

To LB Hackney

Technical Note

From Steer

Date 21st March 2023

Project Downham Road Design Options Assessment

Project No. 24393001

Downham Road Optioneering - Multi-Criteria Assessment

Introduction

Background

1. In January 2023, Steer was commissioned by the London Borough of Hackney (LB Hackney) to undertake an assessment of the two design options currently being considered to improve road safety and conditions for people walking and cycling along Downham Road.
2. These options were developed by LB Hackney following concerns raised by parents of pupils at Hackney New Primary School, as well as residents, regarding road safety along Downham Road. In particular, requests were made to explore the provision for wider footways and improved crossing facilities outside the school, as well as measures to prevent vehicles from u-turning and speeding.
3. This technical note sets out the methodology to undertaking the appraisal of the two options, the outcome of the assessment, as well as recommendations for design amendments.

Context

4. Downham Road is approximately 900m in length and stretches from Kingsland Road (A10) in the east, to west of Southgate Road, where it ends in a cul-de-sac. The section subject to this design optioneering exercise is situated between the A10 and Southgate Road and acts as one of the major east-west spinal roads for the De Beauvoir Town residential area between LB Hackney and LB Islington. There is a mixture of residential and business properties along the road, as well as two educational institutions in Hackney New Primary School and Waterside Academy. **Figure 1** presents the study area:

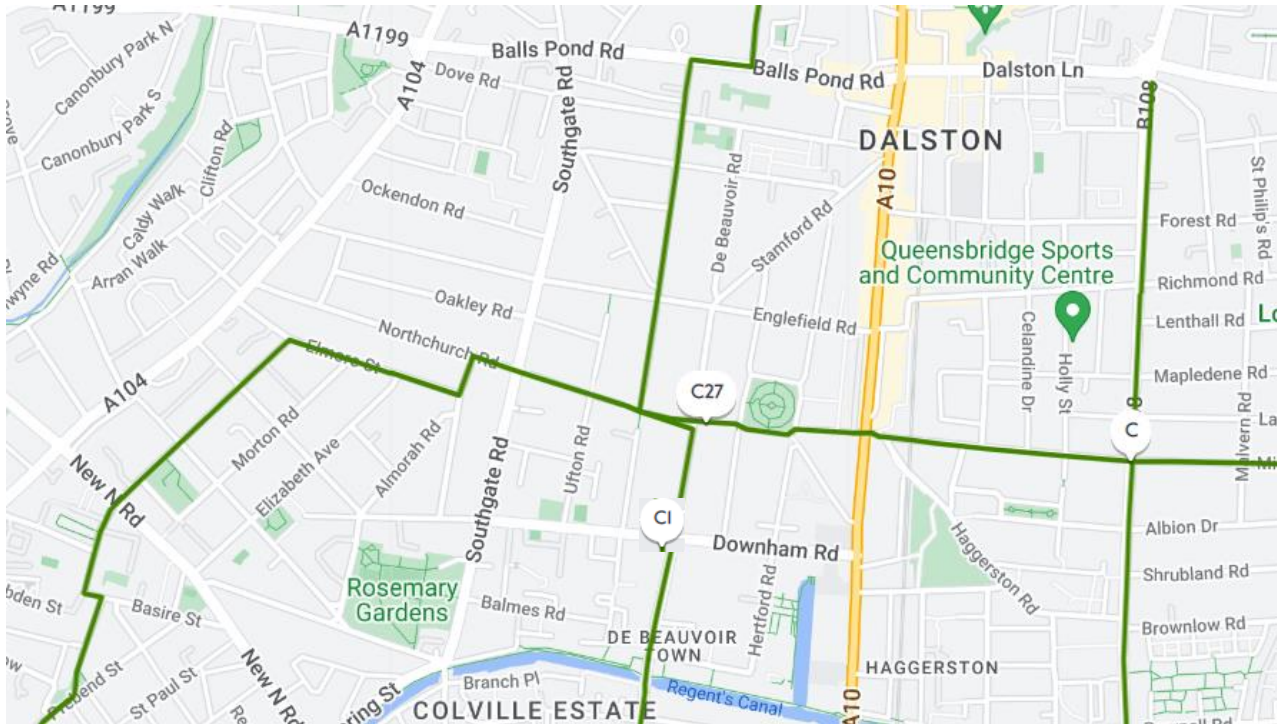
Figure 1: Study area



Source: Google

5. Cycleway 1 (C1), the main north-south cycling route in the borough, crosses Downham Road on De Beauvoir Road. Cycleway 27 (C27, and formerly known as Quietway 2), runs parallel to Downham Road, through De Beauvoir Square. Hertford Road (south of Downham Road), Mortimer Road, Lawford Road and Culford Road are access-only streets from Downham Road. **Figure 2** shows a cycle network plan of the area:

Figure 2: Cycle network map

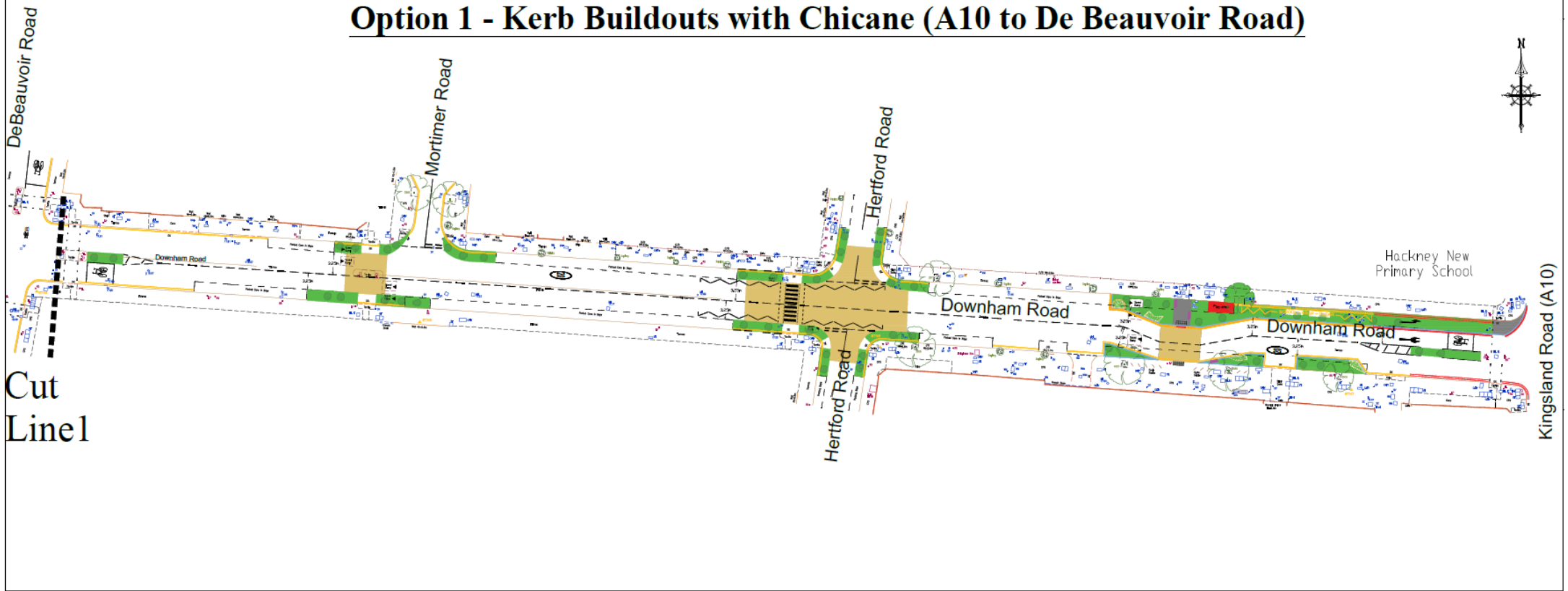


Source: TfL, Google

Proposed schemes

6. In response to the concerns raised, two schemes were developed for Downham Road:
- **Option 1 - Kerb buildouts with chicanes:** The design has sought to implement wider pavements and allow two lanes of traffic. The aim of the design is to prioritise pedestrians over all other modes of road users and improve road safety. The scheme would introduce a chicane and speed table with crossing facilities to reduce vehicle speeds and improve crossing facilities close to the school. To accommodate this scheme, approximately 11 car parking spaces would have to be relocated and/or removed.
 - **Option 2 – Segregated cycle lanes:** This design would provide two running lanes of 3.25m, and 2m wide cycle lanes in each direction. To accommodate this scheme, all 44 existing car parking spaces on Downham Road between De Beauvoir Road and the A10 would need to be removed and/or relocated.
7. Drawings of each option are presented below:

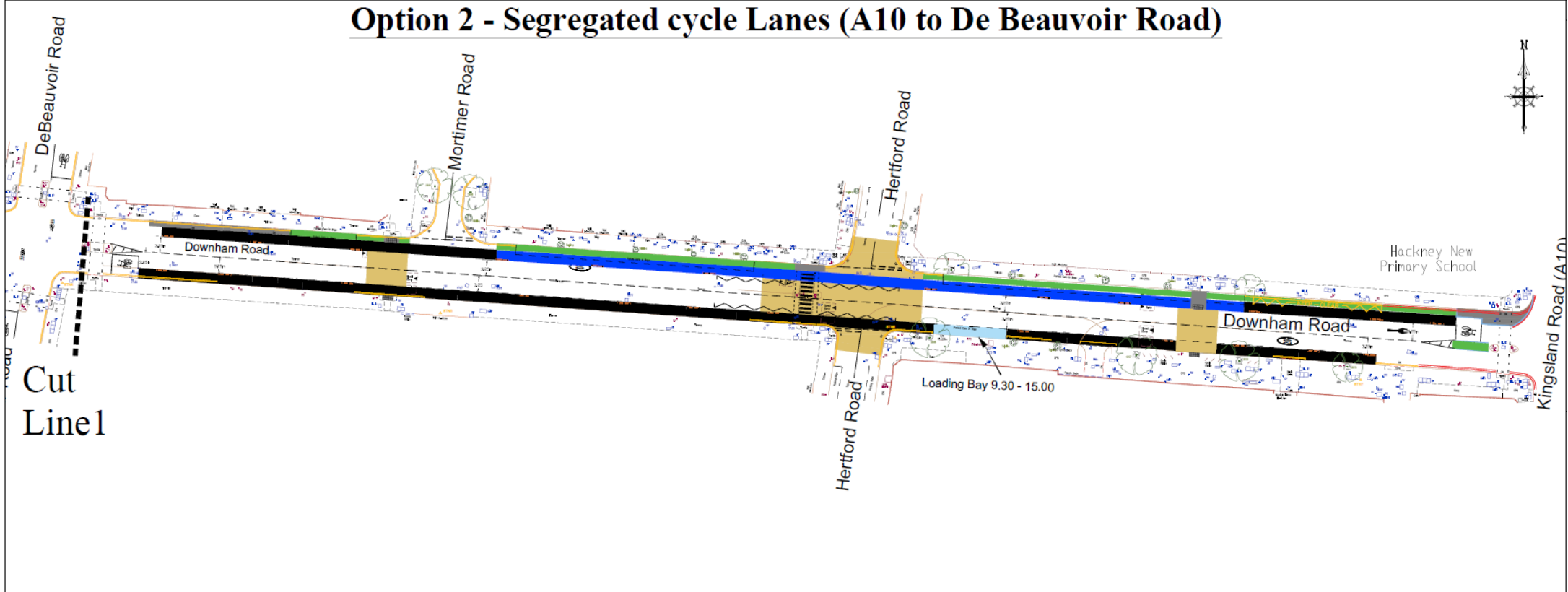
Option 1 - Kerb Buildouts with Chicane (A10 to De Beauvoir Road)



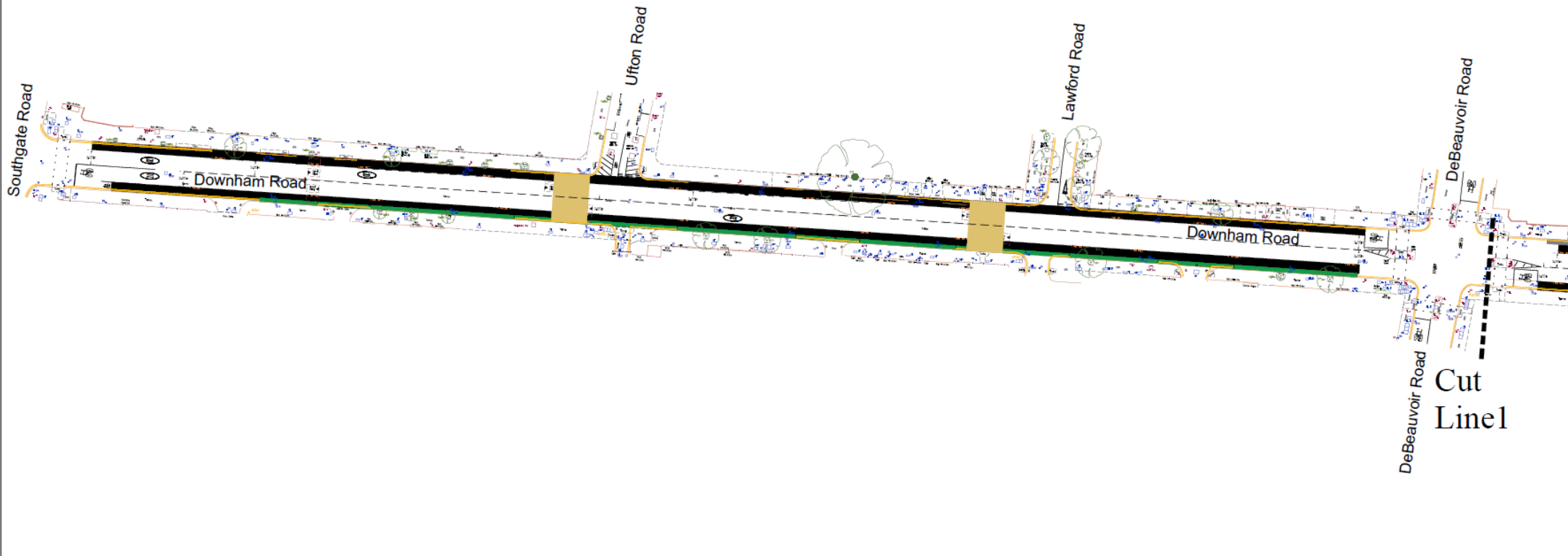
Option 1 - Kerb Buildouts with Chicane (De Beauvoir Road to Southgate Road)



Option 2 - Segregated cycle Lanes (A10 to De Beauvoir Road)



Option 2 - Segregated cycle Lanes (De Beauvoir Road to Southgate Road)



Methodology for the Multi Criteria Assessment

Background

8. A Multi Criteria Assessment (MCA) was developed as a tool to identify the benefits and constraints of each proposed design in a structure and comprehensive format. The criteria for the MCA were identified to ensure that the proposed schemes were robustly assessed in a holistic manner, considering a wide range of direct and indirect impacts.
9. The preferred scheme should strike a balance between achieving the project objectives of encouraging more people to walk and cycle locally, while considering the impacts on resident access, car parking and general traffic conditions.
10. As such, the MCA highlights how each proposed scheme influences that balance, and provides a clear, exhaustive, and evidence-based summary of the considerations to help inform LB Hackney, Councillors, residents, and other stakeholders and guide the decision-making process on what scheme to take forward for further design development.

Development of the MCA

11. The MCA is based on five scheme objectives, each with their own associated criteria/measures and targets. These are outlined below:
 - Objective 1 - Provide a safer and more accessible walking environment
 - Objective 2 - Provide a safer and more accessible cycling environment
 - Objective 3 - Retain adequate accessibility for general traffic
 - Objective 4 - Minimise impact on kerbside activity and operation of businesses
 - Objective 5 - Enhance the quality of public realm
12. Measurable criteria are used to assess how each option performs against each of the objectives. For example: the width of continuous walking space is compared the minimum standard of 2m, to inform how the scheme performs against Objective 1. Measures and targets were directly informed by design guidance and policy, such as LB Hackney's strategies, TfL's Healthy Streets indicators, and LTN 1/20.
13. Other considerations such as public acceptability, technical feasibility, cost, alignment with local policy and impact on existing businesses have also been assessed.
14. The scoring for each objective has been rated using a 7-point scale system, from Significant Positive (the proposal has a very positive impact on the achievement of the objective) to Significant Negative (the proposal has a very negative impact on the achievement of the objective).
15. Each option was split into two sections:
 - **Section A** from Southgate Road to De Beauvoir Road
 - **Section B** from De Behaviour Road to Kingsland Road (A10)
16. This provided the opportunity for a more nuanced assessment of the options, as the existing road layout and the proposed designs change depending on location.

Data sources

17. The following data sources, provided by LB Hackney, have been used to inform the MCA:
 - Car parking stress data covering Downham Road and all adjacent streets within De Beauvoir - provided in January 2023

- Automatic Traffic Count (ATC) data for Downham Road - recorded in November 2022, May 2021, and July 2021)
- Classified Turning Count (CTC) data for the junction of Downham Road and Kingsland Road A10 - recorded in April 2022
- Collision data for Downham Road – covering the previous 36 months

Outcome of the Multi Criteria Assessment

18. A summary of the MCA is presented within **Table 1** below:

Table 1: MCA Summary

Objectives		Option 1: Kerb buildouts with chicanes		Option 2: Segregated cycle lanes	
		A - Southgate Road to De Beauvoir Road	B - De Beauvoir Road to Kingsland Road (A10)	A - Southgate Road to De Beauvoir Road	B - De Beauvoir Road to Kingsland Road (A10)
Objective 1 - Provide a safer and more accessible walking environment		3	3	2	2
Objective 2 - Create a safer and more accessible cycling environment		1	1	3	3
Objective 3 - Retain adequate accessibility for general traffic		0	-1	0	-1
Objective 4 - Minimise impact on kerbside activity and operation of businesses		-1	-1	-2	-3
Objective 5 - Enhance the quality of public realm		3	3	2	2
Other considerations	Public acceptability	M		L	
	Technical feasibility	M		M	
	Alignment with policy	M		M	

19. The full MCA can be viewed in **Appendix A**.

Objectives 1, 2, 3 and 5

20. Overall, Option 1 would best address the issues highlighted in the immediate proximity of the school. The introduction of wide footways and raised tables would create a more pleasant and safer walking environment for parents and children. Furthermore, the introduction of the chicanes is likely to reduce motor traffic speeds along Downham road, enhancing the walking environment and safety of crossing points. However, the benefits along the rest of the Downham Road corridor are relatively limited in relation to the objectives of the scheme.
21. While the scheme would significantly improve the quality of the public realm and walking experience, it would do little towards creating a safer and more accessible cycling environment, as people cycling would still be required to mix with heavy volumes of motor traffic despite the potential decrease in motor traffic speeds. The proposed 3.25m lane width in each direction is slightly above the threshold set by guidance to ensure that cyclists can safely ride in primary position without being overtaken by traffic (which is a maximum width of 3.2m). The lack of cycle facilities on Downham Road would be mitigated to some

degree by the proximity of C27 immediately to the north, which provides a high-quality, low-traffic east-west route through the area, and by C1, providing a north-south route.

22. Option 2 would provide the most comprehensive cycling improvements along the length of the corridor. With protected cycle lanes along the length of Downham Road, people cycling would not have to mix with high volumes of motor traffic. This would be particularly beneficial for parents/carers and children cycling to Hackney New Primary School. While most people can reach Downham Road via designated cycle routes or quiet residential streets, the final stretch on Downham Road itself is currently unsuitable for all-ages cycling, leading to people cycling the footway. The scheme would provide improvements to public realm and walking environment, though to a lesser degree than Option 1, as footway extensions are limited by the introduction of the cycle lanes. The introduction of cycle lanes would also maintain or increase the existing crossing distance rather than narrowing it.

Objective 4

23. Impact on kerbside activity is the main drawback of both schemes. Option 2 would have the most substantial impact, as introducing the cycle lanes would involve the removal/relocation of all existing car parking bays along Downham Road. Under Option 1, some of the car parking bays will need to be removed, though many could be retained on Downham Road. Parking stress data provided by LB Hackney shows that Downham Road currently has 17 live residential permits and 90 spaces, so experiences an overall parking stress of 19 per cent. However, no data is available on occupancy levels, so it is not understood what impact visitor parking may be having on overall parking stress. On the side roads that intersect with Downham Road, there is a total of 384 permits and 634 spaces, equivalent to a stress level of 61 per cent. This would suggest that there may be capacity to relocate a number of parking bays onto side roads, however, without any recent parking occupancy data, it is not currently possible to infer existing demand and potential spare capacity.
24. Regarding loading and servicing, some of the bays would be reduced in length under Option 1; at the proposed footway build outs, waiting and loading restrictions will need to be introduced to prevent vehicles from blocking the carriageway. Under Option 2, loading would not be permitted along the entire length of Downham Road as this would block the traffic and cycle lanes - except for one loading zone which is proposed along the cycle lane east of Hertford Road (operating outside the peak hours).
25. Because of the scale of these impacts (parking in particular), it is likely that Option 1 would have the highest level of public acceptability. It is likely to be positively received by Hackney New Primary School due to the widened footway and new public realm outside of the school entrance, addressing most of their existing concerns. The scheme, as with Option 2, is likely to attract some negative responses from residents/businesses due to reduction in parking/loading facilities. As the scheme does little to improve the cycling environment, this is also likely to draw criticism from some parents/carers of children at the school(s), as well as local campaign groups (such as Hackney Cycling Campaign), and it would not comply with the latest cycling guidance LTN 1/20.
26. Considerations of any future kerbside usage suggests that Option 1 would be favourable over Option 2. Future kerbside usage will be key to the deliverability of 3,000 extra electric vehicle charging hubs by 2030, a stated aim for LB Hackney as part of its Transport Strategy. The additional footway buildouts could also accommodate additional cycle parking and electric vehicle charging infrastructure. Option 2 would limit future use of the kerbside as the segregated cycle lane limits access to the kerbside for anything other than cycling infrastructure. Removal/relocation of car parking would also eliminate the need for an opportunity to provide electric vehicle charging points, however this is not necessarily a negative given LB Hackney's aspirations to reduce motor vehicle usage across the borough.

Public engagement

27. On the 16th and 23rd of November 2022, residents were invited to attend drop-in events to discuss the proposals and provide their initial feedback through to completion of a questionnaire. A total of 101 responses were received.
28. In general, more negative themes emerged in relation to Option 2 and more positive themes emerged from Option 1. Respondents particularly liked the greenery aspects of Option 1. Overlapping suggestions for Options 1 and 2 are to have more pedestrian crossings at convenient locations such as nearby Hackney New Primary School, and to have more traffic calming measures in place.
29. Analysis shows that 32 per cent of respondents to the question '*What do you think of Option 1? (public realm improvements)*', expressed an explicit preference or support for Option 1, whereas 20 per cent of respondents to the question '*What do you think of option 2? (segregated cycle lanes)*', expressed a preference or support for Option 2.
30. With Option 1, the most common concern (11 per cent of responses) was about potential traffic tailbacks along Downham Road, with several people noting the potential impact of this outside Hackney New Primary School. 11 per cent of respondents also expressed that they did not feel Option 1 was safe for cyclists and/or pedestrians. This also relates to the concern that Option 1 limits cycling, due to the absence of a cycling lane. Another popular negative response was that Option 1 does not slow down motor vehicle traffic.
31. The most common negative response to Option 2 was the opposition to reduction of car parking, with 16 per cent of respondents expressing a concern. 8 per cent of respondents were also concerned about cyclists speeding and/or riding on pavements, and 7 per cent expressed objection to a cycle lane in Option 2, some of whom felt that this would make pedestrians feel unsafe.

Potential design amendments

Option 1

Walking environment improvements

- All footway buildouts are shown as 'planting areas' apart from where there are pedestrian crossing points. Whilst this is likely to be adequate based on current footfall, a Pedestrian Comfort Level (PCL) assessment would be beneficial to establish whether this extra footway space is necessary, or whether it can be allocated to planting.
- It would be possible to further improve the walking and cycling environment with the introduction of continuous footways over minor side roads such as Hartford Road and Lawford Road. This would emphasise pedestrian and cyclist priority and assist with slowing down drivers on entry and exit. Except for Southgate Road and De Beauvoir Road, all side roads experience very low flows of motor traffic due to existing road network configuration.
- Consideration could be given to the layout of the proposed buildouts, using appropriate radii and extending the buildouts across vehicular accesses to prevent having frequent gaps in the buildouts.
- Consideration could be given to providing a zebra crossing at the raised table near Hackney New Primary School entrance, rather than west of Hertford Road. This however would need to be reviewed against traffic volumes to ensure that it does not cause issues with queueing at the junction with the A10.

Design of the chicanes

- The two chicanes, west of Ufton Road and outside the school entrance are designed with a taper of 1:3-1:4, which is considered very sharp, and might lead to kerb overruns or conflicts between vans and other large vehicles travelling in opposing directions. Although there is a weight restriction on Downham Road, there are exceptions for loading, and larger vehicles would need to enter the opposing lane to manoeuvre through the chicanes which could lead to safety issues.
- It is recommended that the stagger length of the chicanes is increased to mitigate this, however this could reduce their effectiveness in reducing speeds. Raised tables will assist with this (to be designed with appropriate gradients to avoid grounding and excessive noise/vibration).
- Traffic calming guidance suggests: *“Installing speed cushions on the approach to a chicane would partially compensate for the longer stagger lengths required to accommodate large vehicles, while keeping the speed of cars to around 20 mph. An alternative approach is to use overrun areas to give car drivers the impression of a restricted width carriageway but allowing additional manoeuvring room for large vehicles.”*

Using chicanes vs narrowing the carriageway width

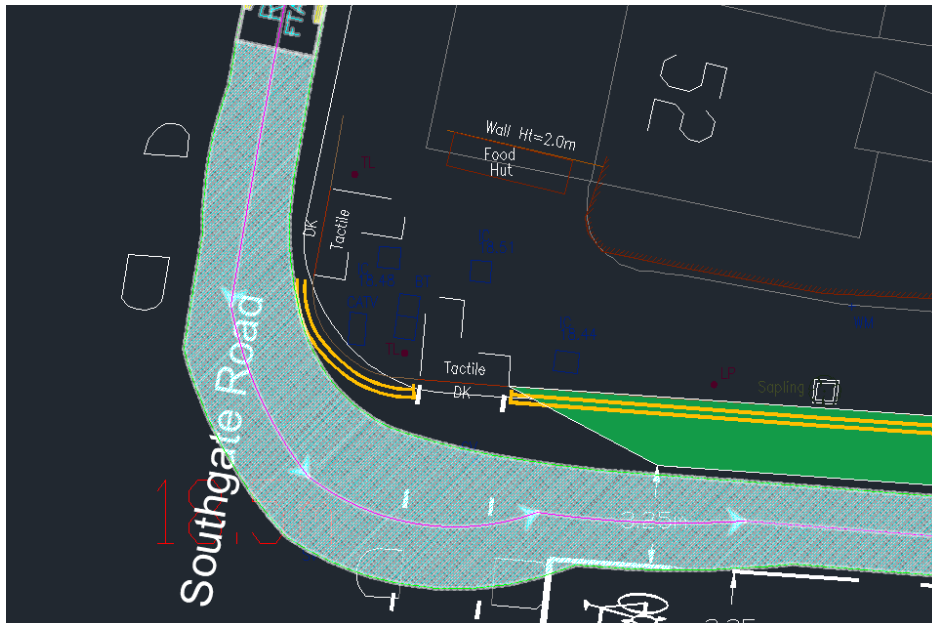
- An alternative to the chicanes would be to introduce carriageway narrowing's (6m or less), building out the footways on both sides. It is recommended that consultation is undertaken with emergency services to establish the most appropriate design solution.
- The carriageway width along Downham Road could be reduced further to 6m rather than 6.5m. 6.5m is generally considered the minimum carriageway width along bus routes, however two-way carriageways within 20mph zones/roads can be to 6m when not used by buses. This would be especially beneficial for cyclists, allowing them to choose to ride in primary position (or at footway pinch points highlighted in the MCA where this extra width could be used to widen the footways).

Kerbside usage

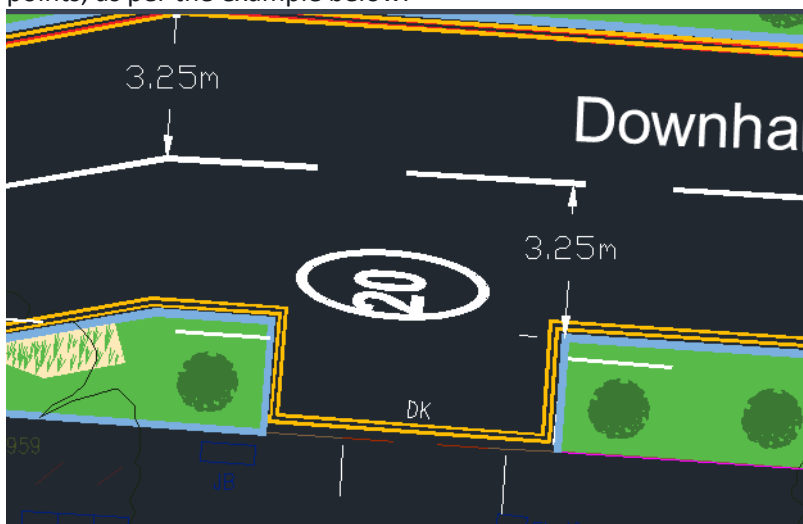
- Parking stress data suggests that existing demand on Downham Road and adjacent side roads could be relatively low, considering only residents. However, it would be beneficial to undertake a parking beat survey across the area in advance of recommending that designs for both options are amended to reducing or relocating as much parking and loading bays as necessary onto side roads.

Junction treatment

- **Junction with Southgate Road:** It may be possible to extend the buildout to the corner which would help reduce crossing widths, however this would need to be checked with vehicle tracking to ensure that larger vehicles would be able to turn into Downham Road without overrunning the kerb (see image below).



- **Junction with Kingsland Road:** Retaining only one approach lane would require an assessment of the capacity of the junction. Consideration could also be given to removing the traffic island and reallocating this space to the footways – subject to vehicle tracking.
- **Junction with De Beauvoir Road:** It is recommended that cycle feeder lanes to the ASLs are provided where space is available. Consideration should be given to removing traffic islands and building out footway corners instead to reduce crossing distances, or alternatively reallocating the space for cycle feeder lanes. There is no need for traffic islands to mount signals if there is only one approach lane.
- During detailed design, ensure that proposed trees do not obstruct visibility or accesses or at crossing points, as per the example below:



Other

- Proposed speed humps should ideally be sinusoidal or have a shallow gradient so that they do not have an adverse impact on people cycling and they do not cause excessive noise and vibration.

Option 2

Walking environment improvements

- it would be possible to further improve the walking and cycling environment with the introduction of continuous footways (and cycleways) over minor side roads such as Hartford Road and Lawford Road. This would emphasise pedestrian and cyclist priority and assist with slowing down drivers on entry and exit. Except for Southgate Road and De Beauvoir Road, all side roads experience very low flows of motor traffic due to existing area-wide filtering. An example of this is shown in **Figure 3** below, from Markhouse Road in Waltham Forest.

Figure 3: Continuous footway example



- Consideration could be given to providing a zebra crossing at the raised table near Hackney New Primary School entrance, rather than west of Hertford Road. This however would need to be reviewed against traffic volumes to ensure that it does not cause issues with queueing at the junction with the A10.
- Crossing the cycle lanes and two lanes of traffic in one movement, at the proposed uncontrolled pedestrian crossings points, can be challenging, especially given the relatively high flows of motor traffic on Downham Road. This applies particularly to children and elderly. Consideration could be given to introducing an additional zebra crossing on the section between De Beauvoir Road and Southgate Road.

Kerbside usage

- Parking stress data suggests that existing demand on Downham Road and adjacent side roads could be relatively low, considering only residents. However, it would be beneficial to undertake a parking beat survey across the area in advance of recommending that designs for both options are amended to reducing or relocating as much parking and loading bays as necessary onto side roads. This would have substantial benefits to the overall public acceptability of the scheme, though particularly for Option 2, which at present would require the removal of all car parking spaces.
- The proposed loading bay on the cycle track (east of Hertford Road, outside The Duke of York pub) poses a road safety risk for cyclists, even though operations are time restricted. Consideration should be given to relocating the bay into Hertford Road as an alternative.

Appendix A: Multi-Criteria Assessment

London Borough of Hackney
Downham Road - Design Options Assessment
Multi Criteria Assessment

Objectives are rated using a 7-point scale system, from Significant Positive (the measure has a very positive impact on the achievement of the objective) to Significant Negative (the measure has a very negative impact on the achievement of the objective)

3	Significant Positive
2	Moderate Positive
1	Slight Positive
0	Neutral Impact
-1	Slight Negative
-2	Moderate Negative
-3	Significant Negative

Additional Considerations (row I to L) are assessed using separate system, because technical feasibility, public acceptability and alignment with policy cannot be attributed a positive or negative connotation. They have been assessed using high/medium/low (for example: low dependency from other schemes means the scheme can progress without affecting or being affected by other proposals)

H	High
M	Medium
L	Low

Objectives	Measures	Target	Option 1: Kerb buildouts with chicanes		Option 2: Segregated cycle lanes21:26	
			A - Southgate Road to De Beauvoir Road	B - De Beauvoir Road to Kingsland Road (A10)	A - Southgate Road to De Beauvoir Road	B - De Beauvoir Road to Kingsland Road (A10)
Objective 1 - Provide a safer and more accessible walking environment	Pedestrian crossings to accommodate desire lines	<i>Pedestrians crossings are within 5 metres of desire lines</i>	- New raised tables west of Ufton Road and west of Lawford Road - Signalised crossings at Southgate Road and De Beauvoir junctions as per existing layout	- New zebra crossing west of Hertford Road and new raised tables outside the school and west of Mortimer Road - Signalised crossing on the approach to Kingsland Road reduced in length	- New raised tables west of Ufton Road and west of Lawford Road - Signalised crossings at Southgate Road and De Beauvoir junctions as per existing layout	- New zebra crossing west of Hertford Road and new raised tables outside the school and west of Mortimer Road - Signalised crossing on the approach to Kingsland Road reduced in length
	Ease of crossing side roads	<i>All side roads have continuous footway treatment or raised tables; side roads in busy locations are one-way</i>	- Ufton Road closed to motorised traffic but no continuous footway/raised table provided - No continuous footway/raised table provided across Lawford Road - No continuous footway/raised table provided across Clifford Road	- No continuous footway/raised table provided across Mortimer Road - New raised table proposed across Hertford Road	- Ufton Road closed to motorised traffic but no continuous footway/raised table provided - No continuous footway/raised table provided across Lawford Road - No continuous footway/raised table provided across Clifford Road	- No continuous footway/raised table provided across Mortimer Road - New raised table proposed across Hertford Road
	Width of clear continuous walking space	<i>Footways are 2.5m in width throughout; minimum at pinch points is 2m</i>	- Footways are overall > 2.5m in width throughout - Pinch points <2m on the approach to De Beauvoir Road (on both the southern and northern footways due to the presence of utility boxes and trees)	- Footways are overall > 2.5m in width throughout - A couple of pinch points <2m along the northern footway between De Beauvoir Road and Mortimer Road (lamp column and cycle stand reducing effective footway width) - A few pinch points <2m along the northern footway between Hertford Road and the school (tree pits reducing effective footway width) - Proposed footway build outs in proximity to the school remove some existing pinch points	- Footways are overall > 2.5m in width throughout - Pinch points <2m on the approach to De Beauvoir Road (on both the southern and northern footways due to the presence of utility boxes and trees) but slightly improved compared to Option 1 on the southern footway as a result of the proposed build out	- Footways are overall > 2.5m in width throughout - A pinch point <2m along the northern footway between De Beauvoir Road and Mortimer Road (lamp column reducing effective footway width) - Proposed footway build outs along the northern footway between Hertford Road and the school remove some of the existing pinch points
	Dropped kerbs and tactile paving at crossings	<i>All crossing points have dropped kerbs and tactile paving</i>	All crossing points have dropped kerbs and tactile paving	All crossing points have dropped kerbs and tactile paving	All crossing points have dropped kerbs and tactile paving	All crossing points have dropped kerbs and tactile paving
	Carriageway width (crossing distances)	<i>Lane widths kept to max of 3.2m (buses); 3m for general traffic</i>	Traffic lanes are 3.25m wide throughout	Traffic lanes are 3.25m wide throughout	Traffic lanes are 3.25m wide throughout	Traffic lanes are 3.25m wide throughout
	Reducing motor traffic speeds	<i>Reduction in motor traffic speeds at critical points along Downham Road</i>	The proposed chicane near Ufton road is likely to reduce motor traffic speed. The additional kerb build outs around junctions with Southgate and Langford road narrow carriageway width and are also likely to assist with reducing motor traffic speeds. Any reduction in motor traffic speed will increase real and perceived road safety for people using formal and informal crossing points.	The new chicane located outside Hackney New Primary School is likely to reduce motor traffic speed. The additional kerb build outs around Mortimer road, Hertford road and the primary school, also narrow carriageway width and are likely to assist with reducing motor traffic speed. Any reduction in motor traffic speed will increase real and perceived road safety for people using formal and informal crossing points, and outside Hackney New Primary School.	The narrowing of the carriageway with the additional of a segregated cycle way is likely to reduce motor traffic speeds, however the maintained straight carriageway with widths of 3.25m are unlikely to have as greater impact as chicanes in Option 1.	The narrowing of the carriageway with the additional of a segregated cycle way is likely to reduce motor traffic speeds, however the maintained straight carriageway with widths of 3.25m are unlikely to have as greater impact as chicanes in Option 1.
	Criteria rating:			3	3	2
Objective 2 - Create a safer and more accessible cycling environment	The cycling environment is suitable for ages 8-80	<i>Cyclists are fully segregated from motor traffic or volumes of motor traffic are sufficiently low to mix safely with cyclists, and cycle movements are managed at junctions</i>	Under Option 1, cyclists will be mixed with traffic. The speeds of motor traffic would be expected to reduce as a result of the Option 1 proposals. Nevertheless, not to such an extent so that it's safe for children to cycle on the traffic lane, especially during peak hours (currently 2-way traffic is greater than 6,000 pcus/day). The new chicane near Ufton road filters motor traffic direction and is likely to reduce motor traffic speed. The reduction in motor traffic speed will increase real and perceived road safety for cyclists mixing with traffic on Downham road.	Under Option 1, cyclists will be mixed with traffic. The speeds of motor traffic would be expected to reduce as a result of the Option 1 proposals. Nevertheless, not to such an extent so that it's safe for children to cycle on the traffic lane, especially during peak hours (currently 2-way traffic is greater than 6,000 pcus/day). The new chicane near Ufton road filters motor traffic direction and is likely to reduce motor traffic speed. The reduction in motor traffic speed will increase real and perceived road safety for cyclists mixing with traffic on Downham road.	Option 2 proposes one-way 2m-wide segregated cycle lanes on either side of Downham Road. This comfortably meets LTN1/20 standards for with-flow cycle tracks and would be suitable for ages 8-80.	Option 2 proposes one-way 2m-wide segregated cycle lanes on either side of Downham Road. This comfortably meets LTN1/20 standards for with-flow cycle tracks and would be suitable for ages 8-80.

	Collision risk between people cycling and turning motor vehicles	<i>On links - conflict mitigation at side roads. At signalised junctions, cycle turning movements are separated by time and/or space</i>	<p><u>On side roads:</u> Ufton Road is closed to traffic from Downham Road so there is no conflict. No measures for cyclists proposed across Lawford Road but turning traffic flows should be low and the raised table proposed west of the junction should reduce the risk of any conflicts. Cycle markings in the middle of the traffic lanes could be proposed to increase conspicuity of cyclists.</p> <p><u>On signalised junctions:</u> On the approach to Southgate Road, an ASL is provided with a short cycle feeder lane. On the approaches to De Beauvoir Road, ASLs are provided however without any cycle feeder lanes.</p>	<p><u>On side roads:</u> No measures for cyclists proposed across Mortimer Road but turning traffic flows should be low and the raised table proposed west of the junction should reduce the risk of any conflicts. The junction of Downham Road with Hertford Road is proposed to be raised so the risk of any conflicts between turning traffic and cyclists should be low. Cycle markings in the middle of the traffic lanes could be proposed to increase conspicuity of cyclists.</p> <p><u>On signalised junctions:</u> On the approach to the A10, an ASL is provided however without any cycle feeder lane, nor any additional cycle safety/priority measures.</p>	<p><u>On side roads:</u> Ufton Road is closed to traffic from Downham Road so there is no conflict. Cycle markings proposed across Lawford Road and a raised table west of the junction which should reduce the risk of any conflicts.</p> <p><u>On signalised junctions:</u> On the approaches to signalised junctions, ASLs are provided and the proposed cycle tracks are feeding into these.</p>	<p><u>On side roads:</u> Cycle markings proposed across Mortimer Road as well as a raised table west of the junction which should reduce the risk of any conflicts. The junction of Downham Road with Hertford Road is proposed to be raised so the risk of any conflicts between turning traffic and cyclists should be low.</p> <p><u>On signalised junctions:</u> On the approaches to signalised junctions, ASLs are provided, however, on the approach to the junction with the A10 additional cycle priority measures would be beneficial to enable cyclists to turn safely in and out of Downham Road.</p>
	Impact of kerbside activity (loading, pickup/drop off)	<i>A buffer of at least 1m is provided between cycle lane and parking/loading facilities</i>	Under Option1, parking/ loading will only be permitted on the marked bays and cyclists will be cycling on the traffic lane so there should be no conflict.	Under Option1, parking/ loading will only be permitted on the marked bays and cyclists will be cycling on the traffic lane so there should be no conflict.	Parking/loading along Downham Road will not be permitted under Option 2 so there will be no conflict.	Parking/loading along Downham Road will not be permitted under Option 2 apart from just one loading bay on the westbound cycle track which will be operating from 9:30am to 3pm. There will be no conflict during peak hours but during the hours of operation of that loading bay there will be some conflict between westbound cyclists and vehicles on the loading bay.
	Opportunity for cycle parking taken	<i>Opportunities to provide cycle parking located along the route</i>	Cycle parking can be provided on the proposed footway build outs.	Cycle parking can be provided on the proposed footway build outs.	Cycle parking can be provided on the southern footway, in between the trees, so it doesn't reduce the effective footway width any further.	Cycle parking can be provided on the northern footway, on the proposed footway width any further.
	Connections into existing network	<i>Cycleway is integrated into the existing cycle network (direct links provided with other routes)</i>	N/A - No cycleway proposed	N/A - No cycleway proposed	Proposed cycle track will link into Cycleway 1 on De Beauvoir Road which also links to Quietway 2 along Northchurch Road and Kingsland Towpath on Regent's canal and Hyde Road/Hoxton Street Quietway	Proposed cycle track will link into Cycleway 1 on De Beauvoir Road which also links to Quietway 2 along Northchurch Road and Kingsland Towpath on Regent's canal and Hyde Road/Hoxton Street Quietway
	Risk of pedestrian/cycle collisions	<i>Use of shared spaces is avoided. Clear delineation made between cycleways and footways. Ped crossings provided over cycleway on desire lines.</i>	No shared spaces proposed as part of this option nor cycle tracks	No shared spaces proposed as part of this option nor cycle tracks	No shared spaces proposed as part of this option. There will be clear delineation between the footway and the proposed cycle track. At the uncontrolled raised crossings pedestrians will need to wait for both cyclists and traffic to clear before they cross. At the zebra crossing cyclists will need to give way to pedestrians. Potential conflict between school pupils and cyclists outside the school entrance especially at drop-off/pick-up times, though this would be off-peak for cycling commuter flows.	No shared spaces proposed as part of this option. There will be clear delineation between the footway and the proposed cycle track. At the uncontrolled raised crossings pedestrians will need to wait for both cyclists and traffic to clear before they cross.
		Criteria rating:	1	1	3	3
Objective 3 - Retain adequate accessibility for general traffic	Congestion/ Journey time impacts	<i>The proposals do not increase congestion along the corridor and general traffic journey times are not adversely impacted by the scheme</i>	Along this section the number of traffic lanes will remain as existing (one lane per direction), however, the proposed chicanes and raised tables are expected to decrease the speed of general traffic. Overall, the impact on general traffic journey times as a result of the proposals should be minimal.	The number of traffic lanes on the approach to the junction with the A10 will be reduced from two to one. This might create longer queues along Downham Road outside the school. Congestion and travel times are therefore expected to increase as a result. On the other hand, the proposals could lead to mode shift to active travel which in turn would reduce congestion in proximity to the school during drop-off and pick-up times.	Along this section the number of traffic lanes will remain as existing (one lane per direction), however, the proposed raised tables are expected to decrease the speed of general traffic. Overall, the impact on general traffic journey times as a result of the proposals should be minimal.	The number of traffic lanes on the approach to the junction with the A10 will be reduced from two to one. This might create longer queues along Downham Road outside the school. Congestion and travel times are therefore expected to increase as a result. On the other hand, parking/loading won't be permitted along Downham Road and the proposals will promote a mode shift to active travel which in turn could reduce congestion in proximity to the school during drop-off and pick-up times.
	Impact on accessibility	<i>All currently possible movements are retained, or an acceptable alternative is provided.</i>	All currently possible movements are retained	All currently possible movements are retained	All currently possible movements are retained	All currently possible movements are retained
		Criteria rating:	0	-1	0	-1
Objective 4 - Minimise impact on kerbside activity and operation of businesses	School pick-up/drop-off	<i>School pick-up/ drop-off does not adversely impact traffic along the corridor or on adjacent roads</i>	N/A	Under Option 1, some short-stay parking bays will be retained along Downham Road in proximity to the school. School pick-up/ drop-off from private motor vehicles could therefore take place from these bays if space is available. It is also expected that some short-stay parking for pick-up/ drop-off will be displaced to surrounding streets (i.e. Hertford Road, Enfield Road). On the other hand, the proposals will encourage active travel (mainly walking and scooting) for getting to and from the school which could mitigate some of the adverse impact to the surrounding road network.	N/A	Under Option 2, school pick-up/ drop-off from private motor vehicles won't be permitted along Downham Road. It is therefore expected that pick-up/ drop-off will be displaced to surrounding streets (i.e. Hertford Road, Enfield Road). On the other hand, the proposals will encourage active travel (walking, cycling and scooting) for getting to and from the school which should mitigate the adverse impact to the surrounding road network.

Loading		Retaining existing loading arrangements, or relocating within 20m	Currently, loading is permitted along this section at certain times where there are single or double yellow lines without double blips as well as at the short-stay parking bays. Under Option 1, some of the bays will be reduced in length and also at the build outs double blips will need to be proposed, prohibiting loading to take place. There are currently no plans relocate this loss of space for loading which would impact on businesses, therefore this would need to be considered in greater detail. A parking beat survey will be needed to determine the impact of these proposals.	Currently, loading is permitted along this section at certain times where there are single or double yellow lines without double blips as well as at the short-stay parking bays. Under Option 1, some of the bays will be reduced in length and also at the build outs double blips will need to be proposed, prohibiting loading to take place. There are currently no plans relocate this loss of space for loading which would impact on businesses, therefore this would need to be considered in greater detail. A parking beat survey will be needed to determine the impact of these proposals.	Currently, loading is permitted along this section at certain times where there are single or double yellow lines without double blips as well as at the short-stay parking bays. Under Option 2, loading won't be permitted along the entire length of Downham Road as this would block the traffic lanes - this may have an impact on some businesses who take deliveries directly from Downham Road. There is no plan to relocate this loss of space for loading but it is expected that loading activity will be displaced to the surrounding streets. A parking beat survey will be needed to determine the impact of these proposals.	Currently, loading is permitted along this section at certain times where there are single or double yellow lines without double blips as well as at the short-stay parking bays. Under Option 2, loading won't be permitted along the entire length of Downham Road as this would block the traffic lanes - this may have an impact on some businesses who take deliveries directly from Downham Road. There is only one loading bay proposed east of Hertford Road on the cycle track (operating outside the peak hours). There is no plan to relocate this loss of space for loading but it is expected that loading activity will be displaced to the surrounding streets. A parking beat survey will be needed to determine the impact of these proposals.
	Parking	Retaining existing arrangements, or relocating within 50m <i>Note - Downham Road currently has 17 live permits and 90 spaces so overall stress of 19%.</i>	Currently, parking is permitted along this section at the designated parking bays (resident permit and short stay). Under Option 1, some of the bays will be reduced in length. There is no plan to relocate this loss of space for parking. A parking beat survey will be needed to determine the impact of these proposals. There are also 2 business parking spaces near the junction with Kingsland Road (A10) which will need to relocate with either option (the best options for this will be on Enfield or Hertford Road).	Currently, parking is permitted along this section at the designated parking bays (resident permit and short stay). Under Option 1, some of the bays will be reduced in length. There is no plan to relocate this loss of space for parking. A parking beat survey will be needed to determine the impact of these proposals. There are also 2 business parking spaces near the junction with Kingsland Road (A10) which will need to relocate with either option (the best options for this will be on Enfield or Hertford Road).	Currently, parking is permitted along this section at the designated parking bays (resident permit and short stay). Under Option 2, all of the parking bays will need to be removed to accommodate the proposed cycle tracks. There is no plan to relocate this loss of space for parking. A parking beat survey will be needed to determine the impact of these proposals. There are also 2 business parking spaces near the junction with Kingsland Road (A10) which will need to relocate with either option (the best options for this will be on Enfield or Hertford Road).	Currently, parking is permitted along this section at the designated parking bays (resident permit and short stay). Under Option 2, all of the parking bays will need to be removed to accommodate the proposed cycle tracks. There is no plan to relocate this loss of space for parking. A parking beat survey will be needed to determine the impact of these proposals. There are also 2 business parking spaces near the junction with Kingsland Road (A10) which will need to relocate with either option (the best options for this will be on Enfield or Hertford Road).
	Future kerbside usage	<i>Deliverability of future kerbside infrastructure such as electric vehicle charging points, cycle parking, SUDs, public realm improvements etc.</i>	Under Option 1 there will be additional footway space and built out kerbs along this section of Downham Road. This additional footway allows for adaptability and accommodation of any future infrastructure requiring kerbside space. The additional footway build outs can be utilised for any kerbside cycle parking. The additional footway build outs can also accommodate any future electric vehicle charging infrastructure. Option 1 will also retain the majority of road side parking which could accommodate any future electric vehicle charging bays.		Future kerbside usage is limited with Option 2. The addition of a segregated cycle track along Downham road inhibits available space for any future electric vehicle charging infrastructure along this route, the removal of parking bays makes the creation of electric vehicle parking bays unlikely, though this is not necessarily a negative feature given aspirations to reduce motor vehicle usage across the borough. There is some limited additional kerb build outs that could accommodate any future additional cycle parking however, this is significantly less space than in Option 1.	
Criteria rating:			-1	-1	-2	-3
Objective 5 - Enhance the quality of public realm	Urban realm improvements	<i>Planting is provided at footway level and SUDs are improved.</i>	New SUDs and planting are proposed under this Option as well as footway build outs (approx. 465 m ²)	New SUDs and planting are proposed under this Option as well as footway build outs (approx. 630 m ²)	New SUDs and planting are proposed under this Option as well as footway build outs (approx. 222 m ²)	New SUDs and planting are proposed under this Option as well as footway build outs (approx. 266 m ²)
	Shade and shelter	<i>The number of street trees is increased, and the walking distance between sheltered areas (i.e. anywhere with canopy cover) is not increased</i>	2 new trees proposed	49 new trees proposed	No new trees proposed	No new trees proposed
	Places to stop and rest	<i>The number of places to sit is increased. Walking distances between places to rest is maintained or reduced.</i>	New seating facilities at the build out west of Ufton Road	New seating facilities at the build outs in proximity to the school entrance	No new seating facilities	No new seating facilities
	Clear air and environmentally friendly	<i>Motorised traffic levels are reduced and active travel is increased. Air quality is improved.</i>	The proposals improve the walking environment, which may encourage an element of mode shift towards walking. However, it should be recognised that the footways on Downham Road are already relatively spacious. While the scheme would marginally improve the cycling experience, it is unlikely to attract new users. Additional street trees are likely to assist with improving air quality.	The proposals improve the walking environment, which may encourage an element of mode shift towards walking. However, it should be recognised that the footways on Downham Road are already relatively spacious. While the scheme would marginally improve the cycling experience, it is unlikely to attract new users. Additional street trees are likely to assist with improving air quality.	The proposals are more likely than Option 1 to create a mode shift from motorised traffic to active travel modes, particularly cycling, therefore in the long-run, air quality could improve along the route, as fewer people choose to drive.	The proposals are more likely than Option 1 to create a mode shift from motorised traffic to active travel modes, particularly cycling, therefore in the long-run, air quality could improve along the route, as fewer people choose to drive.
Criteria rating:			3	3	2	2
Other considerations	Public acceptability	<i>Likely response from residents and businesses to the scheme</i>	Expected positive response from the school due to the widened footway and new public realm outside of the school entrance. This would likely address the majority of their existing concerns. The scheme is likely to attract some negative from residents/businesses due to parking/loading removal. As the scheme does little to improve the cycling environment, this is likely to draw heavy criticism from cycle campaigners, and some parents/carers of children at the school.		The removal of parking and loading space is likely to create significant opposition to the scheme from residents/ businesses on Downham Road. However, the proposals for fully segregated cycle lanes would be warmly welcomed by cycle campaigners, as well as a number of parents/carers of children at the school. This would people them to safely cycle the final stretch of their route to school in safety.	
	Technical feasibility and cost	<i>E.g. carriageway widening and impact on utilities are minimised, and cost is not disproportionate</i>	No major civil works under this option - It is not expected that the proposals will not have any major impact on utilities as there is no footway cut back proposed. Footway drainage will likely be required at the footway build outs. It is understood that this scheme has been costed at £413k + signal costs (tbc by TfL), which is £162k below the estimate for Option 2, making it the lower cost option.		No major civil works under this option - It is not expected that the proposals will have any major impact on utilities as there is no footway cut back proposed and the cycle track will be segregated using curbs and poles rather than kerbs. It is understood that this scheme has been costed at £575k + signal costs (tbc by TfL), which is £162k more expensive than Option 1, making it the more costly option.	
	Alignment with policy	<i>Alignment with Draft Climate Action Plan, Hackney's Transport Strategy, Hackney's Child Friendly Borough policy, and the Mayor's Transport Strategy.</i>	Hackney's Draft Climate Action Plan outlines ambitions to convert road space to public realm, SuDs and other uses. This option would achieve this aim, and likely make it more pleasant and enjoyable to walk, however it would do little-to-nothing to improve to cycling environment, which would not assist Hackney with achieving its aims of increasing journeys by bike. Hackney's Child Friendly Borough policy outlines a strategy for a child-friendly built environment with a focus on safe and unpolluted urban spaces. This option will improve the real and perceived safety of the public realm for children, with widened footways outside the school, additional built out kerb and improved environment with street trees and play area. The location of the new chicane is also likely to calm traffic and reduce road speeds, further enhancing the real and perceived safety outside the school. This directly supports a policy of child friendly streets and will create a safer more accessible space for the children attending Hackney New Primary School.		Hackney's Draft Climate Action Plan aims to achieve at least 59% of journeys starting in Hackney that are by foot or by bike. To achieve this, to Action Plan outlines "expanding cycle infrastructure", which aligns with the 1.5 degree celcius targets. In the accompanying Implementation Plan, there is an action to "design and complete a Cycling Network incorporating LTNs and tracks on main roads". Hackney's Child Friendly Borough policy outlines a strategy for a child-friendly built environment with a focus on safe and unpolluted urban spaces. Whilst Option 2 is likely to have a higher impact upon air quality, it does not go as far to address the issues of safety concerning the footway directly outside the Hackney New Primary School. Traffic speeds are likely to decrease due to the narrowing of the carriageway however, potential conflict with cyclists in the cycle lane is introduced.	
Criteria rating:			M	M	M	M