

Report to the Chief Officer (Highways and Transportation)

Date: 03 February 2015

Subject: Design & Cost Report for A64 York Road Passive Safety Scheme Phase 1

Capital Scheme Number: 32180

Are specific electoral Wards affected? If relevant, name(s) of Ward(s): Harewood	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Are there implications for equality and diversity and cohesion and integration?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Is the decision eligible for Call-In?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Does the report contain confidential or exempt information? If relevant, Access to Information Procedure Rule number: Appendix number:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Summary of main issues

- 1 A64 York Road is a road safety Length for Concern with an accident rate 64% higher than the average for an A classified road. Statistically one third of the accidents on the road involve nose to tail collisions, while over a fifth of the accidents are due to loss of control.
- 2 The proposed measures are designed to reduce the severity of injury to drivers/passengers of vehicles that leave the carriageway by introducing additional Road Restraint Systems (RRS), improving existing signage, road markings and replacing existing sign posts with passively safe posts.
- 3 RRS is recommended at 5 locations (6 barrier lengths) to reduce the severity of accidents should they occur at these locations.
- 4 Also proposed is a change in the Speed Limits along the length of the A64 between Ring Road Seacroft and the A1(M).

Recommendations

- 5 The Chief Officer (Highways and Transportation) is requested to:
 - i) note the contents of this report;

- ii) give authority to design and implement the A64 York Road Passive Safety Scheme Phase 1 at a total estimated cost of £158,500;
- iii) give authority to incur expenditure of £18,500 staff design and supervision costs, £6,000 legal fees and £134,000 works costs, fully funded from the LTP Transport Policy Capital Programme; and
- iv) request the City Solicitor to advertise a draft Speed Limit Order to introduce speed limit reductions on the lengths of roads shown on drawing number EP/732180/TRO/02 and, if no valid objections are received, to make, seal and implement the Order as advertised.

1 Purpose of this report

- 1.1 To seek authority to carry out the consultation, detailed design and construction of the works for the A64 York Road Passive Safety Scheme Phase 1.
- 1.2 To seek authority to incur a total expenditure cost of £158,500 to design, supervise and implement the proposed works.

2 Background Information

- 2.1 The length of the A64 between Ring Road Seacroft and the A1(M) is listed in Leeds City Council's annual report, Lengths for Concern 2014. It is ranked 48th amongst roads with accident rates higher than the national average, having a rate of 64% higher than the norm. In total, there have been 47 reported accidents in the last 5 years, consisting of 36 slight, 10 serious and 1 fatality. The recommendations in the Lengths for Concern publication suggest the introduction of "passive safety" engineering measures.
- 2.2 A survey was carried out of the length of the A64 York Road between Ring Road Seacroft and A1(M) to identify all possible hazards as listed in the design standards (such as, structures, signs, signals, bollards, cabinets, lighting columns, bus shelters etc.).
- 2.3 5 locations (6 barrier lengths) were identified where RRS is recommended to reduce the potential number of Killed or Seriously Injured (KSI) accidents.
- 2.4 The A64 York Road is a main commuter route linking York and Leeds. The speed limit varies along its length. Starting from the York side, the speed limit is 70mph which then reduces to 60mph as the road narrows from a dual carriageway to a single carriageway. This then reduces further to 50mph as motorists reach the build-up of businesses, including Langlands Garden Centre. The speed limit then reduces to 40mph, at a point before the junction with Scholes Lane and the new Grimes Dyke housing development, until it reaches the Ring Road. Along its length there are several bus stops and public rights of way crossing points. The side verges are protected by vehicle road restraint systems in only some locations.
- 2.5 The proposed speed limit change would include extending the current 40 mph speed limit up to the point where the existing National Speed Limit begins, and

changing the length of existing National Speed Limit to a 50mph speed limit up to a point close to the Leeds City Council boundary.

2.6 Along the length of the A64 in question, there are numerous signposts which are improperly positioned according to the Traffic Signs Manual. For instance, the sign for the Dogs Trust is located within the stopping distance of the entrance.

2.7 A similar scheme has been implemented on the A647 Stanningley Bypass. This scheme was completed in April 2014; therefore a full assessment of its effectiveness cannot yet be determined. However, current trends suggest that it has been successful in reducing KSI accidents. Since April 2014, there has been a ratio of 1 KSI for every 4 slight accidents involving vehicles leaving the carriageway. In 2011, before the works began, the ratio was 1 KSI for every 2 slight accidents involving vehicles leaving the carriageway.

2.8 It is anticipated that a further phase of passive safety measures along the A64 York Road will be investigated during the 2015/16 financial year.

3 Main issues

3.1 The extent and proposals of the scheme are shown in the following drawings: EP/732180/01/01, EP/732180/01/02, EP/732180/01/03, EP/732180/01/04.

3.2 A Road Restraint Risk Assessment Process (RRRAP) was undertaken to identify roadside hazards and to determine what, if any, safety measures were necessary. The RRRAP indicated that the following lengths of road were in the 'Unacceptable Risk' region or at the upper end of the 'Tolerable Risk' region. The proposed lengths of RRS would bring these down to the 'Broadly Acceptable Risk' region.

3.3 Road Restraint System Length A – from a point 116m northeast of the junction with Thorner Lane for a distance of 135m in a north-easterly direction, has been proposed to prevent vehicles from falling into the aligned ditch.

3.4 Road Restraint System Length B – from a point 765m southwest of the junction with Kiddal Lane for a distance of 65m in a south-westerly direction, has been proposed to prevent vehicles from colliding with a stone wall alongside the road.

3.5 Road Restraint System Length C – from a point 780m northeast of the Dogs Trust entrance for a distance of 65m in a north-easterly direction, has been proposed to prevent vehicles from falling into the pond at the side of the road.

3.6 Road Restraint System Length D – from a point 270m northeast of the entrance to Whitewell Farm for a distance of 82m in a north-easterly direction, has been proposed to prevent vehicles from falling down the steep fall by the side of the road.

3.7 Road Restraint System Length E – from a point 507m southwest of the junction with Occupation Lane for a distance of 65m in a south-westerly direction, has been proposed to prevent vehicles from falling down the steep fall by the side of the road.

- 3.8 Road Restraint System Length F – from a point 238m northeast of the entrance to Windsor Farm for a distance of 205m in a north-easterly direction, has been proposed to prevent vehicles leaving the carriageway and falling into an aligned ditch.
- 3.9 Signposts which are currently positioned incorrectly, according to the Traffic Signs Manual, will be relocated so they adhere to the regulations. Larger posts will be replaced with passively safe posts to reduce the severity in the event of a collision.
- 3.10 Passive safety measures are intended to reduce the amount of KSI accidents by reducing the severity of accidents. To monitor the success of the scheme, the KSI ratio will have to be compared. The current ratio is 1 KSI accident for every 4 slight accidents. If the scheme is successful, there will be a higher number of slight accidents for every KSI.
- 3.11 Speed surveys were undertaken along the length of the A64 in question to determine whether the current speed limits were suitable. The following table shows the results.

Speed Survey A64 Passive Safety Scheme				
Site No.	Existing Speed Limit	Proposed Speed Limit	Mean Speed	85th %ile
1	NSL (60)	50	48.7	55.8
2	NSL (60)	50	49.6	56.7
3	NSL (60)	50	47.4	54.3
4	NSL (60)	50	46.9	54.2
5	50	40	42.8	49.3
6	40	40	43.4	43.4

- 3.12 This shows that the majority of road users are already driving under the proposed speed limit of 50mph along the length of National Speed Limit and it is anticipated the lower speed limit would encourage further speed reductions.
- 3.13 Furthermore, there are concerns with the speed that drivers are approaching the central bends section. In the last 5 years, there have been 7 reported accidents (2 serious, 5 slight) where a driver has lost control in this length of road. The reduction in speed limit, along with the improvement of signing and road markings, is aimed to lower the accident rate of this section.
- 3.14 Moreover, along the proposed length of the 40mph speed limit, there have been numerous shunting collisions due to right-turning traffic heading into Langlands Garden Centre and neighbouring businesses plus the location where the current 40mph speed limit ends is not a natural point for a change in the speed limit.

Therefore, the proposals extend the 40mph past the built-up area of businesses and residences and create that change to 50mph in a more suited environment.

- 3.15 A Speed Limit Review has been carried out over the last few years. The recommendations from this review were for the current speed limits to remain, as they were suitable for the road at the time. However, since the Review was undertaken, the nature of the road has changed, due to the Grimes Dyke housing development, and the recommendations included in the Review are outdated.

4 Corporate Considerations

4.1 Consultation and Engagement

- 4.1.1 A Stage 1/2 Road Safety Audit was carried out on 7th January 2015. All recommendations have been incorporated into the design.
- 4.1.2 Ward Members of Harewood were consulted on 9th January 2015. No issues were raised with the proposals included as part of Phase 1.
- 4.1.3 Relevant sections in Highways and Transportation have been consulted and their comments have been considered and where possible incorporated in the proposals.
- 4.1.4 The Traffic Management section had no objections to the proposed speed limits or any other parts of the scheme.
- 4.1.5 The emergency services and Metro were consulted on 9th January 2015. There have been no responses to date.

4.2 Equality and Diversity / Cohesion and Integration

- 4.2.1 An equality, diversity, cohesion and integration screening has been carried out on the proposals and confirmed that an impact assessment was not required. Report attached as Appendix 1.
- 4.2.2 The proposals will have a positive impact on all user groups travelling on the A64 York Road by providing a safer environment when the new vehicle barrier systems are installed, preventing potential accidents with roadside hazards.

4.3 Council policies and City Priorities

- 4.3.1 This initiative fits with the Best Council Plan 2013-17 objective of promoting sustainable and inclusive economic growth.
- 4.3.2 The scheme meets item 18 of the Local Transport Plan to improve safety and security to minimise transport casualties.

4.4 Resources and value for money

- 4.4.1 The total estimated cost of the scheme is £158,500, comprising £134,000 Works costs, £6,000 Legal fees and £18,500 Staff costs.

- 4.4.2 The scheme will be fully funded from the LTP Transport Policy Capital Programme.
- 4.4.3 The design and supervision of the works can be carried out within the existing staff resources.
- 4.4.4 A First Year Return Rate (FYRR) of 174.5% has been calculated based on improving the signing (See Appendix 2). Figures relating to the reduction of accidents where RRS is introduced is not available and as such, a FYRR based on this element as well cannot be calculated.

4.5 Capital Funding and Cash Flow

Funding Approval :	Capital Section Reference Number :-						
Previous total Authority to Spend on this scheme	TOTAL £000's	TO JAN 2015 £000's	FORECAST				
			2014/15 £000's	2015/16 £000's	2016/17 £000's	2017/18 £000's	2018 on £000's
LAND (1)	0.0						
CONSTRUCTION (3)	0.0		0.0				
FURN & EQPT (5)	0.0						
DESIGN FEES (6)	0.0	0.0	0.0				
OTHER COSTS (7)	0.0						
TOTALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Authority to Spend required for this Approval	TOTAL £000's	TO JAN 2015 £000's	FORECAST				
			2014/15 £000's	2015/16 £000's	2016/17 £000's	2017/18 £000's	2018 on £000's
LAND (1)	0.0						
CONSTRUCTION (3)	134.0		134.0				
FURN & EQPT (5)	0.0						
DESIGN FEES (6)	18.5	8.5	10.0				
OTHER COSTS (7)	6.0		6.0				
TOTALS	158.5	8.5	150.0	0.0	0.0	0.0	0.0
Total overall Funding (As per latest Capital Programme)	TOTAL £000's	TO JAN 2015 £000's	FORECAST				
			2014/15 £000's	2015/16 £000's	2016/17 £000's	2017/18 £000's	2018 on £000's
Government Grant - LTP / TSG	158.5	8.5	150.0				
Total Funding	158.5	8.5	150.0	0.0	0.0	0.0	0.0
Balance / Shortfall =	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Parent Scheme Number : 99609

Title : LTP Transport Policy Capital Programme

4.6 Legal Implications, Access to Information and Call In

- 4.6.1 There are no legal implications arising from this proposal
- 4.6.2 The works are exempt from call in as the cost is below £250k and the proposals do not have a significant effect on communities living or working in 2 or more wards.

4.7 Risk Management

- 4.7.1 Should the scheme not progress, the risk or likelihood of KSI accidents to drivers/passengers of vehicles that leave the carriageway in the vicinity of the proposed road restraint systems will not be reduced.

5 Conclusions

- 5.1 The scheme aims to reduce the number of KSI accidents on the A64 York Road by reducing the existing speed limits, introducing road restraint systems and improving the existing signing.

6 Recommendations

- 6.1 The Chief Officer (Highways and Transportation) is requested to:

- i) note the contents of this report;
- ii) give authority to design and implement the A64 York Road Passive Safety Scheme at a total estimated cost of £158,500;
- iii) give authority to incur expenditure of £18,500 staff design and supervision costs, £6,000 Legal fees and £134,000 works costs, fully funded from the LTP Transport Policy Capital Programme; and
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7 Background documents ¹

- 7.1 None

¹ The background documents listed in this section are available to download from the Council's website, unless they contain confidential or exempt information. The list of background documents does not include published works.

Appendix 1

Equality, Diversity, Cohesion and Integration Screening



As a public authority we need to ensure that all our strategies, policies, service and functions, both current and proposed have given proper consideration to equality, diversity, cohesion and integration.

A **screening** process can help judge relevance and provides a record of both the **process** and **decision**. Screening should be a short, sharp exercise that determines relevance for all new and revised strategies, policies, services and functions. Completed at the earliest opportunity it will help to determine:

- the relevance of proposals and decisions to equality, diversity, cohesion and integration.
- whether or not equality, diversity, cohesion and integration is being/has already been considered, and
- whether or not it is necessary to carry out an impact assessment.

Directorate: City Development	Service area: Highways and Transportation
Lead person: Jonathan Allchin	Contact number: 75391

1. Title: A64 YORK ROAD PASSIVE SAFETY SCHEME		
Is this a:		
<input type="checkbox"/> Strategy / Policy	<input checked="" type="checkbox"/> Service / Function	<input type="checkbox"/> Other
If other, please specify		

2. Please provide a brief description of what you are screening
The screening focuses on the proposal by Highways & Transportation to provide additional Road Restraint System (RRS) at 6 different locations (along verges with no pedestrian footway) along the A64 York Road between its junction with Ring Road Seacroft and the A1(M). Each location has been identified and prioritised as areas which if an errant vehicle left the carriageway the outcome of the accident severity would most probably be a Killed or Serious Injury (KSI) due to vehicles colliding with a roadside hazard (e.g. trees, structures, signs).

3. Relevance to equality, diversity, cohesion and integration
All the council's strategies/policies, services/functions affect service users, employees or the wider community – city wide or more local. These will also have a greater/lesser relevance to equality, diversity, cohesion and integration.

The following questions will help you to identify how relevant your proposals are.

When considering these questions think about age, carers, disability, gender reassignment, race, religion or belief, sex, sexual orientation and any other relevant characteristics (for example socio-economic status, social class, income, unemployment, residential location or family background and education or skills levels).

Questions	Yes	No
Is there an existing or likely differential impact for the different equality characteristics?		X
Have there been or likely to be any public concerns about the policy or proposal?		X
Could the proposal affect how our services, commissioning or procurement activities are organised, provided, located and by whom?		X
Could the proposal affect our workforce or employment practices?		X
Does the proposal involve or will it have an impact on <ul style="list-style-type: none"> • Eliminating unlawful discrimination, victimisation and harassment • Advancing equality of opportunity • Fostering good relations 		X

If you have answered **no** to the questions above please complete **sections 6 and 7**

If you have answered **yes** to any of the above and;

- Believe you have already considered the impact on equality, diversity, cohesion and integration within your proposal please go to **section 4**.
- Are not already considering the impact on equality, diversity, cohesion and integration within your proposal please go to **section 5**.

<p>4. Considering the impact on equality, diversity, cohesion and integration</p>
<p>If you can demonstrate you have considered how your proposals impact on equality, diversity, cohesion and integration you have carried out an impact assessment.</p> <p>Please provide specific details for all three areas below (use the prompts for guidance).</p>
<ul style="list-style-type: none"> • How have you considered equality, diversity, cohesion and integration? (think about the scope of the proposal, who is likely to be affected, equality related information, gaps in information and plans to address, consultation and engagement activities (taken place or planned) with those likely to be affected)
<ul style="list-style-type: none"> • Key findings (think about any potential positive and negative impact on different equality characteristics, potential to promote strong and positive relationships between groups, potential to bring groups/communities into increased contact with each other, perception

that the proposal could benefit one group at the expense of another)
<ul style="list-style-type: none"> • Actions (think about how you will promote positive impact and remove/ reduce negative impact)

5. If you are not already considering the impact on equality, diversity, cohesion and integration you will need to carry out an impact assessment.	
Date to scope and plan your impact assessment:	N/A
Date to complete your impact assessment	N/A
Lead person for your impact assessment (Include name and job title)	N/A

6. Governance, ownership and approval		
Please state here who has approved the actions and outcomes of the screening		
Name	Job title	Date
Sabby Khaira	Principal Engineer	20/01/2015

7. Publishing	
This screening document will act as evidence that due regard to equality and diversity has been given. If you are not carrying out an independent impact assessment the screening document will need to be published.	
Please send a copy to the Equality Team for publishing	
Date screening completed	20/01/2015
Date sent to Equality Team	22/01/2015
Date published (To be completed by the Equality Team)	

Appendix 2 Accident Savings Calculation



Existing Accident Record

Year	No. of Accidents	Slight	Serious	Fatal
2010	12	10	2	0
2011	12	7	5	0
2012	6	5	0	1
2013	12	10	2	0
2014	5	4	1	0
Total	47	36	10	1

Therefore, the existing accident rate is equivalent to:

- (i) 9.4 overall accidents per year or,
- (ii) 7.2 Slight, 2 Serious and 0.2 Fatalities per year

Accident Savings

Proposed improvement: Rural –signing treatments, data suggests a 30% reduction in accidents (See Appendix 3). Therefore,

- (i) Potential overall savings are: 9.4 accidents x 0.3 = **2.82 accidents per year** or,
- (ii) Potential savings in a severity category breakdown are:
 - Slight: 7.2 accidents x 0.3 = **2.16 slight accidents per year**,
 - Serious: 2 accidents x 0.3 = **0.6 serious accidents per year**,
 - Fatal: 0.2 accidents x 0.3 = **0.06 fatal accidents per year**

Scheme Costs = £158,500

Calculation of First Year Rate Return (% FYRR)

Potential annual accident savings = 2.16 slight, 0.6 serious, 0.06 fatal.

	Cost Per Accident (See Appendix 3)
Slight	£21,370
Serious	£205,060
Fatal	£1,790,200

Slight: 2.16 x £21,370 = £46,159.20

Serious: 0.6 x £205,060 = £123,036.00

Fatal: 0.06 x £1,790,200 = £107,412.00

Total: £46,159.20 + £123,036 + £107,412 = £276,607.20 (monetary value of potential saving)

%FYRR = (Annual Accident Savings x 100) / Scheme Costs

$$= (276,607.20 \times 100) / 158,500 = 174.5\%$$