Funding for Local Transport:
DCC A5004 Long Hill - 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)*: Derbyshire County Council

Bid Manager Name and position: Matt Pickard, Senior Project Officer – Casualty Reduction Strategy

Contact telephone number: 01629 538 657

Email address: matt.pickard@derbyshire.gov.uk

Postal address: County Hall, Smedley Street, Matlock, Derbyshire, DE4 3AG

When authorities submit a bid for funding to the Department for Transport, as part of the Government's commitment to greater openness in the public sector under the Freedom of Information Act 2000 and the Environmental Information Regulations 2004, they must also publish a version excluding any commercially sensitive information on their own website within two working days of submitting the final bid to the Department for Transport. The Department for Transport reserves the right to deem the business case as non-compliant if this is not adhered to.

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

http://www.derbyshire.gov.uk/transport_roads/transport_plans/transport_funding_bids/default.asp

SECTION A - Scheme description and funding profile

A1. Scheme name: A5004 Long Hill – Between Buxton and Whaley Bridge, Derbyshire.

A2. Headline description:

To undertake a holistic approach to road safety improvements along this section of the A5004, Derbyshire, which is identified by the Road Safety Foundation as one of 50 'A' roads where the risk of collisions causing death or serious injury is highest.

The proposed road safety countermeasures have been suggested by VIDA software and through local engineering judgement, and then sense checked as to those that are most appropriate and practical to be installed based on officer knowledge. The intention is that the proposed countermeasures go beyond the traditional reactive approach to collision reduction by building in a higher level of safety into the road for all road users.

A3. Geographical area:

This section of the A5004 is a rural route that connects Whaley Bridge to Buxton in Northwest Derbyshire, comprising a series of bends following hillside contours with sporadic properties along its length. The speed limit is predominantly 50mph and 30mph upon entry into urban areas. The location is favoured by visiting motorcyclists because the route offers challenging riding opportunities.

See Appendix A for Location Plan and Accident Details

A4. Equality Analysis

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

An Equality Impact Assessment was carried out as part of the development of Derbyshire County Council's Local Transport Plan 2011-2026 (LTP3). This bid is made in compliance with the strategic and financial framework of LTP3. A copy can be provided on request.

SECTION B – The Business Case

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

The scheme is intended to reduce risk to road users by taking a long term holistic approach to the route. The A5004 is one of the top 50 'A' roads identified by the Road Safety Foundation (RSF) where the risk of collisions causing death or serious injury is highest. Between 2012 and 2014, 33 collisions have occurred resulting in 0 fatalities, 8 serious and 40 slight injuries to highway users – see Appendix B. There has been a decreasing trend in collisions since the 2012-2014 RSF period but an increase in the KSI collisions, most noticeably involving motorcyclist casualties.

The traditional reactive approach to reduce the collision risk along the A5004 has limited the County Council's ability to take a holistic approach to collision reduction along the route – see Appendix C for past safety and maintenance schemes. The route has a number of bends in a rural setting which coupled with inappropriate speed leads to a higher proportion of motorcycle collisions. The road follows the hillside contours and consequently a loss of control invariably leads to the person leaving the highway (sometimes going down the hillside) or striking roadside boundary features; compounding the injuries received. The rural setting means that stray livestock often cross the highway, increasing the risk of collision.

Taking a holistic approach to road safety along the route will enable a higher degree of safety being established for all road users.

B2. The Strategic Case (Maximum 350 words)

Please read this section in conjunction with B6.

The A5004 has a long term collision history. A number of reactive low cost improvements have been made in response to past collisions which have been partially successful. However, the traditional reactive approach coupled with limited funds has prevented the development of a more comprehensive solution to build in a higher degree of safety for all road users even though this is much needed.

The route and its challenges attract motorcyclists on high capacity motorcycles and drivers from outside the area to test their skills, often with detrimental consequences. They take the bends too fast and lose control. They're unaware of or fail to look out for pedestrians and cyclists at high risk locations. The nature of the route and roadside features allows detritus onto the road creating hazards which have detrimental consequences at higher speeds. The route is largely unlit which in darkness makes it much harder for motorists to determine an approaching hazard so advance signing and other treatments are necessary to give warning.

Average Speed Cameras will address inappropriate speed within lower speed limits and at bends along the route and will reduce the number and severity of collisions. Physical improvements identified below are proposed along the route to address general hazards and specific high risk locations by:

- removing the bend at chainage 7.1-7.4 by straightening the road
- reforming the junction with the A53 in Buxton to make it safer
- applying road markings to reduce the visual width of the road and provide a right turn harborage within Buxton
- installing shoulder rumble strips to increase awareness of the road edge

- clearing roadside hazards such as removing overhanging vegetation, reforming side slopes and installing drainage solutions to prevent detritus coming onto the highway
- creating a safer pedestrian crossing facility and new footway connection to Whaley Bridge (10km mark)
- undertaking signing improvements along the route
- installing roadside barriers and bike guard on the outside of bends.

These, coupled with the Education, Training and Publicity Information measures described in Appendix D, will make the A5004 safer for all road users and reduce the number of accident collisions accordingly.

B3. The Financial Case – Project Costs

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***
DfT Funding Sought	£473	£2,067	£0	£0	£2,540
LA Contribution	£0	£0	£0	£0	£0
Other Third Party Funding	£0	£0	£0	£0	£0

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

The Road Safety Fund will comprise the whole budget for these works. The budget has been prepared based on the 'sense checked' VIDA outputs. The rural and isolated nature of the route means that diversion routes will be abnormally long and require extensive temporary signage. Costs for traffic management have therefore been estimated using advice from our specialist provider. A contingency covers as yet unmeasured items subject to detailed design. The contingency may appear high but takes account of the technology solution being proposed and the installation of infrastructure in rocky subsoil; this cannot be fully assessed until a detailed route survey is undertaken.

Derbyshire County Council (DCC) will take the future maintenance liability for the proposed countermeasures which will be prioritised against its peers and funded from the highway authority's future capital maintenance programme. DCC will continue to monitor collisions upon completion and will generate further improvements appropriate to the collision data. Countermeasures will be prioritised and funded using DCC's Road Safety Budget.

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

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

A Risk Register has been produced for the project and is shown in Appendix E but the financial implications of these risks are in *c)* summarised below:

b) How will cost overruns be dealt with?

DCC's S151 Officer accepts responsibility for meeting any costs over and above the DfT funding award and the future maintenance responsibility of the countermeasures when installed. However, appropriate risk management has been used to identify project those risks with the potential for cost overruns within the Risk Register. DCC can also use procurement frameworks to reduce procurement risk and manage delivery timeframes.

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

The full scope of work is yet to be defined as a feasibility and preliminary design are yet to be undertaken. The type of intervention may change from that currently being proposed affecting the timing of procurement and its installation cost. Some of the proposed countermeasures may detract from the views within the High Peak so consultation with the National Parks Association is essential to achieving a successful project. The rural location and lack of infrastructure will need more innovative solutions which may prove more costly. Early confirmation of funds is essential to aid planning, design and procurement of these measures in combination with other established and equally challenging programmes of work within the County Council.

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)

A BCR cannot be provided at this time as the feedback from the Road Safety Foundation is incomplete. This will have to follow when available. However, initial assessment of the User Defined Input Plan (UDIP) – see Appendix F suggests that some elements of the bid are equal to the investment needed (i.e. 1:1) while other interventions have a significant positive benefit (i.e. centre hatching 25:1; shoulder rumble strips 15:1 and obstruction removal 10:1). There is confidence that the overall BCR value will be at 2 or greater for the route overall.

There are no programmed maintenance works along the route; therefore the project will provide additional benefit for highway users.

The costs in B3 reflect construction costs, contingencies, risk, traffic management, design fees, Education, Training and Publicity Information. Note that traffic management costs are higher than normal reflecting the lack of suitable adjacent diversion routes. Similarly, design costs are anticipated to be higher to cover the technology element and relevant interfaces with utility companies for communication equipment and power supplies.

B7. The Commercial Case (Maximum 300 words)

DCC's section 151 officer confirms that a delivery strategy is in place for this scheme which is legally compliant and achieves best value outcomes.

The proposed countermeasures will be designed either in-house or by our professional services provider with DCC maintaining management and internal communication/liaison responsibilities. The professional services provider has already been through an EU compliant procurement process and can react quickly to service needs. A dedicated Project Manager will be appointed to oversee the design, procurement and installation processes.

DCC has a number of procurement options. The preference at this time is for work to be undertaken by DCC's in house provider, AllRoads. Depending on the value of the

countermeasures and the complexity of installation, work may also be tendered using 'Source Derbyshire' or a contractor may be appointed through DCC's membership of the Midlands Highways Alliance Medium Schemes Framework. Specialist providers will be sourced via the Crown Commercial Service Agreements. Only providers through the 'Source Derbyshire' route would need financial and quality assessment, the others having already pre-qualified through an EU compliant process with tenders evaluated on both Cost and Quality criteria.

No specific State Aid Compliant advice has been sought as it is generally accepted that the improvement of highway infrastructure by highway authorities does not constitute 'economic activity' providing that the infrastructure is open to all potential users on 'equal and non-discriminatory terms'. As the proposed countermeasures are improvements to the public highway with unfettered access to all members of society they meet these requirements and this effectively precludes the existence of State Aid.

B8. Management Case – Delivery (Maximum 300 words)

Deliverability is one of the essential criteria and, as such, any bid should set out if any statutory procedures are needed before it can be delivered.

a) An outline project plan (typically in Gantt chart form) with milestones should be included as an annex, covering the period from submission of the bid to scheme completion. The definition of the key milestones should be clear and explained. The critical path should be identifiable and any contingency periods, key dependencies (internal or external) should be explained. Successful schemes will be subject to quarterly monitoring to assess progress against milestones and to track spend.

Has a project plan been appended to your bid?

Yes, please see Appendix G. Note that the project spans two financial years and shows the establishment of the Project Board to oversee the delivery of this and other Safer Roads Fund projects. The expectation is that design and procurement of this project will be completed in one financial year and the countermeasures installed the following financial year. This is considered the most appropriate response so construction work can be completed in the summer months to discourage use of the route by the vulnerable user groups at these times and to aid construction activities. This will be the first of three Safer Roads Funded projects.

Due to the technology element and the County's desire not to have different speed camera suppliers for different routes, the speed camera procurement will be jointly undertaken with that for the A5012 Via Gellia.

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

Cllr Simon Spencer, DCC Leader, says 'The County Council is committed to reducing road casualties and welcomes the opportunity to take a holistic approach to A5004 route and using the Safer Roads Fund to provide comprehensive countermeasures along the route.'

Geoff Pickford, Service Director – Highways, says 'Reducing the number of collision casualties is a key objective of the County Council. Derbyshire is a popular destination for recreational users of all types with the A5004 providing a key connection to the northern part of the Peak District. Increasing the safety of the highway network is therefore essential to enable visitors and local communities to safely go about their day to day business. We welcome the opportunity to bid for funds from the Safer Roads Fund which will enable the County Council to

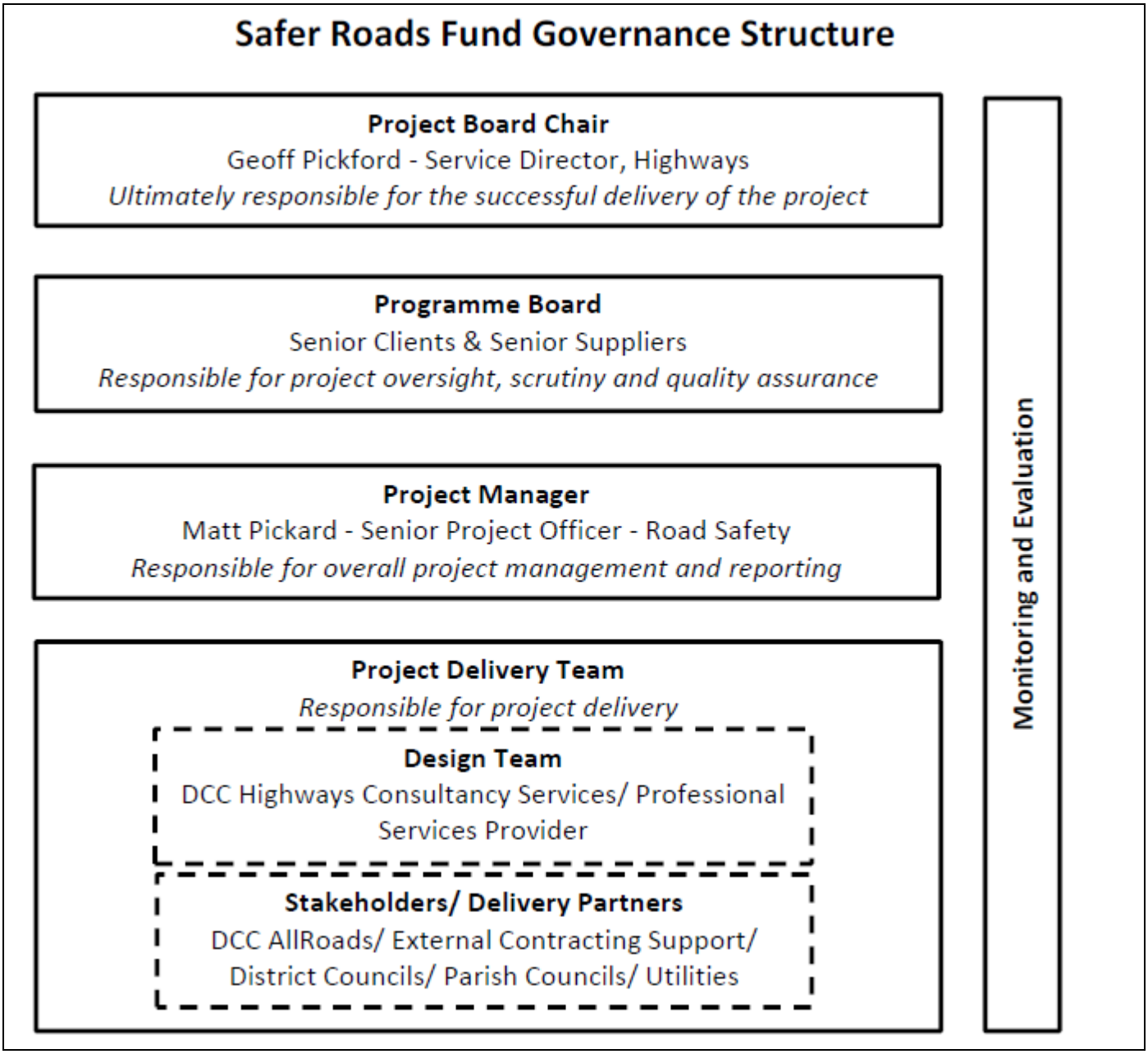
take a much needed holistic approach to the A5004 accident. The Safer Roads Fund will enable much needed investment along the route that will build in as many safety features as necessary and appropriate to reduce future collision statistics.' This aligns to the County Council's Highways vision of delivering a Safe and Reliable network.

B9. Management Case – Governance (maximum 300 words)

DCC has a strong history of managing the delivery of major highway and road safety projects. DCC has started to formalise its project management practices by training staff to PRINCE2 practitioner level and establishing Project Boards to define the scope of work and oversee project delivery. This will be one of the first projects to be set up under PRINCE2 principles and a dedicated Project Manager will be tasked with delivering the project and report to the Project Board on key project issues.

At a strategic level, Geoff Pickford will chair the Project Board comprising senior clients and providers. Matt Pickard, Senior Project Officer – Causality Reduction, will be or will appoint a Project Manager to oversee design, procurement and implementation and to report progress (against time and budget) back to the Project Board. Matt has sufficient authority and experience to ensure delivery of the proposed countermeasures.

The Project Manager will guide and coordinate the work of an integrated delivery team comprising a number of design and delivery teams that will liaise with stakeholders and other outside parties to design and deliver the project. Task Managers will be appointed for each programme element. All internal DCC teams are well versed at successfully designing road safety schemes and delivering projects while liaising with a range of internal and external stakeholders.



B10. Management Case – Risk Management

Risk management is an important control for all projects but this should be commensurate with cost. For projects where the costs exceed £100,000, a risk register covering the top 5 (maximum) specific risks to this scheme should be attached as an annex.

A Project Risk Register has been created for this project and assessed using P50 values. The Risk Register represents those risks associated with the installation of the countermeasures described and does not include for any risks associated with ongoing maintenance activities.

The top five project risks and their impact are repeated below:

A5004 Long Hill - Top Five Project Risks

Number	Risk Score	Risk	Risk Countermeasure
1	15	Power supplies may be needed for some installations (speed cameras) RISK: New utility supplies may not be present nearby requiring a supply to be provided over considerable distances and take a long time to programme Cost of installing power supplies may also be high given the hard ground and distances involved	Select speed camera locations where a power supply is located nearby. If not possible then consider other power sources with an eye to possible procurement options/ potential problems
2	15	RISK: If this project is undertaken in the last SRF funding year, there is a risk that work may not be completed before the funding timeframe expires	Aim to complete the installation and claim funds before the end of March 2021. Current understanding is that DCC can control the funding year this project will sit within, therefore it is under DCC's control to complete the work subject to design and contracting resources being available as described above.
3	15	RISK: Intervention failure where one or more of the safety measures may not work or have a perverse effect.	Design to be safety audited to give confidence that no new safety issues are created Consensus sought that the agreed measures will reduce collisions and injury severity prior to installation
4	12	RISK: The design, specification and installation of speed cameras are outside the design knowledge within DCC. Specialist advice will be needed from a limited pool of suppliers. RISK: DCC may be at risk of breaching procurement rules by approaching a single supplier RISK: DCC will need someone to 'sense check' the outputs supplied	Engage early with procurement as to the issues that may arise. CCS Framework may limit risks fo procurement while offering a route to specilist services but cabinet approval needed to use the framework Consider whether a mini-competition should be held to determine a suitable supplier against set criteria before appointing a sole supplier to design and specify this work
5	12	The National Parks Association and High Peak DC are likely to object to any infrastructure that detracts from the views of the Peak District alongside the A5004 based on past experience RISK: Both parties object to the form and number of safety features resulting in a reduction of safety measures installed	Seek engagement with both groups to overcome these objections

SECTION C – Monitoring, Evaluation and Benefits Realisation

C1. Benefits Realisation (maximum 250 words)

A statement of the likely benefits arising to costs expended is awaited from the Road Safety Foundation. This may have to follow the submission of this bid application. When received, an assessment of the benefits arising can be determined.

C2. Monitoring and Evaluation (maximum 250 words)

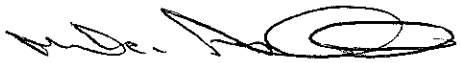
Casualty figures recorded after the project is implemented will be compared to the iRAP baseline data for the 2012-2014 period, as used in the initial scheme identification. As well as the absolute number of accidents, the annual rate may be compared if the AADT changes during the monitoring period. Statistical analysis may be used to identify the significance of reductions or increases. Definitive results may not reveal themselves fully for several years if the sample size is small.

Collision data will be monitored on an annual basis for three years after completion of the countermeasures. This will utilise police accident reports which the authority receives quarterly in arrears. Analysis will identify any problems or unexpected results to be investigated further.

Baseline speed surveys will be undertaken at high risk locations along the A5004 before work commences to allow the effectiveness of the countermeasures to be monitored. These will be repeated shortly after the installation has been completed and at intervals thereafter to determine long term effects.

Details of the overall success or otherwise of the countermeasures will be shared with the DfT or other appropriate parties on request. DCC will also participate in and contribute to forums aimed at sharing experience, knowledge and results of the project as requested or to provide a case study if the countermeasures are deemed a noteworthy success.

SECTION D: Declarations

D1. Senior Responsible Owner Declaration	
As Senior Responsible Owner for **A5012 Via Gellia Safer Roads Fund Improvements** I hereby submit this request for approval to DfT on behalf of **Derbyshire County Council** and confirm that I have the necessary authority to do so. I confirm that **Derbyshire County Council** will have all the necessary powers in place to ensure the planned timescales in the application can be realised.	
Name: **Mike Ashworth**	Signed: 
Position: **Service Director – Economy, Transport and Communities**	

D2. Section 151 Officer Declaration	
As Section 151 Officer for **Derbyshire County Council** I declare that the scheme cost estimates quoted in this bid are accurate to the best of my knowledge and that **Derbyshire 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: **Peter Handford** **Director of Finance & S151 Officer**	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

Appendix A: Location and Chainage Plan (with and without accident locations)

Appendix B: Collision Data 2012 to 2014 (Chainages 0 – 12.7km)

Appendix C: Past Schemes and Maintenance since 08 – 09

Appendix D: Education, Training and Publicity Information

Appendix E: Risk Register

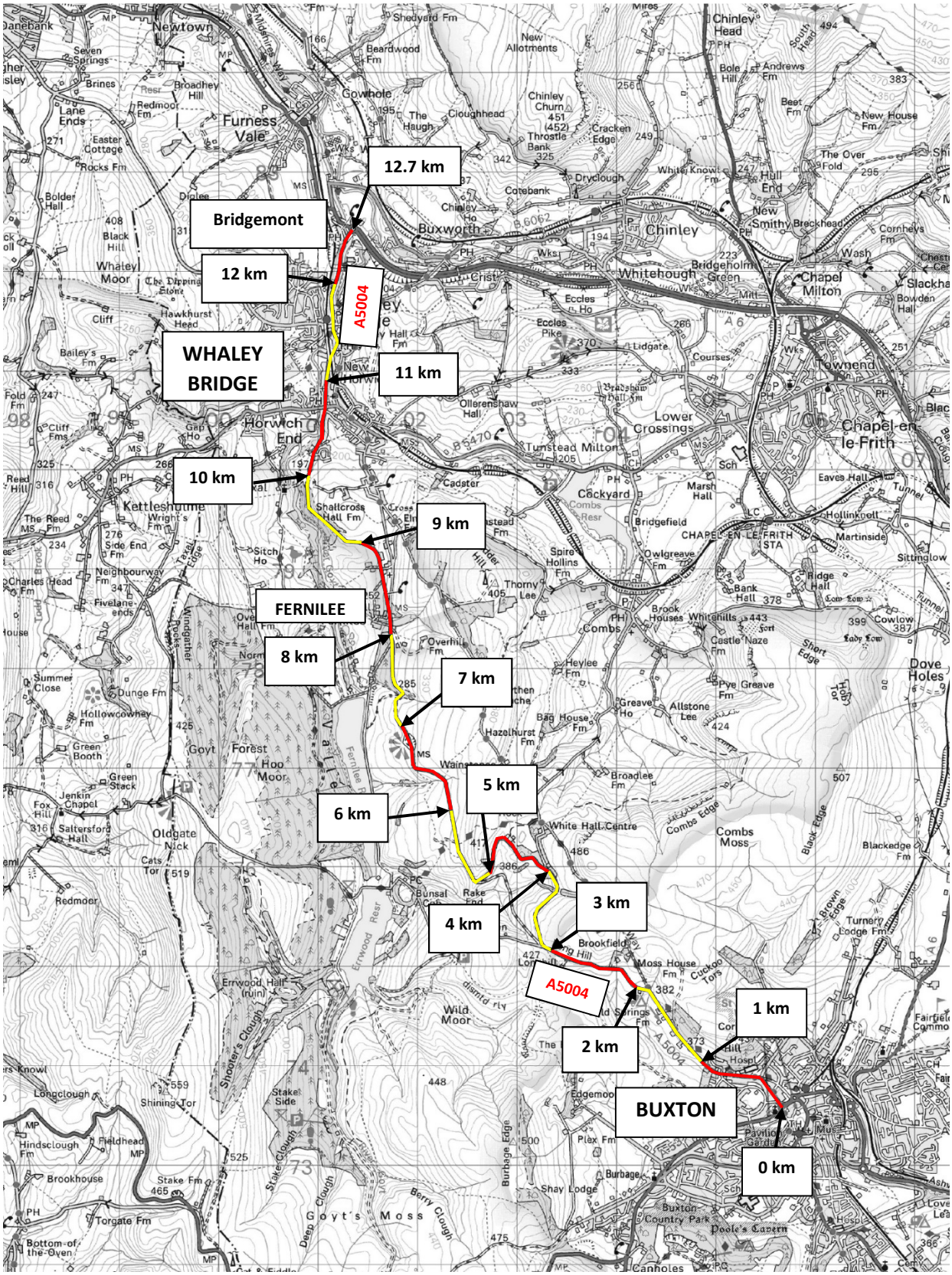
Appendix F: BCR Assessment

Appendix G: Project Plan

Appendix H: Letter of Support

Appendix A: Location and Chainage Plan (with and without accident locations)

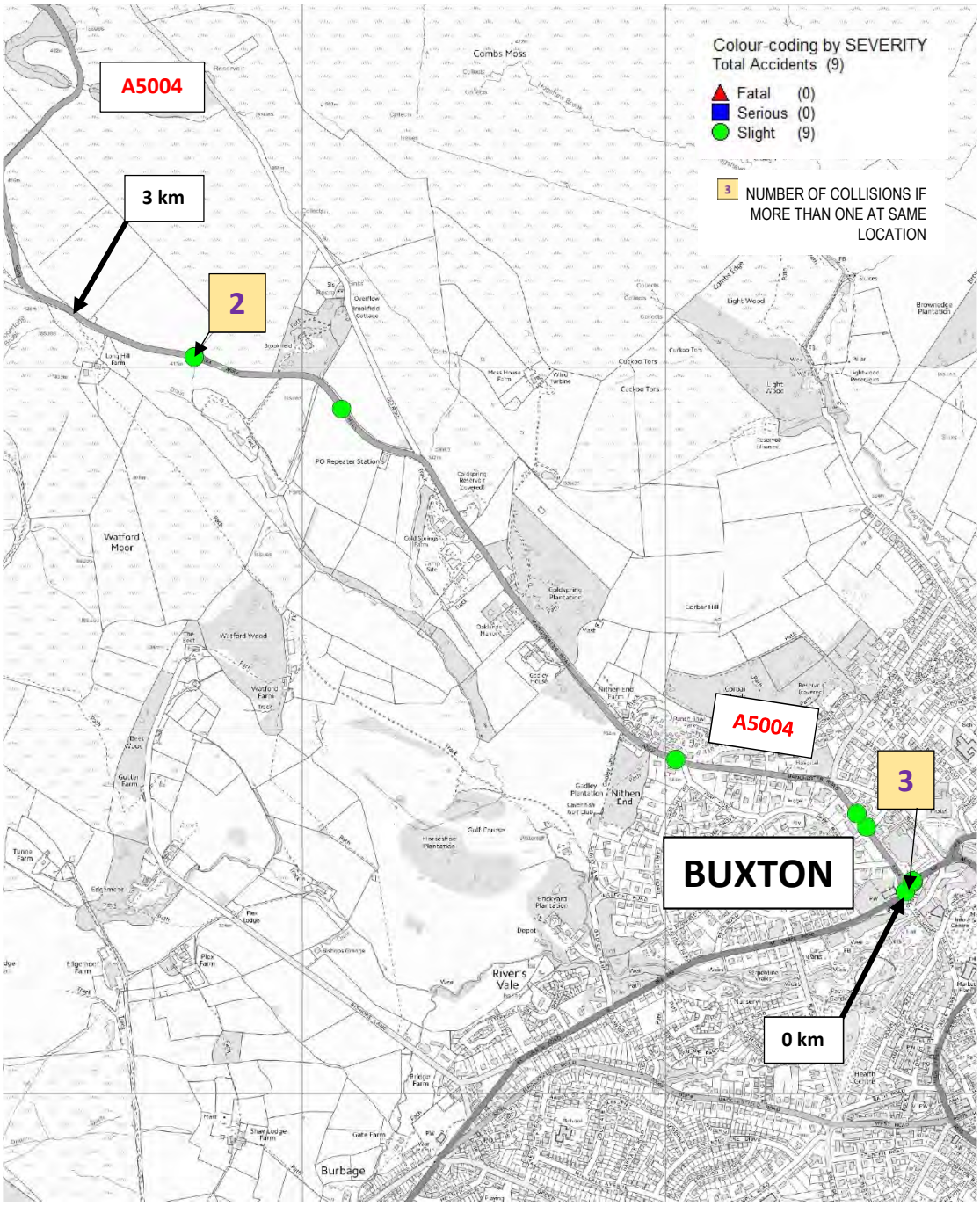
A5004 LONG HILL LOCATION AND CHAINAGE PLAN



A5004 Long Hill
Location and Chainage Plan

SCALE	NTS
DATE	29/09/2017
DRAWING No.	A5004-CP-01
DRAWN BY	AS

Appendix B: Collision Data 2012 to 2014 (Chainages 0 – 12.7km)



Year	Collisions	
2012	4	
2013	3	Total
2014	2	9

Severity	Collisions
Fatal	0
Serious	0
Slight	9

Time of Day	Number	Time of Day	Number
00:00 - 6am	2	12 noon - 4pm	3
6am -9am	1	4pm - 7pm	2
9am - 12 noon	1	7pm - 00:00pm	0

Collisions in darkness		DCC Average
No	%	%
2	22%	26%

Collisions on Wet Road surface		DCC Average
No	%	%
3	33%	32%

Road User Casualties	Number	%	DCC Average %
Pedestrians	0	0%	10%
Motorcyclists	1	8%	10%
Pedal Cyclists	2	15%	7%
Car/Taxi Users	10	77%	67%
Young Car Drivers 17-25 years	2	15%	11%
Older Car Drivers over 60	1	8%	7%
Goods Vehicle Users	0	0%	1%

Day of Week						
Sat	Sun	Mon	Tues	Wed	Thurs	Friday
2	2	0	1	1	2	1

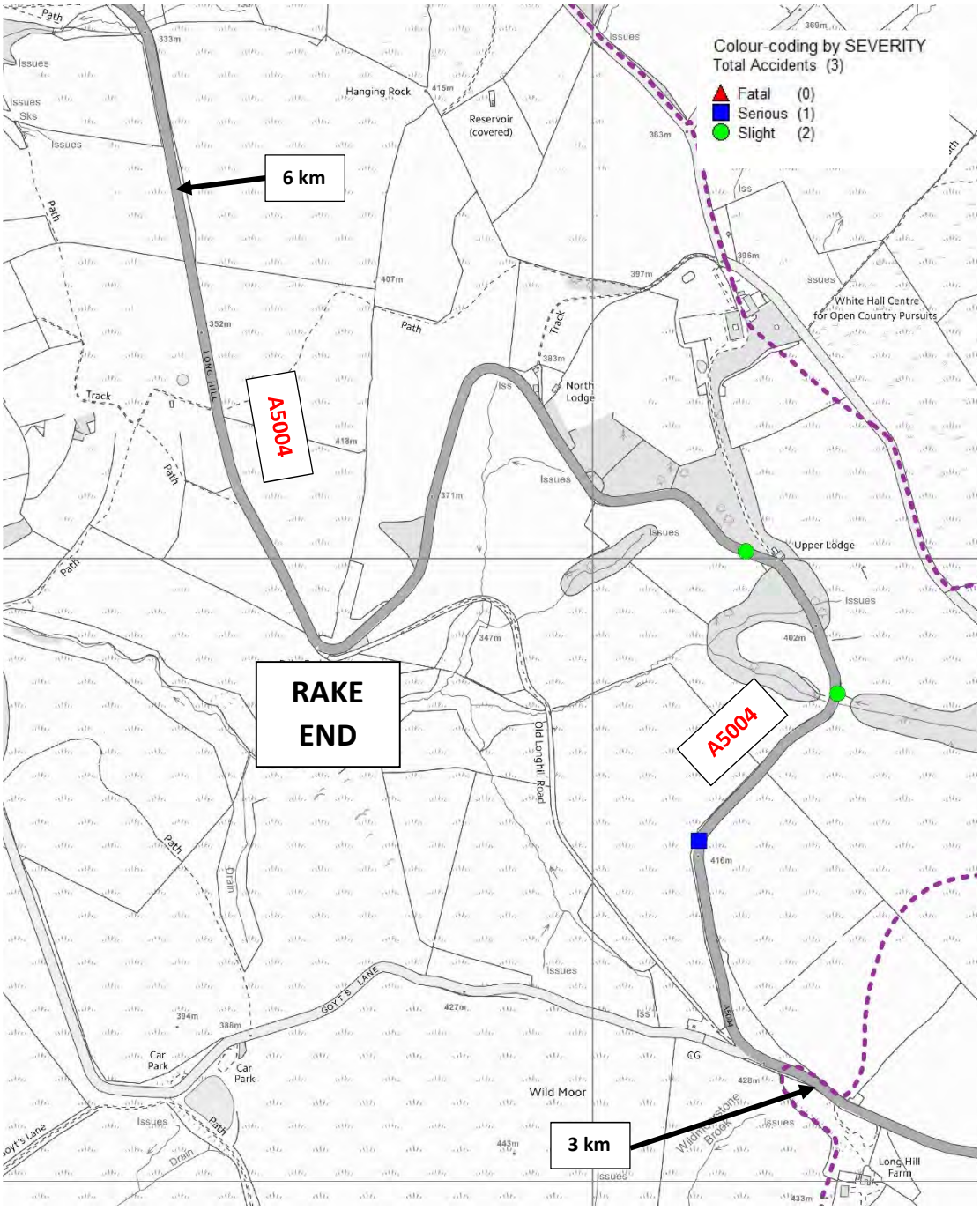
Month											
Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0	1	0	2	2	0	1	1	1	0	0

A5004 Long Hill

Collision Data 2012 to 2014

Chainage 0 to 3 km

SCALE	NTS
DATE	29/09/2017
DRAWING No.	A5004-AP-01
DRAWN BY	AS



Year	Collisions	
2012	1	
2013	1	Total
2014	1	3

Severity	Collisions
Fatal	0
Serious	1
Slight	2

Time of Day	Number	Time of Day	Number
00:00 - 6am	1	12 noon - 4pm	1
6am -9am	1	4pm - 7pm	0
9am - 12 noon	0	7pm - 00:00pm	0

Collisions in darkness		DCC Average
No	%	%
1	33%	26%

Collisions on Wet Road surface		DCC Average
No	%	%
2	67%	32%

Road User Casualties	Number	%	DCC Average %
Pedestrians	1	33%	10%
Motorcyclists	1	33%	10%
Pedal Cyclists	0	0%	7%
Car/Taxi Users	1	33%	67%
Young Car Drivers 17-25 years	0	0%	11%
Older Car Drivers over 60	0	0%	7%
Goods Vehicle Users	0	0%	1%

Day of Week						
Sat	Sun	Mon	Tues	Wed	Thurs	Friday
0	2	0	1	0	0	0

Month											
Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
0	0	0	1	0	0	0	0	1	0	1	0

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A5004 Long Hill

Collision Data 2012 to 2014

Chainage 3 to 6 km

SCALE	NTS
DATE	29/09/2017
DRAWING No.	A5004-AP-02
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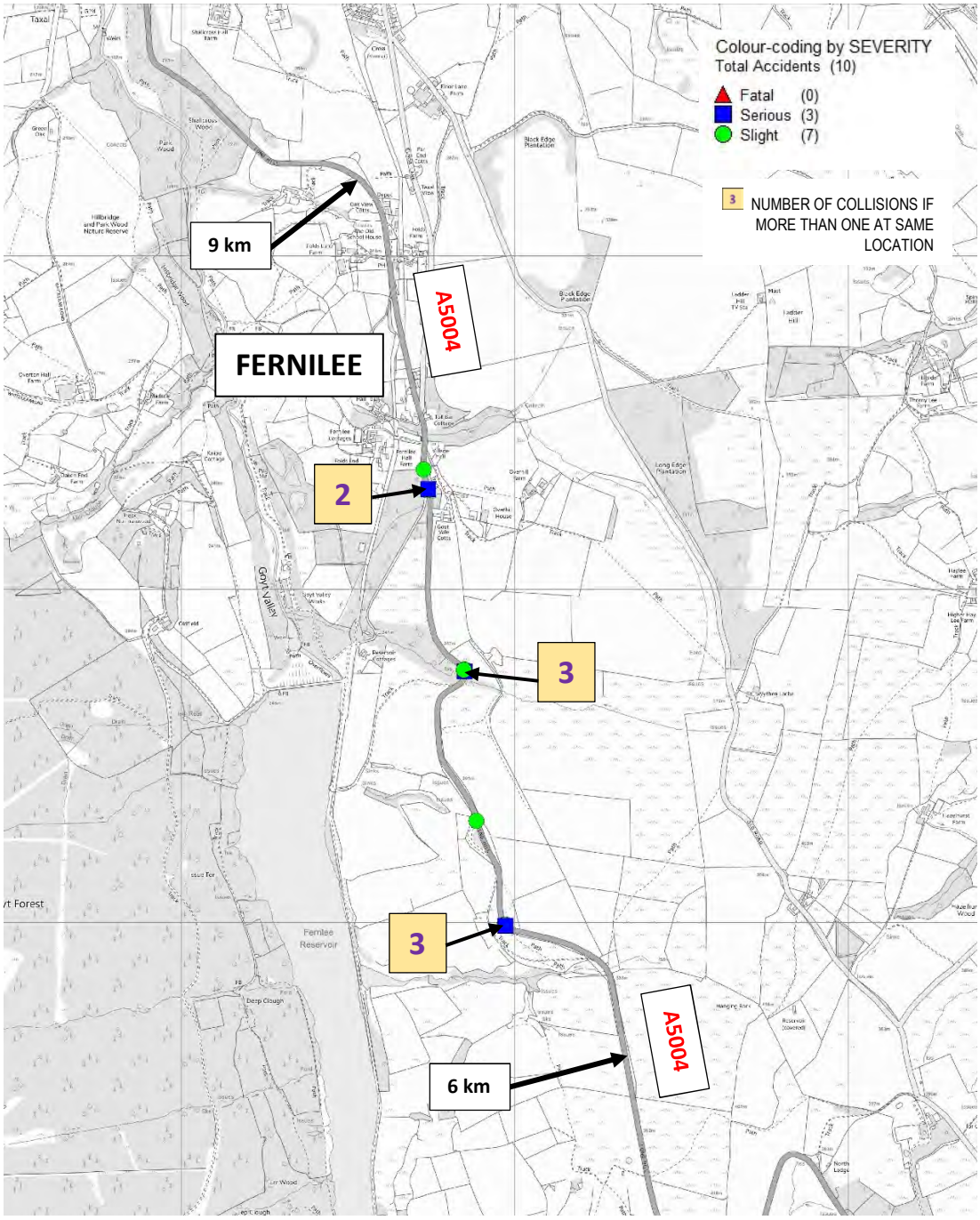

Year	Collisions	
2012	6	
2013	2	Total
2014	2	10

Severity	Collisions
Fatal	0
Serious	3
Slight	7

Time of Day	Number	Time of Day	Number
00:00 - 6am	2	12 noon - 4pm	3
6am -9am	0	4pm - 7pm	2
9am - 12 noon	1	7pm - 00:00pm	2

Collisions in darkness		DCC Average
No	%	%
4	40%	26%

Collisions on Wet Road surface		DCC Average
No	%	%
3	30%	32%

Road User Casualties	Number	%	DCC Average %
Pedestrians	0	0%	10%
Motorcyclists	7	37%	10%
Pedal Cyclists	1	5%	7%
Car/Taxi Users	11	58%	67%
Young Car Drivers 17-25 years	3	16%	11%
Older Car Drivers over 60	0	0%	7%
Goods Vehicle Users	0	0%	1%

Day of Week						
Sat	Sun	Mon	Tues	Wed	Thurs	Friday
1	3	2	2	1	1	0

Month											
Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
0	0	0	0	0	0	2	3	1	2	1	1

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A5004 Long Hill

Collision Data 2012 to 2014

Chainage 6 to 9 km

SCALE	NTS
DATE	29/09/2017
DRAWING No.	A5004-AP-03
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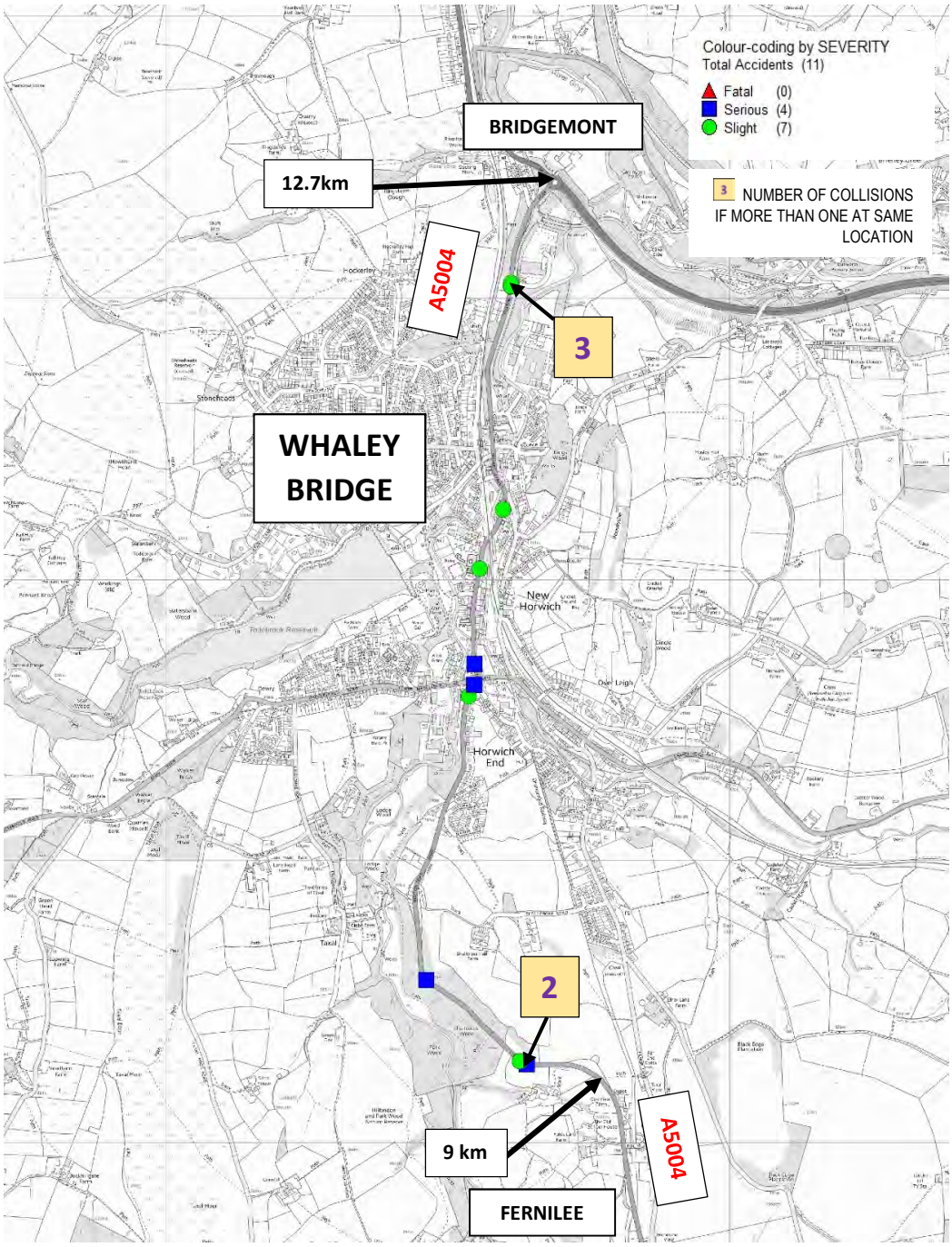

Year	Collisions	
2012	7	
2013	0	Total
2014	4	11

Severity	Collisions
Fatal	0
Serious	4
Slight	7

Time of Day	Number	Time of Day	Number
00:00 - 6am	0	12 noon - 4pm	6
6am -9am	0	4pm - 7pm	4
9am - 12 noon	1	7pm - 00:00pm	0

Collisions in darkness		DCC Average
No	%	%
2	18%	26%

Collisions on Wet Road surface		DCC Average
No	%	%
4	36%	32%

Road User Casualties	Number	%	DCC Average %
Pedestrians	0	0%	10%
Motorcyclists	2	15%	10%
Pedal Cyclists	1	8%	7%
Car/Taxi Users	8	62%	67%
Young Car Drivers 17-25 years	3	23%	11%
Older Car Drivers over 60	2	15%	7%
Goods Vehicle Users	0	0%	1%

Day of Week						
Sat	Sun	Mon	Tues	Wed	Thurs	Friday
3	0	2	0	0	3	3

Month											
Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
1	1	1	0	2	2	1	1	1	1	0	0

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A5004 Long Hill

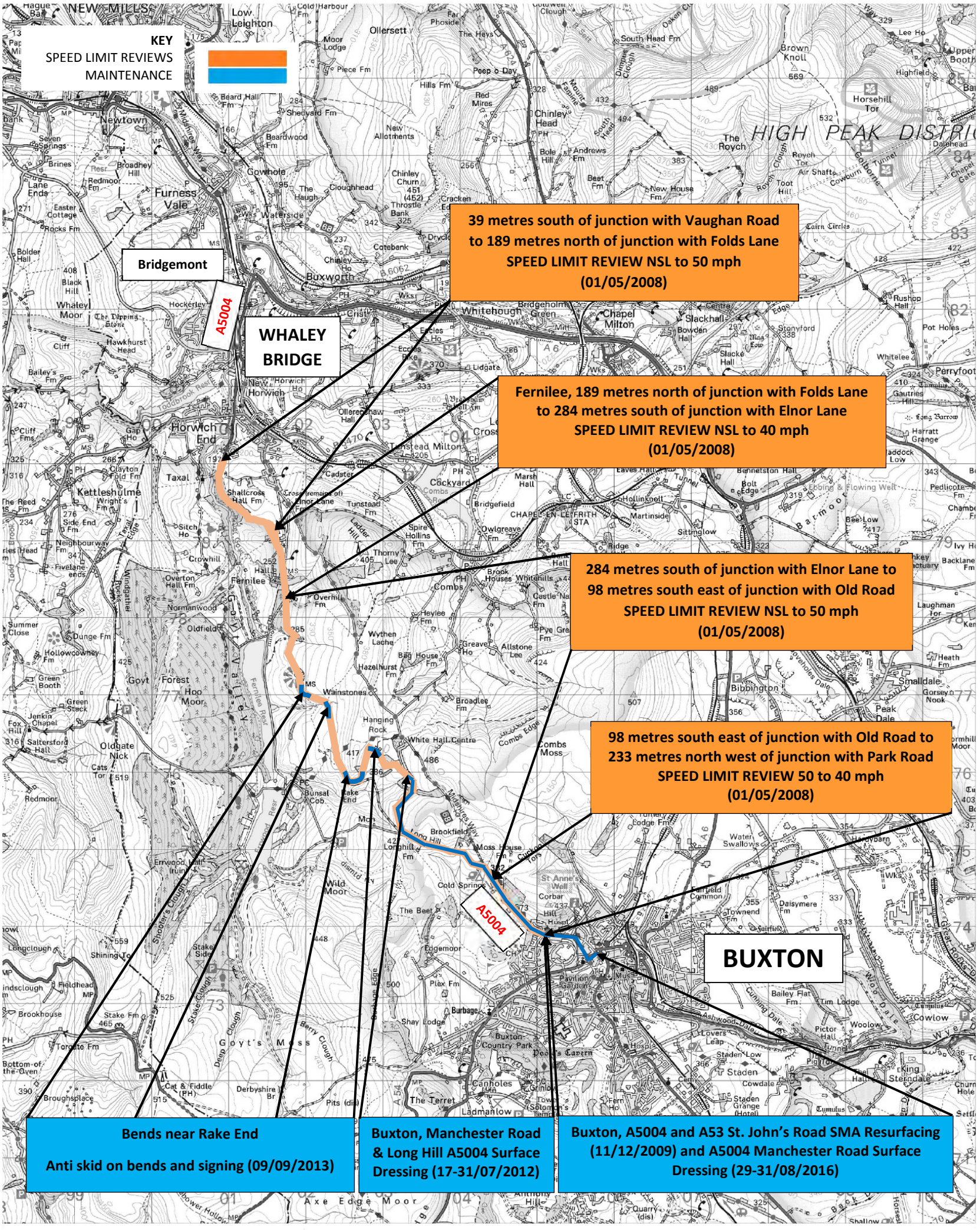
Collision Data 2012 to 2014

Chainage 9 to 12.7 km

SCALE	NTS
DATE	29/09/2017
DRAWING No.	A5004-AP-04
DRAWN BY	AS

Appendix C: Past Schemes and Maintenance since 08 – 09

A5004 LONG HILL PAST SCHEMES AND MAINTENANCE SINCE 2008/2009

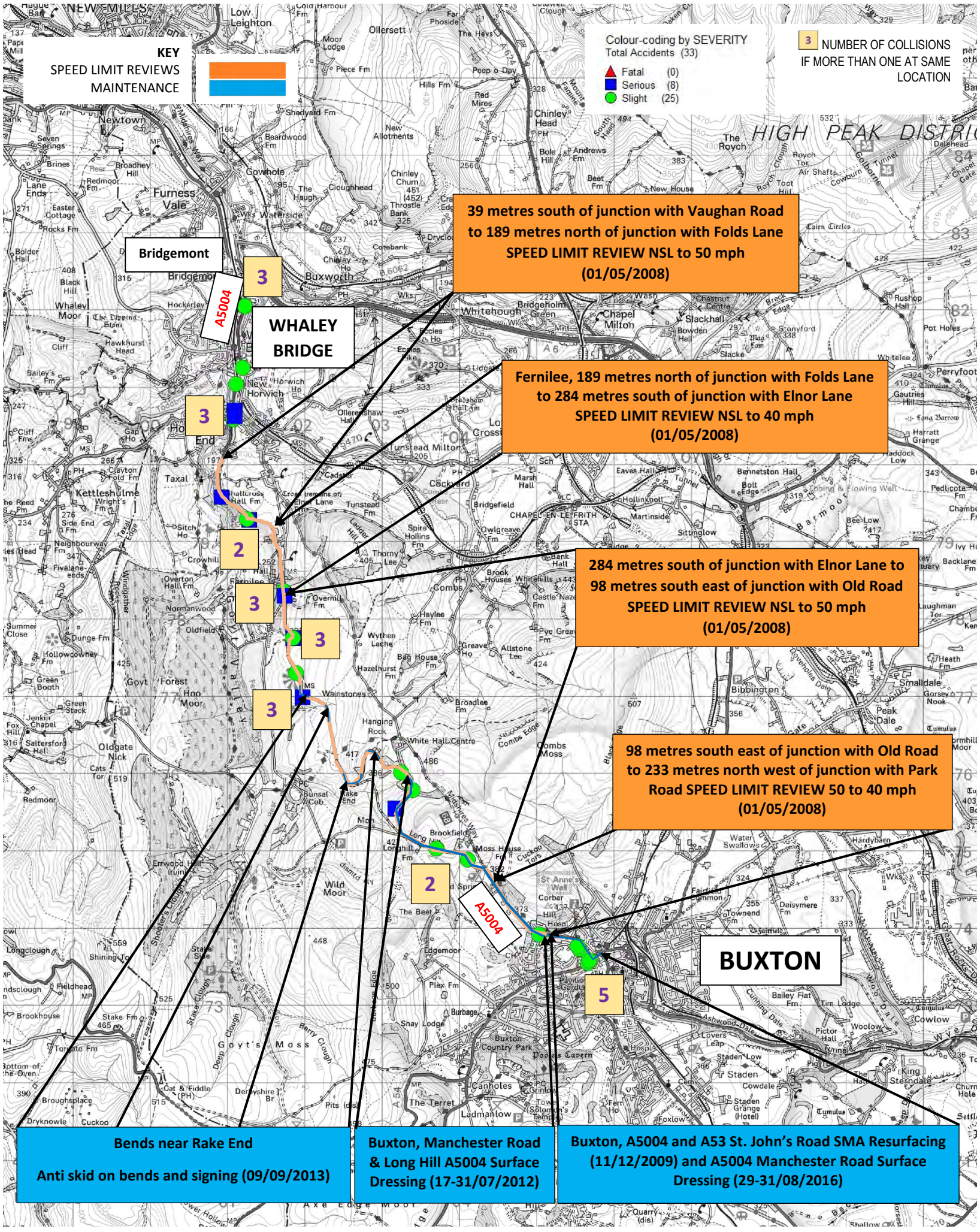


SCALE	NTS
DATE	29/09/2017
DRAWING No.	A5004-SP-01
DRAWN BY	AS

A5004 LONG HILL
PAST SCHEMES AND
MAINTENANCE SINCE 2008-2009

A5004 LONG HILL PAST SCHEMES AND MAINTENANCE SINCE 2008/2009

SHOWING COLLISIONS 01/01/2012 to 31/12/2014



DERBYSHIRE County Council Improving life for local people	A5004 LONG HILL PAST SCHEMES AND MAINTENANCE SINCE 2008-2009 SHOWING COLLISIONS 01/01/2012 to 31/12/2014	SCALE	NTS
		DATE	29/09/2017
		DRAWING No.	A5004-SP-02
		DRAWN BY	AS

Appendix D: Education, Training and Publicity Information

A5004 Long Hill Education, Training and Publicity Information

Derbyshire County Council is the lead partner of the Derby and Derbyshire Road Safety Partnership (DDRSP). DDRSP has a track record of effective and innovative education, training and publicity interventions which have played a significant part in the casualty reduction across the roads of Derbyshire since its inception. These include the effective use of high risk signing on roads with high motorcycle casualties, and the Young Driver Education Programme (YDEP) which was awarded a Prince Michael International Road Safety award in 2016.

We also provide rider and driver training interventions for motorcyclists either subsidising training or providing it ourselves these include:

CBT+ (enhanced compulsory basic training for new motorbike riders)
Enhanced Rider Scheme (more experienced motorbike riders)
Learn Safe Drive Safe (drivers whilst learning to drive)
First Gear (pre-driving workshops for 15 to 17 year olds)
YDEP (behaviour change workshops in secondary schools)
Driving Safer for Longer (workshops to support drivers 65+ to continue driving safer)
County Rider (adult pedal cycle training)

In 2006 we introduced the use of temporary signing in the summer months on routes that are high risk for motorcycles. That demonstrated in the first two years a reduction of over 28% in motorcycle collisions against both control routes and the rest of the road network. In subsequent years this has developed into a comprehensive programme over the summer months including the introduction of a Bikers Guide to the high risk routes. The A5004 has featured in this guide and as part of the summer campaign addressing leisure motorcycle casualties.

Working with the Derbyshire Constabulary and the Derbyshire Fire and Rescue Service, two of the main partner agencies, we propose the following in the programme as part of the holistic approach taken in the measures to improve safety on the A5004;

1. High risk route temporary signing to raise awareness of those groups most vulnerable on the road, such as motorcycles, and the significant proportion of casualties amongst road users from outside the local area. These will raise awareness of hot spot locations, and will be rotated along the route to continually present a ‘fresh face’. £6,000

2. Targeted media engagement to raise awareness of the road’s risks. In the case of the A5004 this will include via the established network of motorcycle dealers, trainers and advocate groups we already work with. These will both highlight the risks and signpost to our existing rider and driver training programmes. £15,000

3. Route video recording using ‘360’ technology. The recording can then be used to highlight risks, improve driving and riding and engage thoroughly with targeted groups. The immersive nature of the experience allows unparalleled opportunities to engage with target groups, whether they are older drivers, motorcyclists or young drivers. The videos can be used at group interventions, or at public events where they can be accessed via free sites (YouTube) in conjunction with inexpensive giveaway headsets. The funding will purchase hardware and the video recording. £25,000

Total Cost: £46,000

Appendix E: Risk Register

A5004 Long Hill - Risk Register

A5004 Long Hill Safer Roads Fund
Project Risk Log

Risk No (Identifier)	Date Raised	Risk Type - category	Reference Programmed activity	Full Description of Risk (including impact)	Cost Impact Score	Time Impact Score	Quality Impact Score	Highest Impact Score	Probability Score	Risk Ranking	Proposed Response Action (countermeasure)	Current Position	Action Owner	Date Last Reviewed	Next Review	Status (open/closed)	Minimum Range Cost £	Maximum Range Cost £	Most Likely Cost £	Probability %	Risk Amount £
1	Sep '17	Stakeholder	Preliminary & Detailed Design	The National Parks Association and High Peak DC are likely to object to any infrastructure that detracts from the views of the Peak District alongside the A5004 based on past experience RISK: Both parties object to the form and number of safety features resulting in a reduction of safety measures installed	M	H	H	H	M	12	Seek engagement with both groups to overcome these objections	Identify the types of treatments at preliminary design and commence discussions with both groups	To be discussed	Sep '17	TBA	Open			£ 5,000	50%	£ 2,500
2	Sep '17	Stakeholder	Availability of Design Resource	RISK: Conflicting pressures on various design programmes delivered by the internal design team delaying design and procurement	M	H	M	H	M	12	Identify a dedicated design resource and ensure design resource is available from internal or external sources	Identify the complete programme(s) of work to be delivered by the design team early and brief any surplus to the eternal Professional Services Provider	To be discussed	Sep '17	TBA	Open			-	-	-
3	Sep '17	Environmental	Weather	The route is in the High Peak area and is therefore susceptible to poor and changeable weather conditions, particularly in winter. RISK: Installation could be delayed if in done during winter time/ early spring	L	M	M	M	M	9	Aim for installation during the summer months. Therefore, the design should be completed in the preceding winter time or early spring.	Check the programming of this project and seek re-appraisal if a summer construction period is not available	To be discussed	Sep '17	TBA	Open			-	-	-
4	Sep '17	Construction	Traffic Management	Traffic management causes significant delays to the travelling public, particularly during holiday periods Road closures will lead to lengthy diversion routes as few adjacent routes exist - likely diversion is via the A6	M	M	VL	M	M	9	Assess options for traffic management when measures to be installed identified. Aim to keep road closures to a minimum to avoid lengthy diversion routes.	Scope of works to be installed yet to be determined. When determined, traffic management effects to be determined. Examine the likely construction programme to avoid holiday periods if possible	To be discussed	Sep '17	TBA	Open			£ 80,000	50%	£ 40,000
5	Sep '17	Construction	Rock/ Hard Ground	The installation will be undertaken in the Peak District where rock/ hard ground is encountered beneath a shallow layer of topsoil. RISK: Delays associated with excessive hard ground for installation of new infrastructure	VH	VH	L	VH	M	15	Assess the ground conditions during the preliminary design and bill the works accordingly	Determine the most appropriate GI to undertake and instruct work to coordinate with the design programme	To be discussed	Sep '17	TBA	Open			£ 40,000	50%	£ 20,000
6	Sep '17	Construction	Availability of Contracting Resource	RISK: Delays associated with the procurement of additional contracting resource should AllRoads not be able to install the safety measures. Delays also with procuring the new contracting resource	M	M	M	M	M	9	Agree with AllRoads whether or not they have capacity and if they do build into their programme of work. If they don't, agree with DCC Procurement as to options for appointing an external resource	Keep AllRoads advised of the programme timescales and ensure that they are resourced to undertake the work	To be discussed	Sep '17	TBA	Open			£ 20,000	50%	£ 10,000
7	Sep '17	Design Technical	Specialist Suppliers	RISK: The design, specification and installation of speed cameras are outside the design knowledge within DCC. Specialist advice will be needed from a limited pool of suppliers. RISK: DCC may be at risk of breaching procurement rules by approaching a single supplier RISK: DCC will need someone to 'sense check' the outputs supplied	H	M	H	H	M	12	Engage early with procurement as to the issues that may arise. CCS Framework may limit risks fo procurement while offering a route to specilist services but cabinet approval needed to use the framework Consider whether a mini-competition should be held to determine a suitable supplier against set criteria before appointing a sole supplier to design and specify this work	Design Manger to consider implications and liaise with procurement. Procurement of the specialist supplier to be factored into the design programme Someone with suitable skills to be engaged to 'sense check'	To be discussed	Sep '17	TBA	Open			£ 15,000	50%	£ 7,500
8	Sep '17	Client	Cost Variations	RISK: Costs may change (increase) between preparing the SRF bid and the time of installation, particularly if other local authorities are installing similar measures elsewhere	L	VL	L	L	M	6	Allow a contingency to cover inflation effects Try and purchase cost sensitive equipment early to avoid inflationary effects.	Should be able to include a contingency item in the SRF bid to cover inflationary effects Yet to determine if opportunities arise to purchase equipment up front to limit inflationary effects	To be discussed	Sep '17	TBA	Open			£ 60,000	50%	£ 30,000
9	Sep '17	Client	Availability of Suitable Power Supplies	Power supplies may be needed for some installations (speed cameras) RISK: New utility supplies may not be present nearby requiring a supply to be provided over considerable distances and take a long time to programme Cost of installing power supplies may also be high given the hard ground and distances involved	VH	VH	L	VH	M	15	Select speed camera locations where a power supply is located nearby. If not possible then consider other power sources with an eye to possible procurement options/ potential problems	Obtain utility information early to identify options for power supplies. Consider if solar or wind power is a suitable alternative option Consider if a fuel cell is an option - note; may take us along the line of a single supplier, see risk 7	To be discussed	Sep '17	TBA	Open			£ 100,000	50%	£ 50,000
10	Sep '17	Client	Vandalism of Installed Safety Features	RISK: Speed cameras may be vandalised by those opposed to such measures	L	L	L	L	M	6	Select equipment that is less prone to vandalism Designer to select locations where stopping to vandalise equipment is limited	Designer to consider susceptibility of equipment to vandalism and make design choices with this in mind Designer to consider speed camera locations where access is limited	To be discussed	Sep '17	TBA	Open			£ 20,000	50%	£ 10,000
11	Sep '17	Client	Telephone Signals/ Communications	RISK: Communication signals using mobile devices is limited in the High Peak area. Speed cameras may need to be hard wired rather than rely on mobile signals. Installation costs will therefore be higher.	H	M	H	H	M	12	Determine the options for achieving comms connections from speed camera suppliers and design the works accordingly Alternatively seek a D & B lump sum from the camera suppliers	Assess signal strength for mobile devices in various weather conditions or seek specialist advice from providers Assess options for hard wired connections	To be discussed	Sep '17	TBA	Open			£ 20,000	50%	£ 10,000
12	Sep '17	Client	Land Acquisition	RISK: Installation of the safety measures may require land not in the control of the highway authority creating delays while negotiations for purchase or consent takes place	M	H	M	H	M	12	Aim to install all measures within the adopted highway limits. If installation work is required on private land, identify the land owner and commence engagement over land purchase	Designer to assess the impact of the safety installations and potential land ownership issues Issues to be reported back to the Programme Board for action, decision and instruction to DCC Estates Dpt.	To be discussed	Sep '17	TBA	Open			£ 25,000	50%	£ 12,500
13	Sep '17	Client	Construction Completion	RISK: If this project is undertaken in the last SRF funding year, there is a risk that work may not be completed before the funding timeframe expires	VH	H	H	VH	M	15	Aim to complete the installation and claim funds before the end of March 2021. Current understanding is that DCC can control the funding year this project will sit within, therefore it is under DCC's control to complete the work subject to design and contracting resources being available as described above.	Programme Board decision to be made as to which programme year this project will sit Design and contracting programmes to be coordinated so that the work does not overrun and all monies claimed by March 2021	To be discussed	Sep '17	TBA	Open			£ 50,000	50%	£ 25,000

Job No: TBC

A5004 Long Hill - Risk Register

Risk No (Identifier)	Date Raised	Risk Type - category	Reference Programmed activity	Full Description of Risk (including impact)	Cost Impact Score	Time Impact Score	Quality Impact Score	Highest Impact Score	Probability Score	Risk Ranking	Proposed Response Action (countermeasure)	Current Position	Action Owner	Date Last Reviewed	Next Review	Status (open/closed)	Minimum Range Cost £	Maximum Range Cost £	Most Likely Cost £	Probability %	Risk Amount £
14	Sep '17	Client	Poor Collision Statistics Post Completion	RISK: Failure of the safety measures to impact on collision statistics or injury severity - SRF money could be clawed back?	VL	VL	VL	VL	M	3	Clawback is unlikley and DfT accept that some interventions may nto affect collision statistics. However, design to be safety audited to give confidence that no new safety issues are created Consensus sought that the agreed measures will reduce collisions and injury severity prior to installation	Safety audits to be undertaken throughout the project period	To be discussed	Sep '17	TBA	Open			-	-	-
15	Sep '17	Client	Maintenance of Completed Works	Future maintenance costs may exceed available budgets (mainly the speed cameras, but that might cover other areas too)	H	L	H	H	M	12	Include an element for whole life cost within the SRF bid and how this can be presented to ensure payment up front and within the funding window. If not, identify suitable budgets for future maintenance and agree internal support or seek cabinet approval for expenditure.	Determine likely costs for maintenance over whole life. Determine the budget that this is likely to come from and agree support from the budget holder.	To be discussed	Sep '17	TBA	Open			£ 50,000	50%	£ 25,000
16	Sep '17	Client	Poor Collision Statistics Post Completion	RISK: High risk road users will move to other routes and the collisions types and severity do not reduce within the County, they just move to a different location.	VL	VL	VL	VL	M	3	Prepare baseline information on adjacent routes between Buxton and Whaley Bridge/ Manchester	Accident records are already taken for adjacent routes so baseline information can be prepared to coincide with the completion of the installation of these safety measures	To be discussed	Sep '17	TBA	Open			£ -	50%	£ -
17	Sep '17	Client	Poor Collision Statistics Post Completion	RISK: Intervention failure where one or more of the safety measures may not work or have a perverse effect.	VH	L	L	VH	M	15	Design to be safety audited to give confidence that no new safety issues are created Consensus sought that the agreed measures will reduce collisions and injury severity prior to installation	Safety audits to be undertaken throughout the project period and accident statistics monitored post completion	To be discussed	Sep '17	TBA	Open			£ 50,000	50%	£ 25,000
Opportunities																					

Risks identified and assessed in accordance with methodology given in HA "Risk Management Manual Version 1.7" dated 27 Nov 2008.

£ -	£ -	Foreseeable Risk Budget	£ 267,500
		Percentage of total Max. risk cost	#DIV/0!

Appendix F: BCR Assessment (Pending)

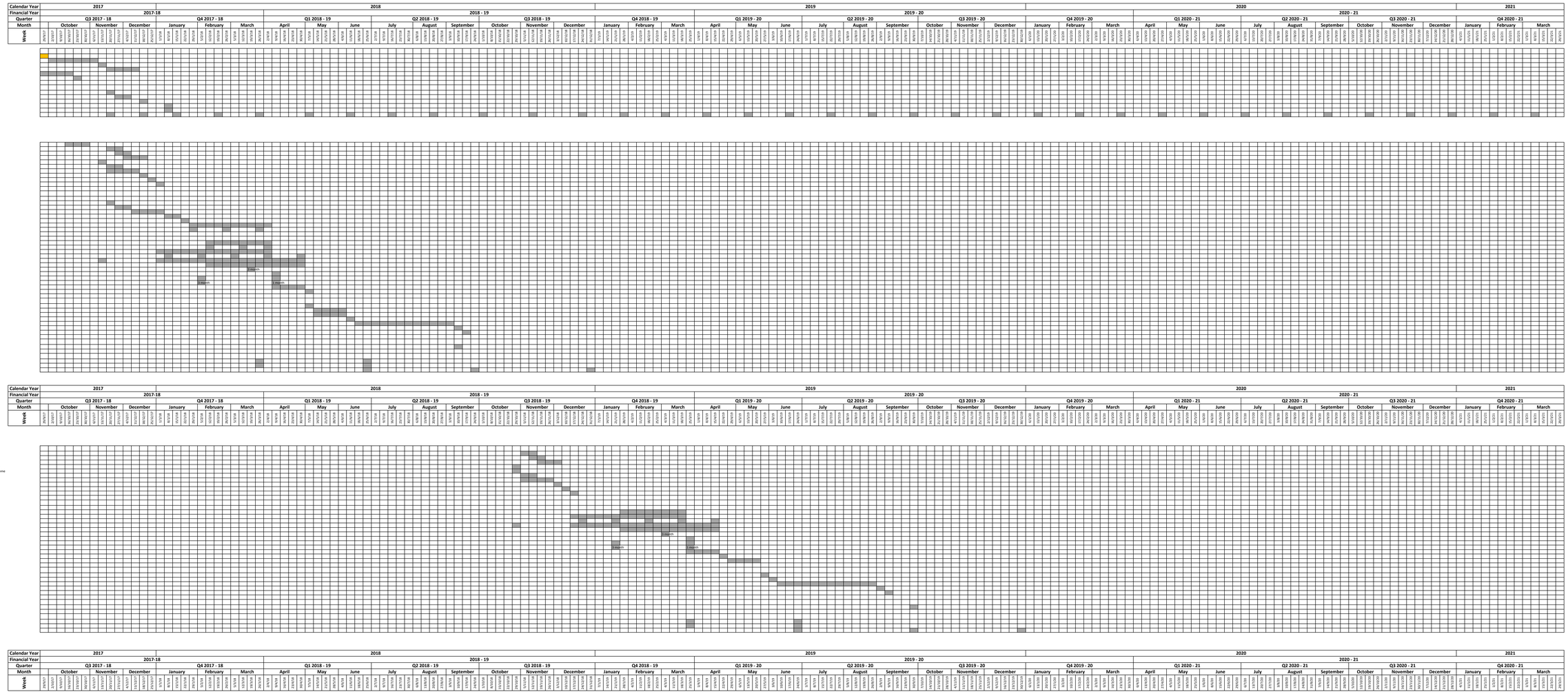
A5004 Long Hill - UDIP Outputs & BCR Assessment

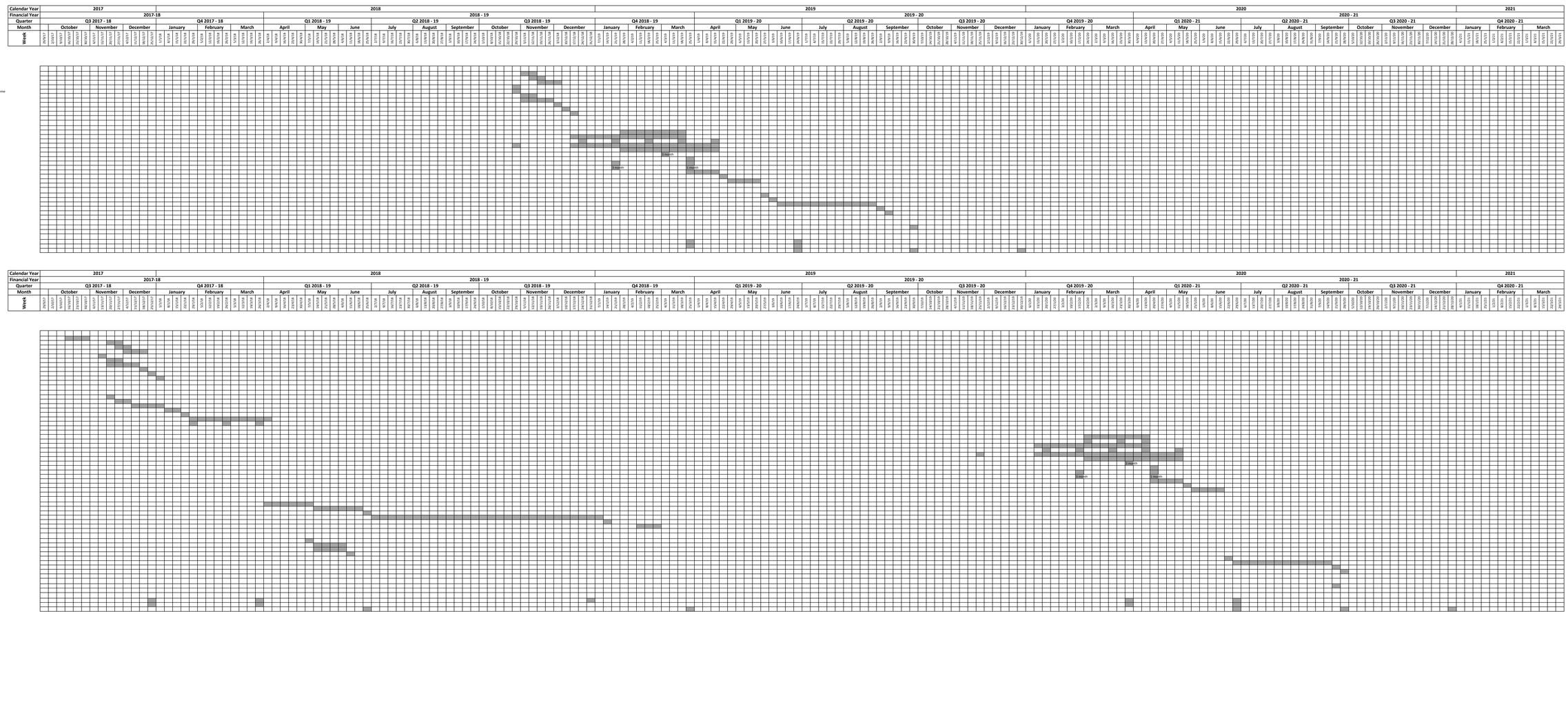
	FSIs Saved	PV of Saftey benefits	Estimated cost	Estimated DCC Costs	Cost per FSI saved	Program BCR
All Countermeasures	47.0	9 378 651	8 437 013	**2 540 000**	179 723.	1.0

Countermeasure	**Length**	**FSIs Saved**	**PV of Saftey benefits**	**Estimated cost**		**Cost per FSI saved**	**Program BCR**
Vertical realignment (major)							
Realignment (sight distance improvement)							
Horizontal Realignment	**0.8 km**	**6**	**1,102,072**	**815,862**	**600,000**	**147,898**	**1**
Duplicate - >20m median							
Duplicate - 10-20m median							
Duplicate - 5-10m median							
Duplicate - 1-5 m median							
Duplicate - <1m median							
Duplication with median barrier							
Service road							
Additional lane (2 + 1 road with barrier)							
Implement one way network							
Overtaking lane							
Grade separation							
Central median barrier (no duplication)							
Central turning lane full length							
Central median barrier (1+1)							
Centreline rumble strip / flexi-post							
Central hatching	**0.6 km**	**1**	**227,835**	**9,023**	**5,000**	**7,912**	**25**
Wide centreline							
Motorcycle Lane (Segregated)							
Motorcycle Lane (Construct on-road)							
Motorcycle Lane (Painted logos only on-road)							
Lane widening (>0.5m)							
Lane widening (up to 0.5m)							
Shoulder sealing passenger side (>1m)	6.9 km	4	892,464	543,480	1,380,000	121,660	2
Shoulder sealing passenger side (<1m)							
Shoulder sealing driver side (>1m)	8 km	4	874,845	627,032	1,600,000	143,190	1
Shoulder sealing driver side (<1m)							
Shoulder rumble strips	**7.8 km**	**10**	**1,939,476**	**125,565**	**46,800**	**12,934**	**15**
Roadside barriers - driver side	**0.8 km**	**3**	**510,781**	**217,500**	**40,000**	**85,071**	**2**
Roadside barriers - passenger side	**1.7 km**	**6**	**1,201,636**	**460,900**	**85,000**	**76,628**	**3**
Clear roadside hazards - driver side							
Clear roadside hazards - passenger side	**0.1 km**	**0**	**66,164**	**20,698**	**1,000**	**62,496**	**3**
Sideslope improvement - driver side	**0.9 km**	**2**	**431,263**	**3,561,022**	**45,000**	**1,649,637**	**0**
Sideslope improvement - passenger side							
Roundabout							
Pave road surface							
Road surface rehabilitation	**0.6 km**	**0**	**78,449**	**73,764**	**144,000**	**187,853**	**1**
Skid Resistance (paved road)							
Skid Resistance (unpaved road)							
Signalise intersection (4-leg)							
Protected turn provision at existing signalised site (4-leg)							
Protected turn lane (unsignalised 4 leg)							
Signalise intersection (3-leg)							
Protected turn provision at existing signalised site (3-leg)							
Protected turn lane (unsignalised 3 leg)	**1 sites**	**1**	**258,529**	**198,076**	**100,000**	**153,066**	**1**
Rail crossing upgrade							
Median crossing upgrade							
Bicycle Lane (off-road)	**10 km**	**5**	**909,335**	**1,497,189**	**809,700**	**328,934**	**1**
Bicycle Lane (on-road)							
Grade separated pedestrian facility							
Signalised crossing							
School zone - crossing guard or supervisor							
Unsignalised raised crossing	**1 sites**	**0**	**90,842**	**56,271**	**20,000**	**123,753**	**2**
Unsignalised crossing							
Refuge Island							
Upgrade pedestrian facility quality	**1 sites**	**0**	**27,233**	**26,528**	**20,000**	**194,604**	**1**
Side road grade separated pedestrian facility							
Side road signalised pedestrian crossing							
Side road unsignalised pedestrian crossing	**1 sites**	**0**	**52,042**	**80,468**	**20,000**	**308,903**	**1**
Footpath provision passenger side (with barrier)							
Footpath provision passenger side (>3m from road)							
Footpath provision passenger side (adjacent to road)	**0.2 km**			**31,103**	**37,500**		**0**
Footpath provision passenger side (informal path >1m)							
Footpath provision driver side (with barrier)							
Footpath provision driver side (>3m from road)							
Footpath provision driver side (adjacent to road)							
Footpath provision driver side (informal path >1m)							
Pedestrian fencing							
Street lighting (intersection)							
Street lighting (ped crossing)							
Street lighting (mid-block)							
Sight distance (obstruction removal)	**2.6 km**	**4**	**700,241**	**73,284**	**78,000**	**20,908**	**10**
School zone warning - flashing beacon							
School zone warning - signs and markings							
Delineation and signing (intersection)	**1 sites**	**0**	**15,444**	**19,249**	**5,000**	**248,995**	**1**
Improve curve delineation							
Improve Delineation							
Restrict/combine direct access points							
Traffic calming							
Parking improvements							
Sideslope improvement (bike lane)							
Clear roadside hazards (bike lane)							
Roadside barriers (bike lane)							
Central median barrier (MC lane)							
Sideslope improvement (seg MC lane) passenger side							
Clear roadside hazards (seg MC lane) passenger side							
Roadside barriers (seg MC lane) passenger side							
Sideslope improvement (seg MC lane) driver side							
Clear roadside hazards (seg MC lane) driver side							
Roadside barriers (seg MC lane) driver side							
Speed management reviews	**9.3 km**				**433,000**		
Speed management reviews (MC Lane)							
ETP	**15.4 km**				**50,000**		

Appendix G: Project Plan

Safer Roads Fund - Project Programme





Appendix H: Letter of Support

Neill Bennett (Economy Transport and Communities)

From: Brown, Justin, 1952 <Justin.Brown.1952@Derbyshire.PNN.Police.UK>
Sent: 22 September 2017 13:21
To: Neill Bennett (Economy Transport and Communities)
Subject: Safer Roads funding scheme bid

I am the Inspector in charge or all matter Roads Policing for Derbyshire. My portfolio consists of the Roads Policing unit, Serious Collision Investigation unit, Traffic Management department, Road Crime team and the Casualty Reduction Enforcement Support Team (CREST). CREST are responsible for managing all safety cameras in Derbyshire along with coordinating Policing operations to combat the fatal 4 causes of collision.
As part of my role I am the lead liaison with Derby and Derbyshire Road Safety Partnership (DDRSP). I have been involved in considering the DDRSP funding application to the safer roads scheme. I am aware of the specific issues which have effected this road and the measures proposed as part of this bid to improve road safety. In my considered opinion the engineering and safety cameras proposed as part of this bid will provide an invaluable improvement to road safety and I fully support the need to implement the measures outlined.

Insp 1952 Brown
CREST, Roads Policing, Collision Investigation and SALCU Inspector
Operations Support
Derbyshire Constabulary
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