

# Low Traffic Neighbourhood Toolkit



March 2021



Walthamstow Village Central Square

01

## INTRODUCTION

05

02

## DESIGN MEASURES

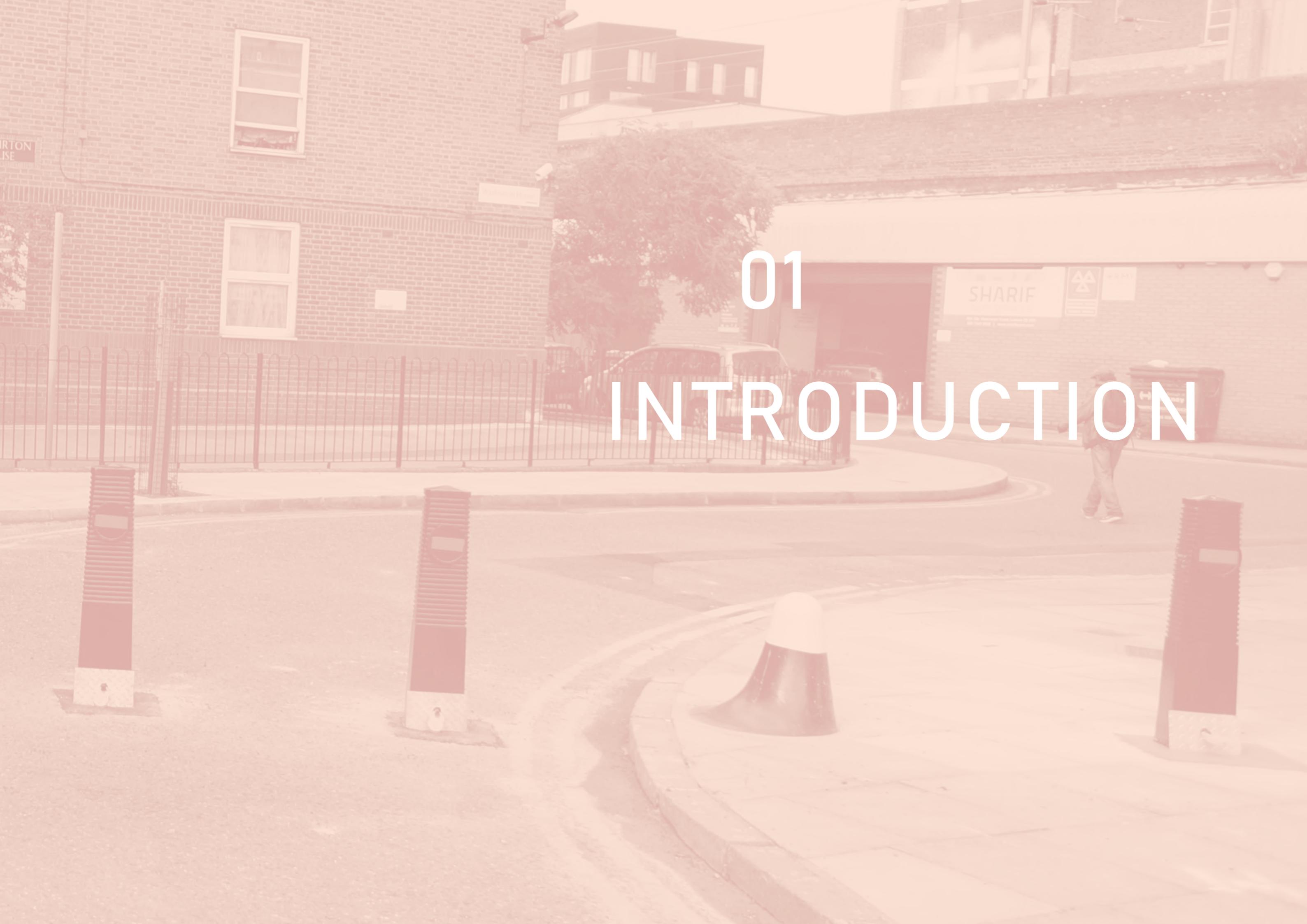
07

03

## DESIGN STRATEGIES

17





# 01

# INTRODUCTION

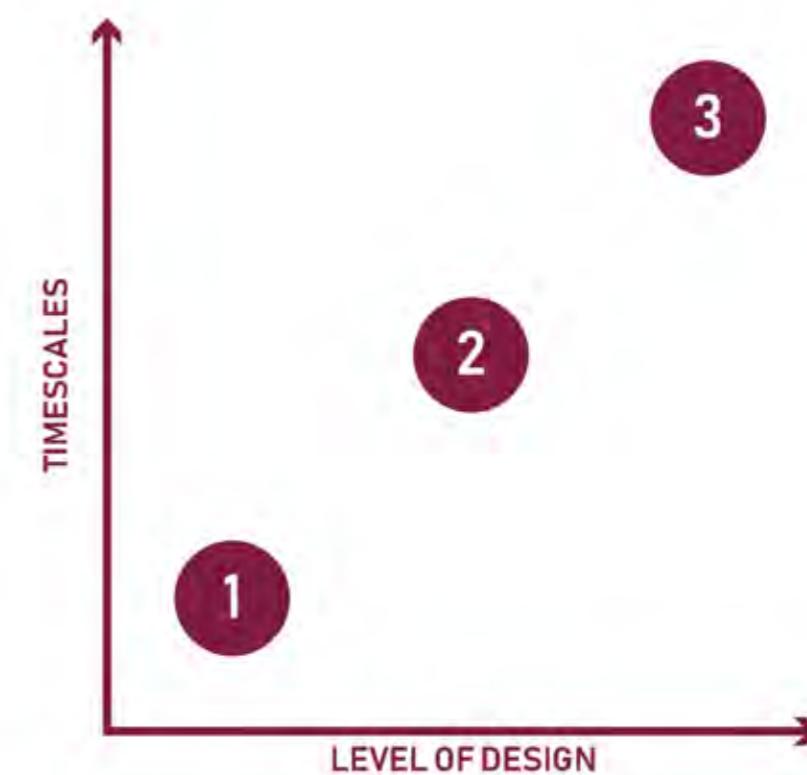


## Introduction

The purpose of the note is to illustrate how temporary design measures can evolve from initial trial responses through to permanent measures with particular focus on Low Traffic Neighbourhoods. The report includes a chapter of design strategies which reviews how different authorities have developed Low Traffic Neighbourhoods.

We have developed three stages to help structure the different design responses showcased in this report (see below). The note provides examples of permanent street design measures and examples which have been delivered as EATF design responses.

Stage 1	Stage 2	Stage 3
Measures respond to immediate issues such as footway crowding, rat-running traffic or insufficient space for cycling	Designs which are more expansive and re-purpose streetscapes to provide space for seating, street greening and socialising.	Represents schemes that have embedded temporary measures into full transformation of the public realm and streetscapes





Oval Triangle: Modal Filter





# 02

# DESIGN MEASURES



## Stage 1

Measures respond to immediate issues such as footway crowding, rat-running traffic or insufficient space for cycling. Consequently the designs are often focussed on pragmatic design solutions using basic traffic management tools to enforce the measures.

### 1.1 - Bedford Hill

High Street closed to vehicular traffic to enable footway widening



1.1

### 1.2 - Bishopsgate

Through-traffic removed but cycle access maintained



1.2

### 1.3 + 1.4 - Brixton

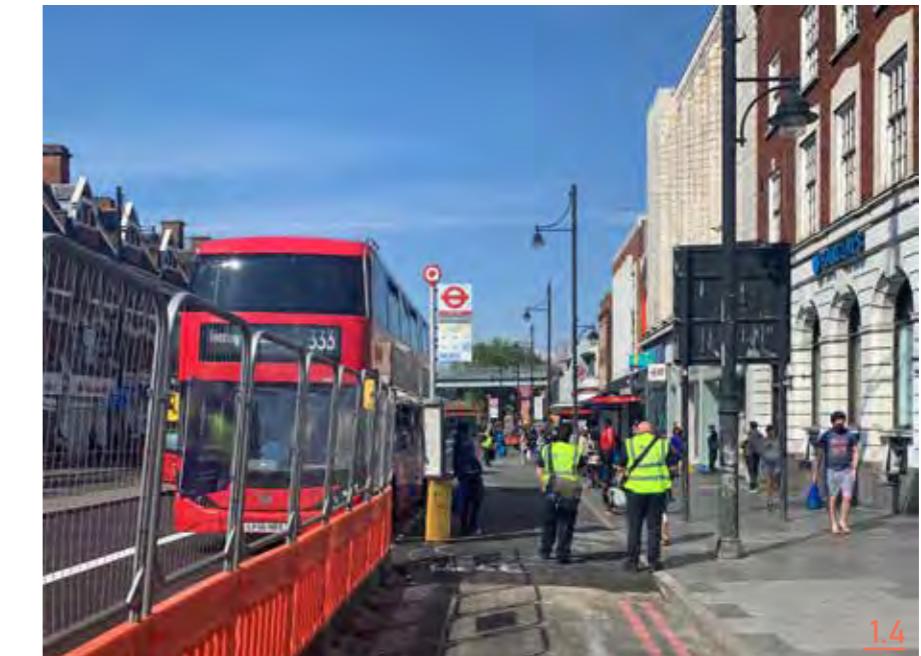
Footway widening enabled through temporary infilling of bus stop



1.3

### 1.5 + 1.6 - Oval Triangle + Clapton LTNs

Planters used to enforce modal filters



1.4

### 1.7 - Cycle Superhighway 8

Ban on left-turn at junction to remove turning conflict with cyclists



### 1.8 - Park Lane

Existing vehicle lane replaced with new bi-directional cycle track using light segregation

### 1.9 - Peckham Rye

One vehicle lane suspended to enable footway widening

### 1.10 - Lower Clapton Road

Parking bays suspended to enable local footway widening



1.5



1.7



1.9



1.6



1.8



1.10



## Stage 2

Stage 2 responses are more expansive designs that re-purpose streetscapes to provide space for seating, street greening and socialising. They are often extensions to existing trial projects and therefore used to further reinforce the design principles.

### 2.1 - Church Street

On-street parking bays replaced with additional cycle parking



2.1

### 2.2 - Royal College Street

Planters and 'orcas' used to delineate cycle lane



2.3

### 2.3 - Warburton Street

Bollards used to create modal filter



2.2

### 2.4 - Prince Edward Road

Benches used to create modal filter



2.4

### 2.5 + 2.6 - Broadway Market

Previous weekend street closure converted to permanent closure to vehicular access

### 2.7 - The Narroway

Temporary closure of High Street to through-traffic complemented by additional seating planting and street art

### 2.8 - Swedenborgsgaten

Public and private outdoor seating used to reinforce street closure

### 2.9 + 2.10 - Hackney + Brackenbury Village

Parking bays replaced by Parklets





## Stage 3

The final stage of design represents schemes that have embedded temporary measures into full transformation of the public realm and streetscapes. Many of the examples in this section were trialled before being upgrade into permanent measures.

### 3.1 + 3.2 - Van Gogh Walk

The public square is the focal point for the local community using play equipment, seating and extensive planting to remove vehicle priority through the area



### 3.3 - Downs Road

An existing modal filter was upgraded to provide a new public space and informal crossing to connect with the adjoining park



### 3.4 - Moreland School Street

The school street has been design using playful colours and layouts to delineate the carriageway including pencil bollards



### 3.5 - Quietway 1

Bi-Directional track installed with new raised crossing and priority given to cyclists



### 3.6 - The Narroway

The trialled closure of the High Street was made permanent in 2018

### 3.7 - Cycleway 6

Sections of the route which had previously used light-segregation were upgraded to provided kerb segregation along the route

### 3.8 - Bonnington Square

Six parking bays were removed to enable the creation of a new community square outside of the two local cafes

### 3.9 + 3.10 - Waltham Forest Mini-Holland

Examples of temporary modal filters that were upgraded to high-quality public realm schemes



3.5



3.7



3.9



3.6



3.8



3.10





03

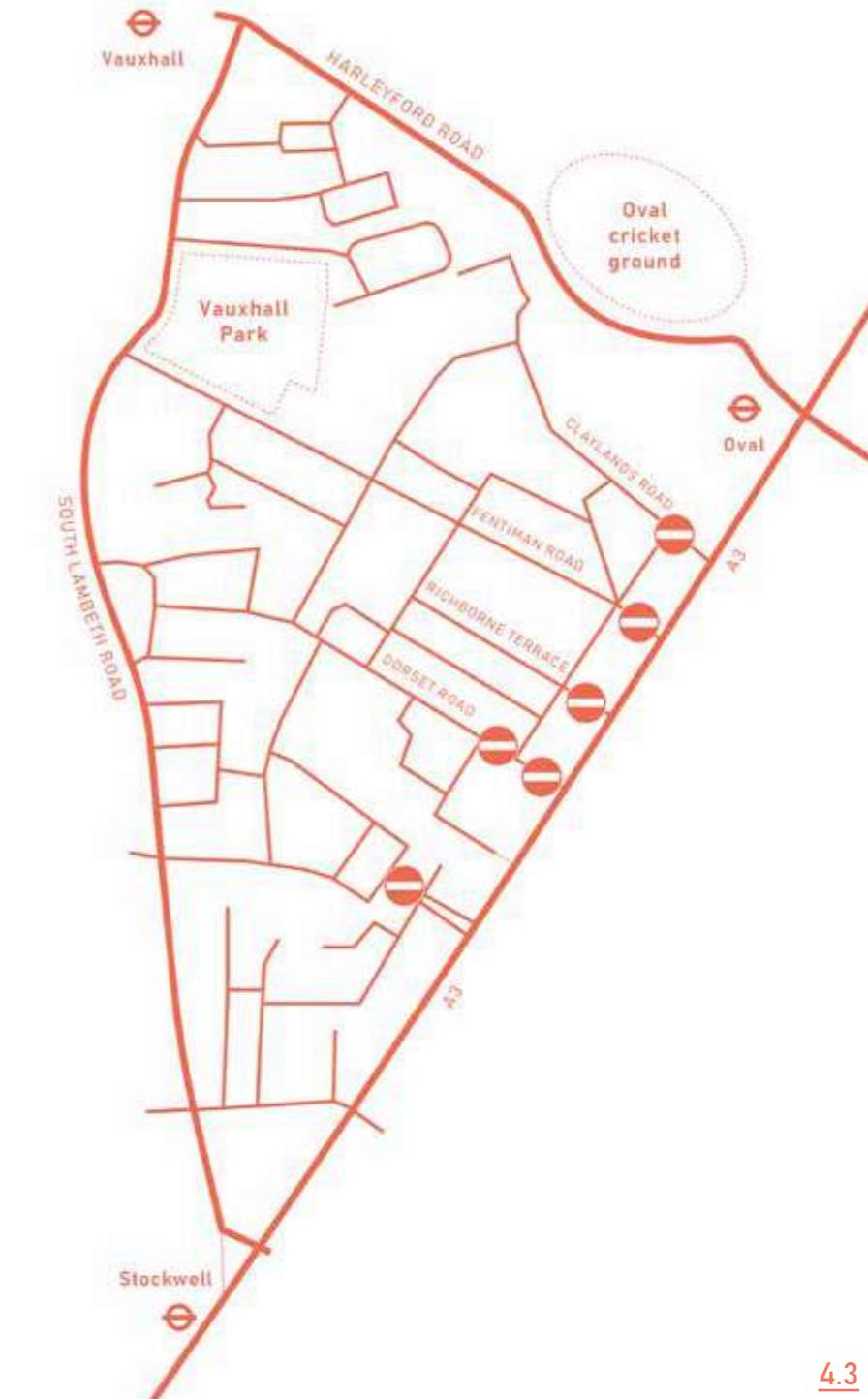
# LTN DESIGN STRATEGIES

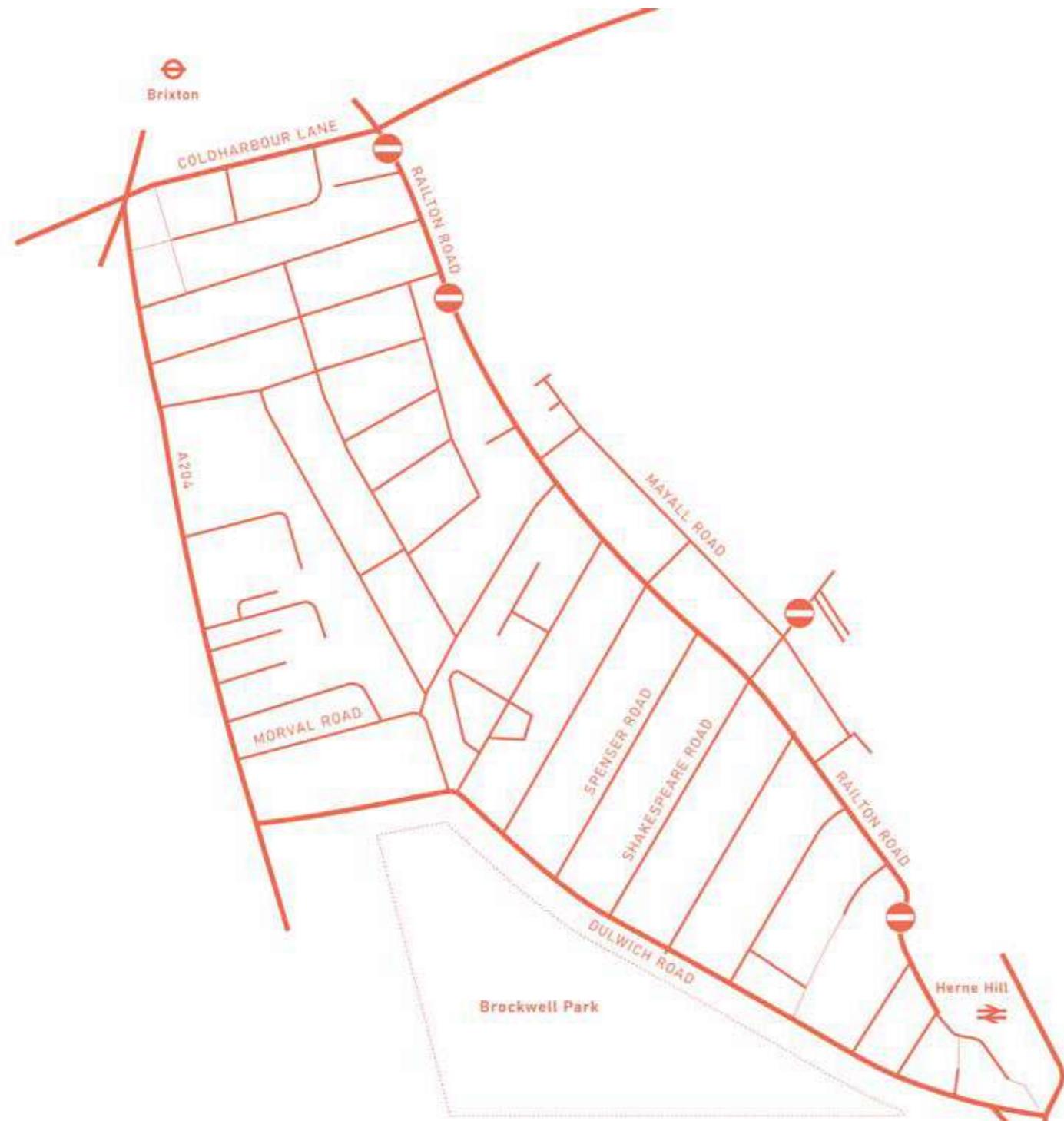
## LB Lambeth

LB Lambeth have developed three pilot Low Traffic Neighbourhood Boroughs as part of their wider response to the COVID-19 pandemic. This case study uses examples from the Oval Triangle and Railton Road LTNs to illustrate the different approaches to filtering.

The three pilot neighbourhoods already had issues relating to rat-running drivers and the LTNs were developed therefore to protect the selected neighbourhoods. Lambeth's design strategy has focussed on the use of modal filters at key junctions using 'Flying Motorbike' (TSRGD 619) signage with camera enforcement (Fig. 4.5). The filters are supported by planters which have been adopted by the local residents groups (Fig. 4.1). A launch event was held for local school children to fill the planters with plants which they had chosen in advance and all materials for the planters were delivered on milk carts (Fig. 4.6).

- The historic issue in the Oval Triangle (Fig 4.3) was northbound and southbound vehicular traffic. The scheme has installed all filters on the eastern side of the neighbourhood which is the focus of northbound through-traffic during the morning peak periods. The location of the filters has largely removed this issue in the mornings however there is still an issue with southbound vehicles. Despite advance signage (Fig 4.2), vehicles are still travelling through the neighbourhood only to reach the modal filters at the end.
- The Railton Road LTN (Fig 4.4) is focussed on Railton Road which is used by northbound and southbound through-traffic, with vehicles using the neighbourhood to access Rail Road. The LTN measures have concentrated on Railton Road to remove through vehicle access using modal filters at several locations along the corridor. Importantly, the scheme has used a bus-gate feature to maintain bus access along Railton Road.





4.4



4.5



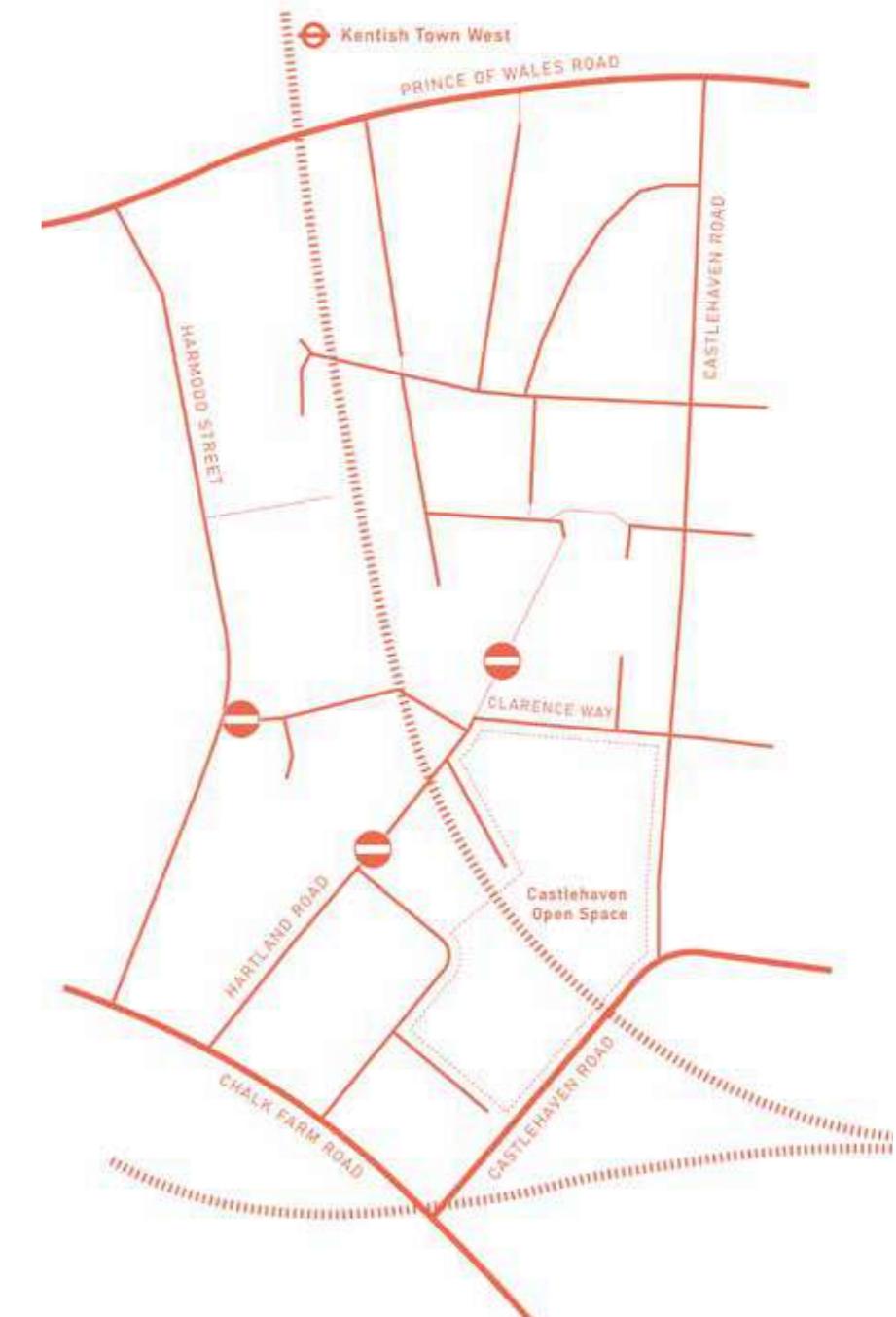
4.6

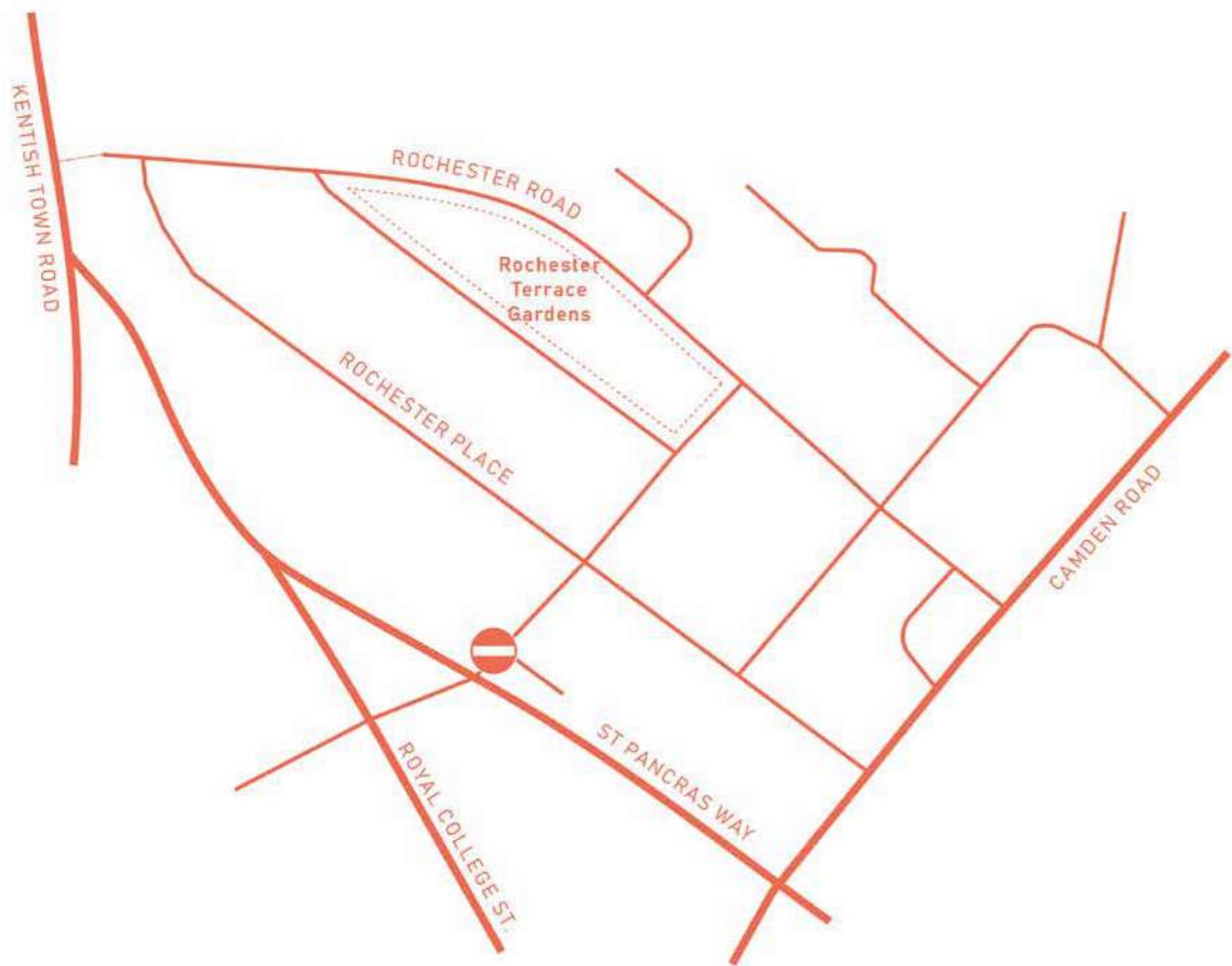
## LB Camden

The COVID-19 pandemic has significantly reduced access to public transport and 62% of residents in the Borough do not have access to a car or van. LB Camden's COVID response has focussed on accelerating measures from their transport strategy including the delivery of several LTNs.

The Borough's response is being delivered in two phases, with a majority of Phase 1 schemes now completed and examples of these are provided on this page. The Phase One schemes consist predominantly of modal filters and also some new pop-up cycle tracks. Similarly to LB Camden, the modal filters are all being enforced using the Flying Motorbike sign, however the design of the filters is different across the projects.

- The Clarence Way + Hartland Road LTN (Figs 5.1 - 5.3) comprises of three modal filters - each filter is designed differently. Fig 5.1 illustrates how bollards have been placed on Clarence Way to enforce the closure. Fig. 5.2 is a higher quality public realm scheme outside of St. Silas School. The third closure on Hawley Road is currently being upgraded to include bollards as it previously only used signage which was not reducing vehicle flows.
- The Sandall Road filter (Fig 5.5) has upgraded an existing width restriction and installed a bollard to remove through-traffic. Dedicated cycle bypasses were already in-situ for the width restriction on what had been a notorious rat-run with through-traffic accounting for c.75% of all trips through the area.
- An important factor in the development of Camden LTNs has been further enhancing local walking and cycling routes. The modal filter on Wilmot Place (Fig 5.6) has removed through-traffic in the adjoining neighbourhood and has also significantly improved access to Cycleway 6 (Fig. 5.6) which runs adjacent to the new LTN.





5.4



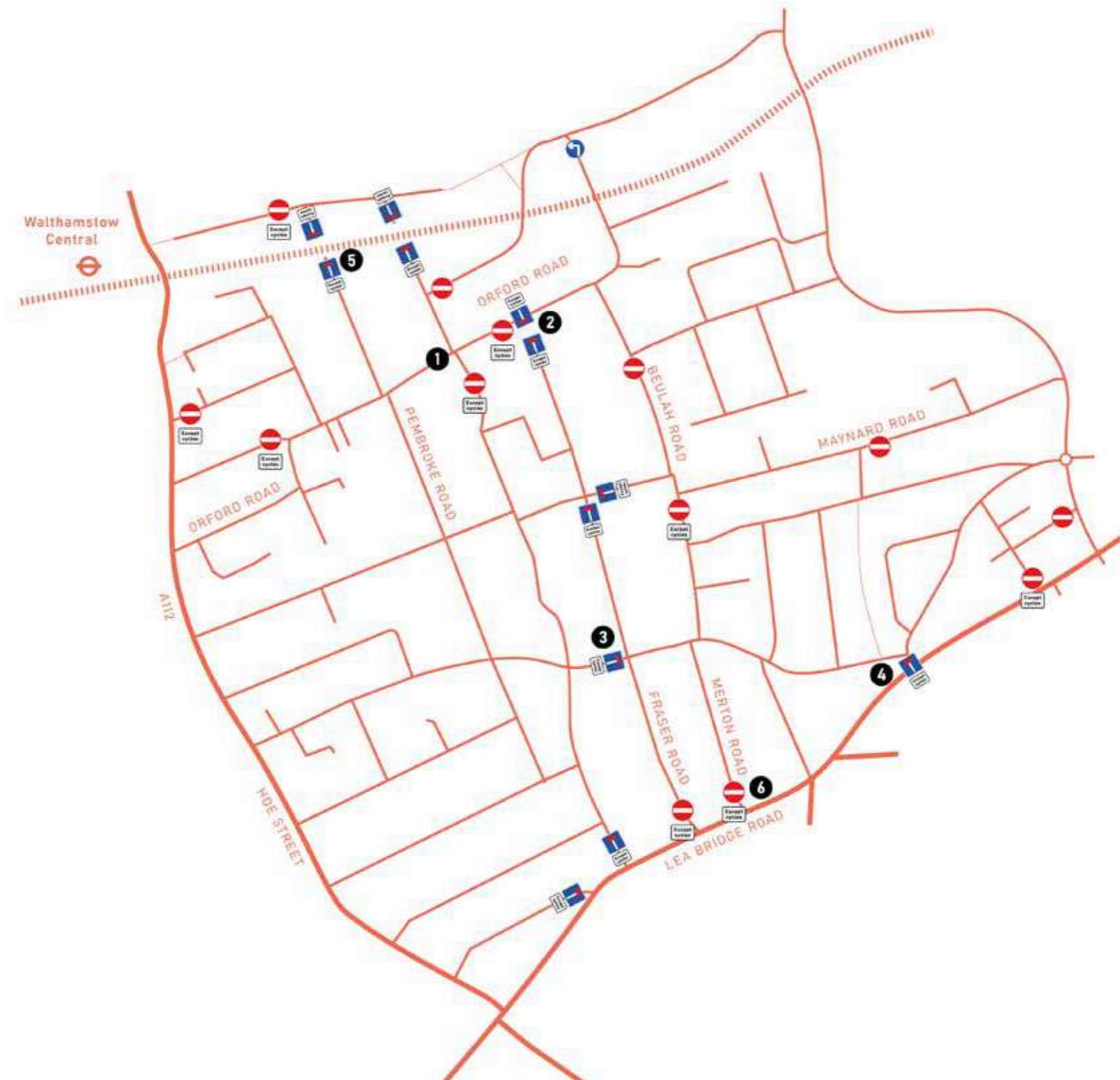
## LB Waltham Forest

LB Waltham Forest were awarded £30m in 2013 by Transport for London to support the development of their 'Mini-Holland' programme. The programme included transformational measures for walking, cycling, public transport and the public realm.

A key aspect of the Mini-Holland programme was the development of four 'villages' and reducing the impact of vehicle speeds and volumes in the villages. Walthamstow Village (Fig. 6.1) was one of the villages and was also the location for the trial closures of Orford Road which was subsequently converted to permanent public realm scheme. The development of the Villages was supported by the installation of high-quality cycle facilities and junction treatments on the main roads surrounding the villages to help further raise awareness of the modal filters within the village. The examples overleaf provide an overview of the range of design measures that were implemented in the Walthamstow Village.

The Walthamstow Village trial used eight road closures for a three week period in 2017 to monitor the impacts of removing vehicular traffic and also as an opportunity to experiment with the design of Orford Road and to raise awareness of walking and cycling. A majority of local streets saw a reduction in vehicular traffic flows with the highest reductions recorded on Orford Road and an 85% reduction in daily flows from 2,525 vpd to 366vpd.

Since the completion of the Mini-Holland programme, Waltham Forest now has highest rates of cycling of all outer London Boroughs and the second highest levels of walking of all London Boroughs. Recent research by the Kings College Air Quality Research Group has found that the number of households exposed to more than EU recommended levels of NO<sub>2</sub> have reduced from 58,000 (2007) to 6,300 (2017).





**1** Bus Gate Timed Closure  
Orford Road



**2** Modal filter (Mid-link)  
West Avenue Bridge



**3** Modal filter (Junction)  
Grove Road



**4** New village square  
Orford Road / Eden Road



**5** Point Closure with Contraflow  
Merton Road



**6** Junction Closure  
Shernhall Street / Lea Bridge Road



Prepared: Julio Manchon-Capillo

Reviewed: Andrew Saffrey

Issued: Ben Coleman

03.03.2021

PJA, The Aquarium, King Street, Reading, RG1 2AN