost?

All work is within land controlled by the authority and so the potential costs and any associated delays are limited. As outlined in the Risk Register at **Appendix 5**, the highest risk relates to Adverse Weather, but this is mitigated by the programming of certain works to coincide with the most favorable weather conditions between Spring and Autumn.

B6. The Economic Case – Value for Money

If available, promoters should provide an estimate of the Benefit Cost Ratio (BCR) of the scheme (particularly for schemes costing more than £100,000)

The scheme is currently being appraised by the Road Safety Foundation to determine the Benefit Cost Ratio (BCR). Further information will therefore be submitted on return of the information. However, we anticipate that the BCR will be greater than 2.

In addition, there are other benefits that relate to the Economy. The A631 provides a valuable east - west link across the County especially between the market towns of Gainsborough and Louth as well as the more Strategic Road Network of the A1 and the East coast. The improvements outlined would have a positive impact on growth and the overall economy with safer links being provided.

The proposals also include for some improvements to road surfacing and grip with the opportunity being taken to improve skid resistance on certain sections of the carriageway rather than patch and surface dress. This will reduce ongoing maintenance and allow other maintenance funds to be targeted at other roads throughout Lincolnshire.

B7. The Commercial Case (Maximum 300 words)

The Section 151 officer confirms that delivery strategies are in place for this scheme to proceed and that it is legally compliant and achieves best value for money. No land take is required for any of the proposed works. The project complies with the Public Contracts Regulations & European Union State Aid rules.

The proposed works will be designed and constructed through established existing in-house delivery mechanisms. Should additional design or delivery resources be required these will be procured through existing framework contracts.

B8. Management Case – Delivery (Maximum 300 words)

Has a project plan been appended to your bid? YES – See Appendix 6

a) *A statement of intent to deliver the scheme within this programme from a senior political representative and/or senior local authority official.*

"As Portfolio Holder for Highways and LRSP Board Member, I fully support Lincolnshire County Councils involvement in the DfT's Safer Roads Fund. We are fully committed to reducing road casualties across our County and this is the key objective of our Road Safety Partnership. Providing a safer environment also encourages a vitality and growth and the A631 is a key route linking the Midlands & A1 and the east coast. Any opportunity to improve the safety of road users is welcomed and supported by this Council."

**County Councillor Richard Davies
(Executive Councillor for Highways & Transport)
(Lincolnshire Road Safety Partnership Strategic Board Member)**

B9. Management Case – Governance (maximum 300 words)

An organogram is shown at **Appendix 7**. This shows the structure for the project.

The project will be managed and overseen by Graeme Butler, Accident Investigation & Prevention Manager who is based in the Lincolnshire Road Safety Partnership at Lincolnshire County Council.

Progress will be reported to the Capital Programme Steering Group as well as quarterly progress meetings with all interested parties such as designers and contractors.

B10. Management Case – Risk Management

Has a risk register been appended to your bid? **YES – See Appendix 5**

The main Risk relates to weather conditions but this has been mitigated by the programming of certain works to coincide with the most favorable weather conditions between Spring and Autumn.

SECTION C – Monitoring, Evaluation and Benefits Realisation

C1. Benefits Realisation (maximum 250 words)

The scheme proposals address not only the reported injury collisions but also the risk of future collisions that may arise due to the road alignment, road condition and speed.

The responsibility for monitoring of the benefits achieved by the scheme will be held by the Lincolnshire Road Safety Partnership, who will monitor the accident trends along this route.

It is hoped that the completed project on the A631 will become an example of what can be achieved through targeted route based improvements on an identified section of road with an improvement to the EuroRap rating from 'high risk' to 'low/medium risk'.

Based on the analysis using the VIDA software, it is anticipated that significant Fatal and Serious Injuries would be saved over the 20 year analysis period. This would result in significant monetary savings per KSI. The benefits and aims are summarised as follows :-

1. A 40% reduction in the number of fatal and serious collisions on this section of the A631;
2. An improvement in the EuroRap rating from 'high risk' to 'low/medium risk';
3. An estimated Benefit Cost Ratio of greater than 2; and
4. Reduced ongoing maintenance costs.

A Logic Matrix is shown at **Appendix 8**

C2. Monitoring and Evaluation (maximum 250 words)

The Lincolnshire Road Safety Partnership undertakes accident statistic monitoring on all injury collisions via the STATS19 Data and Quarterly Reports are produced and are available. This will allow 'Before' and 'After' information to be compiled.

Speed Reading information will also be collected before implementation and then compared to data collected following the scheme introduction. This will show compliance of the speed limit changes as well as the effect of the other measures introduced.

Other surveys will also be undertaken at regular intervals following the implementation of the project. These will include Network Condition Surveys, SCRIM and Grip tests. The purpose of these surveys will be to evaluate the results of the resurfaced areas, to determine whether grip and maintenance has reduced as intended. Existing SCRIM Condition Data is shown at **Appendix 9**.

We would welcome the opportunity to share any data and outcomes with the DfT and other local authorities as part of this process.

SECTION D: Declarations

D1. Senior Responsible Owner Declaration

As Senior Responsible Owner for Safer Roads Fund Scheme A631 I hereby submit this request for approval to DfT on behalf of Lincolnshire County Council and confirm that I have the necessary authority to do so.

I confirm that Lincolnshire County Council will have all the necessary powers in place to ensure the planned timescales in the application can be realised.

Name: Steve Willis

Signed: 

Position: Chief Operating Officer

D2. Section 151 Officer Declaration

As Section 151 Officer for Lincolnshire County Council I declare that the scheme cost estimates quoted in this bid are accurate to the best of my knowledge and that Lincolnshire County Council :-

- has allocated sufficient budget to deliver this scheme on the basis of its proposed funding contribution
- will allocate sufficient staff and other necessary resources to deliver this scheme on time and on budget
- accepts responsibility for meeting any costs over and above the DfT contribution requested, including potential cost overruns and the underwriting of any funding contributions expected from third parties
- accepts responsibility for meeting any ongoing revenue requirements in relation to the scheme
- accepts that no further increase in DfT funding will be considered beyond the maximum contribution requested
- has the necessary governance / assurance arrangements in place
- has identified a procurement strategy that is legally compliant and is likely to achieve the best value for money outcome
- will ensure that a robust and effective stakeholder and communications plan is put in place.

Name: Michelle Grady,
Head of Finance (Communities)
Financial Strategy

Signed: 

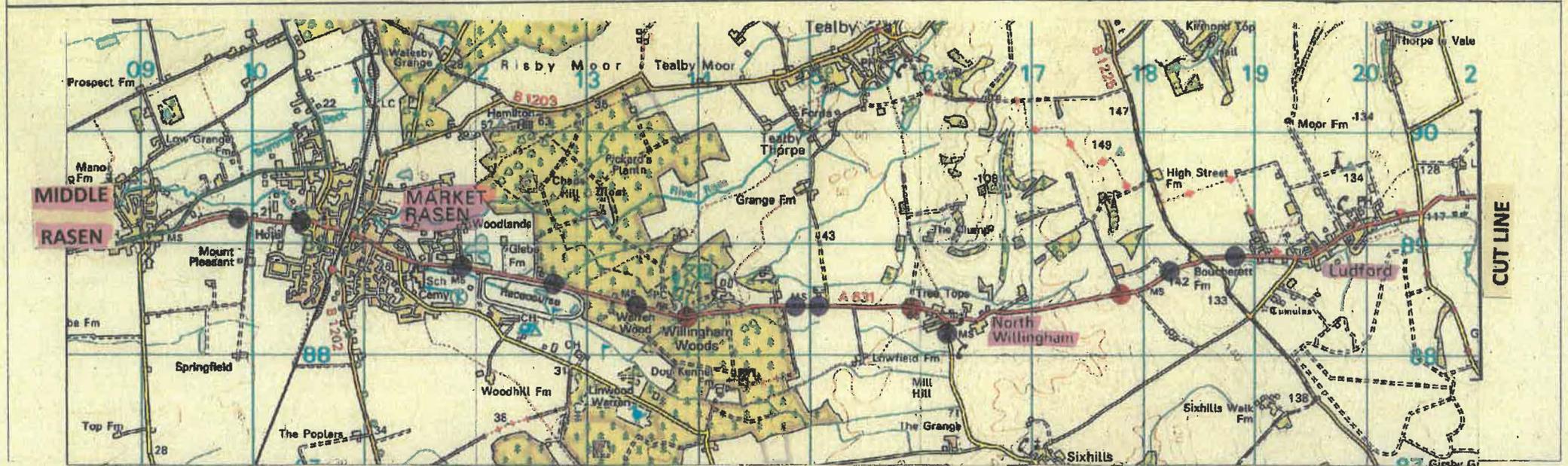
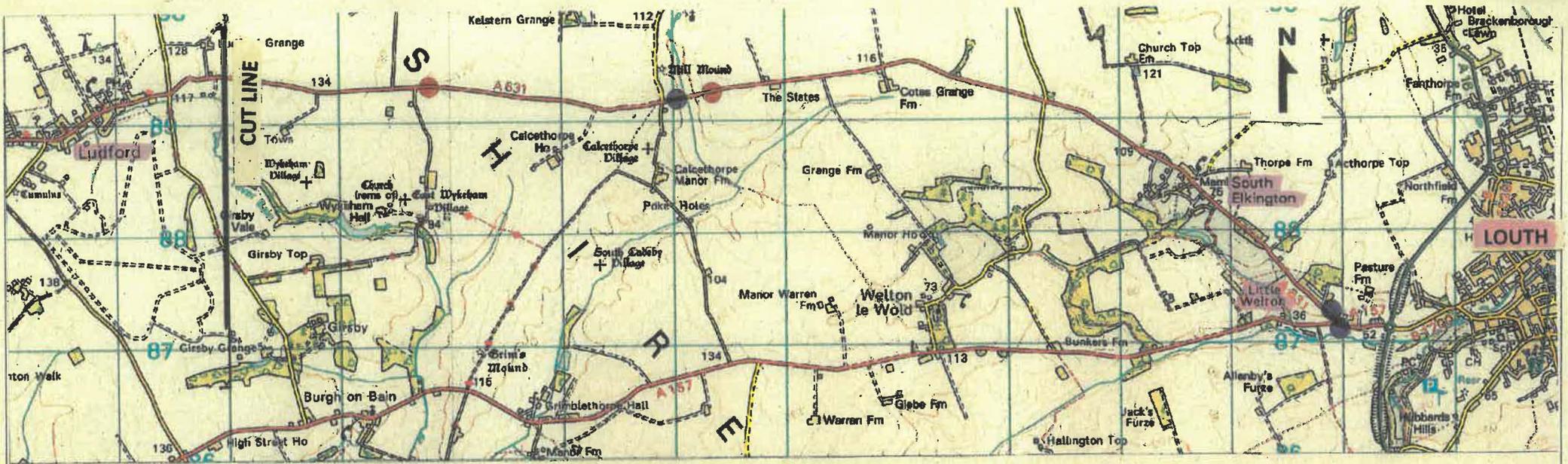
Submission of bids:

An electronic copy only of the bid including any supporting material should be submitted to:

saferroadsfund@dft.gsi.gov.uk

APPENDICES – A631, Louth to Middle Rasen

- 1 – Plan of Route and Accidents 2012 – 2016
- 2 – Equality Impact Assessment
- 3 – Description of Proposed Measures & Estimated Costs
- 4 – Collision / Casualty Data and Target
- 5 – Risk Register
- 6 – Project Plan / Gantt Chart
- 7 – Organogram
- 8 – Logic Matrix
- 9 – Existing SCRIM Data



Lincolnshire
COUNTY COUNCIL



**Lincolnshire
Road
Safety
Partnership**

Key

KSI Accident Statistics 2012 – 2016

- Fatal
- Serious

Scale 1:35000

Drawn By

Date SEPT 2017

Issue Type

Drawing Number: LRSP/GB/A631/2

Scheme Title:

SAFER ROADS FUND

A631, Louth to Middle Rasen

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Equality Impact Analysis to enable informed decisions

The purpose of this document is to:-

- I. help decision makers fulfil their duties under the Equality Act 2010 and
- II. for you to evidence the positive and adverse impacts of the proposed change on people with protected characteristics and ways to mitigate or eliminate any adverse impacts.

Using this form

This form must be updated and reviewed as your evidence on a proposal for a project/service change/policy/commissioning of a service or decommissioning of a service evolves taking into account any consultation feedback, significant changes to the proposals and data to support impacts of proposed changes. The key findings of the most up to date version of the Equality Impact Analysis must be explained in the report to the decision maker and the Equality Impact Analysis must be attached to the decision making report.

****Please make sure you read the information below so that you understand what is required under the Equality Act 2010****

Equality Act 2010

The Equality Act 2010 applies to both our workforce and our customers. Under the Equality Act 2010, decision makers are under a personal duty, to have due (that is proportionate) regard to the need to protect and promote the interests of persons with protected characteristics.

Protected characteristics

The protected characteristics under the Act are: age; disability; gender reassignment; marriage and civil partnership; pregnancy and maternity; race; religion or belief; sex; sexual orientation.

Section 149 of the Equality Act 2010

Section 149 requires a public authority to have due regard to the need to:

- Eliminate discrimination, harassment, victimisation, and any other conduct that is prohibited by/or under the Act
- Advance equality of opportunity between persons who share relevant protected characteristics and persons who do not share those characteristics
- Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

The purpose of Section 149 is to get decision makers to consider the impact their decisions may or will have on those with protected characteristics and by evidencing the impacts on people with protected characteristics decision makers should be able to demonstrate 'due regard'.

Decision makers duty under the Act

Having had careful regard to the Equality Impact Analysis, and also the consultation responses, decision makers are under a personal duty to have due regard to the need to protect and promote the interests of persons with protected characteristics (see above) and to:-

- (i) consider and analyse how the decision is likely to affect those with protected characteristics, in practical terms,
- (ii) remove any unlawful discrimination, harassment, victimisation and other prohibited conduct,
- (iii) consider whether practical steps should be taken to mitigate or avoid any adverse consequences that the decision is likely to have, for persons with protected characteristics and, indeed, to consider whether the decision should not be taken at all, in the interests of persons with protected characteristics,
- (iv) consider whether steps should be taken to advance equality, foster good relations and generally promote the interests of persons with protected characteristics, either by varying the recommended decision or by taking some other decision.

Conducting an Impact Analysis

The Equality Impact Analysis is a process to identify the impact or likely impact a project, proposed service change, commissioning, decommissioning or policy will have on people with protected characteristics listed above. It should be considered at the beginning of the decision making process.

The Lead Officer responsibility

This is the person writing the report for the decision maker. It is the responsibility of the Lead Officer to make sure that the Equality Impact Analysis is robust and proportionate to the decision being taken.

Summary of findings

You must provide a clear and concise summary of the key findings of this Equality Impact Analysis in the decision making report and attach this Equality Impact Analysis to the report.

Impact – definition

An impact is an intentional or unintentional lasting consequence or significant change to people's lives brought about by an action or series of actions.

How much detail to include?

The Equality Impact Analysis should be proportionate to the impact of proposed change. In deciding this asking simple questions "Who might be affected by this decision?" "Which protected characteristics might be affected?" and "How might they be affected?" will help you consider the extent to which you already have evidence, information and data, and where there are gaps that you will need to explore. Ensure the source and date of any existing data is referenced.

You must consider both obvious and any less obvious impacts. Engaging with people with the protected characteristics will help you to identify less obvious impacts as these groups share their perspectives with you.

A given proposal may have a positive impact on one or more protected characteristics and have an adverse impact on others. You must capture these differences in this form to help decision makers to arrive at a view as to where the balance of advantage or disadvantage lies. If an adverse impact is unavoidable then it must be clearly justified and recorded as such, with an explanation as to why no steps can be taken to avoid the impact. Consequences must be included.

Proposals for more than one option If more than one option is being proposed you must ensure that the Equality Impact Analysis covers all options. Depending on the circumstances, it may be more appropriate to complete an Equality Impact Analysis for each option.

The information you provide in this form must be sufficient to allow the decision maker to fulfil their role as above. You must include the latest version of the Equality Impact Analysis with the report to the decision maker. Please be aware that the information in this form must be able to stand up to legal challenge.

Background Information

Title of the policy / project / service being considered	DfT Safer Roads Bid	Person / people completing analysis	Graeme Butler, Accident Investigation & Prevention Manager, Lincolnshire Road Safety Partnership
Service Area	Environment and Economy	Lead Officer	As above
Who is the decision maker?	Richard Wills, Executive Director	How was the Equality Impact Analysis undertaken?	By developing the schemes in accordance with the DfT's Safer Roads Fund Project and consideration of the 'impact' of those schemes
Date of meeting when decision will be made	15/09/2017	Version control	Version 1.0
Is this proposed change to an existing policy/service/project or is it new?	New	LCC directly delivered, commissioned, re-commissioned or de-commissioned?	Directly delivered
Describe the proposed change	Proposed highway improvement works subject to successful bid as part of the DfT's Safer Road Fund Project. None Identified		

Evidencing the impacts

In this section you will explain the difference that proposed changes are likely to make on people with protected characteristics. To help you do this first consider the impacts the proposed changes may have on people without protected characteristics before then considering the impacts the proposed changes may have on people with protected characteristics.

You must evidence here who will benefit and how they will benefit. If there are no benefits that you can identify please state 'No perceived benefit' under the relevant protected characteristic. You can add sub categories under the protected characteristics to make clear the impacts. For example under Age you may have considered the impact on 0-5 year olds or people aged 65 and over, under Race you may have considered Eastern European migrants, under Sex you may have considered specific impacts on men.

Data to support impacts of proposed changes

When considering the equality impact of a decision it is important to know who the people are that will be affected by any change.

Population data and the Joint Strategic Needs Assessment

The Lincolnshire Research Observatory (LRO) holds a range of population data by the protected characteristics. This can help put a decision into context. Visit the LRO website and its population theme page by following this link: <http://www.research-lincs.org.uk> If you cannot find what you are looking for, or need more information, please contact the LRO team. You will also find information about the Joint Strategic Needs Assessment on the LRO website.

Workforce profiles

You can obtain information by many of the protected characteristics for the Council's workforce and comparisons with the labour market on the [Council's website](#). As of 1st April 2015, managers can obtain workforce profile data by the protected characteristics for their specific areas using Agresso.

Positive impacts

The proposed change may have the following positive impacts on persons with protected characteristics – If no positive impact, please state 'no positive impact'.

Age	The proposals may improve the safety and opportunity to cross the road
Disability	The proposals may improve the safety and opportunity to cross the road
Gender reassignment	No Positive Impact
Marriage and civil partnership	No Positive Impact
Pregnancy and maternity	No Positive Impact
Race	No Positive Impact
Religion or belief	No Positive Impact

Sex	No Positive Impact
Sexual orientation	No Positive Impact

If you have identified positive impacts for other groups not specifically covered by the protected characteristics in the Equality Act 2010 you can include them here if it will help the decision maker to make an informed decision.

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Adverse/negative impacts

You must evidence how people with protected characteristics will be adversely impacted and any proposed mitigation to reduce or eliminate adverse impacts. An adverse impact causes disadvantage or exclusion. If such an impact is identified please state how, as far as possible, it is justified; eliminated; minimised or counter balanced by other measures.

If there are no adverse impacts that you can identify please state 'No perceived adverse impact' under the relevant protected characteristic.

Negative impacts of the proposed change and practical steps to mitigate or avoid any adverse consequences on people with protected characteristics are detailed below. If you have not identified any mitigating action to reduce an adverse impact please state 'No mitigating action identified'.

Age	No Mitigating Action Identified
Disability	No Mitigating Action Identified
Gender reassignment	No Mitigating Action Identified
Marriage and civil partnership	No Mitigating Action Identified
Pregnancy and maternity	No Mitigating Action Identified

Race	No Mitigating Action Identified
Religion or belief	No Mitigating Action Identified
Sex	No Mitigating Action Identified
Sexual orientation	No Mitigating Action Identified

If you have identified negative impacts for other groups not specifically covered by the protected characteristics under the Equality Act 2010 you can include them here if it will help the decision maker to make an informed decision.

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Stakeholders

Stake holders are people or groups who may be directly affected (primary stakeholders) and indirectly affected (secondary stakeholders)

You must evidence here who you involved in gathering your evidence about benefits, adverse impacts and practical steps to mitigate or avoid any adverse consequences. You must be confident that any engagement was meaningful. The Community engagement team can help you to do this and you can contact them at consultation@lincolnshire.gov.uk

State clearly what (if any) consultation or engagement activity took place by stating who you involved when compiling this EIA under the protected characteristics. Include organisations you invited and organisations who attended, the date(s) they were involved and method of involvement i.e. Equality Impact Analysis workshop/email/telephone conversation/meeting/consultation. State clearly the objectives of the EIA consultation and findings from the EIA consultation under each of the protected characteristics. If you have not covered any of the protected characteristics please state the reasons why they were not consulted/engaged.

Objective(s) of the EIA consultation/engagement activity

No external stakeholder (service users) consultation has taken place.

Who was involved in the EIA consultation/engagement activity? Detail any findings identified by the protected characteristic

Age	Not Applicable
Disability	Not Applicable
Gender reassignment	Not Applicable
Marriage and civil partnership	Not Applicable
Pregnancy and maternity	Not Applicable
Race	Not Applicable
Religion or belief	Not Applicable

Sex	Not Applicable
Sexual orientation	Not Applicable
<p>Are you confident that everyone who should have been involved in producing this version of the Equality Impact Analysis has been involved in a meaningful way?</p> <p>The purpose is to make sure you have got the perspective of all the protected characteristics.</p>	Yes, by using the corporate standard template
<p>Once the changes have been implemented how will you undertake evaluation of the benefits and how effective the actions to reduce adverse impacts have been?</p>	No adverse impacts have been identified.

Further Details

Are you handling personal data?	<p>No</p> <p>If yes, please give details.</p>
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	Action	Lead officer	Timescale
Actions required Include any actions identified in this analysis for on-going monitoring of impacts.	None Identified	Graeme Butler	
Signed off by	Graeme Butler	Date	15/09/2017

A631 Louth to Middle Rasen – SCHEME DESCRIPTION AND COSTS

The scheme proposals are summarised as follows :-

- 1) **Junction Improvement** – It is proposed to carry out an improvement to the A631 / A157 junction just to the west of Louth. This location has a history of injury accidents and the future risk is likely to continue. A medium sized roundabout is preferred to slow all traffic and cater for all turns. See below.

ESTIMATED COST = £ 1.3 M

- 2) **Skid Resistance & Shoulder Sealing** – Improvements are proposed to the existing road surface to improve grip and skid resistance, especially in the wet. This will lead to a reduction in accidents where the road condition is likely to be a factor in the causation. Overall this is considered to be a major factor in reducing the risk and the severity of those accidents. This is in conjunction with Shoulder Sealing proposals and the ability to lay shoulder rumble strips.

ESTIMATED COST = £ 975,000

- 3) **Shoulder Rumble Strips** – This is proposed to overcome vehicles drifting off to the left and compliments the resurfacing and shoulder sealing elements of this scheme and is seen as a cost effective way of improving the safety of long lengths of the route.

ESTIMATED COST = £ 60,000

- 4) **Wide Centreline** – Due to the carriageway width, it is not possible to lay a central hatching. Therefore a wide centreline is proposed to encourage separation of vehicles. Again, this is a cost effective measure bearing in mind the length of the measures.

ESTIMATED COST = £ 20,000

- 5) **Reduced Speed Limit** – It is proposed to reduce the derestricted (60mph) sections to 50mph. As the accident locations are spread along the length, this will help to reduce the numbers and severity of injuries. It will also reduce the future risk where there may be a loss of control.

ESTIMATED COST = £ 40,000

- 6) **Average Speed Camera System** – It proposed to introduce such a system to enforce the proposed 50 mph speed limit between Market Rasen and Ludford. This section has the highest rate of injury accidents.

ESTIMATED COST £ 300,000

- 7) **Improve Curve Delineation** – It is proposed to carry out improvements / enhancements to the bends to the east of Willingham Woods where a number of collisions have occurred. This will take the form of improved signage and road markings generally. The use of flexible chevron type signs are to be used bearing in mind the route carries motorcyclists to/from the popular location of Willingham Woods and Cadwell Park racing circuit.

ESTIMATED COST = £ 20,000

- 8) **Reactive Signage** – It is proposed to install reactive signage for eastbound traffic approaching the B1225 junction just west of Ludford village. This approach is uphill and the junction is situated just beyond the rise.

ESTIMATED COST = £ 10,000

ESTIMATED TOTAL WORKS COST = £ 2,725,000

VIDA Issues / Suggestions Discounted

Roadside barriers – these are not considered generally appropriate given the open, high quality landscape that the road passes through and the fact that the route is often used by motorcyclists en route to the coast and the Cadwell Park racing circuit. We would not recommend the use of such barriers where motorcyclists are present.

Clear Roadside Hazards – this has been considered and whilst some minor improvements may be possible, this is a rural location and therefore the removal of trees is likely to be met with objections. However, the number of such trees that would cause issues is negligible and the majority of the roadside hazards that have been identified are hedges and shrubbery. We will work with the landowners to address this. The accident history does not raise this as an issue.

Central Hatching – the road width is not sufficient to lay such a marking.



X-Refs & Blocks used in this Drawing
 x-roundabout 4.0
 x-roundabout 4.0 Inset
 x-culvert

Key:

	Traffic Island
	Carriageway
	Over Run Area
	Central Island



PRELIMINARY

PRELIMINARY/FEASIBILITY DRAWING PRIOR TO DETAILED DESIGN ONLY

FOR THIRD PARTY USE, THIS DRAWING SHALL BE DEEMED CURRENT ONLY AT THE DATE OF APPROVAL. PLEASE CHECK FOR AMENDMENTS BEFORE USE.

UNDER NO CIRCUMSTANCES IS THIS DRAWING TO BE ISSUED FOR DETAILED DESIGN, PRICING OR CONSTRUCTION PURPOSES.

Drawing Approval
 Latest Revision: 1st Approval
 Drawn/Designed by: B.H
 CAD By: BH
 Approved By: MCO - 23/08/17

Scale: (A1)
 Plan: 1:500 (Do not scale from this drawing)
 Summary:

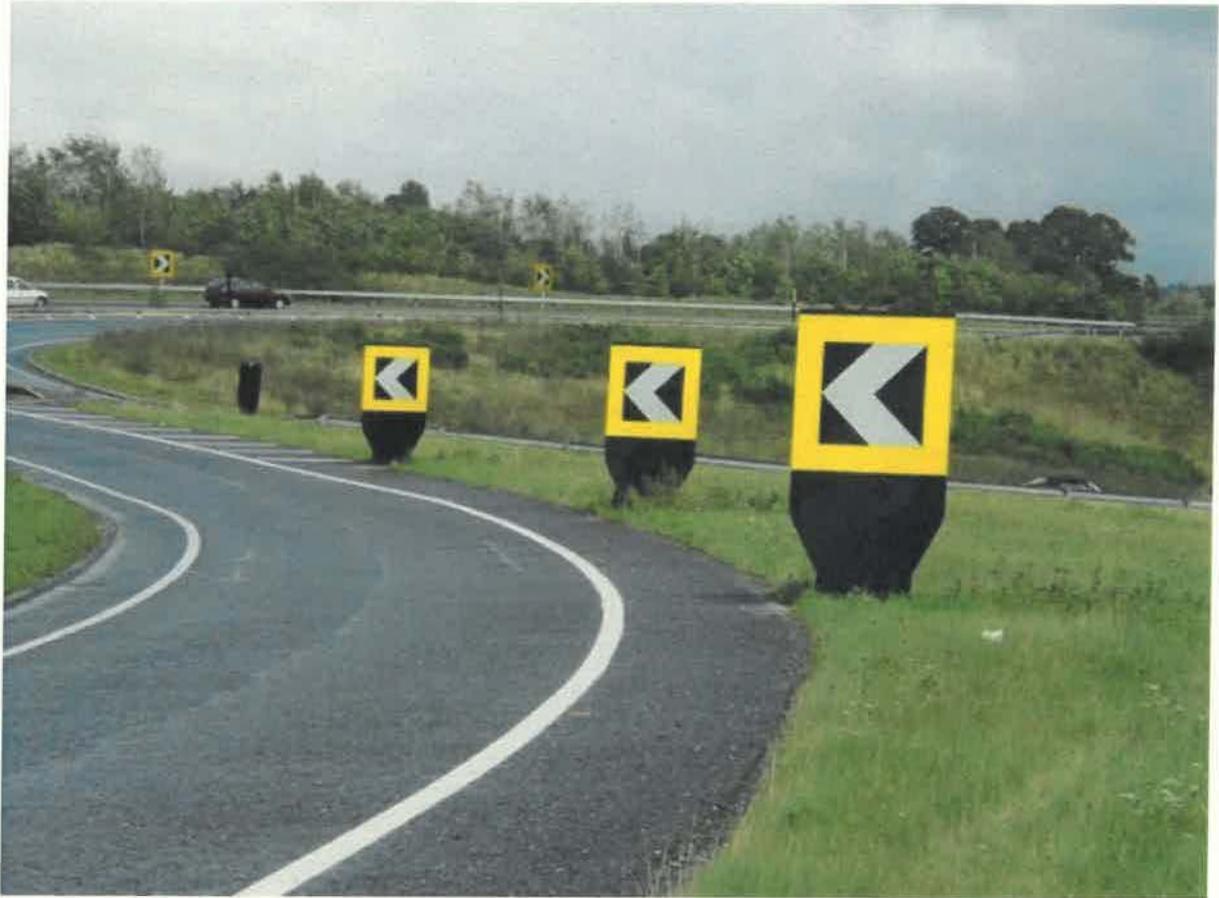
Lincolnshire County Council
 Highways Alliance


0351 / 01 / 0001
 Alternative Scheme Code: Road No: A631/A15

Parish: Elkington
 Structure No: SCN No: Site Ref:

Description:
 Option 1
 Compact Roundabout

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An example of flexible chevrons

ACCIDENT DATA AND TARGET – A631, Louth – Middle Rasen

Accident detail breakdowns for last 5 years 2012-2016

COLLISIONS				
	Fatal	Serious	Slight	Total
2016	0	1	8	9
2015	1	2	9	12
2014	1	4	8	13
2013	2	1	8	11
2012	1	5	15	21
Total	5	13	48	66

Casualty detail breakdowns for last 5 years 2012-2016

CASUALTIES				
	Fatal	Serious	Slight	Total
2016	0	1	9	10
2015	1	4	14	19
2014	1	5	11	17
2013	2	1	11	14
2012	1	6	23	30
Total	5	17	68	90

Collisions and casualty reduction targets (40% Reduction)

	2012-2016	Target 2020-2024
INJURY COLLISIONS		
Fatal/Serious	18	11
Slight	48	29
CASUALTIES		
Fatal/Serious	22	13
Slight	68	41

RISK REGISTER

APPENDIX 5

Description of RISK	Likelihood 1 to 5	Impact 1 to 5	Control Treatment	Likelihood 1 to 5	Impact 1 to 5	FINAL Risk Rating
Cost of project exceeds the allocated budget from DfT	2	3	The estimates are based on previously delivered work and current schedule of rates including a 25% contingency for unforeseen issues and price rises LCC to underwrite the risk.	1	1	1
Timescale Overrun -/ Delays (TRO's / Objections)	1	4	Early discussions with contractor to agree target dates. An existing term maintenance contract is in place and contractor has proven experience of delivering such projects. TROs to be considered early.	1	2	2
Material Availability	2	3	Works requiring large materials may require specialist contractors. LCC has a number of specialist contractors to source such materials and works. There is flexibility to change dates within financial year to cover any issues.	1	2	2
Staffing / Internal Resource Availability	2	4	Sufficient resource has been identified and any works requiring detail design tailored to the end of timeframe	1	2	2
Bad Weather	2	4	Civils works requiring good weather are programmed during the late Spring to Early Autumn period. This gives sufficient time to make up any issues before the end of the financial year	2	2	4

Weighting Risks Impact/Probability

		IMPACT				
		1	2	3	4	5
PROBABILITY	1	L	L	M	M	M
	2	L	M	M	M	H
	3	L	M	M	H	H
	4	L	M	H	H	H
	5	M	M	H	H	H

Description	
H	High
M	Medium
L	Low
/	Insignificant or no record

Description – you should consider:

- _____ o The identification of the event (i.e. : inflation increase over the estimated figures)
- _____ o The factors that could cause it to occur (i.e.: due to...)
- _____ o The element of the project that could be affected (i.e.: affecting labour cost)
- _____ o How it could affect the project or how could it be related to other risks (i.e.: causing delay to the delivery of the works)
- _____ o Any residual effects (i.e.: full inflation risk for capital works)

Scheme	Apr 18	May 18	Jun 18	Jul 18	Aug 18	Sept 18	Oct 18	Nov 18	Dec 18	Jan 19	Feb 19	Mar 19	Apr 19	May 19	Jun 19	July 19	Aug 19	Sept 19	Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jun 20	Jul 20	Aug 20	Sept 20	Oct 20	Nov 20	Dec 20	Jan 21	Feb 21	Mar 21		
Bid Successful	█																																					
Design & Project Meetings		█	█	█	█	█	█	█	█	█	█	█																										
Speed Limit & Traffic Order		█	█	█	█	█	█	█	█	█	█	█																										
Curve Delineation							█	█																														
Skid Resistance													█	█	█	█	█	█	█																			
Shoulder Sealing																█	█	█	█	█																		
Shoulder Rumble Strip																	█	█	█																			
Wide Centreline																	█	█	█																			
Reactive Sign																			█	█	█																	
Average Speed Cameras																		█	█	█	█	█																
Roundabout													█	█	█	█	█	█	█	█																		
Monitoring	█	█	█																						█	█	█	█	█	█	█	█	█	█	█	█	█	Continues Annually ----->>>
Safety Audit																								█	█													

**A631, Louth to Middle Rasen
Project Plan / Gantt Chart**

APPENDIX 6

ORGANOGRAM



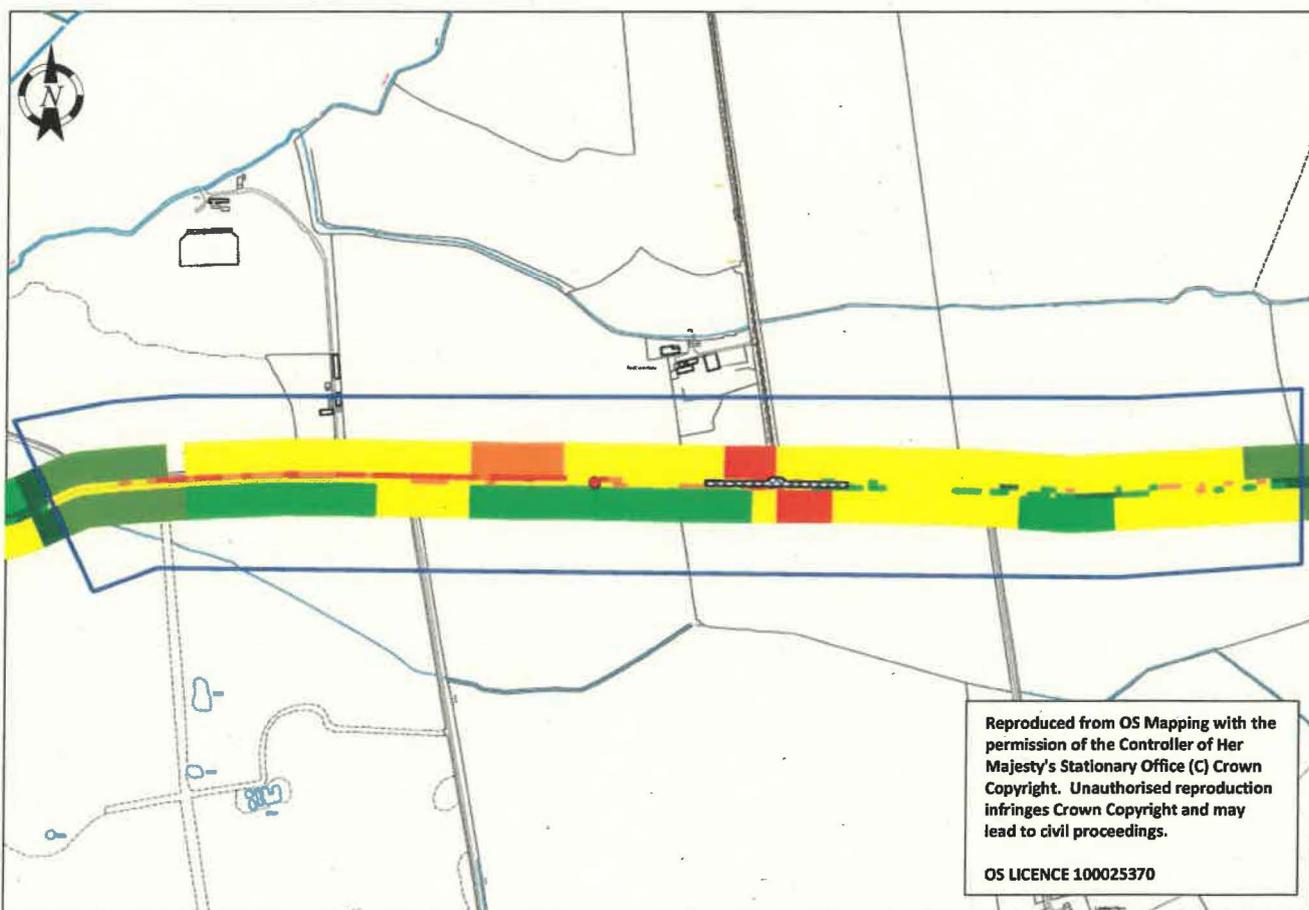
MEASURE	RISK	EFFECT	BENEFIT
Improved Road Surface and Shoulder Sealing	Lack of Grip Vehicles leave carriageway	Improve Grip (in wet) Reduce Accident Severity	To all road users Reduce Ongoing Maintenance Costs
Reduce Speed Limit	Inappropriate Speed Accident Severity	Better Compliance Reduce Accident Severity	To all Road Users & Pedestrians
Improve Curve Delineation	Vehicles Leave Carriageway Head on Accidents High Severity	Reduce Accident Numbers Reduce Severity	All Road Users & Passengers
Shoulder Rumble Strips	Vehicles Leave Carriageway Driver Fatigue	Provides Audible Warning Reduce Likelihood	Drivers & Occupants
Junction Improvement	High Severity Accidents Inappropriate Speed	Reduce Severity	All Road Users & Passengers
Average Speed Camera System	Inappropriate Speed Accident Severity	Improve Compliance Reduce Severity	All Road Users & Passengers
Reactive Sign	Accident Severity Junction Approach	Reduce Severity Improved Warning	All Road Users & Passengers
Wide Centreline	Head on Collision	Separate Traffic	All Road Users & Passengers

A631, Louth to Middle Rasen

APPENDIX 8

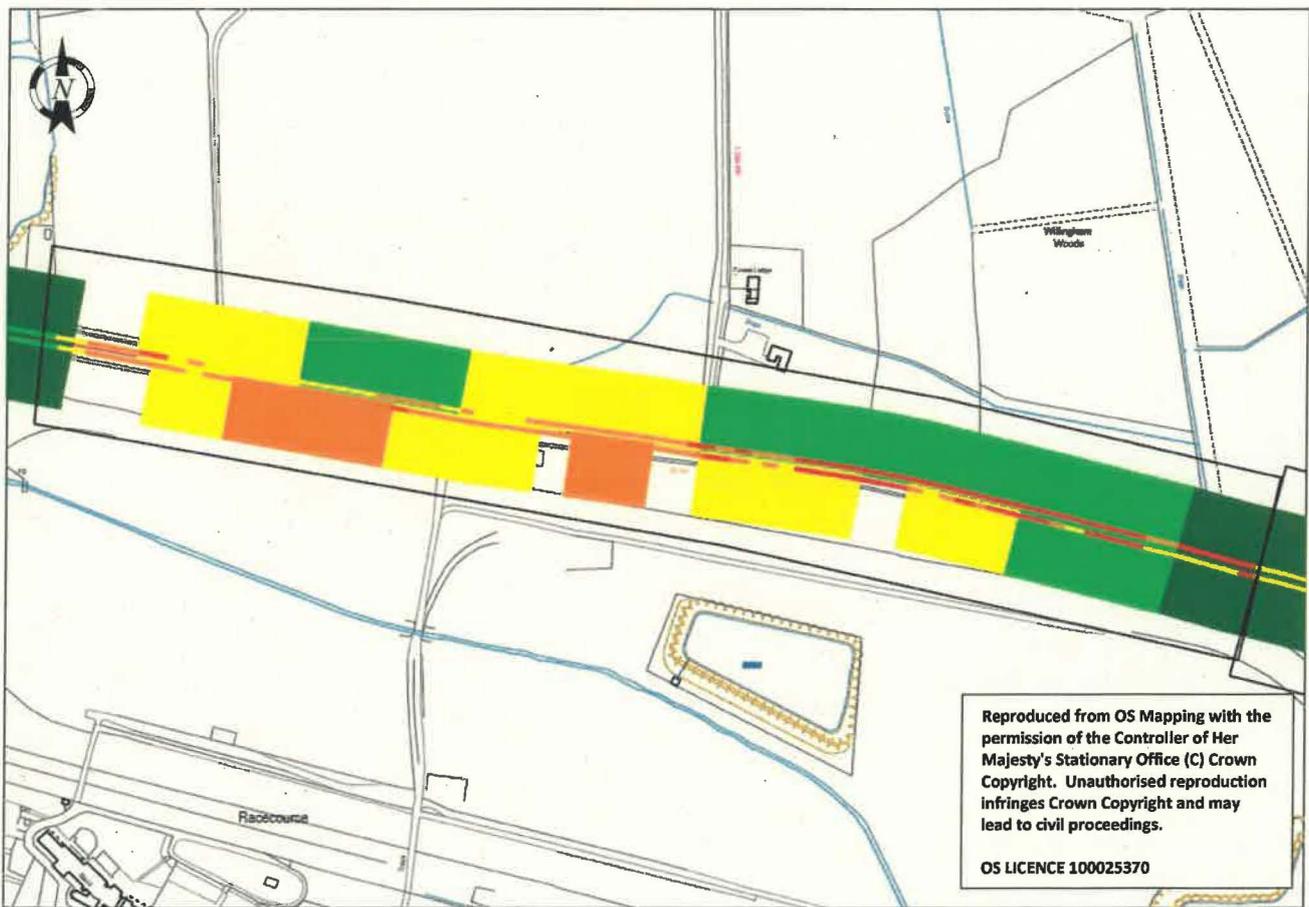
LOGIC MATRIX

Road number: A631	Section number: 280/291	Location: Sandy Lane House, North Willingham	SCRIM survey date: 01/09/2016
Suggested treatment: Resurfacing Scheme to improve skid resistance			Approximate Scheme Length (c/way km): 1.35
Comments:			
<ul style="list-style-type: none"> SCRIM deficient length present within the bounds of the scheme at both junction approaches 			
Condition Data:			
LCI			
RCI - 29/08/2015 (CL) + 23/08/2016 (CR)			
CVI - 2016			
Residual Life - 02/06/2015 (CL) + 03/06/2015 (CR)			
3 year accidents to 30/06/2016 (● = Dry Accident & ● = Wet Accident)			



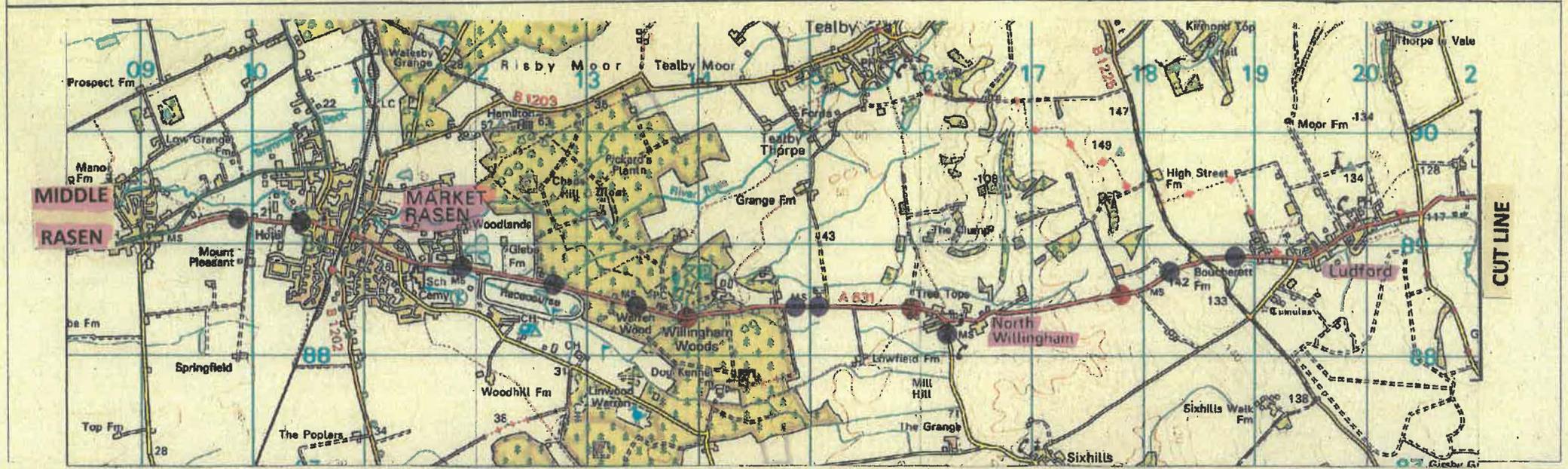
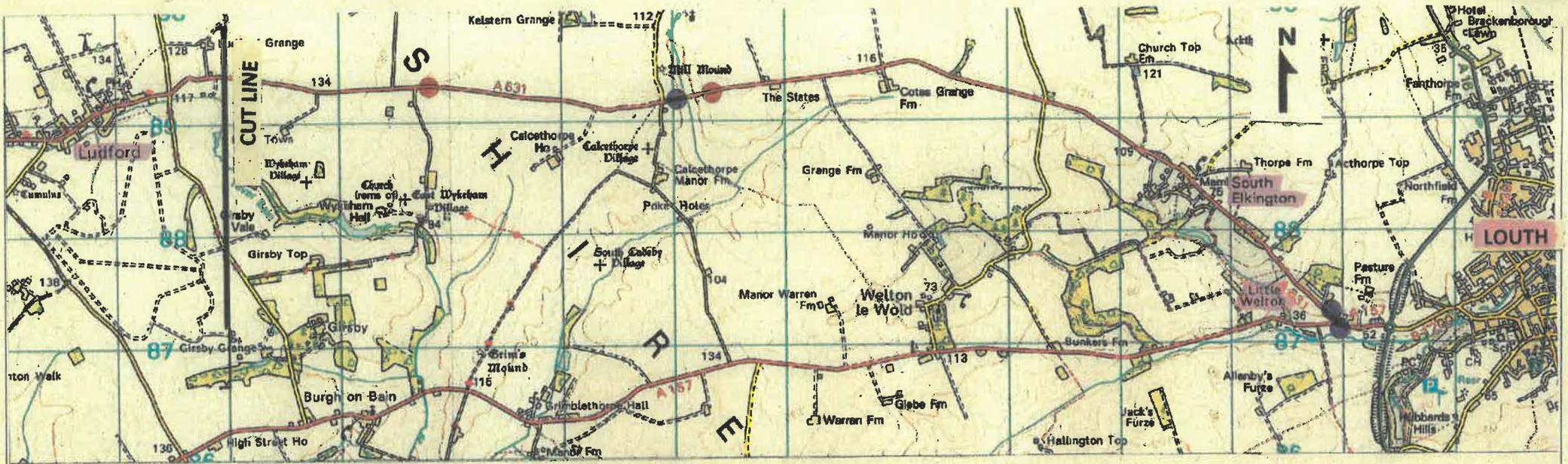


Road number: A631	Section number: 275/280	Location: Market Rasen racecourse	SCRIM survey date: 01/09/2016
Suggested treatment: Resurfacing Scheme to improve skid resistance			Approximate Scheme Length (c/way km): 0.75
Comments:			
<ul style="list-style-type: none"> Current surfacing is old Surface Dressing that has lost texture meaning a large proportion of the site is ≤ the SCRIM investigatory level with the remaining sections only slightly above 			
Condition Data:			
LCI			
RCI - 29/08/2015 (CL) + 23/08/2016 (CR)			
CVI - 2016			
Residual Life - 02/06/2015 (CL) + 03/06/2015 (CR)			
3 year accidents to 30/06/2016 (● = Dry Accident & ● = Wet Accident)			



APPENDICES – A631, Louth to Middle Rasen

- 1 – Plan of Route and Accidents 2012 – 2016
- 2 – Equality Impact Assessment
- 3 – Description of Proposed Measures & Estimated Costs
- 4 – Collision / Casualty Data and Target
- 5 – Risk Register
- 6 – Project Plan / Gantt Chart
- 7 – Organogram
- 8 – Logic Matrix
- 9 – Existing SCRIM Data



Lincolnshire
COUNTY COUNCIL



**Lincolnshire
Road
Safety
Partnership**

Key

KSI Accident Statistics 2012 – 2016

- Fatal
- Serious

Scale 1:35000

Drawn By

Date SEPT 2017

Issue Type

Drawing Number: LRSP/GB/A631/2

Scheme Title:

SAFER ROADS FUND

A631, Louth to Middle Rasen

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Equality Impact Analysis to enable informed decisions

The purpose of this document is to:-

- I. help decision makers fulfil their duties under the Equality Act 2010 and
- II. for you to evidence the positive and adverse impacts of the proposed change on people with protected characteristics and ways to mitigate or eliminate any adverse impacts.

Using this form

This form must be updated and reviewed as your evidence on a proposal for a project/service change/policy/commissioning of a service or decommissioning of a service evolves taking into account any consultation feedback, significant changes to the proposals and data to support impacts of proposed changes. The key findings of the most up to date version of the Equality Impact Analysis must be explained in the report to the decision maker and the Equality Impact Analysis must be attached to the decision making report.

****Please make sure you read the information below so that you understand what is required under the Equality Act 2010****

Equality Act 2010

The Equality Act 2010 applies to both our workforce and our customers. Under the Equality Act 2010, decision makers are under a personal duty, to have due (that is proportionate) regard to the need to protect and promote the interests of persons with protected characteristics.

Protected characteristics

The protected characteristics under the Act are: age; disability; gender reassignment; marriage and civil partnership; pregnancy and maternity; race; religion or belief; sex; sexual orientation.

Section 149 of the Equality Act 2010

Section 149 requires a public authority to have due regard to the need to:

- Eliminate discrimination, harassment, victimisation, and any other conduct that is prohibited by/or under the Act
- Advance equality of opportunity between persons who share relevant protected characteristics and persons who do not share those characteristics
- Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

The purpose of Section 149 is to get decision makers to consider the impact their decisions may or will have on those with protected characteristics and by evidencing the impacts on people with protected characteristics decision makers should be able to demonstrate 'due regard'.

Decision makers duty under the Act

Having had careful regard to the Equality Impact Analysis, and also the consultation responses, decision makers are under a personal duty to have due regard to the need to protect and promote the interests of persons with protected characteristics (see above) and to:-

- (i) consider and analyse how the decision is likely to affect those with protected characteristics, in practical terms,
- (ii) remove any unlawful discrimination, harassment, victimisation and other prohibited conduct,
- (iii) consider whether practical steps should be taken to mitigate or avoid any adverse consequences that the decision is likely to have, for persons with protected characteristics and, indeed, to consider whether the decision should not be taken at all, in the interests of persons with protected characteristics,
- (iv) consider whether steps should be taken to advance equality, foster good relations and generally promote the interests of persons with protected characteristics, either by varying the recommended decision or by taking some other decision.

Conducting an Impact Analysis

The Equality Impact Analysis is a process to identify the impact or likely impact a project, proposed service change, commissioning, decommissioning or policy will have on people with protected characteristics listed above. It should be considered at the beginning of the decision making process.

The Lead Officer responsibility

This is the person writing the report for the decision maker. It is the responsibility of the Lead Officer to make sure that the Equality Impact Analysis is robust and proportionate to the decision being taken.

Summary of findings

You must provide a clear and concise summary of the key findings of this Equality Impact Analysis in the decision making report and attach this Equality Impact Analysis to the report.

Impact – definition

An impact is an intentional or unintentional lasting consequence or significant change to people's lives brought about by an action or series of actions.

How much detail to include?

The Equality Impact Analysis should be proportionate to the impact of proposed change. In deciding this asking simple questions "Who might be affected by this decision?" "Which protected characteristics might be affected?" and "How might they be affected?" will help you consider the extent to which you already have evidence, information and data, and where there are gaps that you will need to explore. Ensure the source and date of any existing data is referenced.

You must consider both obvious and any less obvious impacts. Engaging with people with the protected characteristics will help you to identify less obvious impacts as these groups share their perspectives with you.

A given proposal may have a positive impact on one or more protected characteristics and have an adverse impact on others. You must capture these differences in this form to help decision makers to arrive at a view as to where the balance of advantage or disadvantage lies. If an adverse impact is unavoidable then it must be clearly justified and recorded as such, with an explanation as to why no steps can be taken to avoid the impact. Consequences must be included.

Proposals for more than one option If more than one option is being proposed you must ensure that the Equality Impact Analysis covers all options. Depending on the circumstances, it may be more appropriate to complete an Equality Impact Analysis for each option.

The information you provide in this form must be sufficient to allow the decision maker to fulfil their role as above. You must include the latest version of the Equality Impact Analysis with the report to the decision maker. Please be aware that the information in this form must be able to stand up to legal challenge.

Background Information

Title of the policy / project / service being considered	DfT Safer Roads Bid	Person / people completing analysis	Graeme Butler, Accident Investigation & Prevention Manager, Lincolnshire Road Safety Partnership
Service Area	Environment and Economy	Lead Officer	As above
Who is the decision maker?	Richard Wills, Executive Director	How was the Equality Impact Analysis undertaken?	By developing the schemes in accordance with the DfT's safer Roads Fund Project and consideration of the 'impact' of those schemes
Date of meeting when decision will be made	15/09/2017	Version control	Version 1.0
Is this proposed change to an existing policy/service/project or is it new?	New	LCC directly delivered, commissioned, re-commissioned or de-commissioned?	Directly delivered
Describe the proposed change	Proposed highway improvement works subject to successful bid as part of the DfT's Safer Road Fund Project. None Identified		

Evidencing the impacts

In this section you will explain the difference that proposed changes are likely to make on people with protected characteristics. To help you do this first consider the impacts the proposed changes may have on people without protected characteristics before then considering the impacts the proposed changes may have on people with protected characteristics.

You must evidence here who will benefit and how they will benefit. If there are no benefits that you can identify please state 'No perceived benefit' under the relevant protected characteristic. You can add sub categories under the protected characteristics to make clear the impacts. For example under Age you may have considered the impact on 0-5 year olds or people aged 65 and over, under Race you may have considered Eastern European migrants, under Sex you may have considered specific impacts on men.

Data to support impacts of proposed changes

When considering the equality impact of a decision it is important to know who the people are that will be affected by any change.

Population data and the Joint Strategic Needs Assessment

The Lincolnshire Research Observatory (LRO) holds a range of population data by the protected characteristics. This can help put a decision into context. Visit the LRO website and its population theme page by following this link: <http://www.research-lincs.org.uk> If you cannot find what you are looking for, or need more information, please contact the LRO team. You will also find information about the Joint Strategic Needs Assessment on the LRO website.

Workforce profiles

You can obtain information by many of the protected characteristics for the Council's workforce and comparisons with the labour market on the [Council's website](#). As of 1st April 2015, managers can obtain workforce profile data by the protected characteristics for their specific areas using Agresso.

Positive impacts

The proposed change may have the following positive impacts on persons with protected characteristics – If no positive impact, please state 'no positive impact'.

Age	The proposals may improve the safety and opportunity to cross the road
Disability	The proposals may improve the safety and opportunity to cross the road
Gender reassignment	No Positive Impact
Marriage and civil partnership	No Positive Impact
Pregnancy and maternity	No Positive Impact
Race	No Positive Impact
Religion or belief	No Positive Impact

Sex	No Positive Impact
Sexual orientation	No Positive Impact

If you have identified positive impacts for other groups not specifically covered by the protected characteristics in the Equality Act 2010 you can include them here if it will help the decision maker to make an informed decision.

Adverse/negative impacts

You must evidence how people with protected characteristics will be adversely impacted and any proposed mitigation to reduce or eliminate adverse impacts. An adverse impact causes disadvantage or exclusion. If such an impact is identified please state how, as far as possible, it is justified; eliminated; minimised or counter balanced by other measures.

If there are no adverse impacts that you can identify please state 'No perceived adverse impact' under the relevant protected characteristic.

Negative impacts of the proposed change and practical steps to mitigate or avoid any adverse consequences on people with protected characteristics are detailed below. If you have not identified any mitigating action to reduce an adverse impact please state 'No mitigating action identified'.

Age	No Mitigating Action Identified
Disability	No Mitigating Action Identified
Gender reassignment	No Mitigating Action Identified
Marriage and civil partnership	No Mitigating Action Identified
Pregnancy and maternity	No Mitigating Action Identified

Race	No Mitigating Action Identified
Religion or belief	No Mitigating Action Identified
Sex	No Mitigating Action Identified
Sexual orientation	No Mitigating Action Identified

If you have identified negative impacts for other groups not specifically covered by the protected characteristics under the Equality Act 2010 you can include them here if it will help the decision maker to make an informed decision.

--

Stakeholders

Stake holders are people or groups who may be directly affected (primary stakeholders) and indirectly affected (secondary stakeholders)

You must evidence here who you involved in gathering your evidence about benefits, adverse impacts and practical steps to mitigate or avoid any adverse consequences. You must be confident that any engagement was meaningful. The Community engagement team can help you to do this and you can contact them at consultation@lincolnshire.gov.uk

State clearly what (if any) consultation or engagement activity took place by stating who you involved when compiling this EIA under the protected characteristics. Include organisations you invited and organisations who attended, the date(s) they were involved and method of involvement i.e. Equality Impact Analysis workshop/email/telephone conversation/meeting/consultation. State clearly the objectives of the EIA consultation and findings from the EIA consultation under each of the protected characteristics. If you have not covered any of the protected characteristics please state the reasons why they were not consulted/engaged.

Objective(s) of the EIA consultation/engagement activity

No external stakeholder (service users) consultation has taken place.

Who was involved in the EIA consultation/engagement activity? Detail any findings identified by the protected characteristic

Age	Not Applicable
Disability	Not Applicable
Gender reassignment	Not Applicable
Marriage and civil partnership	Not Applicable
Pregnancy and maternity	Not Applicable
Race	Not Applicable
Religion or belief	Not Applicable

Sex	Not Applicable
Sexual orientation	Not Applicable
<p>Are you confident that everyone who should have been involved in producing this version of the Equality Impact Analysis has been involved in a meaningful way? The purpose is to make sure you have got the perspective of all the protected characteristics.</p>	Yes, by using the corporate standard template
<p>Once the changes have been implemented how will you undertake evaluation of the benefits and how effective the actions to reduce adverse impacts have been?</p>	No adverse impacts have been identified.

Further Details

Are you handling personal data?	<p>No</p> <p>If yes, please give details.</p>
--	---

	Action	Lead officer	Timescale
Actions required Include any actions identified in this analysis for on-going monitoring of impacts.	None Identified	Graeme Butler	
Signed off by	Graeme Butler	Date	15/09/2017

A631 Louth to Middle Rasen – SCHEME DESCRIPTION AND COSTS

The scheme proposals are summarised as follows :-

- 1) **Junction Improvement** – It is proposed to carry out an improvement to the A631 / A157 junction just to the west of Louth. This location has a history of injury accidents and the future risk is likely to continue. A medium sized roundabout is preferred to slow all traffic and cater for all turns. See below.

ESTIMATED COST = £ 1.3 M

- 2) **Skid Resistance & Shoulder Sealing** – Improvements are proposed to the existing road surface to improve grip and skid resistance, especially in the wet. This will lead to a reduction in accidents where the road condition is likely to be a factor in the causation. Overall this is considered to be a major factor in reducing the risk and the severity of those accidents. This is in conjunction with Shoulder Sealing proposals and the ability to lay shoulder rumble strips.

ESTIMATED COST = £ 975,000

- 3) **Shoulder Rumble Strips** – This is proposed to overcome vehicles drifting off to the left and compliments the resurfacing and shoulder sealing elements of this scheme and is seen as a cost effective way of improving the safety of long lengths of the route.

ESTIMATED COST = £ 60,000

- 4) **Wide Centreline** – Due to the carriageway width, it is not possible to lay a central hatching. Therefore a wide centreline is proposed to encourage separation of vehicles. Again, this is a cost effective measure bearing in mind the length of the measures.

ESTIMATED COST = £ 20,000

- 5) **Reduced Speed Limit** – It is proposed to reduce the derestricted (60mph) sections to 50mph. As the accident locations are spread along the length, this will help to reduce the numbers and severity of injuries. It will also reduce the future risk where there may be a loss of control.

ESTIMATED COST = £ 40,000

- 6) **Average Speed Camera System** – It proposed to introduce such a system to enforce the proposed 50 mph speed limit between Market Rasen and Ludford. This section has the highest rate of injury accidents.

ESTIMATED COST £ 300,000

- 7) **Improve Curve Delineation** – It is proposed to carry out improvements / enhancements to the bends to the east of Willingham Woods where a number of collisions have occurred. This will take the form of improved signage and road markings generally. The use of flexible chevron type signs are to be used bearing in mind the route carries motorcyclists to/from the popular location of Willingham Woods and Cadwell Park racing circuit.

ESTIMATED COST = £ 20,000

- 8) **Reactive Signage** – It is proposed to install reactive signage for eastbound traffic approaching the B1225 junction just west of Ludford village. This approach is uphill and the junction is situated just beyond the rise.

ESTIMATED COST = £ 10,000

ESTIMATED TOTAL WORKS COST = £ 2,725,000

VIDA Issues / Suggestions Discounted

Roadside barriers – these are not considered generally appropriate given the open, high quality landscape that the road passes through and the fact that the route is often used by motorcyclists en route to the coast and the Cadwell Park racing circuit. We would not recommend the use of such barriers where motorcyclists are present.

Clear Roadside Hazards – this has been considered and whilst some minor improvements may be possible, this is a rural location and therefore the removal of trees is likely to be met with objections. However, the number of such trees that would cause issues is negligible and the majority of the roadside hazards that have been identified are hedges and shrubbery. We will work with the landowners to address this. The accident history does not raise this as an issue.

Central Hatching – the road width is not sufficient to lay such a marking.



X-Refs & Blocks used in this Drawing
 x-roundabout 4.0
 x-roundabout 4.0 Inset
 x-culvert

Key:

	Traffic Island
	Carriageway
	Over Run Area
	Central Island



PRELIMINARY

PRELIMINARY/FEASIBILITY DRAWING PRIOR TO DETAILED DESIGN ONLY

FOR THIRD PARTY USE, THIS DRAWING SHALL BE DEEMED CURRENT ONLY AT THE DATE OF APPROVAL. PLEASE CHECK FOR AMENDMENTS BEFORE USE

UNDER NO CIRCUMSTANCES IS THIS DRAWING TO BE ISSUED FOR DETAILED DESIGN, PRICING OR CONSTRUCTION PURPOSES

Drawing Approval
 Latest Revision: 1st Approval
 Drawn/Designed by: B.H
 CAD By: BH
 Approved By: MCO - 23/08/17

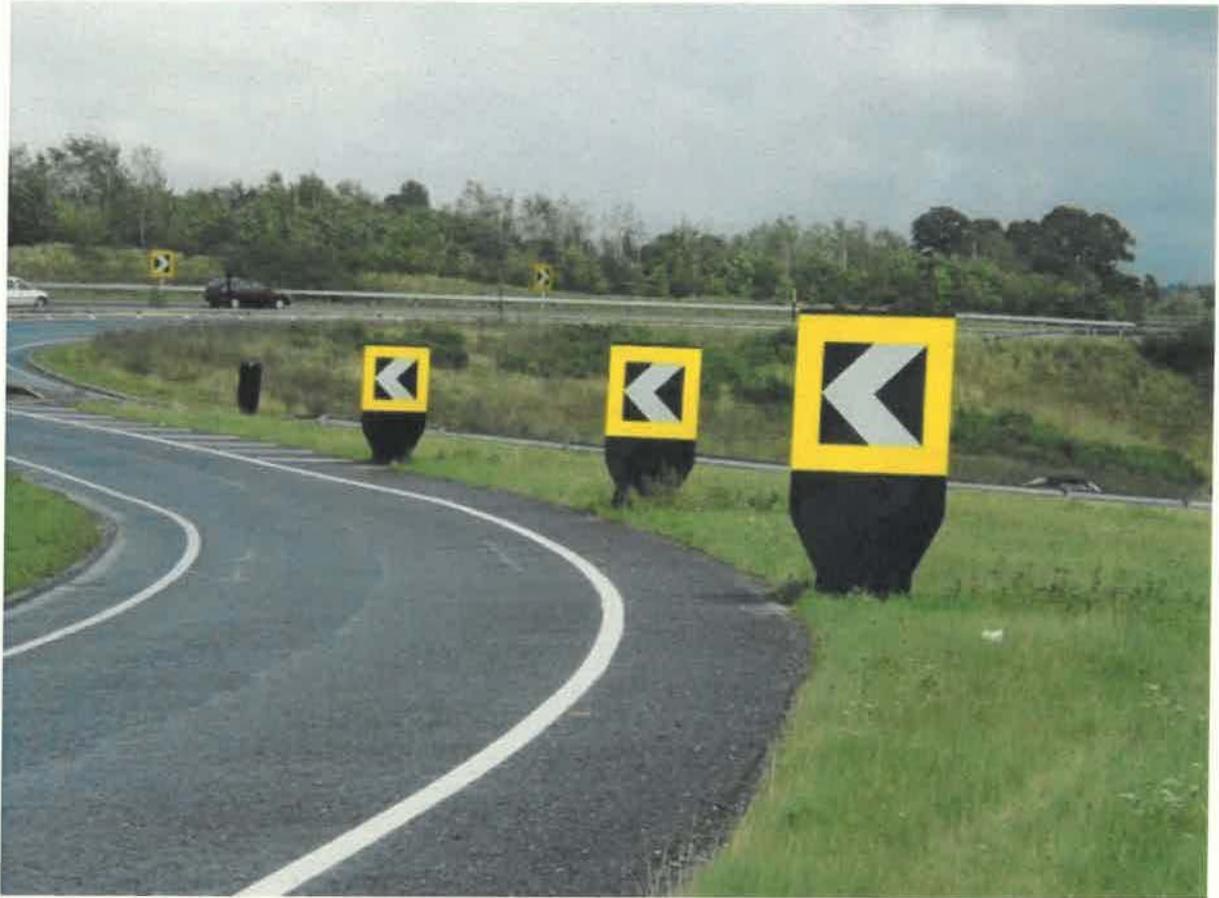
Scale: (A1)
 Plan: 1:500 (Do not scale from this drawing)
 Summary:

Lincolnshire
 Highways Alliance



0351 / 01 / 0001
 Alternative Scheme Code: Road No: A631/A15
 Parish: Elkington
 Structure No: SCN No: Site Ref:

Description:
 Option 1
 Compact Roundabout



An example of flexible chevrons

ACCIDENT DATA AND TARGET – A631, Louth – Middle Rasen

Accident detail breakdowns for last 5 years 2012-2016

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Collisions and casualty reduction targets (40% Reduction)

	2012-2016	Target 2020-2024
INJURY COLLISIONS		
Fatal/Serious	18	11
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Fatal/Serious	22	13
Slight	68	41

RISK REGISTER

APPENDIX 5

Description of RISK	Likelihood 1 to 5	Impact 1 to 5	Control Treatment	Likelihood 1 to 5	Impact 1 to 5	FINAL Risk Rating
Cost of project exceeds the allocated budget from DfT	2	3	The estimates are based on previously delivered work and current schedule of rates including a 25% contingency for unforeseen issues and price rises LCC to underwrite the risk.	1	1	1
Timescale Overrun -/ Delays (TRO's / Objections)	1	4	Early discussions with contractor to agree target dates. An existing term maintenance contract is in place and contractor has proven experience of delivering such projects. TROs to be considered early.	1	2	2
Material Availability	2	3	Works requiring large materials may require specialist contractors. LCC has a number of specialist contractors to source such materials and works. There is flexibility to change dates within financial year to cover any issues.	1	2	2
Staffing / Internal Resource Availability	2	4	Sufficient resource has been identified and any works requiring detail design tailored to the end of timeframe	1	2	2
Bad Weather	2	4	Civils works requiring good weather are programmed during the late Spring to Early Autumn period. This gives sufficient time to make up any issues before the end of the financial year	2	2	4

Weighting Risks Impact/Probability

		IMPACT				
		1	2	3	4	5
PROBABILITY	1	L	L	M	M	M
	2	L	M	M	M	H
	3	L	M	M	H	H
	4	L	M	H	H	H
	5	M	M	H	H	H

Description	
H	High
M	Medium
L	Low
/	Insignificant or no record

Description – you should consider:

- _____ o The identification of the event (i.e. : inflation increase over the estimated figures)
- _____ o The factors that could cause it to occur (i.e.: due to...)
- _____ o The element of the project that could be affected (i.e.: affecting labour cost)
- _____ o How it could affect the project or how could it be related to other risks (i.e.: causing delay to the delivery of the works)
- _____ o Any residual effects (i.e.: full inflation risk for capital works)

Scheme	Apr 18	May 18	Jun 18	Jul 18	Aug 18	Sept 18	Oct 18	Nov 18	Dec 18	Jan 19	Feb 19	Mar 19	Apr 19	May 19	Jun 19	July 19	Aug 19	Sept 19	Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jun 20	Jul 20	Aug 20	Sept 20	Oct 20	Nov 20	Dec 20	Jan 21	Feb 21	Mar 21	
Bid Successful	█																																				
Design & Project Meetings		█	█	█	█	█	█	█	█	█	█	█																									
Speed Limit & Traffic Order		█	█	█	█	█	█	█	█	█	█	█																									
Curve Delineation							█	█																													
Skid Resistance													█	█	█	█	█	█	█																		
Shoulder Sealing																█	█	█	█	█																	
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Average Speed Cameras																		█	█	█	█	█	█														
Roundabout													█	█	█	█	█	█	█	█																	
Monitoring	█	█	█																						█	█	█	█	█	█	█	█	█	█	█	█	Continues Annually ----->>>
Safety Audit																								█	█												

**A631, Louth to Middle Rasen
Project Plan / Gantt Chart**

APPENDIX 6

ORGANOGRAM



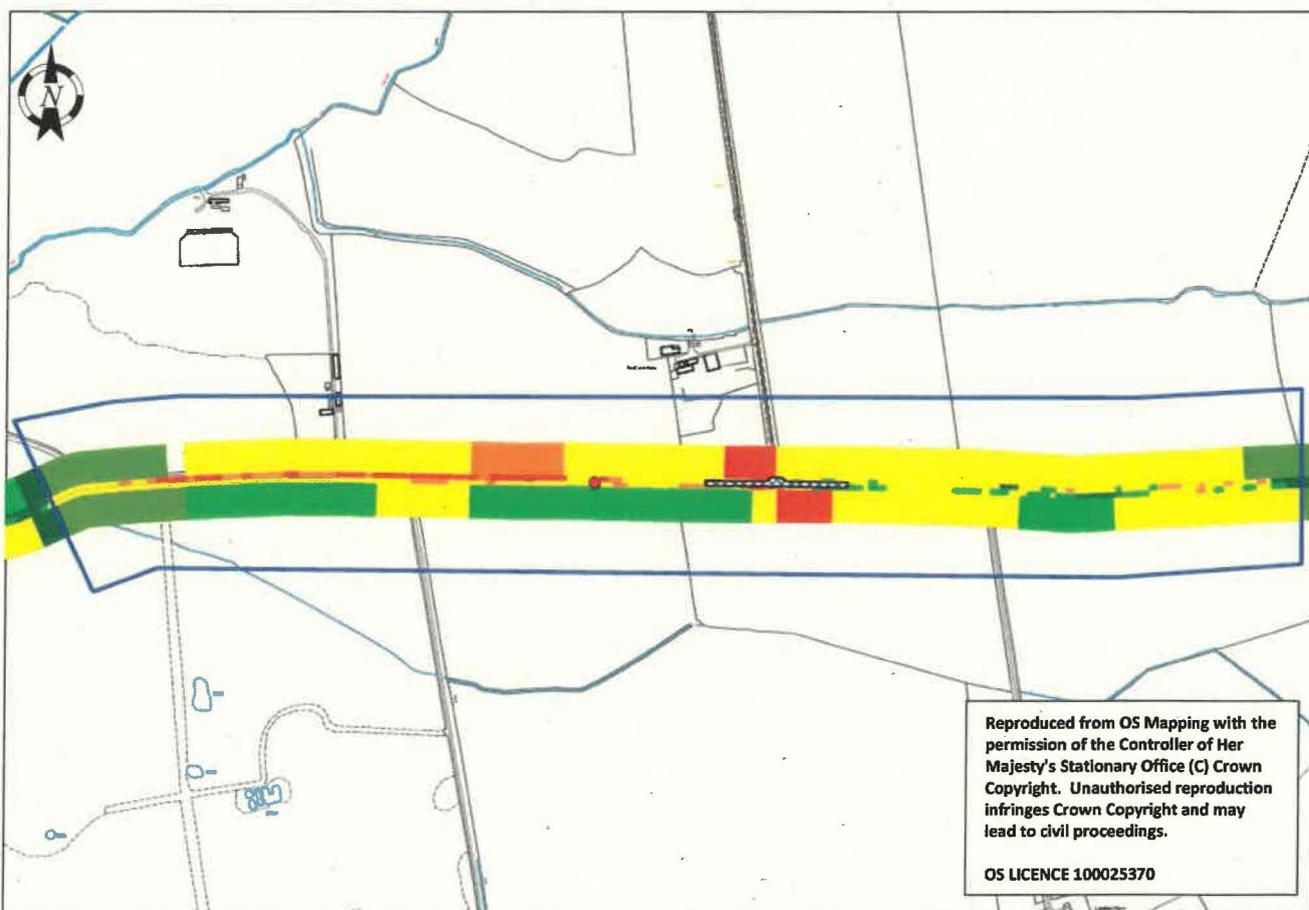
MEASURE	RISK	EFFECT	BENEFIT
Improved Road Surface and Shoulder Sealing	Lack of Grip Vehicles leave carriageway	Improve Grip (in wet) Reduce Accident Severity	To all road users Reduce Ongoing Maintenance Costs
Reduce Speed Limit	Inappropriate Speed Accident Severity	Better Compliance Reduce Accident Severity	To all Road Users & Pedestrians
Improve Curve Delineation	Vehicles Leave Carriageway Head on Accidents High Severity	Reduce Accident Numbers Reduce Severity	All Road Users & Passengers
Shoulder Rumble Strips	Vehicles Leave Carriageway Driver Fatigue	Provides Audible Warning Reduce Likelihood	Drivers & Occupants
Junction Improvement	High Severity Accidents Inappropriate Speed	Reduce Severity	All Road Users & Passengers
Average Speed Camera System	Inappropriate Speed Accident Severity	Improve Compliance Reduce Severity	All Road Users & Passengers
Reactive Sign	Accident Severity Junction Approach	Reduce Severity Improved Warning	All Road Users & Passengers
Wide Centreline	Head on Collision	Separate Traffic	All Road Users & Passengers

A631, Louth to Middle Rasen

APPENDIX 8

LOGIC MATRIX

Road number: A631	Section number: 280/291	Location: Sandy Lane House, North Willingham	SCRIM survey date: 01/09/2016
Suggested treatment: Resurfacing Scheme to improve skid resistance			Approximate Scheme Length (c/way km): 1.35
Comments:			
<ul style="list-style-type: none"> SCRIM deficient length present within the bounds of the scheme at both junction approaches 			
Condition Data:			
LCI			
RCI - 29/08/2015 (CL) + 23/08/2016 (CR)			
CVI - 2016			
Residual Life - 02/06/2015 (CL) + 03/06/2015 (CR)			
3 year accidents to 30/06/2016 (● = Dry Accident & ● = Wet Accident)			





Road number: A631	Section number: 275/280	Location: Market Rasen racecourse	SCRIM survey date: 01/09/2016
Suggested treatment: Resurfacing Scheme to improve skid resistance			Approximate Scheme Length (c/way km): 0.75
Comments:			
<ul style="list-style-type: none"> Current surfacing is old Surface Dressing that has lost texture meaning a large proportion of the site is ≤ the SCRIM investigatory level with the remaining sections only slightly above 			
Condition Data:			
LCI			
RCI - 29/08/2015 (CL) + 23/08/2016 (CR)			
CVI - 2016			
Residual Life - 02/06/2015 (CL) + 03/06/2015 (CR)			
3 year accidents to 30/06/2016 (● = Dry Accident & ● = Wet Accident)			

