Havering
LONDON BOROUGH

HIGHWAYS ADVISORY COMMITTEE

17 December 2019

Subject Heading:	**HILLDENE AVENUE CASUALTY REDUCTION PROGRAMME – PROPOSED SAFETY IMPROVEMENTS (The Outcome of public consultation)**
CMT Lead:	**Dipti Patel**
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Policy context:	**Havering Local Development Framework (2008) Havering Local Implementation Plan 2018/19 Delivery Plan**
Financial summary:	**The estimated cost of £0.070m for implementation will be met by Transport for London through the 2019/20 Local Implementation Plan allocation for Casualty Reduction Programme – Hilldene Avenue (A3067).**

The subject matter of this report deals with the following Council Objectives

Havering will be clean and its environment will be cared for	[X]
People will be safe, in their homes and in the community	[X]
Residents will be proud to live in Havering	[ ]

SUMMARY

Hilldene Avenue – Casualty Reduction Programme was one of the schemes approved by Transport for London for funding for 2019/20.

A feasibility study was undertaken to identify safety improvements including a mini roundabout, zebra crossing, pedestrian refuge, raised pelican crossing, road markings and road signs to reduce the casualty rate along the street. A public consultation has been carried out and this report details the findings of this consultation and recommends that the safety improvements as detailed in the recommendation be approved.

The scheme is within **Heaton** and **Gooshays** wards.

RECOMMENDATIONS

1. That the Committee having considered the representations and information set out in this report recommends to the Cabinet Member for Environment in consultation with the Leader of the Council that the safety improvements as detailed below and shown on the relevant drawings be implemented as follows:

   (a) Hilldene Avenue outside property No: 36 Hilldene Avenue
   - Pedestrian refuge as shown drawing reference QS005/1.

   (b) Hilldene Avenue / Chatteris Avenue / Edenhall Road Junctions
   - Zebra crossing
   - Mini roundabout at the Hilldene Avenue / Edenhall Road Junction as shown drawing reference QS005/1.

   (c) Hilldene Avenue by Hilldene Close
   - Upgrading existing pelican crossing with speed table as shown on drawing reference QS005/2.

2. That, it be noted that the estimated costs of £0.070m, will be met from the Transport for London's (TfL) 2019/20 Local Implementation Plan allocation for Casualty Reduction.

REPORT DETAIL

1.0 Background

1.1 In November 2018, Transport for London ("TfL") approved funding for a number of Casualty Reduction Schemes as part of the 2019/20 Local Implementation Plan. The 'Hilldene Avenue - Casualty Reduction Programme' was one of the schemes approved by TfL. A feasibility study has been carried out to identify potential casualty reduction measures in the area. The feasibility study looked at ways of reducing casualties and risk exposure (especially to vulnerable users) and a series of safety improvements were identified. Following completion of the study, the safety improvements, as set out in this report, were taken forward to a formal public consultation.

1.2 The Government and Transport for London have set targets for 2020 to reduce Killed or Serious Injury collisions ("KSIs") by 40%; Child KSIs by 50%; pedestrian, cyclist KSI's by 50% and slight injuries by 25% from the baseline of the average number of casualties for 2005-09.

1.3 The Mayor's Vision Zero Strategy aims to eliminate deaths and serious injuries on London's road and street network including **Havering** roads in light of previous incidents. The Mayor's aim is for no-one to be killed in or by a London Bus by 2030 and for all deaths and serious injuries from road collisions to be eliminated from London's roads and streets by 2041. The main targets are as follows:

(a) 65% reduction in KSIs by 2022 against 2005-2009 baseline average
(b) 70% reduction in KSIs by buses by 2022 against 2005-2009 baseline average
(c) 70% reduction in KSIs by 2030 against 2010-2014 baseline average
(d) 0 KSIs by 2041
(e) 0 KSIs by buses by 2030

The Hilldene Avenue Casualty Reduction Scheme was developed to help to meet the above targets.

Traffic Survey Results Summary

1.4 Traffic surveys showed that two-way traffic flows are up to 1200 vehicles per hour during peak periods along Hilldene Avenue by Chatteris Avenue.

A speed survey was also carried out and the results are as follows.

Location	85%il Speed (mph)		Highest Speed (mph)	
	Eastbound	Westbound	Eastbound	Westbound
Hilldene Avenue east of Chatteris Avenue (off peak)	35	37	45	50
Hilldene Avenue east of Chatteris Avenue (Peak)	31	32	40	45
Hilldene Avenue west of Hilldene Close (Off peak)	38	35	45	50
Hilldene Avenue west of Hilldene Close (Peak)	30	29	45	45

The 85th percentile traffic speed (the speed at which 85% of vehicles are

travelling at or below) along Hilldene Avenue exceeds the 30mph speed limit. Officers consider these speeds to be excessive and a contributory factor in collisions and risk exposure.

Injury Collision Data

1.4 In the five-year period to 31st May 2018, **thirty six** personal injury collisions (PICs) were recorded along Hilldene Avenue. Of these thirty six PICs, five (14%) were serious; nine (25%) involved pedestrians; twelve (33%) involved children; three (8%) involved cyclists; two (6%) involved motorcyclists and nine (25%) occurred during the hours of darkness.

Details of PICs are as follows:

Location	Fatal	Serious	Slight	Total PIAs
Hilldene Avenue / Straight Road Junction	0	1	8 (1-Ped)	9
Hilldene Avenue between Straight Road and Charlbury Crescent	0	0	2 (1-Ped)	2
Hilldene Avenue / Charlbury Crescent Junction	0	0	1 (1-Dark)	1
Hilldene Avenue between Charlbury Crescent and Chatteris Avenue	0	1 (1-Ped)	0	1
Hilldene Avenue / Chatteris Avenue Junction	0	0	2 (1-Dark)	2
Hilldene Avenue / Edenhall Road Junction	0	1 (1-Dark)	3 (1-Dark)	4
Hilldene Avenue / Newbury Road Junction	0	0	2 (1-Ped) (2-Dark)	2

Hilldene Avenue between Westdene Drive and Eastdene Drive	0	2 (2-Ped)	4 (1-Ped) (2-Dark)	6
Hilldene Avenue / Eastdene Drive Junction	0	0	1	1
Hilldene Avenue between Eastdene Drive and Chipenham Road	0	0	1	1
Hilldene Avenue between Chipenham Road and North Hill Drive	0	0	1	1
Hilldene Avenue / North Hill Drive Roundabout	0	0	6 (2-Ped) (1-Dark)	6
Total	**0**	**5**	**31**	**36**

Proposals

1.5 The following safety improvements were proposed along Hilldene Avenue to reduce vehicle speeds and minimise collisions.

(a) Hilldene Avenue outside property No: 36 Hilldene Avenue (Plan No:QS005/1)
- Pedestrian refuge as shown.

(b) Hilldene Avenue / Chatteris Avenue / Edenhall Road Junctions (Plan No.QS005/1)
- Zebra crossing as shown
- Mini roundabout at the Hilldene Avenue / Edenhall Road Junction

(c) Hilldene Avenue by Hilldene Close (Plan No:QS005/2)
- Upgrading existing pelican crossing with speed table.

2.0 Outcome of public consultation

2.1 Letters, describing the proposals were delivered to local residents / occupiers. Approximately, 150 letters were delivered via post to the area affected by the proposals. Emergency Services, bus companies, local Members and cycling representatives were also consulted on the proposals. Four written responses from Local Members, cycling representative and residents were received and the comments are summarised in the Appendix 1. Two Members raised

general queries about the scheme. A resident and the cycling representative are in favour of the scheme.

2.2 The majority of respondents generally supported the scheme. Two residents raised concerns about particular locations of speed cushions and others requested further measures on the service road. Some indicated that speed cameras would be a better solution.

2.3 Details of some of the operational Casualty Reduction Schemes implemented within Havering, TfL's targets, Mayor's vision zero Strategy and traffic calming techniques are summarised in the Appendix 2.

3.0 Officers' comments and conclusions

3.1 The collision analysis indicated that **thirty six** personal injury collisions (PICs) were recorded along Hilldene Avenue. Of these thirty six PICs, five were serious; nine involved pedestrians; twelve involved children; three involved cyclists; two involved motorcyclists and nine occurred during the hours of darkness.

3.2 Appendix 2 provides commentary/analysis of the effectiveness of implemented Casualty Reduction Schemes, traffic calming measures and other features used in the Council's Casualty Reduction Programme, TfL's targets, Mayor's Vision Zero Strategy, UK Traffic calming techniques and their effect.

3.3 Officers prepared a set of proposals which are considered appropriate for Hilldene Avenues' class of road. These measures should influence driver behaviour and reduce the risk exposure of vulnerable road users to collisions. Officers' recommend that all suggested measures should be implemented.

3.4 The proposed safety improvements as detailed in the recommendation would minimise collisions, particularly for vulnerable road users along Hilldene Avenue.

IMPLICATIONS AND RISKS

Financial implications and risks:

This report is asking HAC to recommend to the Cabinet Member the implementation of the above scheme.

The estimated cost of £0.070m for feasibility, consultation and implementation will be met by Transport for London through the 2019/20 Local Implementation Plan allocations for Hilldene Avenue Casualty Reduction Programme (A3067). The funding will need to be spent by 31st March 2020, to ensure full access to the grant.

The costs shown are an estimate of the full costs of the scheme, should all proposals be implemented. It should be noted that subject to the recommendations of the committee a final decision then would be made by the Lead Member – as regards actual implementation and scheme detail. Therefore, final costs are subject to change.

This is a standard project for Environment and there is no expectation that the works cannot be contained within the cost estimate. There is an element of contingency built into the financial estimate. In the unlikely event of an overspend, the balance would need to be contained within the overall Environment budget.

Legal implications and risks:

The Council's power to construct and maintain places of refuges for the protection of pedestrians in the maintained highway is set out in Part V of the Highways Act 1980 ('HA1980')

The Council's power to construct road humps in highway maintainable at public expense is set out in Part V of the HA 1980. Before making an order under this provision the Council should ensure that the statutory procedures set out in section 90C, Part V of the HA 1980 and the Highways (Road Humps) Regulations 1999 are complied with. The Traffic Signs Regulations and General Directions 2016 govern road traffic signs and road markings.

The Council's power to create a pedestrian crossing on roads is set out in Part III of the Road Traffic Regulation Act 1984 ("RTRA 1984"). Before making an order under this provision the Council should ensure that the statutory procedures set out in Part III of the RTRA 1984 and the Zebra, Pelican and Puffin Pedestrian Crossing Regulations and General Directions 1997 are complied with. The Traffic Signs Regulations and General Directions 2016 govern road traffic signs and road markings.

The Council's power to make an Order regulating or controlling vehicular traffic on roads is set out in section 6 of Part 1 of the Road Traffic Regulations Act 1984 ("RTRA"1984). Schedule 1 of the RTRA 1984 lists those matters as to which Orders can be made under section 6. The Traffic Signs Regulations and General Directions 2016 govern road traffic signs and road markings.

Section 122 RTRA 1984 imposes a general duty on local authorities when exercising functions under the RTRA. It provides, insofar as is material, to secure the expeditious, convenient and safe movement of vehicular and other traffic (including pedestrians) and the provision of suitable and adequate parking facilities on and off the highway. This statutory duty must be balanced with any concerns received over the implementation of the proposals.

In considering any responses received during consultation, the Council must ensure that full consideration of all representations is given including those which do not accord with the officer's recommendation. The Council must be satisfied that any objections to the proposals were taken into account.

In considering any consultation responses, the Council must balance the concerns of any objectors with the statutory duty under section 122 RTRA 1984.

Human Resources implications and risks:

The recommendations made in this report do not give rise to any identifiable HR risks or implications that would affect either the Council or its workforce.

Equalities Implications and Risks:

The Council has a general duty under the Equality Act 2010 to ensure that its highway network is accessible to all users. Where infrastructure is provided or substantially upgraded, reasonable adjustments should be made to improve access. In considering the impacts and making improvements for people with protected characteristics (mainly, but not limited to disabled people, the young and older people), this will assist the Council in meeting its duty under the Act.

Havering has a diverse community made up of many different groups and individuals. The council values diversity and believes it essential to understand and include the different contributions, perspectives and experience that people from different backgrounds bring.

The Public Sector Equality Duty (PSED) under section 149 of the Equality Act 2010 requires the council, when exercising its functions, to have due regard to:

(i) the need to eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under the Equality Act 2010;
(ii) the need to advance equality of opportunity between persons who share protected characteristics and those who do not, and;
(iii) foster good relations between those who have protected characteristics and those who do not.

Note: 'Protected characteristics' are: age, sex, race, disability, sexual orientation, marriage and civil partnerships, religion or belief, pregnancy and maternity and gender reassignment.

The council demonstrates its commitment to the Equality Act in its decision-making processes, the provision, procurement and commissioning of its services, and employment practices concerning its workforce. In addition, the council is also committed to improving the quality of life and wellbeing of all Havering residents in respect of socio-economics and health determinants.

There would be some visual impact from the proposals; however these proposals would generally improve safety for both pedestrians and vehicles.

BACKGROUND PAPERS

None.

APPENDIX 1
SUMMARY OF RESPONSE

RESPONSE REF:	COMMENTS	STAFF COMMENTS
QS005/1 (Member)	I have a couple of questions. - What height are you intending to use on the raised crossing for speed reduction? The reason I ask is that I see different heights being used across the borough - Will the zebra crossing be a raised crossing or a simple crossing	Staff advised the -75mm height at the raised crossing. In accordance with the current Road Hump Regulation, the maximum height of the hump is 100mm. We use 75mm height in the borough. - It is a simple zebra crossing with pedestrian refuge without a raised table.
QR005/2 (Local Member)	I do remember you sent us a similar proposal for Straight Road, which went for consultation. What is the update	Straight Road Casualty Reduction Scheme was rejected by the Council.
QS005/3 (Hilldene Avenue resident)	I am happy for the proposals made especially upgrading existing pelican crossing at Hilldene Close. Request for more speed humps.	Further measures could be considered at a later date if necessary.
QS005/4 (Havering Cycling Representative)	On behalf of Havering cyclists, I would like to support this scheme. If the scheme goes ahead, would it be possible to use non-slip paint for the road markings to minimise the risk to cyclists.	We will ask our contractor whether they can use the non-slip paint when we implement the scheme.

APPENDIX 2
SUMMARY OF CASULATY TARGETS, CASUALTY REDUCTION, TRAFFIC CALMING TECHNIQUES AND THEIR EFFECT

1. PERCENTAGE OF CASUALTY REDUCTION

The following table shows the percentage of casualty reduction achieved on the implementation of Accident Reduction Programme schemes in recent years using vertical deflections such as humped crossings, speed tables and speed cushions.

SCHEME	IMPLEMENTATION DATE	PERCENTAGE CASUALTY REDUCTION
Mawney Road and White Hart Lane Between A12 and Collier Row Road	March 2012	77%
Hornchurch Town Centre (20mph zone)	June 2012	45%
Collier Row Lane Between Goring Road and Playfield Avenue	March 2014	60%
Crow Lane Whole length	March 2015	40%
Dagnam Park Drive Between Gooshays Drive and Chudleigh Road (20mph zone)	January 2016	100%
Rainham Road Between Ford Lane and Wood Lane	December 2016	50%

Please note that vertical deflections such as humped crossings, speed tables, speed cushions were used in all the above schemes to reduce accidents. The casualties are compared before and after implementation of the schemes.

2. TFL 2020 CASUALTY TARGETS

The Government and Transport for London have set targets for 2020 to reduce Killed or Serious injury accidents (KSI) by 40%; Child KSIs by 50%; pedestrian, cyclist KSI's by 50% and slight injuries by 25% from the baseline of the average number of casualties for 2005-09. The **Havering** Accident Reduction Programme, funded by Transport for London will help to meet these targets.

3. LONDON MAJOR'S VISION ZERO STRATEGY

The Major's Vision Zero Strategy aims to eliminate deaths and serious injuries on London's road and street network including **Havering** roads in the light of previous incidents. The Major's aim is for no-one to be killed in or by a London Bus by 2030 and for all deaths and serious injuries from road collisions to be eliminated from London's road and street by 2041. The main targets are as follows:

(a) 65% reduction in KSIs by 2022 against 2005-2009 baseline average
(b) 70% reduction in KSIs by buses by 2022 against 2005-2009 baseline average
(b) 70% reduction in KSIs by 2030 against 2010-2014 baseline average
(d) 0 KSIs by 2041
(e) 0 KSIs by buses by 2030

4. TRAFFIC CALMING TECHNIQUES IN UK AND THEIR EFFECT ON SPEED REDUCTION, ACCIDENT REDUCTION AND AIR QUALITY/ HEALTH/ POLLUTION

(a) TRAFFIC CALMING TECHNIQUES

The following 'Traffic calming techniques' are widely used in UK.

(1) Vertical deflections include Road hump, speed table, speed cushions, rumble strips
(2) Horizontal deflection include Chicanes
(3) Road Narrowing
(4) Central islands
(5) Traffic calming at junctions includes changes in alignment, roundabout and mini roundabouts.
(6) Gateway measures include different surface materials, traffic islands, 20/30mph road signs
(7) Speed cameras and speed limit changes
(8) Traffic management measures include road closures and one way streets

All the above traffic calming measures are not suitable for all the roads in **Havering**. The selected traffic calming measures are generally used depending on the road character and nature of achievement such as speed reduction and accident reduction.

(b) SPEED REDUCTION

Vertical deflections such as road humps, speed tables and speed cushions in the carriageway have a **greater impact on vehicle speeds** than any other measures. In order to achieve greater vehicle speeds reduction, the vertical deflections need to be placed close apart which may require greater funding.

(c) ACCIDENT REDUCTION

The impact of traffic calming schemes on accident levels is generally related to both the speed reducing effect of the scheme and any reduction in traffic levels as a consequence of it. Slower vehicle speeds in 20mph speed limit roads compared with 30mph or over speed limit roads, not only reduce the occurrence of the accidents, but also have a significant effect on their severity such as from fatal and serious injuries to slight injuries.

(d) AIR QUALITY / HEALTH / POLLUTION

WHAT IMPACT DO SPECIFIC SCHEMES HAVE ON AIR QUALITY AND HEALTH?

The Transport for London research suggest:

(i) 20mph zones **do not increase air pollution**. Imperial College University's evaluation of 20mph zones in London suggested they had **no net negative impact on exhaust emissions** and resulted in clear benefits to driving style and associated particulate emissions.

(ii) Speed bumps generate small, local increase in emissions, but the heath impacts are likely to be **negligible**. They dramatically reduce road danger and support the Health Street Approach. It is uncertain whether speed bumps have negative impacts on air quality over the whole area of a scheme. There is good evidence they are one of the best ways to reduce vehicle speeds and are expected to reduce collisions by around 44%. Speed tables should be considered as an alternative to speed bumps.

(iii) Protected cycle lanes tend not to prolong journey time and are **not expected to increase air pollution.**