

## LONDON BOROUGH OF WALTHAM FOREST

Meeting Date:	PLM - 2 September 2015
Title:	Mini Holland Blackhorse Village
Directorate:	Neighbourhoods and Commissioning
Report of:	Head of Highways and Infrastructure
Contact:	Kathiravelu Valavan
Phone:	Ext: 2525
E.Mail:	<a href="mailto:vala.valavan@walthamforest.gov.uk">vala.valavan@walthamforest.gov.uk</a>
Wards affected:	William Morris and High Street Wards
Appendices:	Appendix A : Map of proposals Appendix B : Engagement approach for delivery Appendix C : Consultation questionnaire results Appendix D : Reasons and benefits of proposed changes Appendix E : Alternatives considered Appendix F : Full equality analysis Appendix G : Sustainability implications
Status:	Open

### 1. SUMMARY

1.1 Waltham Forest was one of only three councils in London to be awarded Mini-Holland funding with an anticipated allocation of £27 million.

1.2 On 9 September 2014 Cabinet approved the delivery plan for the Mini Holland Programme.

1.3 The Mini-Holland Business Case was approved by Transport for London Surface Board on 18 November 2014.

1.4 On 10 February 2015 Cabinet delegated authority to the Director of Neighbourhoods and Commissioning in consultation with the Deputy Leader to approve future individual schemes of the Mini Holland Programme.

1.5 Portfolio Holder approval is sought to proceed to detailed design and construction for the Blackhorse Village area wide improvements scheme, which forms part of the Mini-Holland Programme.

## **2. RECOMMENDATIONS**

2.1 For the reasons set out in this report the Director of Neighbourhoods and Commissioning, in consultation with the Portfolio Holder for Environment is recommended to:

2.2 Note the results of the consultation and the received resident emails and petitions.

Approve the preliminary scheme design for the Blackhorse Village area wide improvements scheme as part of the Mini-Holland Programme.

2.3 Agree that the Blackhorse Village area wide improvements scheme proceeds to detailed design and subsequent construction as part of the Mini Holland Programme.

## **3. BACKGROUND**

3.1 Waltham Forest Council's Mini-Holland Programme comprises of a set of integrated schemes that will deliver vast improvements in safety and convenience for cyclists and pedestrians, along with imaginative public realm enhancements to support residential and local shopping areas.

3.2 The overarching objectives of the Blackhorse Village area wide improvements are to reduce the amount of through traffic using residential streets, and improve the look, feel and safety of the Blackhorse Village area for all road users.

3.3 This is to be achieved through a combination of road closures, traffic direction changes, creation of shared public spaces, greening and safety improvements.

3.4 In February 2015 Cabinet delegated authority to the Director of Neighbourhoods and Commissioning in consultation with the deputy leader to approve future individual schemes of the Mini-Holland Programme including the award of any contracts that are deemed to be key decisions.

3.5 A map attached as Appendix A details these proposals, the reasons and benefits of the proposals are set out in Appendix D.

3.6 The Blackhorse Village scheme was initiated in March 2015 via an online "perception survey" that commenced on 13 March and concluded on 3 April 2015.

3.7 The perception survey was conducted within the Blackhorse Village scheme area to gain an understanding of what residents and businesses thought about the area and the type of improvements they would like to see. In total 534 people completed the survey and provided 958 individual comments.

3.8 Following the perception survey, a detailed analysis report was prepared in April 2015, which highlighted various concerns and aspirations of the local community that were geographically mapped. This was used to inform the development of an initial concept design.

3.9 In May 2015 the concept design was presented at a series of four workshops within the scheme area for the local community to co-design and further develop in conjunction with the design team.

3.10 The workshop results were then analysed and included within a workshop analysis report, which influenced the development of the subsequent preliminary design stage in June 2015.

3.11 The preliminary design proposal included a mix of road closures, traffic direction changes, creation of shared public spaces and safety improvements. The preliminary design was then taken to a full public consultation, which commenced on 30 June and concluded on 21 July.

3.12 Between 30 June and 1 July over 5,000 consultation documents and questionnaires were hand delivered by council officers to all households in the area. To promote the consultation, street notices were erected in the area, council officers undertook 'door knocking' to remind local people to have their say on the proposals; and drop-in sessions were held on Wednesday 8 July and Saturday 11 July at local venues. Officers also carried out various technical surveys, consulted with emergency services, religious institutions, schools and the Dial a Ride service.

3.13 The results of the public consultation have been analysed and included within Appendix C.

3.14 This was an extensive consultation process undertaken by the Highways and Infrastructure unit. During the engagement period the Council received and responded to over 200 emails, over 99 residents attended design workshops, and over 103 residents attended drop in sessions. Council officers knocked on doors of over 90% of the area to remind the community to respond to the consultation and elicit their views on the scheme if required. 14.2% of households within the consultation area responded to the final consultation questionnaire. For reference, most consultations attract a response in the region of 10% or below participating households.

3.15 The results of the consultation showed that 60% were in favour of safer environmental proposals and 23% were not in favour. 44% of those responding were in favour of the road closures and associated traffic management measures with 36% not in favour. This equates to 54% of households that were in overall favour of the scheme.

#### **4. OPTIONS & ALTERNATIVES CONSIDERED**

4.1 At each stage of engagement we have taken on board the feedback of residents and businesses, and many of their suggestions have been included in the design proposal. Some alternative options were proposed by community members. These have been considered but not incorporated. These include:

- Make Chewton Road one-way westbound and Longfield Road one-way eastbound

- Remove proposed road closure from Northcote Road and make one-way eastbound
- Remove the proposed closures from Hatherley Road, Westbury Road and Somers Road

4.2 Further information about why these proposals were not seen as viable options is included in Appendix E. However, in summary, pursuing these options would not achieve the aims of the Mini-Holland programme in the Blackhorse Village scheme. These aims are to improve infrastructure to make it safer for road users, improve and create new public spaces and increase the number of people choosing to travel on foot, by bike and on public transport, in order to reduce road congestion and improve air quality.

## **5. SUSTAINABLE COMMUNITY STRATEGY PRIORITIES (AND OTHER NATIONAL OR LOCAL POLICIES OR STRATEGIES)**

5.1 Council Priorities: Bringing you better shopping, streets and leisure (regenerating the borough)

- Work to make our high streets thrive with a variety of shops and services to meet resident's needs
- Upgrade our pavements and roads

5.2 Mayor for London's Vision for Cycling

- Safer streets for bikes.
- More people travelling by bike.
- Better places for everyone.

5.3 Transport for London- Improving the health of Londoners: Transport action plan

## **6. IMPLICATIONS**

6.1 **Finance, value for money and risk**

6.1.1 The funding of the Blackhorse Village scheme is to be within the financial year 2015/16, which will comprise £78,000 from the Local Implementation Plan (LIP), £20,000 from Section 106 and £671,000 from Mini Holland.

6.1.2 The procurement of works and services will be carried out using existing framework or term contracts which have already received Council approval. When it is expected that better value for money can be obtained using an open tender process this will be undertaken.

6.1.3 There are always risks with a programme of this size, in particular delays or budget overruns. These risks will be ameliorated by good programming and planning. The Council has a good record of delivering major public realm projects in the last five years and will use this experience to minimise risk within this programme.

## **7. Legal**

7.1 The Council as Highway Authority has a duty under section 41 of the Highways Act 1980 to maintain certain highways within its area. It also has a wide general power under section 62 of the 1980 Act to carry out works to improve the highways it has a duty to maintain and many other specific powers under the 1980 Act.

7.2 The Council may by order regulate the use of roads under section 6 and other specific powers of the Road Traffic Regulation Act 1984.

7.3 All procurements under the programme will have to comply with the Council's Contract Procedure Rules and, where necessary, the Public Contracts Regulations 2006 (as amended).

7.4 Under Part 3 of the Council's Constitution Cabinet may delegate key decisions to an officer of the Council.

7.5 Appropriate Traffic Management Orders will be made under the Road Traffic Regulation Act 1984 and advertised in accordance with the Local Authorities' Traffic Orders (Procedure) (England and Wales) Regulations 1996.

7.6 Before making these orders consideration must be given to section 122 of the Road Traffic Regulation Act 1984 which contains the Council's duty to secure the expeditious, convenient and safe movement of vehicular and other traffic and the provision of suitable and adequate parking facilities on and off the highway.

## **8. Equalities and diversity**

8.1 A full Equality Analysis (attached as Appendix F) has been undertaken, which has considered the impact of the proposal on those with protected equality characteristics. Although the proposals are likely to bring about positive improvements, the analysis has identified some potential for adverse impact and measures to help mitigate against these are set out.

## **9. Sustainability (including climate change, health, crime and disorder)**

9.1 The programme will have a positive impact on sustainability by encouraging a shift in transport mode from car use to cycling and walking. This will also contribute to improving the health and well-being of the local community and air quality. The design guide includes an aspiration to employ low energy use equipment e.g. lighting units; using SUDs (sustainable drainage) compliant materials; and following the Council's Sustainable Procurement Strategy for sourcing materials. It is estimated that the Mini Holland programme will reduce CO2 emissions by approximately 1,000 Tonnes per year (see Appendix G).

## **10. Council infrastructure**

10.1 Whilst the size of this programme represents a significant investment of council resources, the programme is externally funded and there is sufficient funding to

employ staff required for the project or to backfill existing council officers engaged in the programme.

**11. Race/ ethnicity**

11.1 No negative impacts are expected from the proposals on the community in respect of ethnicity.

**12. Faith/ religion**

12.1 No negative impacts are expected from the proposals on the community in respect of faith or religion.

**13. Sexual orientation**

13.1 No negative impacts are expected from the proposals on the community in respect of sexual orientation.

**14. Climate Change & Sustainability Impact Assessment**

14.1 There are no climate impact implications to water, waste, land or buildings. Decreased congestion is considered to be a benefit to air quality. Any increase in road safety is considered to provide an opportunity for modal shift to encourage walking, cycling and increased use of public transport.

Approved by

  
.....  
**Cllr Clyde Loakes**  
**Environment Portfolio Holder**

Date: 1.9.15

Approved by

*M. Moloney*  
.....  
**Michele Moloney**  
**Director of Neighbourhoods and Commissioning**

Date: *1/9/15*

-  Existing one-way
-  Proposed one-way
-  Proposed two-way
-  Road closure with feature
-  'Copenhagen' crossing
-  Bridge improvement / Public art
-  Junction Improvement
-  Landscaping
-  Streetscape Improvement
-  Road to be resurfaced



## **Blackhorse Village area wide improvements**

### **Appendix B- Engagement approach for delivery**

The following document outlines the engagement approach for delivery for the Blackhorse Village area wide improvement scheme. Based on this extensive approach the Council has developed proposals which take on board the resident's priorities, benefits the whole community and achieves the overarching aims of Mini Holland in Blackhorse Village.

The Blackhorse Village area wide improvements aim to reduce the amount of through traffic using residential streets whilst improving the look, feel and safety of Blackhorse Village for all road users.

The Council has followed an engagement approach for delivery, detailed in the table below. The sections in orange highlight the engagement stages. This was an extensive consultation process run by Highways and Infrastructure. We value the views of our residents and have been consulting on the Blackhorse Village area wide improvements scheme over a five month period. We have talked to as many residents and local businesses as possible and have encouraged people to have their say at every opportunity.

<b>Delivery Process</b>	
<b>Stage 1</b>	<b>Perception Survey</b>
Stage 2	Concept Design
<b>Stage 3</b>	<b>Workshops</b>
Stage 4	Preliminary Design (TfL Review)
<b>Stage 5</b>	<b>Public Consultation</b>
Stage 6	Detailed Design (TfL Review)
<b>Stage 7</b>	<b>Scheme Notification Booklet</b>
Stage 8	Construction
Stage 9	Review

#### **Stage 1 – Perception Survey**

A perception survey was carried out as part of the early engagement for the scheme in March 2015. All households within the consultation boundary were hand delivered the survey on 13 March 2015. The response period was between 13 March and 3 April 2015.

The perception survey aimed to measure respondent's views on how they felt about the area and why they felt this way. The study involved a continual assessment of people's views and could be accessed by an online portal. Residents were encouraged to undertake the survey via the Commonplace online portal but those who did not have access to the internet were able to submit feedback questionnaires, which were entered into a central database for analysis.

The perception survey aimed to reveal concerns and aspirations that local people experience in their everyday lives. There is no one better at understanding the issues within a local area than those that live, work and play there.

### **Perception Survey Promotion**

The survey was promoted through a variety of methods including; hand delivering surveys, social media, email newsletters, on-street posters featuring a QR code link to the survey, through councillor updates and partner companies such as London Cycling Campaign and Waltham Forest Cycling Campaign.

The Council met with local schools during the perception survey period to inform them about the Blackhorse Village scheme and to encourage them to promote the survey in their newsletters. Council officers had meetings with the schools on the following dates.

19 March- Stoneydown Primary School  
23 March- Greenleaf Primary School  
25 March- Mission Grove Primary School  
30 April- St Patrick's Catholic Primary School

The Council also encouraged parents to fill in the survey by having a gazebo up outside the school gates from 3pm- 4:30 pm. Council officers distributed leaflets to promote the survey and were able to answer any questions residents had about the Mini Holland Programme and the Blackhorse Village scheme. Council officers spoke to over 200 parents through these events.

### **Perception Survey Methodology**

The perception survey aimed to reveal issues that local people experience everyday while living, travelling and working in Blackhorse Village. Participants of the survey were asked a series of multiple choice questions designed to gain an insight and provide an overview of how people travel within the study area and what concerns them relating to the project. Users were not restricted to just one comment at one location, allowing them to give a broader/ less specific view.

Commonplace provided an interactive mapping tool for participants to select points within and around the study area to state how they feel and what they would like to see to encourage them to walk and cycle in the borough more. Participants were given the option to leave their own comments, opening up the range of issues which could be discussed.

Users were not restricted to one comment at one location, they were able to add as many comments as they wished, allowing them to give broader/less specific views.

### **Perception Survey Findings**

The survey was undertaken in March 2015 and attracted 534 unique users, posting over 958 comments.

The survey initially asked respondents to highlight a point on a map of the Blackhorse Village area of importance to them, and used a scale to ask respondents to indicate how they felt about the highlighted area. It then asked respondents to select options asking why they feel this about the area and how they thought the area could be changed to make it a more pleasant environment for walking and cycling.

The next section allowed respondents to detail anything else that would encourage them to walk or cycle more in the area. Respondents were not limited to the number of comments they could post. Some respondents posted numerous comments in multiple locations, whilst others wrote one comment covering a wide range of issues. When categorising the comments, each comment was broken down into individual points covered, totalling 1200 comments overall.

### **Question Analysis- how did respondents feel about the Blackhorse Village area?**

The perception survey asked respondents to mark specific points on a map which they felt were important to them or needed improvements. Respondents were then asked to rate their feeling towards this particular area on a scale of 1 to 10 with 1 being the most negative and 10 being the most positive.

This question highlighted that respondent's feelings towards Blackhorse Village are primarily dominated by concerns for safety in the area with 60% of respondents noting this as an issue in relation to the area they had highlighted on the map. The second most selected option was 'it is unattractive', with 376 of respondents (51%) selecting this option.

In comparison, 113 respondents (26%) stated that they felt their selected area felt safe, and 87 respondents (20%) felt their selected area is attractive.

### **Question Analysis- what changes would respondents like to see to make it a more pleasant environment for walking and cycling?**

Respondents were able to select as many options as they wished from a series of multiple choice options. The most popular change respondents would like to see in the Blackhorse Village area was more plants and trees (73%). The second most popular option from respondents was to see less traffic. Respondents clearly demonstrated a wish to improve the Village by seeing less and slower traffic movement and a more attractive environment. Requests for planting, reduced traffic flows and improved road safety also dominated the responses.

## **Question Analysis- open comments**

Respondents were asked “Is there anything else that would encourage you to walk or cycle more in the area?” and left with an open field to write their comments. Although specifically asking for views on walking and cycling, analysis of responses reveals this section was used as a means for people to express a wide range of views relating to the Blackhorse Village area and the Mini–Holland proposals. The responses have been analysed and we have identified over 1200 separate comments and issues that were raised. These can be broadly broken down into 10 categories:

**Traffic and Road Safety** – the majority of comments (257) were made regarding road safety and traffic issues. 119 specific comments were made about high speed and aggressive driving and 105 comments were made regarding the problems caused by rat-running traffic.

**Better public realm** – 232 comments were made requesting improved public realm, including better lighting, more trees, provision of pocket parks, and the commission of public art.

**Pro-Cycling** – 217 respondents posted positive comments in regards to cycling. 141 specifically requested improvements to cycle routes and cycle safety measures, and 40 requested more and improved cycle parking. Other comments included suggestions to extend the Mini- Holland scheme, promotion of considerate road use and the introduction of Boris bikes.

**Pedestrian Issues** – 194 comments were made regarding pedestrian safety issues. 54 comments made reference to the condition of footways and the need for comprehensive maintenance. Several comments were received regarding the lack of footway outside Blackhorse station as well as a number of pedestrian crossings being perceived to be unsafe.

**General Environmental Issues** – 186 comments related to a desire for a cleaner and better environment. 90 of these comments stated concerns over the need for cleaner streets and the eradication of fly tipping.

**Against Mini–Holland** – 51 comments were from those concerned that there would be a negative impact on local business and worry that the scheme does not cater to the needs of all road users. There were only a relatively small number of such comments (4% of all received).

**Site Specific Traffic Issues** – 42 requests were made to change existing road layouts, including;

- The right Hand turn out of Pretoria Avenue
- Blackhorse Road / Forest Road crossover
- Hatherley Road/ Hoe Street Junction
- Closing Palmerston Road and Mission Grove

- Re-phasing of the traffic lights around the market area.

**Better public transport** – 7 comments were made about public transport with 2 respondents asking for additional bus services and 4 requesting the reinstatement of a bus countdown service.

**Parking Issues** – 14 comments were made regarding parking. The focus of these comments was on the provision of fair and enforceable parking, reducing congestion around schools and protecting resident's access to parking.

**Highway Maintenance** – 18 comments were received highlighting areas of the network which were degraded or in need of maintenance and improvements.

### **Summary and Conclusions**

The results of the perception survey highlight that people's feelings towards Blackhorse Village area are dominated by concerns over safety and attractiveness. Respondents clearly wish to improve the Village by seeing less and slower traffic movement and a more attractive urban environment.

Requests for more planting, reduced traffic flows and improved road safety dominate the comments received.

With particular regards to how respondents could be encouraged to walk and cycle in the local area:

- Many respondents requested improved lighting on poorly lit streets and public areas, as well as requests for increased street patrols, regular street cleaning and the eradication of fly-tipping.
- Better cycling priority comments were generally positive about the schemes introduction. There were calls for increased levels of secure cycle parking; segregated routes and; requests to extend the Mini-Holland scheme and the promotion of considerate road use.
- Traffic and road safety concerns focused on rat running, speeding and the need for traffic calming measures to reduce speed. Approximately 20% of all additional comments were related to traffic and safety matters
- There were a large number of calls for improved pedestrian safety and new facilities along with comments made regarding the condition of footways and the need for comprehensive maintenance. A large number of comments related to the junction of Forest Road and The Bell and Hatherley Road junctions.

## **Stage 2- Concept Design**

Based on the outcomes of the perception survey we developed a Concept Design for the area.

## **Stage 3- Workshops**

In May 2015 the concept design was presented at a series of four workshops within the scheme area. The co-design workshops were for residents to give feedback and suggested ways to develop the designs. Leaflets were delivered to all residents within the Blackhorse Village area to ensure that all residents were informed and invited to the meetings. A total of 99 people attended the workshops.

The workshops were held across the Blackhorse Village area, at four different locations:

William Morris Community Centre	12 May 2015
The Limes Community and Children's Centre	14 May 2015
St Patrick's Parish Club	18 May 2015
Stoneydown Primary School	21 May 2015

The purpose of the workshop was to engage with residents to help shape our plans.

The format was:

- Informative - we told residents about the results from the perception survey and our initial designs for the scheme
- Inclusive - we wanted to hear residents views and what is important to them analyse and offer views on future proposals
- Interactive - there were group exercises where residents helped develop the concept design.

The workshops were very productive and informative. Issues and opportunities were actively debated amongst the groups and the Council received many constructive suggestions on how to improve the scheme and the area overall. Attitudes and opinions varied across the four workshops. This allowed the Council to identify and address the different viewpoints and apprehensions felt in each of the locations. All the information received through the exercises was collated and has fed into the development of a scheme which was then put to consultation.

A summary of the key themes is outlined below.

### **Exercise 1- Route Mapping**

In the first exercise, attendees were asked where they walked and cycled in the Blackhorse Village area. Collectively the attendees walked and cycled the majority of the area.

## **Exercise 2- Concept Co-Design**

As part of the second exercise residents evaluated the concept design and highlighted areas that they thought needed to be changed. Residents were given a plan of the concept design and had the opportunity to amend or comment on:

- Road closures (modal filters)
- Traffic calming
- Crossing points
- Improving streets for pedestrians
- Improving streets for cyclists

The feedback received demonstrates that residents were particularly in favour of the road closures at:

- Ruby Road
- Pretoria Avenue near Stoneydown Primary School
- Northcote Road

Residents would like to see crossing improvements at:

- Mission Grove/Palmerston Road junction
- Palmerstone Road/High Street signalised crossing
- Hatherley Road/Hoe Street/Milton Road junction.

There was also a strong consensus that Mission Grove needed to be improved for cyclists.

In principle the proposals were generally well received but the location of some of the road closures were questioned by some attendees. These included the ones at:

- Pretoria Avenue (which was well received by others elsewhere in the exercise)
- Northcote Road (which was well received by others elsewhere in the exercise)
- Cottenham Road
- Hatherley Road
- Somers Road
- Suffolk Park Road

In addition to the road closures there was strong opposition to the bus gate on Mission Grove.

## **Exercise 3- Public Realm Improvements**

The third exercise of the workshop asked residents to consider what they would like to see implemented as part of the scheme. The results were marked up on a map of the area. More detailed results can be found with the report mentioned above, however the most popular areas for public realm improvements included:

- The link between the two Stoneydown Primary School sites
- Additional landscaping of Jewel Road
- Additional landscaping at the east end of Mission Grove
- Public art and improved lighting on Willow Walk
- Improved lighting at the west end of Mission Grove
- Generally more cycle storage
- Generally cleaner streets

Through Stages 1-3 groups of residents on particular roads were keen to meet with us to discuss their issues further. We met with resident groups including, Pearl Road, Ruby Road, Jewel Road, Orchard Street, Ritchings Avenue and Northcote Road.

These engagement activities, as well as the traffic data gathered, have allowed the Council to design a scheme which will enhance Blackhorse Village and work for residents and businesses. We have listened to residents and businesses feedback, analysed the data from the perception survey and the workshops and developed a proposal based on this.

### **Stage 5 – Public consultation**

Between 30 June and 1 July 2015 Council Officers hand delivered over 5000 consultation documents to all residents and businesses within the Blackhorse Village consultation area.

The consultation period ran for three weeks from 30 June 2015 to 21 July 2015. During this period, the Council ran numerous engagement events and met with key stakeholders. A summary of the activities that took place are outlined below.

- Two drop in sessions were held at different locations in the scheme area. The first was on Wednesday 8 July at William Morris Community Centre from 6-9 p.m. The second was on Saturday 11 July at Stoneydown Primary School from 2-5 p.m. Over 103 residents attended over both days.
- Council Officers door-knocked 90% of the Blackhorse Village area from 6 July 2015 to 16 July 2015, from 4pm to 7pm. This was undertaken to remind residents to respond to the consultation and was an opportunity for council officers to answer questions. During this period, council officers spoke to over 2000 residents.
- Council officers met with the councils refuse operators.
- The Council promoted the public consultation extensively on social media, which included Facebook and also Twitter to share infographics of the perception survey results. The proposed changes and benefits the Mini Holland scheme were tweeted and reminders for people to take part in the consultation were tweeted.

- The Council emailed everyone who had responded to the perception survey to inform them about the next stage of engagement.
- The consultation was promoted in the Council e-newsletter, the Mini Holland e-newsletter and Your News weekly.
- The Council put up twenty QR posters at junctions within the Blackhorse Village area. The posters contained a link to the Mini Holland website where residents could view the details of the proposed designs.
- The Mini Holland team had a stall at Walthamstow Garden Party from 18 – 19 July from 12pm- 6pm. Council officers were present both days to promote the consultation and answer any questions that residents had. The festival attracts around 34,000 people, which enabled further promotion of the consultation to a large audience.

In addition to the various engagement channels used by the Council, the consultation period also prompted local residents to also door knock their own street and local area and distribute leaflets with their personal feelings about the proposed changes. There were residents campaigning for and against the proposals which demonstrates that the consultation provoked discussion within the local community.

The Council received 665 questionnaires from households within the consultation area. All the responses have been collated and analysed. A full report and analysis on the results is attached as Appendix C. The questionnaire responses reflect 14.2% of households in the consultation area.

Approximate dates for the next stages of the scheme are shown below.

**Stage 6 Detailed Design** - August- September 2015

**Stage 7 Scheme Notification Booklet** - October 2015

**Stage 8 Construction** - October 2015- March 2016

**Stage 9 Review** – September 2016

If implementation takes place we will continue to monitor traffic levels and feedback from the area. We will commence a review of the measures approximately six months after full implementation.

## **Blackhorse Village area wide improvements**

### **Appendix C- Consultation questionnaire results**

This appendix looks solely at the results from the consultation stage. Appendix D of this report outlines the final measures and reasons for those measures. The measures are based on feedback received during the full engagement process, including the results highlighted below and any further suggestions that were made during the consultation period.

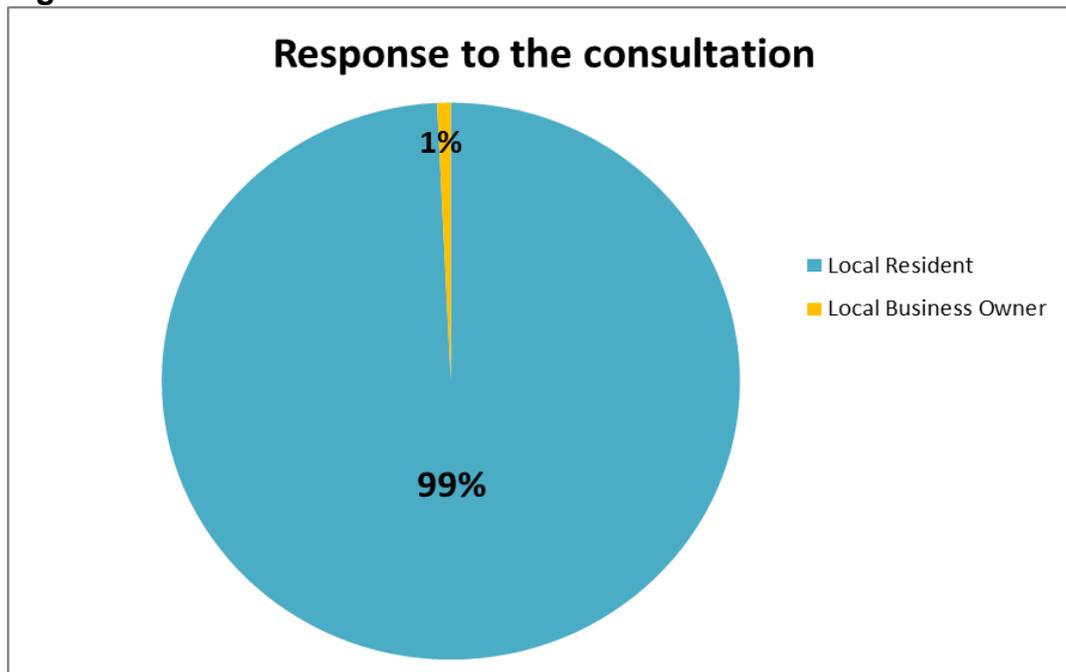
#### **Consultation results**

All households were delivered the Blackhorse Village area wide improvement scheme consultation document and questionnaire by Council Officers between 30 June and 1 July 2015. Households were requested to send back their questionnaires (one per household) by freepost by 21 July 2015. The Council received 665 questionnaires from households within the consultation area. This is a 14.2% response rate.

#### **About the respondents**

Respondents were initially asked to detail in what capacity they were responding to the consultation. The results are detailed in Figure 1.

**Figure 1**



#### **About the proposals**

##### **Safer environment proposals**

The questionnaire then provided details of five different measures which aim to create a safer environment in Blackhorse Village. Households expressed how supportive they were of each of the measures. Residents were able to select one of five options: very supportive, quite supportive, neutral, not very supportive and not supportive at all.

Analysis shows that 60% of households were in favour of all the safer environment proposals (Figure 2).

**Figure 2**

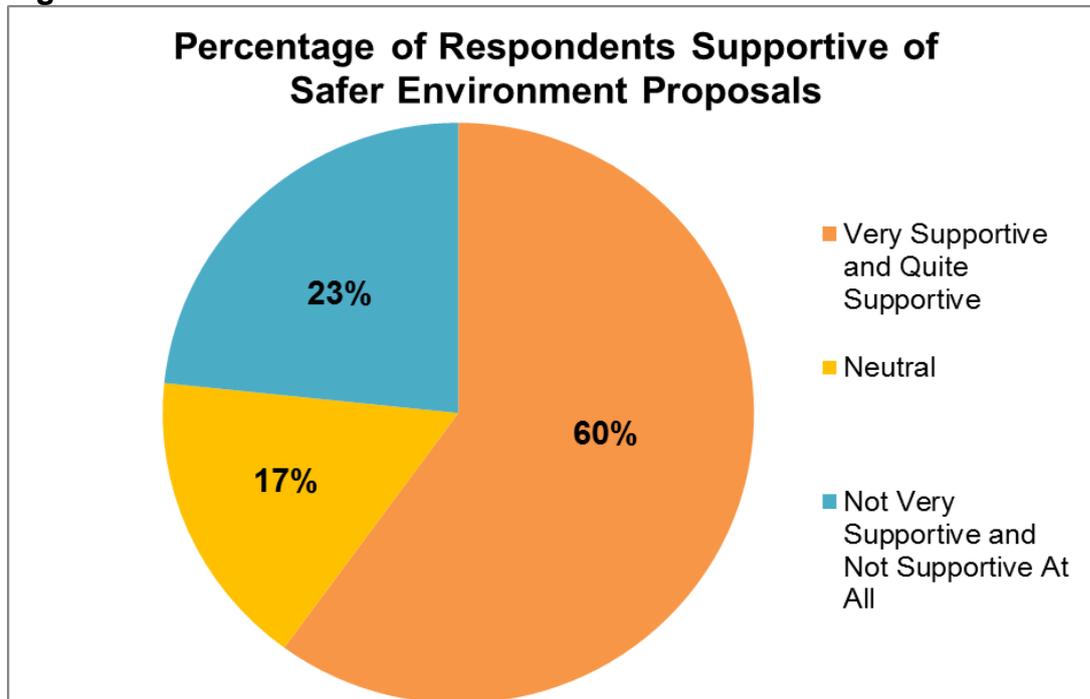


Figure 3 shows the responses for implementing raised 'Copenhagen' style crossings at key junctions in Blackhorse Village which prioritise pedestrians and slow traffic down.

**Figure 3**

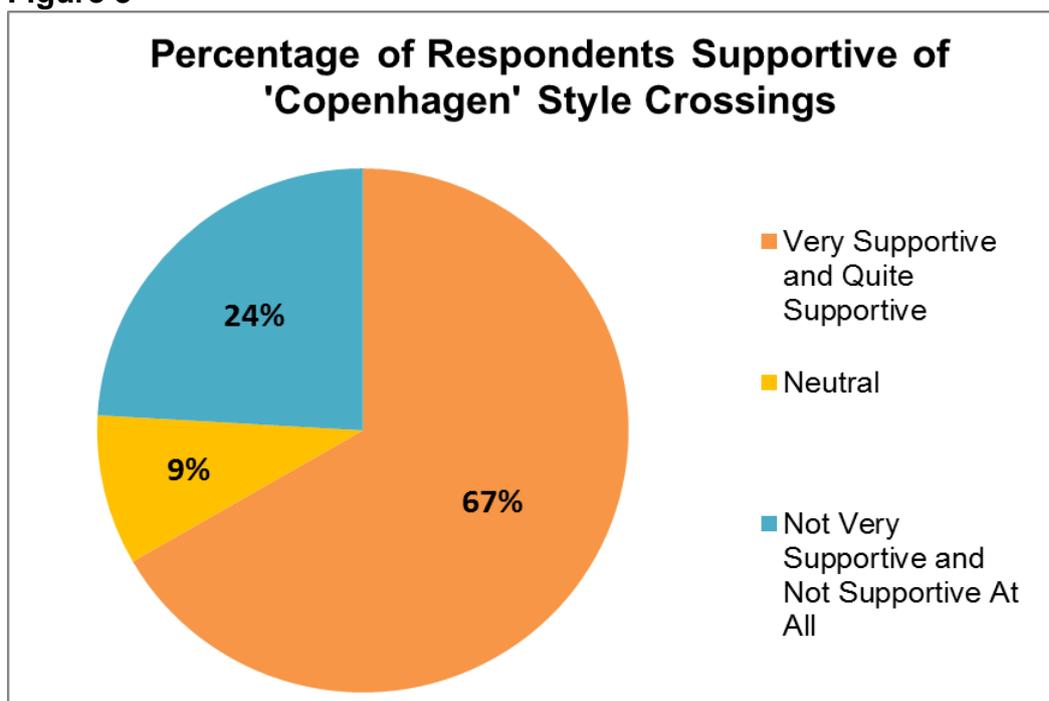


Figure 4 conveys the responses to improving the junction of Greenleaf Road and Melville Road.

**Figure 4**

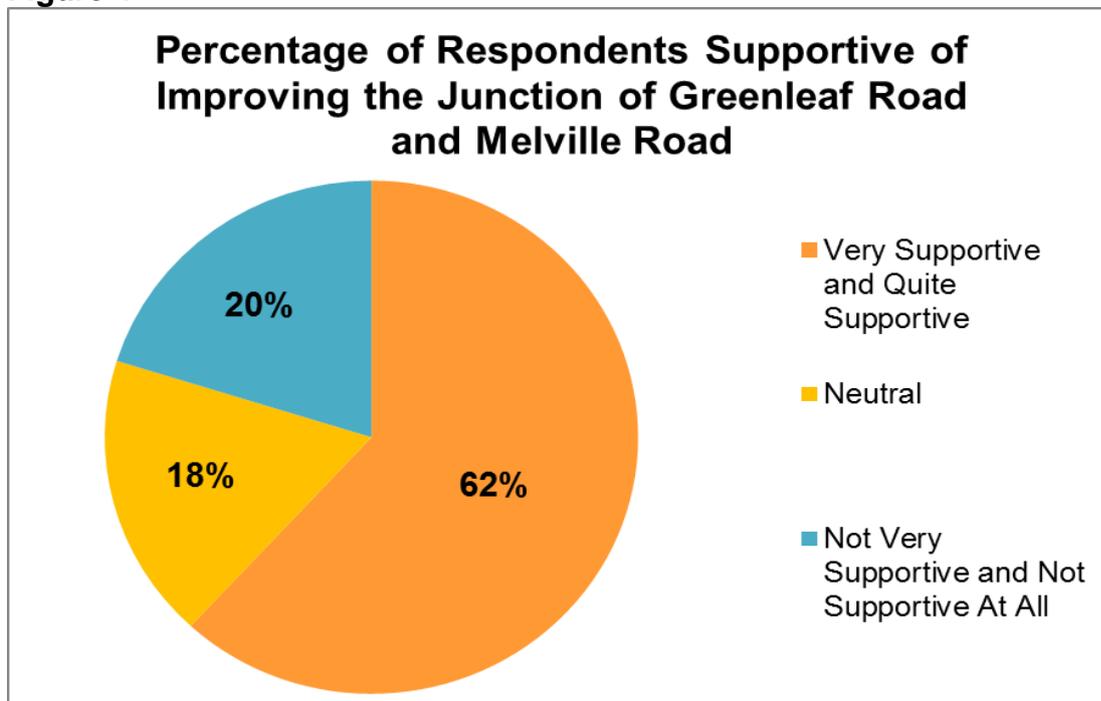


Figure 5 visualises the responses to improving the junction of Northcote Road and Elmsdale Road, which was highlighted as a popular east to west walking and cycling route within the area.

**Figure 5**

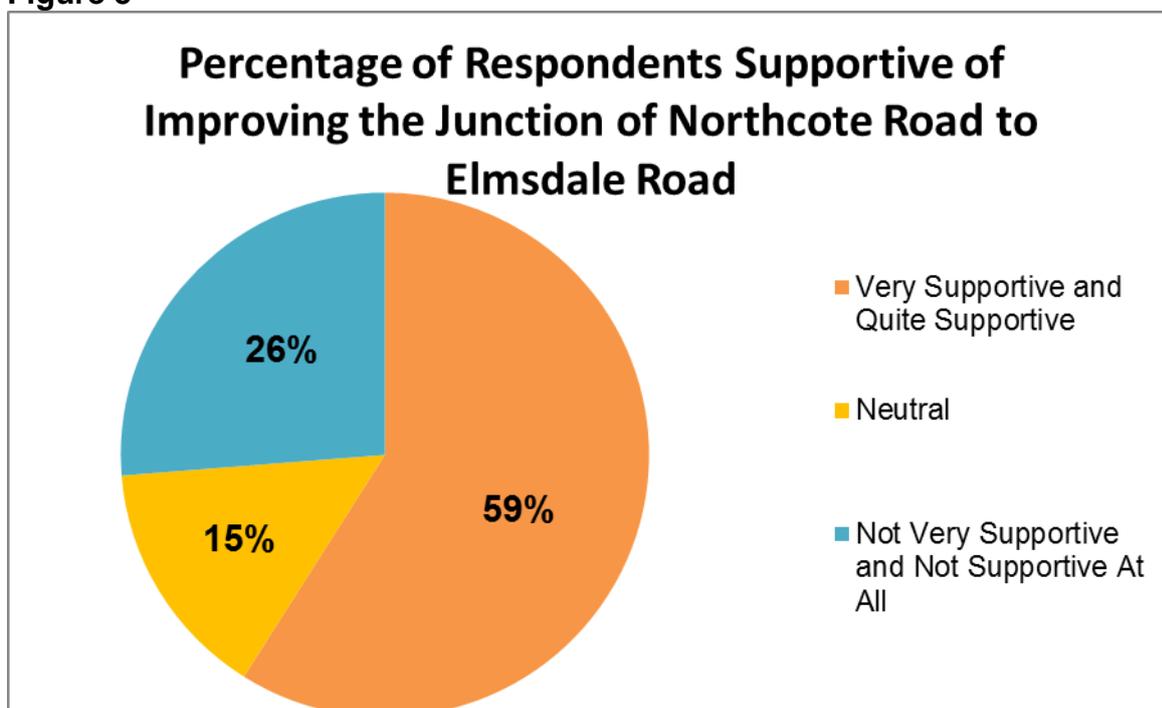


Figure 6 shows the responses for improving the junction of Walpole Road and Coleridge Road, which was also highlighted as a popular east to west walking and cycling route within the Blackhorse Village area.

**Figure 6**

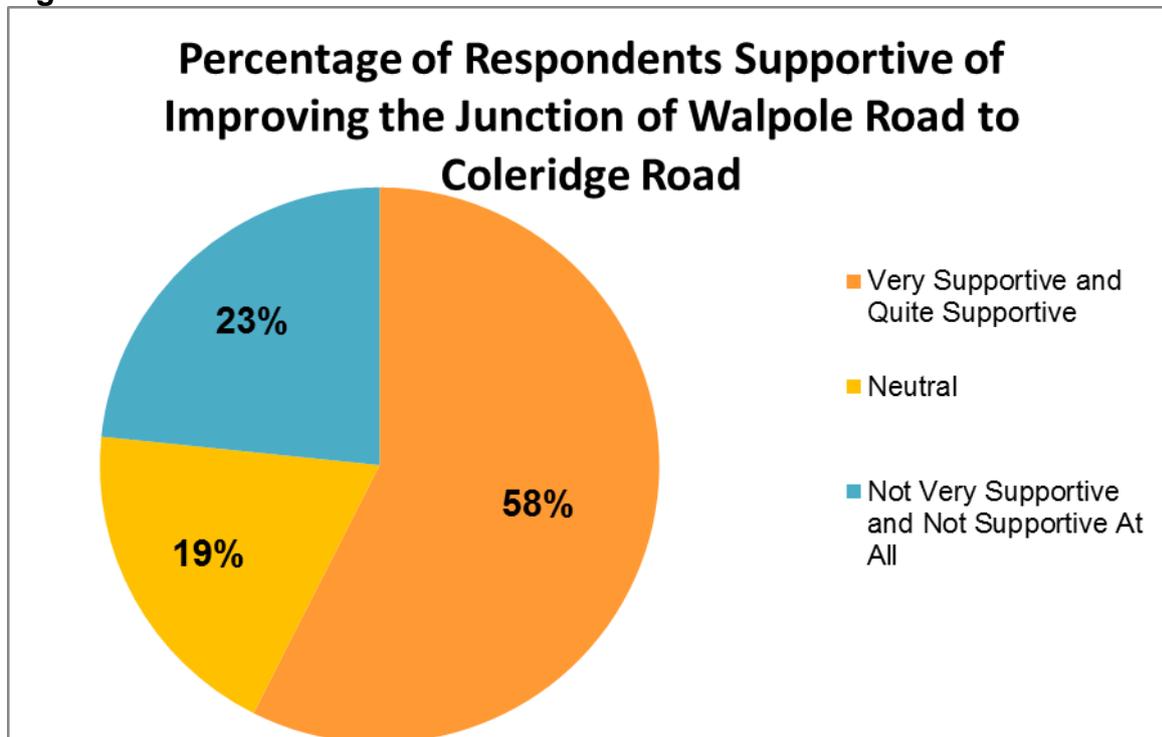
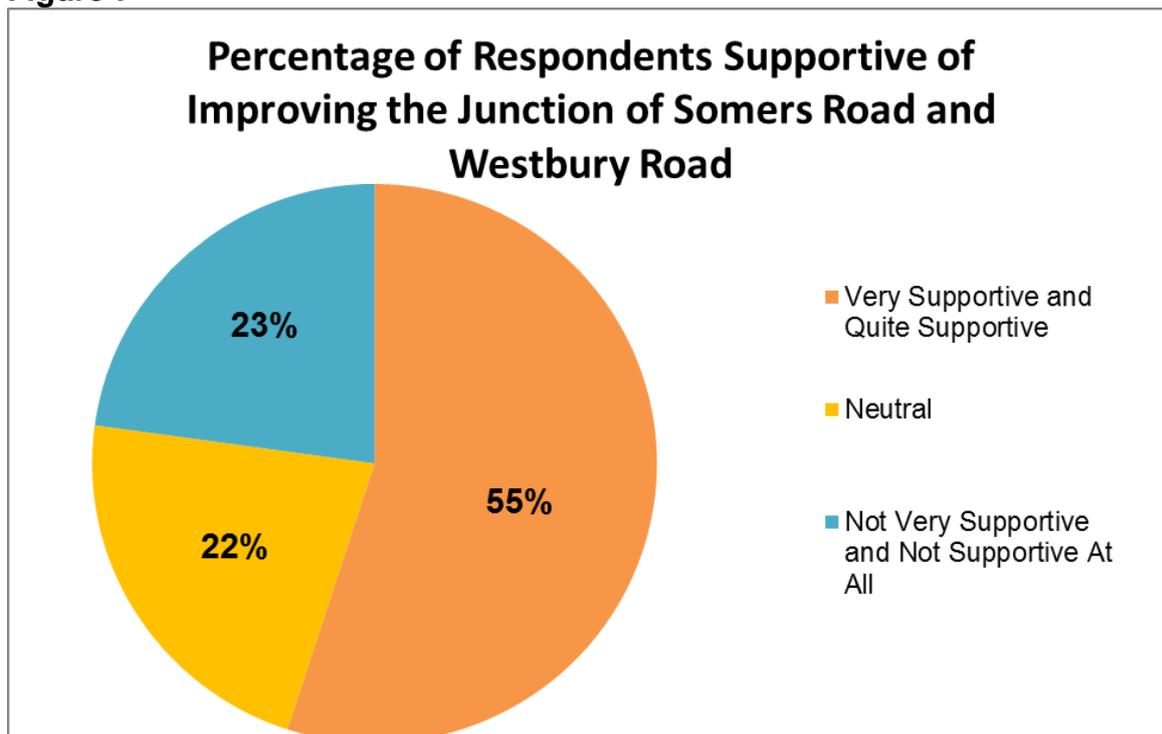


Figure 7 shows the responses for improving the junction of Somers Road and Westbury Road.

**Figure 7**



## Improving public spaces

In question two, residents were provided with descriptions of eleven schemes to improve public spaces in the area. Respondents were asked to tell us which were most important to them by selecting three of the eleven measures. The table below shows the most popular choices. The Council will look to implement the schemes in order of priority based on this feedback.

Popularity order	Public space improvements	Number of selections
1	Additional tree planting across the Blackhorse Village area	313
2	Blackhorse Road/ Stoneydown streetscape improvements	204
3	Pretoria Avenue streetscape improvements	187
4	More outdoor seating	173
5	Greenleaf Road streetscape improvements	159
6	Mission Grove (outside school) streetscape improvements	150
7	More cycle parking	134
8	Buxton Road (Mission Grove School) streetscape improvements	127
9	Ritchings Avenue- public art on the bridge	59
10	Suffolk Park Road- public art on the bridge	46
11	Vernon Road- public art on the bridge	30

## Road closures and traffic direction changes

Question three of the questionnaire asked households to state how supportive they are of Series A, B and C of road closures, no entries and traffic direction changes. Residents were able to select one of six options: very supportive, quite supportive, neutral, not very supportive, not supportive at all or don't know. Each series consists of the following proposals:

### Series A (west)

- Pretoria Avenue north of the junction with Longfield Avenue
- Suffolk Park Road between Ickworth Park Road and Wellington Road
- Northcote Road near the junction with Palmerston Road
- Chewton Road make one-way eastbound
- Longfield Avenue make one-way westbound.

If the above measures are introduced the following changes to traffic direction must also be implemented:

- Pretoria Avenue- one way northbound between Warner Road and Longfield Avenue

- Pretoria Avenue- two way between The Links and the proposed road closure
- Wellington Road- one way southbound between Forest Road and Canning Road.

**Series B (north east)**

- Coleridge Road near the junction with Palmerston Road
- Erskine Road between Gainsford Road and Melville Road
- Gaywood Road near junction with Hoe Street
- Greenleaf Road south of junction with Brookdale Road
- Hawthorne Road near junction with Hoe Street
- Jewel Road near junction with Hoe Street
- Ruby Road near junction with Hoe Street.

If the above measures are implemented the following changes to the traffic must also be implemented:

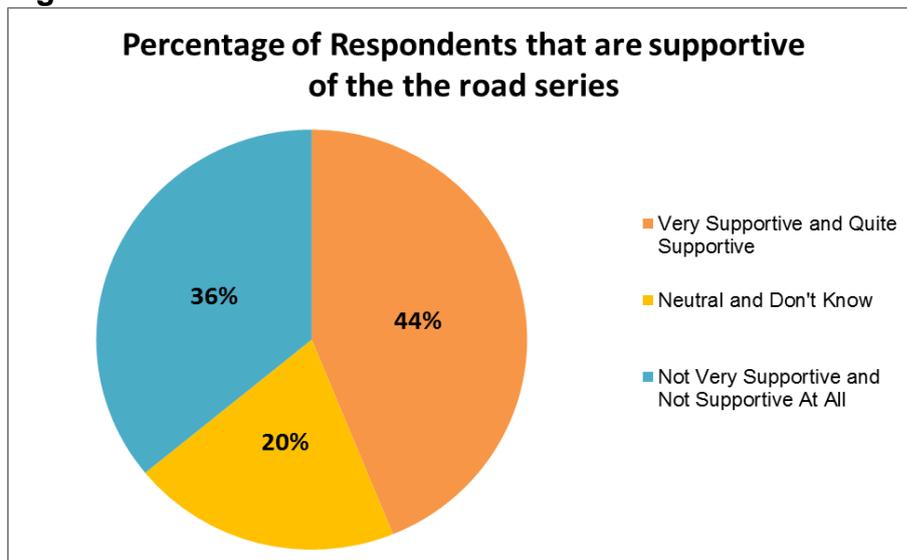
- Coleridge Road- make two-way
- Gaywood Road- make two-way
- Greenleaf Road- make one-way (northern section from school entry/exit up to Forest Road)
- Hawthorne Road- make two-way
- Jewel Road- make two-way (southern end)
- Rosebank Grove- make two-way (southern end)
- Ruby Road- make two-way
- Wolsey Avenue- make two-way.

**Series C (south east)**

- Hatherley Road- near junction with Westbury Road
- Somers Road- near junction with Westbury Road
- Westbury Road- near junction with Hatherley Road.

Figure 8 shows the overall percentage of respondents that were supportive of the three road series.

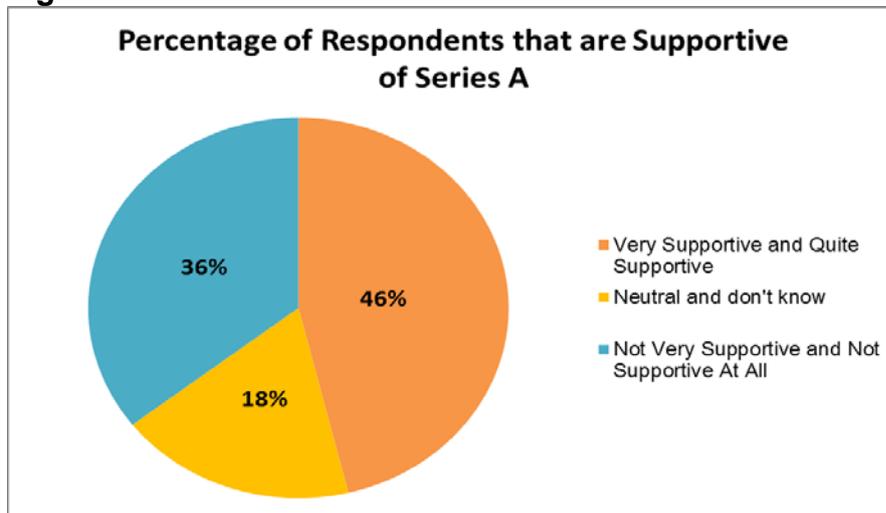
**Figure 8**



As can be seen, the majority of respondents are supportive of Series A, B and C.

### Series A

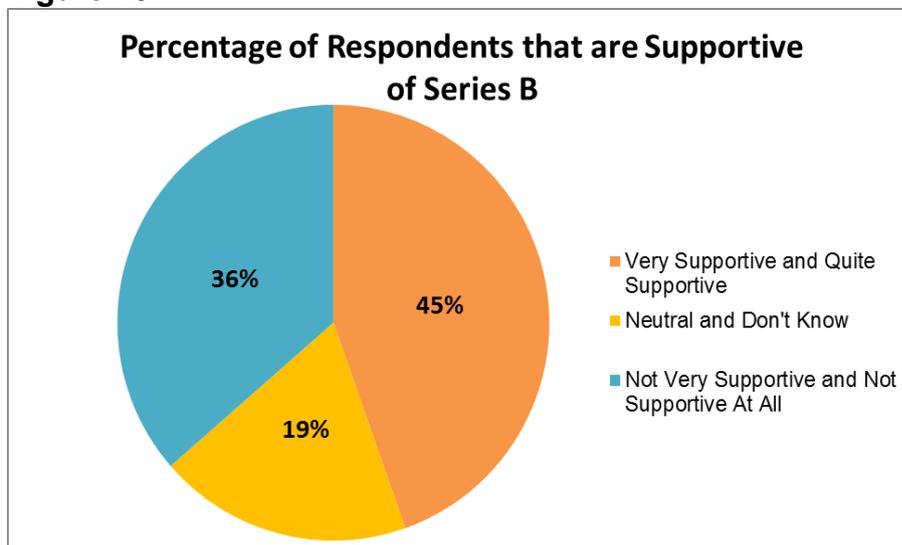
Figure 9



Series A shows that 46% were in favour of the proposed measures and 36% were not in favour. 15% are neutral and 3% did not know.

### Series B

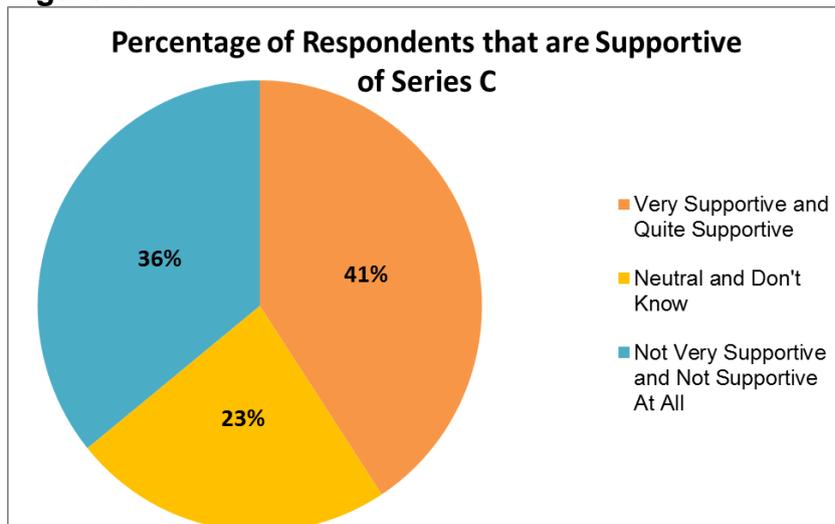
Figure 10



The results from series B showed that 45% were in favour, 36% were not in favour, 15% were neutral and 4% did not know.

## Series C

Figure 11



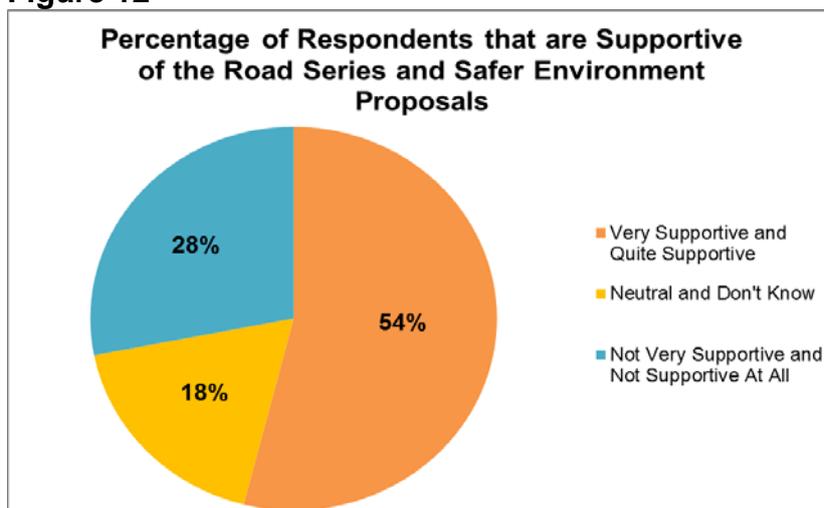
For Series C, 41% of respondents were in favour of the measures, 36% were not in favour, 19% were neutral and 4% said they don't know.

### All Measures

Undertaking further analysis of question 3, shows that overall 44% of those responding were in favour of the road closures and changes to traffic directional changes, 36% were not in favour of the measures, 16% were neutral and 4% said they did not know.

Looking at all the proposed measures to be provided as part of the scheme, including the road closures, associated traffic management measures and safer environmental proposals of the 5121 selections (total responses to all questions), 54% were in favour of all measures and 28% against (Figure 12).

Figure 12



## **Blackhorse Village area wide improvements**

### **Appendix D- Reasons and benefits of the proposals**

The proposals have been developed based on the results of the perception survey, concept design, workshops, preliminary design and public consultation. At every stage of the process we have adapted and developed the proposals based on feedback from residents, businesses and key stakeholders. As we have taken suggestions from residents and businesses, many of the current proposals vary from the earlier concept design stage.

This appendix provides detailed information about the proposed changes in Blackhorse Village and the benefits each proposal will bring to the community, which are to be considered by the portfolio holder.

### **Road closures and traffic direction changes**

**Overall from the consultation responses, there was 44% support for these measures, 36% against the measures 16% neutral and 4% said they don't know.**

A core element of the proposal is the introduction of a series of road closures and traffic direction changes. The closures affect motored vehicles only; pedestrians and cycles will be able to pass through all the outlined closures. Where a closure is introduced, space will be provided to allow vehicles to turn around where feasible, as highlighted as a necessity by residents during the engagement process.

We want to ensure any permanent road closures are designed in a way that is in keeping with the surroundings. Therefore, we will design the closures with the help of residents, businesses and key stakeholders.

The remaining section of this report itemises the scheme proposal and looks at each series of measures of road closures and traffic direction changes individually. Each proposed change should not be looked at in isolation; there are reliant interconnecting factors for each series of measures. They will significantly reduce the amount of through traffic using the residential streets whilst maintaining access for residents, visitors, businesses and emergency services.

### **Series A (West)**

- Close Pretoria Avenue north of its junction with Longfield Avenue
- Close Suffolk Park Road between Ickworth Park Road and Wellington Road
- Close Northcote Road near to the junction with Palmerston Road
- Chewton Road - make one-way eastbound
- Longfield Road - make one-way westbound

If the above measures are introduced the following changes to traffic direction must also be implemented:

- Pretoria Avenue – one-way northbound between Warner Road and Longfield Avenue
- Pretoria Avenue – two-way between The Links and the proposed road closure
- Wellington Road – one-way northbound between Canning Road and Forest Road

### Reasons and Benefits

**Within the consultation responses, 46% supported these measures, 36% were against the measures, 15% were neutral and 3% said they did not know.**

This series looks at a number of streets within the western section of the Blackhorse Village scheme. One of the key factors in the development of this scheme has been the number of rat running vehicles within the area. These proposals act to reduce that number and allow the scheme to achieve its core objectives.

Northcote Road, Pretoria Avenue and the enclave from Pretoria Avenue to Palmerston Road are common routes through this residential area for vehicles trying to bypass the surrounding main roads. Therefore, a series of closures are proposed that are reliant upon each other to gain maximum efficiency. Justification of the proposed closures is based upon local community responses within the Perception Survey, Automatic Traffic Count (ATC) data and community response within the Workshops and Public Consultation.

The ATC data has been used in a hypothetical analysis, which uses actual recorded directional daily average vehicle counts (shown in italics below), which is then totalled and compared to the number of addresses within the street. The number of addresses may reflect car ownership, but we have doubled this figure to compensate for the possibility of two cars owned per address. This number has then been multiplied by two to reflect two vehicle journeys a day, which is then subtracted from the daily average vehicle count total. The results show an unacceptable level of non-local vehicle journeys within these residential streets.

<b>Pretoria Avenue</b>	
<i>Northbound</i>	<i>1034 vehicles</i>
<i>Southbound</i>	<i>111 vehicles</i>
Total	1145 vehicle journeys per day
Number of addresses	117
Potential maximum car ownership	234
2 x journeys per day	468
Difference	<b>677</b> non-local vehicle journeys per day

<b>Northcote Road</b>	
<i>Eastbound</i>	<i>928 vehicles</i>
<i>Westbound</i>	<i>1145 vehicles</i>
Total	2073 vehicle journeys per day
Number of addresses	174
Potential maximum car ownership	348
2 x journeys per day	696
Difference	<b>1377</b> non-local vehicle journeys per day

The above is typical for the majority of streets within the Western section of the scheme area, which includes Pretoria Avenue that also has a proposed road closure to reduce the number of non-residential vehicle journeys. The closures in Northcote Road and Pretoria Avenue are both supported by a road closure in Suffolk Park Road, which if installed together will discourage vehicles aiming to avoid the signalised junctions at the junctions of Forest Road with Blackhorse Road; and Forest Road with Palmerston Road.

These closures are further supported by residents within and around Orchard Street, who during the scheme development process requested to meet with officers to outline the current problems they are experiencing due to non-local vehicle journeys within their streets. There has also been significant support for the road closures from Stoneydown School and the governors of the school.

It should be noted that a group of six residents requested to meet officers to outline their objection to the Northcote Road closure, however, the majority of the group do not actually live within Northcote Road.

The measures within this series are well supported in the consultation responses, therefore little changes have been made from the consultation proposals.

It should also be noted that a resident of Ritchings Avenue sent requests for various changes. The resident recommended the following proposals:

1. Ritchings Avenue to be one way from Forest Road as diagram below, with kerb parking.
2. Pretoria Avenue to have one way increased to go out into Forest Road as diagram below.
3. No entry and restriction to be removed from Suffolk Park Road, if not, then it should be inserted on the map drawn by you and open for consultation, as this is not shown to the residents of Walthamstow.

The above requests will be investigated during the detailed design stage and upon confirmation from Network Rail whether feasible once bridge replacement/strengthening programme has been undertaken.

### **Series B (North East)**

- Close Coleridge Road near to junction with Palmerston Road
- Close Erskine Road between Gainsford Road and Melville Road
- Close Gaywood Road near to junction with Hoe Street
- Close Greenleaf Road south of junction with Brookdale Road
- Close Hawthorne Road near to junction with Hoe Street
- Close Jewel Road near to junction with Hoe Street
- Close Ruby Road near to junction with Hoe Street

If the above measures are introduced the following changes to traffic direction must also be implemented:

- Coleridge Road - Make two-way
- Gaywood Road - Make two-way
- Greenleaf Road - Make one-way (Northern section from school entry/exit up to Forest Road)
- Hawthorne Road - Make two-way
- Jewel Road - Make two-way (Southern end)
- Rosebank Grove - Make two-way (Southern end)
- Ruby Road - Make two-way

### **Reason and Benefits**

**Within the consultation responses, 45% supported these measures, 36% were against the measures, 15% were neutral and 3% said they did not know.**

One of the key concerns highlighted by the local community throughout the engagement process is vehicles avoiding the signalised junction of Forest Road and Hoe Street by using Pearl Road, Jewel Road, Ruby Road, Gaywood Road or Hawthorne Road as an alternative route. These are predominantly residential streets, such as Greenleaf Road, which has a daily average of 992 vehicles northbound and 1071 southbound. Greenleaf Road also accommodates two community centres and a school; a vehicle count of 2063 per day presents a serious risk to residents and the vulnerable. Therefore a series of road closure in the streets outlined above are proposed to mitigate rat-running non-local vehicle journeys.

The above is also reflected in the daily average vehicle count within Coleridge Road (1674 westbound only) and also Erskine Road (2566 total), which again is an unacceptable amount for a residential street, therefore, road closures are proposed within both of these streets.

### **Series C (South East)**

- Close Hatherley Road – near to junction with Westbury Road
- Close Somers Road - near to junction with Westbury Road
- Close Westbury Road – near to junction with Hatherley Road

### **Reasons and Benefits**

**Within the consultation responses, 41% supported these measures, 36% were against the measures, 19% were neutral and 4% said they did not know.**

Series C focusses on the south-eastern section of the scheme, which suffers from severe rat-running of non-local vehicles. Hatherley Road currently has 4284 vehicle journeys per day and has 125 addresses within the street, therefore if we assume each of these addresses may have two cars per household (=250) (which is an unlikely scenario - vehicle ownership will be significantly less), and that each of those vehicles makes 2 journeys per day (to and from work = 500 vehicle journeys) there may be a potential reduction of 3784 vehicle journeys per day, many of which are oriented from and to the main roads. To mitigate displacement of these journeys

should the Hatherley Road closure be implemented, closures in Westbury Road and Somers Road will need to be implemented.

### **Creating a safe environment – Final Measures**

- Implementing raised ‘Copenhagen’ style crossings at key junctions into Blackhorse Village which prioritise pedestrians and slow traffic down.
- Greenleaf Road / Melville Road - Junction improvements
- Northcote Road to Elmsdale Road - East-West route / junction improvements
- Somers Road / Westbury Road Junction improvements
- Walpole Road to Coleridge Road - East-West route / junction improvement

### **Reasons and Benefits**

**Within the consultation responses, 60% were supportive of all these measures overall, 23% were against the measures overall and 17% were neutral.**

In order to fully achieve the benefits of the scheme we need to create a safe and pleasant environment for all road users. Therefore the final design includes a number of measures to reduce traffic speeds and to create a safer environment.

Residents have told us that reducing the risks of speeding traffic and creating a safer environment in Blackhorse Village are key priorities. In response, we are proposing the following:

<b>Proposals to create a safe environment</b>	<b>Reasons and benefits for changes</b>
Raised ‘Copenhagen’ style crossings to be implemented at key locations in Blackhorse Village.	<b>Within the consultation responses, 67% supported these measures, 24% were against the measures and 9% were neutral.</b>  A number of junctions in Blackhorse Village have been identified to introduce ‘Copenhagen’ style crossings. The junction has a raised crossing and added space for cyclists and pedestrians to help slow traffic and prioritise pedestrians crossing.
Greenleaf Road / Melville Road - Junction improvements	<b>Within the consultation responses, 62% supported these measures, 20% were against the measures and 18% were neutral.</b>  This junction has been identified to undergo improvements. It is a busy route which is close to several schools, where people have told us they have concerns over road safety.
Northcote Road to Elmsdale Road - East-West route / junction improvements	<b>Within the consultation responses, 59% supported these measures, 26% were against the measures and 15% were neutral.</b>

	The Council proposes making safety improvements to this junction, which is a heavily used route and a key route for cyclists travelling east-west and vice versa across the Palmerston Road. Safety will be improved by widening the pavement and raising the carriageway.
Somers Road / Westbury Road Junction improvements	<b>Within the consultation responses, 55% supported these measures, 23% were against the measures and 22% were neutral.</b>  To make the area more accessible and safer for pedestrians and cyclists we propose to reduce the carriageway width and increase the footway width. The junction will receive tree planting and landscaping.
Walpole Road to Coleridge Road - East-West route / junction improvement	<b>Within the consultation responses, 58% supported these measures, 23% were against the measures and 19% were neutral.</b>  The Council proposes making safety improvements to this junction, which is a heavily used route and a key route for cyclists travelling east-west and vice versa across the Palmerston Road. Safety will be improved by widening the pavement and raising the carriageway.

### **New and improved public spaces – Final Measures**

The most popular measures were:

1. Additional tree planting across Blackhorse Village.
2. Blackhorse Road / Stoneydown – Streetscape improvements
3. Pretoria Avenue – Streetscape improvements
4. More outdoor seating.

These measures will be implemented subject to available budget. The rest of the measures are listed in popularity order below. These measures will be implemented subject to further budget availability.

5. Greenleaf Road – Streetscape improvements
6. Mission Grove (Outside school) – Streetscape improvements
7. More cycle parking.
8. Buxton Road (Mission Grove School) – Streetscape improvements
9. Ritchings Avenue – Public Art on the bridge
10. Suffolk Park Road – Public Art on the bridge
11. Vernon Road – Public Art on the bridge

### **Reason and Benefits**

Based on the feedback and suggestions we received from the Perception Survey and at the resident design workshops, we identified public spaces that we will develop to enhance the look and feel of the area. Residents have told us which of the following are most important to them. We will take them forward in popularity order, when funds become available.

<b>Proposals to create new and improved public spaces</b>	<b>Reasons and benefits for changes</b>
Buxton Road (Mission Grove School) – Streetscape improvements	Improvements outside the school in Buxton Road will provide: <ul style="list-style-type: none"> <li>• Potential for a community project to create additional greening: Orchard, meadows and foraging spaces</li> <li>• New local “Pocket Park” and meeting place to include trees, planting, seating and playful elements</li> <li>• Improved entrance space to school</li> <li>• Safer crossing locations for pedestrians</li> <li>• New cycle parking stands</li> </ul>
Mission Grove (Outside school) – Streetscape improvements	Improvements outside the school in Buxton Road will provide: <ul style="list-style-type: none"> <li>• Wider footways and narrowed carriageway where possible</li> <li>• Improved entrance space to school</li> <li>• Safer crossing locations for pedestrians</li> <li>• New cycle parking stands</li> </ul>
Greenleaf Road – Streetscape improvements	Streetscape improvements outside Greenleaf school may include: <ul style="list-style-type: none"> <li>• Footways widened creating generous and more sociable access to the school and local play space</li> <li>• Potential for a community project to create additional greening</li> <li>• Additional street trees, planting, places to sit and cycle parking</li> <li>• Safer crossing locations for pedestrians, including raising the level of pedestrian access</li> <li>• Traffic calming measures to help slow traffic</li> </ul>
Pretoria Avenue – Streetscape improvements	Improvements outside the school in Pretoria Avenue will provide: <ul style="list-style-type: none"> <li>• Traffic calming measures to help slow traffic</li> <li>• New terrace with trees and seating forming a link with Stoneydown Park</li> </ul>

	<ul style="list-style-type: none"> <li>• New cycle parking stands</li> <li>• Improved level cycling and pedestrian access</li> <li>• Wayfinding information to places of local interest</li> <li>• Green, park-like environment at the entrance to the school with an avenue of trees</li> </ul>
Blackhorse Road / Stoneydown – Streetscape improvements	<p>This currently neglected space will undergo:</p> <ul style="list-style-type: none"> <li>• Landscaping and greening improvements</li> <li>• Remove perimeter wall</li> <li>• New wilderness planting: meadow, wildflowers</li> <li>• Log seating arrangements path</li> <li>• Reduced access route for Parks maintenance vehicles</li> </ul>
Ritchings Avenue – Public Art on the bridge	<p>Network Rail will be carrying out bridge replacement, refurbishment and parapet upgrades for a selection of the bridges within the scheme area. Unfortunately the existing public art will be removed by Network Rail during their improvement works, but we are working with Network Rail to request that they fund new public art at these locations where feasible. If this is possible the public art will be developed in conjunction with the local community.</p>
Suffolk Park Road – Public Art on the bridge	
Vernon Road – Public Art on the bridge	
More cycle parking.	<p>A key element of the Mini Holland bid was the desire to improve the boroughs infrastructure for those choosing to cycle. We therefore recommend creating more cycle parking across Blackhorse Village. We will ensure the parking facilities are in keeping with the environment. We are logging requests from residents about the location of this parking.</p>
More public seating.	<p>We want to make Blackhorse Village a great place for people to live, work and visit. We therefore recommend having more public seating for people to utilise and enjoy. We are logging requests from residents and businesses about where they would like to see seating located. The seating will be designed in a way that will not encourage antisocial behaviour.</p>

### Area upkeep

A number of maintenance issues have been brought to our attention by residents during the engagement process. As part of the scheme we will address a number of

these by realigning current revenue, local maintenance and Section 106 funds in order to make improvements to the area. Work will start in early 2015 on the following and will continue over the next two years.

<b>Proposed area upkeep work</b>	<b>Reasons and benefits for changes</b>
Road resurfacing	<p>As part of the Blackhorse Village scheme we will resurfacing the following streets:</p> <ul style="list-style-type: none"> <li>• Maude Road</li> <li>• Maude Terrace</li> <li>• Warner Road</li> <li>• Somers Road</li> </ul>
De-cluttering	<p>To de-clutter the area we propose to remove redundant street signs which will reduce the number of obstructions on footways.</p>

## **Blackhorse Village area wide improvements**

### **Appendix E- Alternatives considered**

At each stage of the engagement process we have taken on board the feedback and views of residents. Throughout the three month engagement process we have received and responded to approximately 200 emails from community members. The Council has developed and amended the proposals at every stage to represent the feedback and views of residents.

This report considers the more common suggestions and recommendations made by residents and businesses.

#### **Mission Grove – Bus Gate**

A Bus Gate was proposed within the Concept Design plans that were presented at the co-design Workshops. In total, there were seven objections to the Bus Gate, therefore the design team decided to omit this from the proposals. This is also supported by the fact that the Quietway scheme is also looking at future proposals on Mission Grove, which may contribute to the mitigation of excess traffic flow and provide a safer pedestrian and cycle environment.

#### **Wolsey Avenue - Direction of traffic flow**

Wolsey Avenue is currently one-way northbound, and it was proposed to make the street two-way throughout to give the community a wider scope of options to travel locally by vehicle.

We received several representations during the public consultation stage that objected to this proposal, therefore we have omitted this from the scheme and Wolsey Avenue will remain one-way northbound. This will not affect the efficiency of the Series A closure proposals.

#### **Jewel Road / Pearl Road – Direction of traffic flow**

Jewel Road is currently one-way northbound and Pearl Road is currently two-way throughout. As part of the preliminary design, it was proposed to close the southern end of Jewel Road and retain the current flow of traffic in Jewel Road and Pearl Road. We received several representations during the public consultation stage to either make both streets two-way or both streets one-way, to balance the traffic flow between the two streets. Therefore, we will make Pearl Road one-way southbound and maintain Jewel Road being one-way northbound.

We also received several requests for traffic calming within Jewel Road and Pearl Road. We believe that by implementing a full road closure, we will significantly reduce vehicle volumes and speeds; and will radically reduce the number of non-local vehicle journeys. Therefore we believe that no further traffic calming will be required. Vehicle behaviour and community response during the six month review period will provide sufficient data to enable a decision whether further traffic calming is required after the review stage.

#### **Longfield Avenue / Chewton Road - Direction of traffic flow**

Longfield Avenue is currently one-way eastbound and Chewton Road is currently two-way. It was proposed to close Pretoria Avenue just north of the junction of

Pretoria Avenue and Longfield Avenue; and to make Longfield Avenue one-way westbound and Chewton Road one-way eastbound.

Residents of Longfield Road have made representations and believe that if the street becomes one-way westbound that it will be used as a rat-run from Mission Grove to Pretoria Avenue and then to Longfield Avenue.

The design team believe that if this was to occur, it would be a minimal amount of residential vehicles; and that the proposals should go ahead with the intent to review the situation for a six month period following construction completion. If there is adverse impact, mitigating measures may be implemented if required after the review stage.

### **Palmerston Road – Streetscape improvements**

Streetscape improvements were proposed on Palmerston Road from Melbourne Road to Gainsford Road. The design team reviewed these proposals following the workshops, and decided to change these proposals to east-west junction improvement proposals at the junctions of Melbourne Road/Coleridge Road and Northcote Road/Elmsdale Road. These proposals will have a more beneficial impact on pedestrians and cyclists crossing Palmerston Road.

### **Greenleaf Road – Streetscape improvements**

The preliminary design proposed to make streetscape improvements outside the William Morris Community Centre on Greenleaf Road. To achieve this, the parking bays outside the Community Centre would need to be removed to create sufficient space. The LBWF Traffic Team had an existing proposal to remove these parking bays, but it transpired that the Community Centre required the parking bays to remain. Therefore, this proposal has been omitted from the scheme.

### **Hatherley Road / Westbury Road / Somers Road – Closure Locations**

As part of the concept design three road closures were proposed in Hatherley Road / Westbury Road / Somers Road near to the junctions with Palmerston Road. Following the Workshop stage the design team decided to locate these closures to the farthest point east as possible. This is to reduce the amount of vehicle journeys that can only exit on to Hoe Street, and to also reduce the amount of commercial vehicles travelling in an east-west direction across the scheme area.

A resident from Campbell Road made representation and submitted an independent survey of residents on Campbell Road, which was split in to two surveys. Both surveys asked residents of Campbell Road if they agreed with the statement “*We request that any closures should not deny us access to Hoe Street via Hatherley Road, or to Forest Road and Selborne Road via Palmerstone Road*”. One survey showed that 13 addresses agreed with the statement and the other survey showed that 18 addresses agreed with the statement, giving a total of 31 in agreement.

Series C consists of three proposed closures; in Westbury Road, Somers Road and Hatherley Road. These streets are currently suffering from heavy volumes of non-local traffic. For example, Hatherley Road has 2171 eastbound and 2113 westbound daily average vehicles counted, which is an unacceptable volume of traffic for this residential street. The proposed road closure in Hatherley Road will mitigate this excess volume, which will need to be supported by the other road closures in Series C to mitigate potential displacement. Also, the overall public consultation results show for Series C that 36% were not in favour and that 41% were in favour,

therefore the majority was in favour of Series C, which is recommended to be progressed to detailed design and implementation.

### **Ritchings Avenue / Suffolk Park Road / Pretoria Avenue**

A resident of Ritchings Avenue sent a request to the project team to consider the proposals listed below:

1. *Ritchings Avenue to be one way from Forest Road as diagram below, with kerb parking.*
2. *Pretoria Avenue to have one way increased to go out into Forest Road as diagram below.*
3. *No entry and restriction to be removed from Suffolk Park Road.*

The project team has liaised with Network Rail, who has confirmed the weight limit on the bridge on Suffolk Park Road will be increased due to their bridge strengthening programme, which will allow the removal of the no-entry signs. This will also allow two-way traffic on Suffolk Park Road. Where possible, it is preferable to allow two-way traffic, therefore the project team will not be implementing one-way working on Ritchings Avenue as requested in #1 above. This will be reflected in Pretoria Avenue, which will be made two-way working from Longfield Avenue to Forest Road and will satisfy the request #2 above.

### **Northcote Road**

Representation was made by a resident of Newport Road (a cul-de-sac off Northcote Road), which objected to the proposed road closure on Northcote Road. A meeting was held between officers and several local residents to understand concerns and to outline the scheme strategy and objectives. The various concerns from the local community centred on perceived restricted vehicle permeability within the residential streets; officers outlined that all addresses will be accessible by vehicle, although there may be some increased journey times on some routes.

Following this meeting officers met with the Vicar and Church Warden of St Michael and All Angels Church (which is located within the proposed closure), who have endorsed the proposed road closure and improved public space within Northcote Road.

A typical example of responses to the Perception Survey for Northcote Road is shown below, which is based upon the responses that were collated on the closing date of the Perception Survey (3 April 2015), any response received beyond the closing date were not recorded:

Northcote Road - Perception Analysis Summary

Total perception survey respondents	534
-------------------------------------	-----

	Responses	% of respondents	Number of addresses on Northcote Road	% of Northcote Road that responded	Various comments summary
Northcote Road resident responses	46	8.6%	174	26.4%	Adjust signals timing
					Vehicle conflict at bridge
					Narrow pavement
					Cycle lane too narrow
					Cycle signals appreciated
					More cycle parking required
					Slower and less traffic required - Street used as cut through
					Ban HGVs / Speeding vehicles
					Cannot cycle / vehicle speed too fast
					Less traffic required
					Reinstate footways
					Unpleasant congestion
					Too much traffic / too much air pollution
					Don't make one-way
					Difficult to cross
Difficult to cross - cars weave around cushions					
Traffic too fast					
Northcote Road related responses (all addresses)	60	11.2%			Parking problems
					Traffic problems
					Make contra-flow for cyclists
					Close the street
					Speeding traffic
					Traffic too fast
					Traffic is non-local
					Don't make one-way
					Traffic too fast
					If Pretoria closed it will go to Northcote
					Hard to cross road
					Common through road
					Not easy to cross
Dangerous rat-run. Close street					

Considering the response to the perception survey, the ATC figures shown in Appendix D, that the church has endorsed the closure and that the consultation

result for Series A is 36% not in favour and 46% in favour, the proposed closure in Northcote Road is recommended to be progressed to detailed design and implementation.

### **Emergency Services**

The project team liaised with the London Fire Brigade Waltham Forest Station Commander, the Metropolitan Police Service Roads Transport Policing Command Traffic Management Officer, Dial-a-Ride and the London Ambulance Service and issued plans of the concept design. All parties except the London Ambulance Service responded by outlining several requirements that the LBWF design team have acknowledged, and will be reflected within the detailed design stage.



# WALTHAM FOREST COUNCIL FULL EQUALITY ANALYSIS (EA) TEMPLATE

Decision

Date

## What is an Equality Analysis (EA) for? [Double click here for more information / Hide](#)

The Council must have due regard to its Public Sector Equality Duty (PSED) when making decisions at member and officer level. An EA is the best method by which the Council can provide the evidential analysis to comply with the equality duty, particularly for major decisions. However, the level of analysis required should only be proportionate to the relevance of the duty to the service or decision. Some decisions will require detailed equalities consideration, e.g. a decision on adult

social care provision or reduction of grants to voluntary organisations, whereas the performance of other functions will have less of an equalities impact, e.g. the appointment of committees where only a limited assessment is required. In rare cases, the Courts have said there may be no impact. If you think this may be the case, then you should undertake the EA screening process first to determine if you need to complete this full EA and have a rational basis for this conclusion.

## What is the Public Sector Equality Duty (PSED)? [Double click here for more information / Hide](#)

The public sector equality duty (s.149, Equality Act 2010) requires the Council, when exercising its functions, to have “due regard” to the need to:

1. eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited under the Act,
2. advance equality of opportunity between those who share a “protected characteristic” and those who do not share that protected characteristic and
3. foster good relations between persons who share a relevant protected characteristic and persons who do not share it (this involves having due regard, in particular, to the need to (a) tackle prejudice, and (b) promote understanding).

These are collectively referred to in this EA as the equality aims. Advancing equality (the second equality aim) involves having due regard, in particular, to the

need to:

- Removing or minimising disadvantages suffered by people due to their protected characteristic
- Taking steps to meet the needs of people from protected groups where these are different from the needs of other people including steps to take account of disabled people’s disabilities *and*
- Encouraging people from protected groups to participate in public life or in other activities where their participation is disproportionately low

NB Please note that, for disabled persons, the Council must have regard to the possible need for steps that amount to positive discrimination, to “level the playing field” with non-disabled persons, e.g. in accessing services through dedicated car parking spaces.

### IMPORTANT NOTES:

1. **THIS FRONT SHEET IS AN ESSENTIAL PART OF THE EA – COMPLETE THE TEMPLATE AND SUBMIT IT AS A SINGLE DOCUMENT.**
2. **IN RARE CASES, WHEN COMPLETING THE ASSESSMENT IT MAY BECOME APPARENT THAT THE RECOMMENDATIONS WOULD LEAD TO UNLAWFUL DISCRIMINATION E.G. A PROPOSAL TO PAY MEN MORE THAN WOMEN. IF SO, STOP, RECONSIDER YOUR PROPOSAL AND SEEK ADVICE.**

THE HEAD OF SERVICE OR DIRECTOR WHO IS RESPONSIBLE FOR MEMBER LEVEL REPORTS MUST BE SATISFIED WITH THE FINALISED EQUALITY ANALYSIS AND FOR MAJOR PROPOSALS, IT IS SENSIBLE TO ENSURE YOUR LEAD MEMBER HAS BEEN CONSULTED.



**Fostering good relations** [Double click here for more information / Hide](#)

Fostering good relations involves having due regard, in particular, to the need to tackle prejudice and promote understanding.

**Protected Characteristics** [Double click here for more information / Hide](#)

**Guidance on compliance with the PSED for officers and decision makers** [Double click here for more information / Hide](#)

**What to do if your proposal is scheduled for Cabinet/Committee?** [Double click here for more information / Hide](#)

## The Proposals: Mini Holland Programme and Blackhorse Village Area improvement Scheme

### 1. What is the Proposal?

The Blackhorse Village scheme forms part of the Mini Holland Programme. The Cabinet Report (9<sup>th</sup> September 2014) outlined the Mini Holland Programme and Procurement Options and sought the Cabinet approval for the delivery plan and the delegation on key decisions relating to the implementation of the associated schemes.

This programme underpins the Council's priorities and links to the Waltham Forest Joint Strategic Needs Assessment 2014 (NHS) to embed health policy in the local authority Core Strategy, including:

- Policy CS13 – promoting health and wellbeing, improving access to health facilities, promoting higher levels of regular exercise, reducing the proliferation of any land use which reduces people's ability to be healthy.

Waltham Forest was one of the three Councils in London to be awarded £27 million from Transport for London (TfL) as part of the Mini Holland Programme to establish a number of integrated schemes designed to deliver dramatic improvements in safety and convenience for cyclists, coupled with imaginative public realm enhancements to improve residential and local shopping areas. The rationale of this programme is to encourage more people to cycle rather than use cars, particularly for short local journeys and the primary outcome will be an improved cycle network based on improving safety for all road users by providing a safer environment for all.

**This programme** will endeavour to promote the following:

- reduction in traffic congestion in residential streets and improve air quality;
- remove barriers to travel for all, particularly those living in deprived communities;
- improve health outcomes due to increased exercise by active travel patterns;
- create a more sustainable community with an attractive environment, new and improved public spaces and improved walking and cycling links; and encourage cycling as a viable mode of transport.

The proposal seeks to contribute to an increase in people cycling in the borough whilst also reducing road casualties and going some way towards transforming residential streets into vibrant people-centred environments. This will encourage more children cycling to school, more employees cycling to work, as well as incorporating cycling to undertake work related activities e.g. site visits. It will also support better health and fitness amongst the population (which is difficult to measure) and reduced usage of the private car for some trips.

Within the wider Mini Holland Programme we are delivering a scheme known as the Blackhorse Village scheme (William Morris and High Street Wards), that will implement area wide improvements and includes a series of road closures to make it safer for cyclists and pedestrians (the reduction of pollution, congestion and rat running) and also to increase footfall in the area, to give the local economy a boost.

In March 2015, we collected feedback via an online perception survey to understand concerns and aspiration from the local community. Following this, we prepared a concept design that addressed and mitigated the community feedback, which led to a series of workshops with residents and businesses to further understand their views and co-design the development of the concept design to a preliminary design. We have also sought the views of the Emergency Services, London Buses and important

### **1. What is the Proposal?**

frontline services (such as Dial-a-Ride, refuse and recycling collections, street cleansing etc) to ensure the final scheme proposal does not have a negative impact in terms of access to those services. The preliminary design was then taken to a full public consultation, which included two drop-in sessions that the community were invited to attend. The results and analysis of the public consultation influenced the final detailed design.

This Equality Analysis has been prepared to comply with the Public Sector Equality Duty and assess the impact of the wider programme including the Blackhorse Village scheme on all the equality target groups directly or/and indirectly. This is a desktop evaluation, and is not based on survey or data collection for this programme.

### **2. What are the recommendations?**

Approval is being sought for the implementation of the final scheme.

### **3. Who is affected by the Proposal? *Identify the main groups most likely to be affected by the recommendations, directly and indirectly.***

The implementation of the Blackhorse Village proposal is likely to affect:

- anyone who currently cycles for transport, leisure or sport;
- anyone who would potentially choose to cycle;
- other road users including motorists, pedestrians, equestrians;
- other users of the highways and off road paths e.g. pedestrians
- participants in major cycling events;
- cycling event organisers;
- residents living on or near to popular cycling routes, for examples those around Lea Bridge Road that will have high levels of cycling;
- residents living on or near roads/routes that could potentially have restricted vehicle access
- businesses and visitors
- Members of staff living in the borough as well as those that will be directly involved in delivery the scheme.

It is not foreseen that there will be a differential impact for individuals in the community or/and does not appear to have an adverse impact on any social group of the protected characteristics.

We recognise that cycling is not an activity that will be accessible to all residents in the borough, however two of the key aspects of the Blackhorse Village scheme are the public realm improvements, which are designed to increase permeability and ease of access to all road and footway users, and the reduction of traffic levels within primarily residential streets, in order to improve the living environment for all users. It is these aspects of the scheme that will improve for those groups that do not have direct access to cycling.

Living environment has a great influence on health and wellbeing. Poor air quality is an issue experienced by residents of Waltham Forest as well as everyone who lives in London. Poor air quality can cause serious health problems and reduce life expectancy by up to eight months (Department of Environment, Food and Rural Affairs (Defra), 2010). The Health Effects Institute panel concluded that the evidence is sufficient to support a causal relationship between exposure to traffic-related air pollution and the

exacerbation of asthma.

The most vulnerable people include children and older residents. Individuals particularly at risk also include those with existing respiratory problems and chronic illnesses such as asthma and chronic obstructive pulmonary disease (COPD). There are approximately 690,000 asthma sufferers in London and 230,000 individuals suffering from COPD. It also found suggestive evidence of a relationship with onset of childhood asthma, non-asthma respiratory symptoms, impaired lung function, total and cardiovascular mortality, and cardiovascular morbidity, although the data are not sufficient to fully support causality.

Long-term exposure to Particulate Matter (PM2.5) aggravates respiratory and cardiovascular conditions. The statistics for each of the London boroughs as a fraction (%) of mortality attributable shows that Waltham Forest is 1.7% higher than the UK average and is ranked 21st in London. In 2008, the IOM research determined that 129 deaths were attributable to long-term exposure to PM2.5 pollution in Waltham Forest (of which 7 in Hoe Street ward and 8 in Leyton ward) and 4,267 deaths in London.

Part of our Mini Holland objective is to reduce short local car trips. We will set a target to reduce single occupancy vehicle use mode share in the borough by 5% by 2020, to 35% (from 2011/2012 baseline of 40% for Waltham Forest. The proposal encourages these types of journeys are reduced and the users transfer to more sustainable means of transport. During the two week trial in the Walthamstow Village Pilot area, traffic monitoring showed that over 5,000 vehicle movements a day were removed from the area, which consisted primarily of residential roads. Reducing traffic levels will benefit all groups and not just those that have direct access to cycling.

The World Health Organisation defines healthy ageing as 'the process of optimising opportunities for physical, social and mental health to enable older people to take an active part in society without discrimination and to enjoy an independent and good quality of life. Primary prevention actions to promote healthy ageing are, therefore, grounded in neighbourhoods and communities, affecting community and home life. Physical activity programmes can improve mental wellbeing and reduce mental illness. So the promotion of physical activity through cycling among older people will help to reduce risk of depression and dementia later in life. The effectiveness of exercise in the treatment of clinical depression is well documented. Physical activity such as cycling improves not only sub-threshold, mild and moderate depression and wellbeing, improved mental health and wellbeing in deprived communities, improved mental wellbeing of those with schizophrenia and improved mental health outcomes in older people.

**Age** [Double click here to add impact / Hide](#)

Check box if NOT applicable

**Key borough statistics:** The 2011 census shows that Waltham Forest has a population of 258,249. Broken down by broad age group, some 26.1% of the population (67,303) were aged 0-19, 35.8% (92,392) 20-39, 28.2% (72,988) 40-64 and 10% (25,566) were aged 65+. Compared to London and England and Wales Waltham Forest has a younger age profile with 8.1% of its population aged 0-4 and 26.1% 0-19 compared to 7.2% and 24.5% across London and 6.2% and 24% across England and Wales respectively. Those aged 20-39 (35.8%) constitute the same percentage of the population in Waltham Forest as across London as a whole (also 35.8%) compared to only 26.9% across England and Wales. Smaller proportions of the borough population are found in the 40-64 and 65+ age groups which constitute 28.2% and 10%

compared to 32.7% and 16.4% across England and Wales. (Source: 2011 Census, Office for National Statistics). **Children in Care:** As at December 2012, we had 289 children in our care. 56% were male and 44% female. Most are in the 12-16 age bracket (35%) followed by 6-11 age group (24%). Ethnic breakdown - White: 42%; Black or Black British: 28%; Mixed race: 19%; Asian or Asian British: 6%; Other: 4%. **NB: These statistics provide general data for this protected characteristic. You need to ensure you have sufficient data about those affected by the proposals – see below under “additional equalities data”. Ward based data is available here: <http://www.walthamforest.gov.uk/Pages/Services/statistics-economic-information-and-analysis.aspx?l1=100004&l2=200088>**

[Double click here to show borough wide statistics / hide statistics](#)

**Age** *Click and hover over the questions to find more details on what is required*

**Additional Equalities Data (Service level or Corporate)** *Include data analysis of the impact of the proposals*

- High Street ward has 5,623 households with 14,850 people of which 3,200 are children aged 0-15.
- 12% of children in reception year and 23.9% children in year 6 are obese.
- 22.6% of dependent children in the ward are considered to living in out of work households.
- 7.5% of High Street ward are over 65; this is lower than the Borough and London average.
- The life expectancy age for males is 80.2 compared to the average of 78.8 in the borough and 79.3 in London. The life expectancy age for women is 84.8 compared to the average of 78.8 in the borough and 83.5 in London.
- A higher than average percentage of the High Street ward population is of working age (between 16 and 64) (70.4%). This is higher than the Borough and London average (68.1% and 68.7% respectively) (GLA SHLAA Trend -2013).
- High Street ward has an average employment rate(69.4%); the London average of 69.2%. 35.7% of the eligible population have Level 4 qualifications or above compared to the Borough average of 30.0%. 18.3% of the population in this ward have no qualifications compared to 20.8% in the Borough. William Morris ward has 5,043 households with 13,750 people of which 3,250 are children aged 0-15.
- 7% of households have no adults in employment, with dependent children.
- Older people aged 65 and over make up 8.2% of the population.
- Young people and elderly are often more dependent on modes other than the private car. According to Projecting Older People Population Information (POPPI), it has been projected that 4,857 people in Waltham Forest aged 65+ will have restricted mobility and they often need access to a car, dial-a-ride and other emergency services.
- Fear of crime affects both older and younger people, as evidenced in the resident’s panel report 2009. This found that elderly people would avoid going out after dark, whilst younger people found teenagers hanging around shops a problem.
- The proposed scheme does not limit or restrict access for the older people. The scheme has been heavily influenced by the comments received from residents of the local almshouses, care homes and dial-a-ride. This took place during stage 2, 3 and 4 of the engagement.

**What is the proposal’s impact on the equalities aims? Look for *direct impact* but also evidence of *disproportionate impact* i.e. where a decision affects a protected**

**What actions can be taken to avoid or mitigate any negative impact or to better advance equality and foster good relations?**

**Age** *Click and hover over the questions to find more details on what is required group more than the general population, including **indirect impact***

This programme is expected to make a positive impact on all age groups.

Many studies show the potential health benefits of cycling for older people far outweigh the risks, and high levels of cycling among older people in the Netherlands and Denmark demonstrate the potential.

The intervention is thought to improve the environment for all age groups

The reduction of traffic levels will create a safer environment for all users including pedestrian accessing a number of destinations within the area including schools, parks and places of worship. The improved cycling and pedestrian access, traffic calming measures and park like environment directly outside the entrance to Stoneydown Primary School on Pretoria Avenue will benefit younger age groups. The safer crossing locations for pedestrians, traffic calming measures and widened footways outside Greenleaf Primary School will create a more sociable access to the school and local play space will also benefit younger age groups.

Improved public realm, greater natural surveillance on streets, particularly in the evenings will improve community safety and help to reduce crime and fear of crime, which is a real concern to older people.

Improved lighting should help the area to feel safer which will have a particular positive impact on older people and young people, who may currently feel intimidated in the evening.

Young people from low income families will benefit from an allocated fund to subsidise cycle training.

Improvements to the street network within the centre will improve the pedestrian environment generally; legibility (e.g. way finding) and sense of place will benefit older people as it will be easier to travel around the borough and town centre.

In addition to all the above, this programme will have the potential for the following positive impacts:

- Improved safety for young people, who historically make up a high proportion of

During the engagement process concerns were raised around potential adverse impacts on access for the elderly as a result of the road closures. Within the proposals all areas are still accessible by car, although different routes may need to be taken to access them. This may require a longer distance to travel when doing so by car however all road closures will be permeable and allow for pedestrians, cyclists and mobility scooters to go through.

Where older people are reliant on access services or indeed where services such as home care providers and friends/relatives that would need to visit could be inconvenienced by having to travel further distances.

Providing information about road changes is key for all those requiring access the area. There may be barriers to accessing information among some older people who are less likely to have Internet access and therefore may be excluded from the benefits of an online website e.g. alternative route, partial road closures (certain parts of the day). During each stage of the engagement process leaflets were delivered to all properties within the area, door knocking was undertaken and meetings held with a number of organisations including the care homes within the area. We will continue this process during the final two stages of the scheme.

**Age** *Click and hover over the questions to find more details on what is required*

cycling casualties

- Increased independence for young people who aren't able to drive
- Improved safety for older people, who are more likely to be deterred from cycling by safety concerns

**Disability** [Double click here to add impact / Hide](#)

Check box if NOT applicable

**Key borough statistics:** Look for update from latest APS / also see Borough profile update Recent data from the 2011/2012 Annual Population survey suggests there are 31,000 disabled people of working age (16-64) living in Waltham Forest of which around 16,000 are female and 15,000 male. This represents around 1 in 5 (20%) of the working age population, a higher rate than found across London (16.9%) though lower than that found in England (20.5%). 2012 data finds that across the borough some 10,350 residents claim disability living allowance with rates tending to be higher in the southern and middle wards of the borough though this data should only

be treated as a rough indicator of the prevalence of disability. As at January 2012, some 1,299 children and young people had a statement of Special Educational Needs in Waltham Forest.

(Source: 2011 Census, 2011/12 Annual Population survey, Office for National Statistics, Department for Work and Pensions, Department for Education) **Notes: These statistics provide general data for this protected characteristic. You need to ensure you have sufficient data about those affected by the proposals – see below under “additional equalities data”.**

[Double click here to show borough wide statistics / hide statistics](#)

**Disability** *Click and hover over the questions to find more details on what is required*

**Additional Equalities Data (Service level or Corporate)** *Include data analysis of the impact of the proposals*

Walthamstow is within the top 5% most deprived areas, in terms of crime, in London. Fear of crime is higher amongst those with disabilities as evidenced in the resident’s panel report 2009.

According to the HNMA (2007) 24.2% of households in the borough include a member with a disability. 44.1% of those with a disability suffer from mobility difficulties and 6.2% contained a member who is a wheel chair user.

### **Sensory disability**

In 2011, Waltham Forest had 875 older people registered as blind or partially sighted and 65 as deaf or hard of hearing. The rates were significantly lower for those who were deaf or hard of hearing compared to national rates, however, those that were registered as blind were significantly higher than the national rates.

### **Long-term conditions**

The association between physical inactivity (including overweight and obesity) and the following long term illnesses in London (particularly in residents of Waltham Forest) remains strong:

Diabetes ((both Type 1 and Type 2) remains a significant problem for the community and accounted as 13,214 in 2011/12. The estimated number of all deaths

## Disability *Click and hover over the questions to find more details on what is required*

attributable to diabetes for those aged 20 to 79 in Waltham Forest is 14.6%, similar to other boroughs in outer and inner north east London but much higher than in England.

Cardiovascular disease remains the biggest killer of those aged 75 and under, and there are significantly higher rates in the poorer wards compared to more affluent areas. The increase in older Black, Asian and Minority Ethnic (BAME) populations in the borough is important to plan for because these groups are more at risk of Cardiovascular disease. It is also the main contributor for health inequalities between Waltham Forest and England.

Representatives of disabled people (London-wide) have expressed opposition to shared use pavements, due to concerns about being passed too close and fear of collisions. Walthamstow is within the top 5% most deprived, in terms of crime, in London. Fear of crime is higher amongst those with disabilities as evidenced in the resident's panel report 2009.

The requirement that homes, shops and other facilities should be accessible to all members of the community and meet the needs of residents throughout their changing life cycle will benefit this group.

**What is the proposal's impact on the equalities aims?** *Look for **direct impact** but also evidence of **disproportionate impact** i.e. where a decision affects a protected group more than the general population, including **indirect impact***

The adoption and delivery of the Mini Holland programme is likely to have a positive impact on the equalities aim and bring about specific benefits to disabled people by adding more direct routes, widening footways, creating level surfaces, drop kerbs and tactile paving.

Cycling is the third most popular sport among disabled people with just under 10% of cycling participants having a disability. Therefore action to enable more and safer cycling will have positive impacts for this group. Structural improvements for cyclists using shared use of the footway will also benefit wheelchair users and buggy users.

Increased participation in physical activity such as cycling would have benefits in preventing and addressing many health problems that can result in disability along with the overall health and well-being of the individual.

The proposed improvements to new and existing public spaces and the routes between them will have a positive impact on **all equalities groups** but will need to be done so in a way that does not encourage anti-social behaviour as this would

**What actions can be taken to avoid or mitigate any negative impact or to better advance equality and foster good relations?**

The following activity to be delivered as part of the scheme is likely to contribute to advancement of disability equality and help mitigate against potential negative impacts identified:

Improvements to key pedestrian junctions (with removal of barriers at crossings, and pavement widening) within the centre will benefit those in wheelchairs/who have restricted mobility.

Maintenance work of footways and reduced signage will help create well maintained, even surfaces free from clutter and obstructions significantly influence the comfort levels of people with impaired mobility.

The environment will be designed to help disabled persons and parking issues will be considered during the design process and groups representing disabled persons will be fully consulted. New disabled parking bays will be located as close as possible to all proposal areas, and blue badge holders will continue to be able to utilise the controlled parking bays in the close proximity without a permit.

The final detailed design of closures and works would be subject to a wide range of

## Disability *Click and hover over the questions to find more details on what is required*

have a negative impact on all equalities groups and particularly disabled people.

The proposal of this scheme is to promote cycling through the development of better places and liveable environment, although cycling itself may not be accessible to some people for instance people with visual or physical impairment, the liveable environment will be improved to benefit these groups.

There may be issues of conflicts between users particularly for people with mobility or sensory impairment. Potential conflict between pedestrians and cyclists.

Representatives of disabled people (London-wide) have expressed opposition to shared use pavements, due to concerns about being passed too close and fear of collisions. Many disabled people, particularly those with visual impairments, feel intimidated by bikes coming from behind as they are silent.

Some disabled people may experience problems in accessing information therefore this needs to be provided in alternative formats.

Access to open space is understood to have benefits in terms of physical and mental health. Improvement and improved access to existing open spaces (e.g. Town Square and Parks) within the centre (and beyond e.g. Walthamstow Wetlands) will be of benefit to those who spend a proportionately higher amount of time in public spaces; which could include both young people and the elderly.

scrutiny include following TfL designs standards and safety audits. Please find the attached link to such design standards.

<https://www.gov.uk/government/publications/shared-space>

The final design will also take into consideration the need to maximise footway space to ensure that areas designated for shared use (pedestrians, buggy users, wheelchair users and cyclists) are not restricted. The final design adheres to shared space guidelines and subject to safety audits that takes into consideration the needs of disabled people, in particular, those with visual impairment

Provision of new social infrastructure e.g. installation of outdoor seating and parklets will serve to enhance the quality of life for the disability groups through the introduction of the new community facility.

The reduced impact of motor vehicles can be attractive to cyclists and it may encourage them to divert from other, less attractive cycling routes. However, pedestrian movements in the street are also likely to increase, creating potential for greater interaction with cyclists. In mitigation, research suggests that cyclists have a high awareness of pedestrians in shared space and tend to ride around them or give way. Cyclists were found to be more likely to avoid or give way too pedestrians than vice versa.

As part of this scheme and throughout the Mini Holland Programme, there will be a targeted communications campaign including a dedicated and interactive website with clear sign postings and updates to residents on both progress and the scheme proposals. Information packs are being developed that will be issued to all households and businesses within the catchment area of future Mini Holland schemes along with contact details to address any concerns or queries. Information will also be exchanged with Disability Groups.

**Key borough statistics:** According to the 2011 census, 8.1% (20,839) of the Waltham Forest population is aged 0-4 compared to 7.2% across London and 6.2% across England and Wales. For those aged 0-1 these percentages are respectively 3.3% (Waltham Forest), 3% (London) and 2.5% (England & Wales). The Total Fertility rate for Waltham Forest in 2011 is 2.69 (3<sup>rd</sup> highest across London) compared to a London and England figure of 1.99. The teenage pregnancy rate in Waltham Forest (2010) is 45.7 per 1,000 of the female population aged 15-17

compared with 37.1 across London and 35.5 across England and Wales. Source: 2011 Census, Conception statistics and Birth Summary Tables, Office for National Statistics. **NB: The total fertility rate measures the projected number of births born to a woman over her lifetime. These statistics provide general data for this protected characteristic. You need to ensure you have sufficient data about those affected by the proposals – see below under “additional equalities data**

[Double click here to show borough wide statistics / hide statistics](#)

**Pregnancy and Maternity** [Click and hover over the questions to find more details on what is required](#)

**Additional Equalities Data (Service level or Corporate)** *Include data analysis of the impact of the proposals.*

High Street ward has a fertility rate of (95.4) compared to the borough average of (77.5) and the London average (67.0) (Census 2011).

William Morris ward has a fertility rate of 91.3.

**What is the proposal’s impact on the equalities aims?** *Look for **direct impact** but also evidence of **disproportionate impact** i.e. where a decision affects a protected group more than the general population, including **indirect impact***

Pregnant women and parents with young children on bike seats may have particular safety concerns. Therefore enabling safer cycling will be of benefit of this group.

Public realm improvements, particularly to the street networks (a more pedestrian friendly environment with removal of barriers) will improve the pedestrian environment generally, but also be of specific benefit to pregnant women and women with your children.

Road closures could cause problems for pregnant women and mothers of young children in getting to doctors or healthcare appointments.

**What actions can be taken to avoid or mitigate any negative impact or to better advance equality and foster good relations?**

The final design also took into consideration the need to maximise footway space to ensure that areas designated for shared use (pedestrians, buggy users, wheelchair users and cyclists) are not restricted.

All areas are fully accessible by car however different routes maybe required in order reach certain destinations. Local Health Centres will be fully consulted in the final scheme design to ensure that there are no negative impacts of the proposals on pregnant women, those with young children and local health centre users in general. In addition, information will be passed to the local centres to pass onto customers about routes to the centre and location of appropriate parking.

**Key Borough Statistics:** According to 2011 census data Waltham Forest's White British population is 92,999, 36% of the total borough population. All other ethnic groups constitute 64% of the population (165,250). Broken down by specified ethnicity: White Other (37,472/14.5%), Pakistani (26,347/10.2%), Black Caribbean (18,841/7.3%), Black African (18,815/7.3%), Indian (9,134/3.5%), Other Black (7,135/2.8%), Any other ethnic group (6,728/2.6%), Bangladeshi (4,632/1.8%) and Chinese (2,579/1%). Note: The more detailed ethnicity breakdown goes into more detail and data for more recent arrivals includes: Polish (6,944/2.7%), Other Eastern

Europe (6,020/2.3%) and Baltic states (3,011/1.2%). Data on arrivals from other countries over the last 8 years show that Poland, Pakistan and Lithuania have supplied the greatest number of migrants. (Source: 2011 Census, Office for National Statistics, Department for Work and Pensions)

**NB: These statistics provide general data for this protected characteristic. You need to ensure you have sufficient data about those affected by the proposals – see below under “additional equalities data”.**

[Double click here to show borough wide statistics / hide statistics](#)

Race [Click and hover over the questions to find more details on what is required](#)

**Additional Equalities Data (Service level or Corporate)** *Include data analysis of the impact of the proposals*

- High Street ward is ethnically diverse with 50.7% BAME residents. This compares to 47.8% in Waltham Forest. 51.8% of William Morris ward residents are BAME.
- Walthamstow has a high proportion of households which are classified as overcrowded (22.4%). Many of these homes are occupied by BME groups. (Walthamstow Socio-Economic Master plan 2007).
- 77.4% of BME households, who wished to move but stated an inability to do so, specified this was due to being unable to afford to buy a home.
- Walthamstow includes a significant number of local community areas which are amongst the top 5% most deprived areas in London (Walthamstow Socio-Economic Master plan 2007). BME groups are disproportionately more likely to be living in poverty.
- The 2006 AESOP study of ethnicity and psychosis (Department of Health, 2010) found inequalities in terms of incidence of mental illness amongst BME groups.

**What is the proposal's impact on the equalities aims?** *Look for **direct impact** but also evidence of **disproportionate impact** i.e. where a decision affects a protected group more than the general population, including **indirect impact***

In some cultures, particularly women from some ethnic groups may be less likely to cycle. Measures to promote and encourage cycling could be of benefit to this group.

BME groups are disproportionately more likely to be living in poverty and in overcrowded homes. Increasing facilities for cycling and storage for bicycles will benefit BME groups as cycling would be the cheaper mode of travel for this group.

**What actions can be taken to avoid or mitigate any negative impact or to better advance equality and foster good relations?**

The consultation and engagement process that we used to inform and shape the final design of the Villages scheme will continue throughout the Mini Holland Programme to ensure all stakeholders participate in the design process to mitigate against any potential negative impact on any equality groups.

All publicity, communication and information will be produced in an accessible and inclusive way ensuring that it is targeted as necessary.

## Race *Click and hover over the questions to find more details on what is required*

Travel patterns of BME groups show a high share of public transport trips. The proposals will make the walking and cycling routes to and from the access points for public transport in a better and safer environment.

Evidence suggests BME groups are less likely to drive cars. Improvements to cycling, public transport and public transport accessibility will benefit BME groups.

Language could be a barrier with information materials, including cycling promotion and notification of events.

## Religion or Belief *Double click here to add impact / Hide*

Check box if NOT applicable

**Key borough statistics:** According to the 2011 Census the borough has 48.4% of its population stating their religion to be Christian, Muslim 21.9%, Hindu 2.3%, Jewish 0.5%, Sikh 0.5%, Buddhist 0.8% and other 0.4%. Some 18% of residents claimed no religion whilst 7.3% did not state an answer. The multi-faith nature of Waltham Forest is evidenced by more recent data which shows that Waltham Forest has

around 150 Christian Churches, 16 Muslim Mosques, 4 Hindu Temples, 3 Jewish Synagogues, 1 Sikh Gurdwara and 1 Tao Temple. **NB: These statistics provide general data for this protected characteristic. You need to ensure you have sufficient data about those affected by the proposals – see below under “additional equalities data”.**

*Double click here to show borough wide statistics / hide statistics*

## Religion or Belief *Click and hover over the questions to find more details on what is required*

**Additional Equalities Data (Service level or Corporate)** *Include data analysis of the impact of the proposals*

Type response here

**What is the proposal’s impact on the equalities aims?** *Look for **direct impact** but also evidence of **disproportionate impact** i.e. where a decision affects a protected group more than the general population, including **indirect impact***

**What actions can be taken to avoid or mitigate any negative impact or to better advance equality and foster good relations?**

There are several mosques in the trial area and we met with the staff and members to discuss the proposals with them. We engaged with several local churches in the area, of different faiths, and held events at several local churches to publicise and consult on the development of the final proposal.

We will continue to engage with religious groups as part of the future scheme development proposals to ensure any concerns raised are addresses as part of the final scheme design. All concerns raised have been taken into consideration.

LBWF staff met with religious institutions within the scheme catchment area to elicit their views and concerns. The main concern raised was from Waltham Forest

## Religion or Belief *Click and hover over the questions to find more details on what is required*

Counsel of Mosques in relation to parking during times of worship.

**Sex** [Double click here to add impact / Hide](#)

Check box if NOT applicable

**Key borough statistics:** The 2011 census put the gender split of Waltham Forest as Male: 128,970 (49.94%) and Female 129,279 (50.06%). (Source: 2011 Census, Office for National Statistics).

**NB: These statistics provide general data for this protected characteristic. You need to ensure you have sufficient data about those affected by the proposals – see below under “additional equalities data”.**

[Double click here to show borough wide statistics / hide statistics](#)

**Sex** *Click and hover over the questions to find more details on what is required*

**Additional Equalities Data (Service level or Corporate)** *Include data analysis of the impact of the proposals*

- In the UK 1% of all transport trips by women are by bike, whilst for men it is 2% (DfT, 2008). Women in the UK currently cycle much less than their male counterparts, whereas this is not the case in countries which have high levels of cycling generally, such as Holland, Denmark and Germany (Garrard, 2003).
- DfT statistics for 2007 showed that only 29% of cycle trips were made by women. However statistics from The Netherlands, Germany and Denmark demonstrates the potential for more women to cycle, with 55%, 49% and 45% of trips respectively. An Australian study showed that female commuter cyclists preferred to use routes with maximum separation from motorised traffic.
- In London, where levels of cycling have been increasing significantly over recent years, the gender gap is most evident in the youngest age group; 2% of females aged under 25 cycle, whilst 11% of males in the same age group do. In the 25 – 44 age group, 40% of males and 21% of females cycle, whilst in the 45 and above age group levels are similar at 12% for women and 14% for men (TfL, 2008). This shows that although women of all ages cycle less than men, there may be peaks of disparity in cycling levels at different stages of people’s lives.

**What is the proposal’s impact on the equalities aims?** *Look for **direct impact** but also evidence of **disproportionate impact** i.e. where a decision affects a protected group more than the general population, including **indirect impact***

Fewer women than men cycle and women tend to be less confident cycling on the road. National research shows that safety issues are of a particular concern in relation to cycling for women. Women prefer separate cycling facilities, either partially or totally segregated from motor traffic. Therefore enabling more and safer cycling will be of benefit.

It is not foreseen that there will be a differential impact for individuals in the

**What actions can be taken to avoid or mitigate any negative impact or to better advance equality and foster good relations?**

A key aspect of the Mini Holland Programme is to encourage cycling proficiency and awareness in schools. This will increase participation from females

In addition to this local cycle training groups will be providing free cycle training and cycle maintenance for residents. It is also anticipated that this will increase participation.

**Sex** *Click and hover over the questions to find more details on what is required*

community if the proposed changes are adopted and implemented.

The proposed improvements to new and existing public spaces and the routes between them will have a positive impact on **all equalities groups** but will need to be done so in a way that does not encourage anti-social behaviour as this would have a negative impact on all equalities groups and particularly women, young and old people and LGBT communities..

## **Sexual Orientation and Gender Reassignment** [Double click here to add impact / Hide](#)

[Check box if NOT applicable](#)

**Key borough statistics:** National estimates of LGBT population range from 0.3% to 10% using different measures. A study commissioned by Waltham Forest Council suggested the population to be somewhere between 7,000 to 10,000 people in 2007 (this is 4-6% of the adult population). The study also suggested that there may be at least 35 transgender individuals in the borough (Source: Measuring Sexual Identity –

Office for National Statistics, Waltham Forest LGBT Matters). **NB: These statistics provide general data for these protected characteristics. You need to ensure you have sufficient data about those affected by the proposals – see below under “additional equalities data”.**

[Double click here to show borough wide statistics / hide statistics](#)

## **Sexual Orientation and Gender Reassignment** *Click and hover over the questions to find more details on what is required*

**Additional Equalities Data (Service level or Corporate)** *Include data analysis of the impact of the proposals*

Type response here

**What is the proposal’s impact on the equalities aims?** *Look for **direct impact** but also evidence of **disproportionate impact** i.e. where a decision affects a protected group more than the general population, including **indirect impact***

Members of the LGBT community may often feel vulnerable in certain situations, in particular relating to public transport and walking around the area. This proposal can help to reduce this vulnerability by making the area more pedestrian friendly to walk around, creating community hubs and increasing natural surveillance through design.

The proposed improvements to new and existing public spaces and the routes between them will have a positive impact on **all equalities groups** but will need to be done so in a way that does not encourage anti-social behaviour as this would have a negative impact on all equalities groups and particularly **women, young and old people, and LGBT.**

**What actions can be taken to avoid or mitigate any negative impact or to better advance equality and foster good relations?**

There are no negative impacts on this equality group to mitigate.

## Sexual Orientation and Gender Reassignment *Click and hover over the questions to find more details on what is required*

### Marriage and Civil Partnership [Double click here to add impact / Hide](#)

Check box if NOT applicable

#### Key borough statistics:

2009 - 2010	670 marriages registered in the borough and 32 Civil Partnerships
2010 - 2011	725 marriages registered in the borough and 27 Civil Partnerships
2011 - 2012	812 marriages registered in the borough and 25 Civil Partnerships

**NB: These statistics provide general data for these protected characteristics. You need to ensure you have sufficient data about those affected by the proposals – see below under “additional equalities data”.**

[Double click here to show borough wide statistics / hide statistics](#)

### Marriage and Civil Partnership *Click and hover over the questions to find more details on what is required*

#### Additional Equalities Data (Service level or Corporate) *Include data analysis of the impact of the proposals*

Type response here

**What is the proposal’s impact on the equalities aims?** *Look for **direct impact** but also evidence of **disproportionate impact** i.e. where a decision affects a protected group more than the general population, including **indirect impact***

**What actions can be taken to avoid or mitigate any negative impact or to better advance equality and foster good relations?**

The proposed improvements to new and existing public spaces and the routes between them will have a positive impact on **all equalities groups** but will need to be done so in a way that does not encourage anti-social behaviour as this would have a negative impact on all equalities groups and particularly **women, young and old people, and LGBT**.

There are no negative impacts on this equality group to mitigate.

### Additional Impacts on Advancing Equality & Fostering Good Relations [Double click here to add impact / Hide](#)

Check box if NOT applicable

See pages 1 and 2 for full details of these two aims. This section seeks to identify what additional steps can be taken to promote these aims or to mitigate any adverse impact. Analysis should be based on the data you have collected above for the 8 protected characteristics covered by these aims. Remember, marriage and civil partnership is not covered.

Key borough data: From our 2011 Cohesion Survey, a third of our respondents believe that differences are ‘definitely respected’. A further 46% believe this is the case most of the time, and just 6% feels this is not the case. By age group, a higher

proportion of older residents feel differences are respected ‘definitely/most of the time’ (86% aged 66+ years). Residents with a disability are less likely to feel differences are respected (74%) than those without a disability (80%). The survey also shows that participation in community activity is 75% for Asian residents and residents in North Chingford (72%). Participation is lowest amongst South Chingford residents (63%).

**NB: These statistics provide general data for these protected characteristics. You need to ensure you have sufficient data about those affected by the proposals – see below under “additional equalities data”.**

[Double click here to show borough wide statistics / hide statistics](#)

## Additional Impacts on Advancing Equality & Fostering Good Relations *Click and hover over the questions to find more details on what is required*

### Additional Equalities Data (Service level or Corporate)

According to the GLA SHLAA Trend based population projection data of 2013, High Street ward has a population density in the borough with 4,726 persons per square kilometre. William Morris has a population density of 13,650 per square kilometre. This compares to the borough average of 6,897 per square kilometre. High Street ward also has a high fertility rate of 95.4, William Morris has a fertility rate of 91.3 in comparison to the borough average of 75.4 and the London average of 64.0 (Office for National Statistics).

Census data also indicates that High Street ward has 4.1% of people travel by bicycle to work compared to the 2.8% of average for the borough and 4% for average of Londoners. Residents of this ward have fewer cars per household (0.6) in comparison to the borough average of 0.8 and the London average of 0.8. This ward has an average score for public transport accessibility in 2012 of 4.4 which is higher than the borough average of 3.5, in comparison to the London average of 3.7.

58% of the properties in High Street ward are flat/maisonette or apartment compared to the borough average of 41.2% and 52.2% in London, with 31.7% of households living in private rented accommodation compared to a quarter in the borough and a quarter in London.

Census data indicates that William Morris ward has a higher proportion of people to travel to work by bicycle (3.7%). The number of cars per household is in line with the borough and London average of 0.6. William Morris ward had an average public transport accessibility rating in 2012 of 3.5.

42.6% of the properties in William Morris ward are flat/maisonette or apartment and 29.1% live in private rented accommodation.

#### **Are there any additional benefits or risks of the proposals on advancing equality and fostering good relations not considered above?**

The extensive amount of community engagement work carried out before/during and after the trial helped to gauge the potential impact of the programme proposals on different equality groups and results of the consultation on the trial closures shaped and informed the final scheme design. .

#### **What actions can be taken to avoid or mitigate any negative impact on advancing equality or fostering good relations not considered above?**

Provide details of how effective the mitigation will be and how it will be monitored.

The Mini Holland Programme contains a number of complementary measures which include the provision of secure cycle sheds and cycle stands on the highway. This will make cycling far more accessible for those individuals that live in premises that cannot be used to store a bike.

## Conclusion

*Consider the Guidance below and set out your conclusions from the equalities analysis of the 8 protected characteristics. If there are negative equalities impacts, but you think that the proposals should still proceed in the current or amended form, explain what the objective justification for this is, providing evidence as*

*appropriate. If it is helpful, refer to other documents e.g. the Cabinet report. You may find it helpful to identify one of the 4 outcomes below as being closest to your current proposals. (Use your conclusions as a basis for the “Equalities Implications” in the Cabinet report.)*

### **This analysis has concluded that...**

In terms of summarising the responses received, 54% of respondents were in favour of the proposed measures to be introduced by the scheme and 28% were against.

The scheme has developed through consultation with a number of stakeholders including: cycling and access groups, religious groups, Dial a Ride, local Councillors, Local MP, local businesses, residents groups and the Council staff. This scheme has received a lot of support. There has been some concern about the potential conflict between cyclists and pedestrians and the final scheme design addresses these concerns. Continuous dialogue with stakeholders will form the basis of the final design of all Mini Holland.

### **Outcome of Analysis** *Check one that applies*

No major change required when the assessment has not identified any potential for discrimination or adverse impact and all opportunities to advance equality have been taken.

#### **Outcome 3**

Continue despite having identified some potential for adverse impacts or missed opportunities to advance equality. In this case, the justification should be included in the assessment and should be in line with the duty to have ‘due regard’. For the most important relevant policies, compelling reasons will be needed. You should consider whether there are sufficient plans to reduce the negative impact and/or plans to monitor the actual impact.

#### **Outcome 2**

Adjustments to remove barriers identified by the assessment or to better advance equality. Are you satisfied that the proposed adjustments will remove the barriers identified?

#### **Outcome 4**

Stop and rethink when an assessment shows actual or potential unlawful discrimination.

Signed off by Head of Service:

Name:

Date:

## Appendix G - Matrix to Assess Climate Change Impacts

Aim is to reduce Carbon Emissions (CO <sub>2</sub> ) by 80% by 2050	Positive impact	Negative impact	Mitigation measure	Effect on CO <sub>2</sub> emissions (+ or - tonnes of CO <sub>2</sub> )	Opportunity to promote
<b>Water</b> Water Use and Flooding		Use of impermeable material for cycling infrastructure could increase potential flooding	Use permeable paving, SUD systems.		Flooding exacerbated by climate change can be mitigated by using permeable materials and adhering to SUD guidance. Their use will be encouraged.
<b>Energy</b> Energy efficiency and energy saving in buildings, including opportunities for installation of renewable energy generation	Mini Holland will endeavour to use renewable energy as far as possible, e.g. to power automatic cycle counters, lighting				
<b>Air</b> Air quality, pollution	Mini Holland seeks to increase journeys made by bike (10% by 2020), and reduce trips by car (-5% by 2020). This will have obvious air quality benefits (e.g. reduction in NO <sub>x</sub> , PMs).			An annual reduction of 5% in CO <sub>2</sub> emissions would equate to approximately 3,700 Tonnes per year.	
<b>Waste</b> – reducing, reusing and recycling waste	Contractors working on MH will be required to re-use and recycle materials wherever feasible.	Waste disposed of in landfill	Recycling and Re-use of materials. Term contracts include a performance indicator which measures the amount of construction and demolition waste reused or recycled.		

<b>Aim is to reduce Carbon Emissions (CO2) by 80% by 2050</b>	<b>Positive impact</b>	<b>Negative impact</b>	<b>Mitigation measure</b>	<b>Effect on CO2 emissions (+ or - tonnes of CO2)</b>	<b>Opportunity to promote</b>
<b>Land</b> Use of brown-field and green-field sites	N/A				
<b>Bio-diversity</b> Effects on bio-diversity including green space, trees, rivers and streams	Mini Holland aims to reduce motor traffic, which will have a positive impact on biodiversity by reducing land take for roads/ parking, reducing road kill, noise and other disturbance, and a reduction in harmful emissions (NOx, PMs) which negatively impact on flora, fauna, air and water quality.				
<b>Transport Travelling to deliver service.</b>	Reduction in carbon emissions through cycling, walking and the use of low emission vehicles	Transport and the type of vehicles used produce substantial carbon emissions.	Staff and contractors will be encouraged to walk, cycle and use public transport in the course of work to deliver the MH programme. Where the use of motor vehicles is necessary, fuel-efficient, low emission vehicles will be preferred.	100 miles reduced lorry mileage [HGV 3.5 – 7.5 tonne] (161 kms) saves 0.106 tonnes of CO2. So for every mile of reduced lorry travel saves 1.06kgs of CO2. (Source: Defra)	Transport and the type of vehicles used produce substantial carbon emissions. The term contracts include a performance indicator to measure conformity with Euro standards.

Aim is to reduce Carbon Emissions (CO2) by 80% by 2050	Positive impact	Negative impact	Mitigation measure	Effect on CO2 emissions (+ or - tonnes of CO2)	Opportunity to promote
<b>Buildings</b> Adaptability of buildings to heat or flooding. Use of green roofs, rainwater harvesting etc.	N/A				

<b>Commentary on any differences in financial costings for climate change mitigation / adaptation measures including energy efficiency and potential external grant sources</b>
<b>Potential “whole life costing” savings ie: increased installation costs will achieve running cost savings over lifetime; including reduced use of resources eg: water saving devices</b>
<b>Explanation of Proposal chosen in context of results matrix assessment, including what mitigating steps can and have been taken</b>
<b><u>Total Tonnes of CO2 &amp; DEC rating of building to be occupied</u></b>
An annual reduction of 5% in CO <sub>2</sub> emissions would equate to approximately 3,700 Tonnes per year.