

<b>Report to</b>	Norwich Highways Agency Committee 21 March 2019	<b>Item</b>
<b>Joint Report of</b>	Assistant Director Communities and Environmental Services, and Head of city development services	<b>6</b>
<b>Subject</b>	Transport for Norwich - A140 Mile End Road and Colman Road Improvements to relieve congestion at the Daniels Road Roundabout	

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### **Purpose**

To consider the responses to the consultation on proposed changes to the Outer Ring Road (ORR) and to agree to implement the proposals as originally proposed with minor amendments

### **Recommendation**

To:

- (1) agree to implement the proposals on Colman Road, Mile End Road, South Park Avenue and Unthank Road as shown on the plan numbered 1-4 attached as Appendix ;
- (2) ask the head of city development to complete the necessary statutory process to implement the above proposals with the exception of those items in (3) below as detailed in the report:
- (3) ask the head of city development to advertise the following minor amendments to the previously proposed traffic regulation orders, as shown on the plans in Appendix 1:
  - (a) the removal of the previously advertised short stay spaces on Unthank Road and their replacement with double yellow lines;
  - (b) changes to the proposed arrangement of the bus stop and parking spaces on the westbound section of Colman Road;
- (4) agree to delegate any objections to these minor changes to the head of city development services in discussion with the chair and vice-chair.

### **Corporate and service priorities**

The report helps to meet the corporate priority a safe, clean and low carbon city and the service plan priority to implement the Local Transport Plan and Norwich Area Transportation Strategy.

## **Financial implications**

The Local Enterprise Partnership (LEP) Local Growth Fund has allocated funding to relieve congestion and delays related to the A11 / A140 roundabout. The cost of the implementation of these recommended works is initially estimated at £650,000, but this will be subject to revision following more detailed design work.

**Ward/s:** Eaton, Nelson and University

**Cabinet member:** Councillor John Fisher - Environment and Sustainable Development; Councillor Stonard - Sustainable and inclusive growth

## **Contact officers**

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## **Background documents**

None

## Report

### Background

1. The roundabout junction of the A11 Newmarket Road with the A140 Daniels Road / Mile End Road has been identified as one of the key sites in Norwich where works are needed to relieve congestion, reduce delays and improve journey times for all road users. The Local Enterprise Partnership (LEP) has recognised the need for improvements at the junction and has allocated funding to deliver these outcomes.
2. At the inception of the project it was identified that one of the main causes of congestion at the roundabout was the queuing back from adjoining junctions on the network. At the June 2018 Norwich Highways Agency committee (NHAC) meeting officers advised that work was underway looking at the section of the Outer Ring Road (ORR) between South Park Avenue and Newmarket Road and at the December NHAC meeting this work was considered and it was resolved to consult on proposals for the Mile End Road / Colman Road section of the ORR between South Park Avenue and Church Avenue.
3. The proposals included the following:-
  - (a) alterations to the traffic light controlled junction at South Park Avenue to improve the operation of the junction, including pedestrian facilities;
  - (b) new pedestrian refuges on Colman Road near to Highland Road and Unthank Road;
  - (c) replacing the existing pedestrian crossing near Mornington Road and Waldeck Road with a staggered signalised pedestrian crossing;
  - (d) provide double yellow lines on the northern side of Colman Road with a combination of double yellow lines and parking bays on the southern side;
  - (e) provide double yellow lines on both sides of Unthank Road with a parking bay on the northern side.
4. The consultation took place between 18 January 2019 and 12 February 2019, with statutory advertisements placed in the press and around the entire area and a letter drop (including copies of the proposals) to all local residents, schools and businesses. Stakeholder groups were also consulted. Information about the associated traffic regulation orders was also available on the City Council's website.
5. This report considers the responses to those proposals.

### Consultation

6. Overall, approximately 280 letters (some stakeholders were consulted via e-mail) were sent out to local residents, businesses and stakeholders and 64 responses were received. The overall responses from businesses, residents and other interested parties are summarised in Appendix 2. The major issues raised are discussed later in this report. Those issues raised by just a few respondents are responded to in the Appendix.

7. Officers visited the schools in the area, and whilst two of them were happy with the proposals, the response received from Colman Junior School is reproduced at Appendix 3 and the issues raised and responded to in the main report.

## **Responses to Issues Raised**

### **Proposals do not favour sustainable transport modes**

8. The overall aim of the Transport for Norwich (TfN) strategy is to increase walking, cycling and the use of public transport, but one element of it is to manage general traffic (including Heavy Goods Vehicles [HGVs] accessing the City) onto the main road network, which is more suited to larger vehicles and higher traffic flows, to enable sustainable transport improvements elsewhere. This results in quieter side streets becoming much more suitable as walking and cycling environments. The main aim of these proposals is to improve vehicular traffic flow along this length of Colman Road / Mile End Road and to encourage traffic to use this route, which is one of the most important parts of the strategic road network in the City, rather than the side roads.
9. Colman Road and Mile End Road currently suffer from slow moving traffic congestion at peak times, which has a negative impact on to Newmarket Road. In order to facilitate more efficient and flexible coordination of the traffic signal installations along the route, staggered pedestrian crossing facilities are required, as at other locations around the ORR. Although introducing a staggered crossing will inherently add a small amount of time to the pedestrian crossing movement, the average time to complete the entire crossing movement will be reduced. This is because there are a reduced number of phases in the lights, so the overall repeat cycle is shorter
10. Informal, non-signalised, pedestrian crossing points are also being proposed which will enable pedestrians to cross the road in other locations when there is a gap in the traffic if they are confident to do so. These are in addition to the light controlled facilities.
11. The existing cycle advance stop line (ASL) will be retained at the South Park Avenue junction with Colman Road / Mile End Road. The westbound approach to the South Park Avenue junction provides a single wider lane in place of the existing two narrow lanes, which allows more carriageway space for cyclists. The installation of double yellow line waiting restrictions, other than where there are proposed parking spaces, will contribute to a clearer and safer route for cyclists by reducing the amount of cars parked along the edge of the carriageway.
12. Although changes to the timing of the traffic signals on the new junctions will mean slightly increased waiting times here for buses, this is more than compensated for by improvements to journey times along the ring road itself. The proposals result in substantially faster and more consistent bus journeys as was demonstrated in the previous report.

### **Pedestrians will be subject to increased levels of pollution**

13. These proposals will not expose pedestrians to a greater level of air or noise pollution and in fact are likely to result in less exposure. A major contributor to air pollution is queuing traffic, and these proposals will result in fewer queues which will be particularly beneficial in the morning peak hours when there are high levels of vehicular traffic and pedestrian movement. In addition, as has already been noted, the average time to cross the road will be reduced with the new crossing arrangements.

### **Crossings are less safe for Children**

14. The staggered pedestrian crossings provide a safe environment while waiting for a pedestrian green phase to be activated at the crossing points. An Integrated Impact Assessment has been conducted which amongst other factors has considered the impact of these proposals on equality and diversity for all users of the proposed highway improvements. The overall assessment has determined the impact of this scheme to be neutral in this regard. There is no evidence to suggest that a staggered crossing presents a particular increased risk to children or other road users. A staggered crossing ensures that waiting pedestrians are only required to check that traffic has stopped from one direction and also that they are in the live carriageway for a shorter period of time overall. The existing crossing patrol will be retained so long as finance and political will remains. Recent consultation on removal of crossing patrol was rejected by councillors.

### **Pedestrian Crossings will not have adequate capacity**

15. The pedestrian crossing islands will be designed in accordance with appropriate design standards. The traffic signal controlled pedestrian movements would be staggered so that pedestrians would have to cross in two movements where they currently cross in one. This is unlikely to result in the island becoming overfilled with pedestrians.

### **Proposals will increase congestion**

16. The proposals have been specifically designed to reduce levels of congestion, and this was demonstrated in the figures supplied with the previous report to this committee which are reproduced at Appendix 4.
17. The efficiency of the junction at South Park Avenue is improved by introducing staggered pedestrian crossing arrangements which also reduces the length of time for a complete cycle of the junction to take place. All the junctions will be fully integrated with the new pedestrian crossings (which is not really possible at the moment as they operate with a single crossing movement) This will reduce congestion has been demonstrated by the improved and more consistent journey times that will be achieved on this section of the ORR .
18. The existing full length of the right turn lanes on the Colman Road / Mile End Road approaches to Unthank Road and Daniels Road are often not utilised to full capacity. It is not expected that reducing these lengths will contribute to

congestion and this is supported by traffic modelling simulations. Existing video surveys and queue length surveys were analysed before bringing forward the suggestion of reducing the available right turn lanes and as mentioned were heavily under-utilised. The aim is to optimise the carriageway space for ahead movements.

19. Reducing the north bound lane on Colman Road from two to just one lane also has advantages. The main advantage is the reduction of two traffic phases at the lights (left turn and ahead) into one (ahead or left), this simplifies the junction with the introduction of segregated pedestrian crossings (where pedestrian movements are done in two phases) to allow the junction to be as efficient as possible. Previously, when a large vehicle sat in the left and ahead narrow lanes, there would be friction between the vehicles, causing slow moving traffic which would cause a temporary bottleneck.

### **Traffic Regulation Orders**

20. The following Traffic Regulation Orders (TRO) (which have already been advertised) will be required to implement the scheme:

- Additional double yellow lines in South Park Avenue.
- Double Yellow lines on Colman Road, with limited waiting bays
- Install Bus Stop Clearways at bus stops (these do not require a formal TRO)

21. The consultation raised a couple of issues that result in the need to amend (and therefore re-advertise) the traffic regulation orders in a couple of locations. On Colman Road, First Buses have raised concerns about the location of the bus stop within a section of car park bays, preferring a location before the parking bays. This requires a re-advertisement of a revised location of the parking bays. On Unthank Road, concern was raised that the retention of some parking spaces between the proposed double yellow lines would add to congestion (although vehicles do park there currently).

22. Therefore, the following changes to the previously proposed TRO are recommended for statutory consultation following the results of this consultation:

- (a) the removal of the limited waiting bays on Unthank Road to be replaced by double yellow lines
- (b) changing the arrangement of the bus stop and the proposed parking spaces on Colman Road (Westbound side near to the junction with Unthank Road).

## **Resource Implications**

23. Finance: The TfN programme forms an integral part of strategic infrastructure as set out in the Joint Core Strategy. The delivery of this work is funded by government grants by way of the Local Enterprise Partnership (LEP) Local Growth Fund.
24. Staff: The project will be delivered through joint team working involving both county council and city council officers.
25. Property: The proposals can be delivered within the existing highway boundary so there is no requirement for land acquisition.

## **Other Implications**

26. Legal Implications: None
27. Environmental implications. No significant environmental impacts have been identified, and the proposals are therefore permitted development.
28. Human Rights: None.
29. Communications: The Communications Project Manager for Transport for Norwich schemes will manage publicity and enquiries.
30. An Integrated Impact Assessment has been conducted which amongst other factors has considered the impact of these proposals on equality and diversity for all users of the proposed highway improvements. The overall assessment has determined the impact of this scheme to be neutral in this regard.

## **Section 17 - Crime & Disorder Act**

31. The scheme will be designed to ensure it has a positive effect on crime and disorder where possible. Care will be taken during construction to minimise opportunities for crime and disorder, for instance the secure storage of construction equipment and materials.

## **Risk Implications/Assessment**

32. A risk assessment has been undertaken for the development of the NATS Implementation Plan (TfN). The key risks for delivering this are around funding, planning and timescales. These risks are being managed through active project management and ongoing engagement with stakeholders.

## **Implementation**

33. Consultation on the minor amendments to the TROs will take place in early summer, and the full technical design will take place so that construction of the scheme can commence in Spring 2020.

## **Conclusions**

34. The proposals fully accord with the Transport for Norwich Strategy, and many of the concerns raised at the consultation are not supported by the analysis or by experience in other locations. The ORR is a critical part of the strategic road network and is one of the few locations where general traffic would be prioritised over other user groups, but overall, no groups are disadvantaged by the scheme which, subject to a minor amendment to the proposed traffic regulation orders is recommended for implementation.



## Integrated impact assessment



**NORWICH**  
City Council

### Report author to complete

**Committee:**

Norwich Highways Agency Committee

**Committee date:**

21 March 2019

**Director / Head of service**

Head of City Development Services

**Report subject:**

Transport for Norwich - A11 Newmarket Road – A140 Mile End Road Improvements to relieve congestion at the Daniels Road Roundabout

**Date assessed:**

14 March 2018

**Description:**

This report updates members on the current position of the work to identify capacity improvements at the A11 Newmarket Road / A140 Mile End Road junction

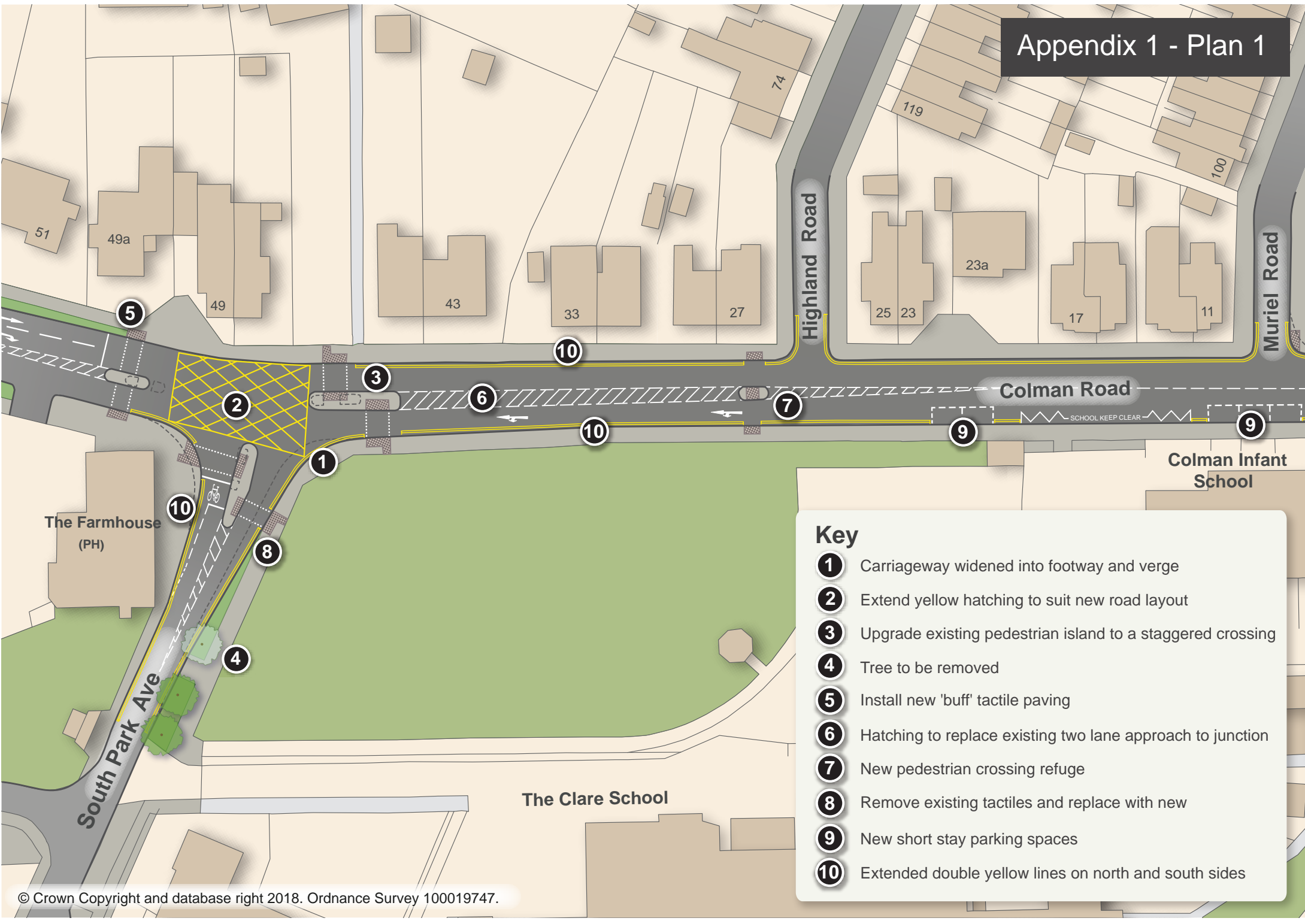
	Impact			
<b>Economic (please add an 'x' as appropriate)</b>	<b>Neu tral</b>	<b>Positi ve</b>	<b>Negat ive</b>	<b>Comments</b>
<b>Finance (value for money)</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The TfN programme forms an integral part of strategic infrastructure as set out in the Joint Core Strategy. The delivery of this project is funded by the Local Enterprise Partnership (LEP) Local Growth Fund.
<b>Other departments and services e.g. office facilities, customer contact</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project will be delivered through joint team working involving both County Council and City Council officers
<b>ICT services</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No further comments.
<b>Economic development</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No further comments.
<b>Financial inclusion</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No further comments.
<b>Social (please add an 'x' as appropriate)</b>	<b>Neu tral</b>	<b>Positi ve</b>	<b>Negat ive</b>	<b>Comments</b>
<b>Safeguarding children and adults</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No further comments.
<b><u>S17 crime and disorder act 1998</u></b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	This scheme will be designed to ensure it has a positive effect on crime and disorder where possible. Care will be taken during construction to minimise opportunities for crime and disorder, for instance the secure storage of construction equipment and materials.

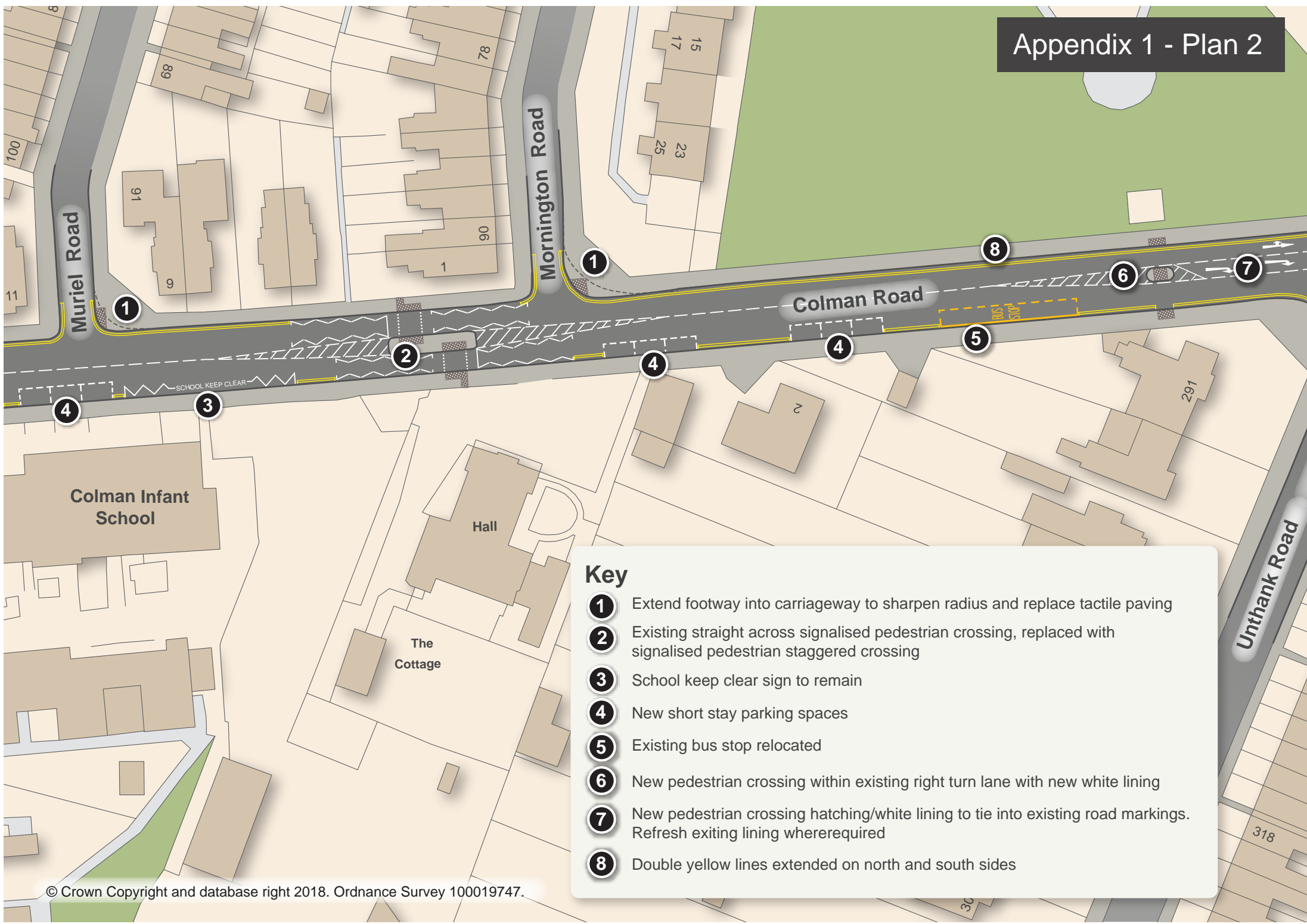
	Impact			
<b>Human Rights Act 1998</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No further comments
<b>Health and well being</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The transport for Norwich strategy aims to encourage more trips by foot and cycle. These proposals from part of that strategy by encouraging general traffic to use the main road network
<b>Equality and diversity (please add an 'x' as appropriate)</b>	<b>Neu tral</b>	<b>Positi ve</b>	<b>Negat ive</b>	<b>Comments</b>
<b>Relations between groups (cohesion)</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No further comments.
<b>Eliminating discrimination &amp; harassment</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No further comments.
<b>Advancing equality of opportunity</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No further comments.
<b>Environmental (please add an 'x' as appropriate)</b>	<b>Neu tral</b>	<b>Positi ve</b>	<b>Negat ive</b>	<b>Comments</b>
<b>Transportation</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	One of the main objectives derived from the TfN strategy is to increase walking and cycling and the strategy follows a mode hierarchy principal where walking, cycling and public transport are, where appropriate, prioritised above use of the car. These proposals form part of that overall package as they contribute to an improved journey time for public transport and an improved cycle environment, promoting the use of sustainable travel methods.

	Impact			
Natural and built environment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No further comments
Waste minimisation & resource use	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No further comments
Pollution	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	These proposals are intended to reduce journey times and delays on the main road network
Sustainable procurement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No further comments
Energy and climate change	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	These proposals are intended to reduce journey times and delays on the main road network
<b>(Please add an 'x' as appropriate)</b>	<b>Neu tral</b>	<b>Positi ve</b>	<b>Negat ive</b>	<b>Comments</b>
Risk management	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A risk assessment has been undertaken for the development of the NATS Implementation Plan (TfN). The key risks for delivering this are around funding, planning and timescales. These risks are being managed through active project management and ongoing engagement with stakeholders

Recommendations from impact assessment	
Positive	
None	
Negative	

None
<b>Neutral</b>
<b>Issues</b>



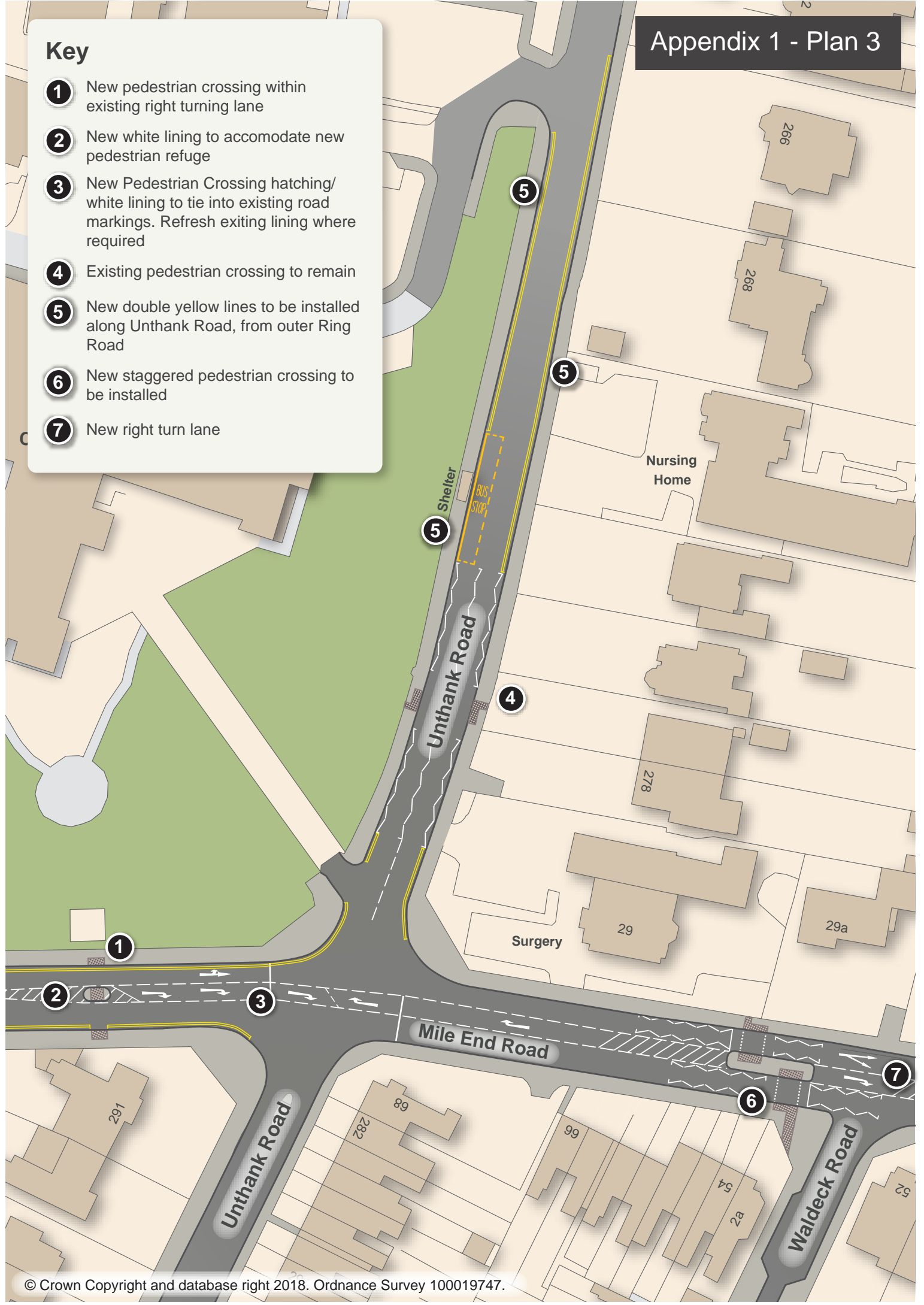


**Key**

- 1 Extend footway into carriageway to sharpen radius and replace tactile paving
- 2 Existing straight across signalised pedestrian crossing, replaced with signalised pedestrian staggered crossing
- 3 School keep clear sign to remain
- 4 New short stay parking spaces
- 5 Existing bus stop relocated
- 6 New pedestrian crossing within existing right turn lane with new white lining
- 7 New pedestrian crossing hatching/white lining to tie into existing road markings. Refresh exiting lining wherever required
- 8 Double yellow lines extended on north and south sides

**Key**

- 1 New pedestrian crossing within existing right turning lane
- 2 New white lining to accomodate new pedestrian refuge
- 3 New Pedestrian Crossing hatching/ white lining to tie into existing road markings. Refresh exiting lining where required
- 4 Existing pedestrian crossing to remain
- 5 New double yellow lines to be installed along Unthank Road, from outer Ring Road
- 6 New staggered pedestrian crossing to be installed
- 7 New right turn lane





Key

- 1 New staggered pedestrian crossing to be installed
- 2 New right turn lane
- 3 Extend length of right turn lane starting adjacent to Melrose Road



**APPENDIX 2**

<b><i>Issue</i></b>	<b><i>Times Raised</i></b>	<b><i>Officers Comments</i></b>
<b>Overall responses</b>		
Generally against the proposed highway improvements.	<b>32</b>	All the issues raised are discussed individually either in the Appendix or in the report
Generally in favour of the proposed highway improvements.	<b>7</b>	All the issues raised are discussed individually either in the Appendix or in the report
<b>General Comments</b>		
Proposals favour vehicular traffic over pedestrians and cyclists.	<b>15</b>	See Report
Pedestrians will be exposed to increased air and noise pollution while waiting at the staggered pedestrian crossings which also increase the risk of people crossing during a green traffic phase.	<b>13</b>	See Report.
General concern for the safety of school children. Traffic crossing patrol staff will still be required to manage school children - especially at proposed staggered pedestrian crossing on South Park Avenue junction with Colman Road/Mile End Road.	<b>10</b>	See report
High volume of Heavy Good Vehicles (HGVs) use A140 Colman Road/Mile End Road.	<b>9</b>	See report
Proposals do not promote the use of sustainable travel methods or provide improved journey times for public transport and cyclists.	<b>9</b>	see report
Staggered pedestrian crossing islands could become filled with pedestrians waiting to cross the road.	<b>8</b>	.See report

**APPENDIX 2**

<b><i>Issue</i></b>	<b><i>Times Raised</i></b>	<b><i>Officers Comments</i></b>
The proposals do not include facilities for cyclists.	<b>6</b>	See report
Proposals encourage increased traffic flow and speed and do little to minimise or mitigate the impact on local residents.	<b>6</b>	see report
Narrow existing wide carriageway to provide segregated cycleway facility and improvements for cyclists crossing the carriageway.	<b>4</b>	The main aim of these proposals is to improve vehicular traffic flow along this length of Colman Road/Mile End. There is insufficient space to provide a segregated cycleway facility along this length of Colman Road/Mile End Road.
Cars park at Caroline Court during peak school times, contribute to congestion and create a dangerous environment for pedestrians and cyclists. Extend double yellow line waiting restrictions.	<b>3</b>	There are currently double yellow line waiting restrictions at the entrance to Caroline Court and these are to be extended along South park Avenue to the junction with the ORR. Pick-up/ drop off is, however permitted on DY lines which are enforce by the City Council's Civil Enforcement team
Proposed carriageway layout on Colman Road/Mile End Road will make route more difficult for emergency vehicles to overtake.	<b>2</b>	The proposals are unlikely to affect the journeys of emergency service vehicles. However, all blue light emergency services were included within this consultation.
Loss of carriageway lanes will reduce the volume of traffic that can be held on Colman Road/Mile End Road and cause traffic to queue and back up to Daniels Road roundabout.	<b>2</b>	See report
The 30mph speed limit along Colman Road/Mile End Road is often ignored and traffic only usually slows down when approaching the speed camera. Enforce speed restriction.	<b>2</b>	The proposed highway improvements will not contribute to increased vehicle speeds. Enforcement of speed limits is outside of the scope of these proposals.
Encourage emergency vehicles to use alternative routes to the NNUH and Earlham Road Police Station.	<b>1</b>	The routes taken by emergency vehicles are dependent upon the location of each individual emergency situation. It is not possible to dictate routes for emergency services.

**APPENDIX 2**

<b><i>Issue</i></b>	<b><i>Times Raised</i></b>	<b><i>Officers Comments</i></b>
School buses to Norwich High School for Girls should be encouraged to park on Newmarket Road.	<b>1</b>	School buses stopping on A11 Newmarket Road would contribute to congestion on this main route which would also create safety concerns with children walking further to school.
Make roads adjoining Colman Road/Mile End Road 'access only' to encourage cycling to the nearby schools.	<b>1</b>	This issue will be given further consideration by officers from Norwich City Council and is beyond the scope of the current scheme.
Give consideration to the effect that the Northern Distributor Road (NDR) has had on traffic using the outer ring road (ORR).	<b>1</b>	The traffic modelling that forms the basis of these proposals was derived from traffic counts taken in 2016 and 2018. This data has been balanced to represent typical traffic flows. The impact of the NDR on other roads in Norwich is still being assessed. If the NDR had a drastic effect at this location, it would show as the difference between the 2016 and 2018 surveys (which was recorded as minimal, less than 100 vehicles) - however, both surveys were combined and used in the traffic modelling, taking the averages from the combined surveys to factor in changes such as NDR and Sweet Briar/Dereham Road roundabout.
Remove redundant bus stop pole from the north side footway between the junctions of Waldeck Road and Melrose Road.	<b>1</b>	This bus stop pole relates to the now redundant Norwich Orbital bus service. Consideration will be given to its removal as part of this scheme.
Resurface the full extents of Colman Road/Mile End Road.	<b>1</b>	It is currently proposed that only the carriageway at the South Park Avenue junction with Colman Road/Mile End Road and the approaches to the new pedestrian crossings will be resurfaced.
Plans do not show details for works on Daniels Road roundabout itself - traffic will back up onto this junction.	<b>1</b>	It has been identified that the main causes of congestion on the Daniels Road roundabout are due to the impact of nearby junctions on A11 Newmarket Road and A140 Colman Road/Mile End Road. It is not necessary to conduct physical works on the roundabout itself. Traffic modelling has demonstrated that these proposals will reduce

**APPENDIX 2**

<b><i>Issue</i></b>	<b><i>Times Raised</i></b>	<b><i>Officers Comments</i></b>
		congestion along this length of Colman Road/Mile End Road.
Remove Daniels Road roundabout and replace with traffic lights, yellow boxes and enforcement cameras.	<b>1</b>	Consideration has been given to alternative options to a roundabout at the Daniels Road junction. However, traffic modelling has determined that the congestion on the roundabout is caused by the nearby junctions and not the roundabout itself. At present, the local highway authority does not have the power to enforce moving traffic violations beyond those in relation to bus lanes/gates.
There has been no analysis of the potential delays to pedestrian movements.	<b>1</b>	The purpose of this scheme is to improve the operation of this complex section of carriageway and reduce tailbacks through the Daniels Road roundabout from Colman Road/Mile End Road. However, it is not expected that the provision of staggered pedestrian crossings will cause significant delays to pedestrians or increased journey times. Also, additional pedestrian refuges have been provided for pedestrians to increase available options to cross the carriageway.
Proposals include a lot of road markings (white hatching, yellow lines, yellow box markings) this creates a future maintenance issue and is unlikely to be enforced.	<b>1</b>	White hatching and centre lines are required to create distinct traffic lanes and direct vehicles around kerbed pedestrian islands. Double yellow line waiting restrictions are required to discourage parking along much of the length of Colman Road/Mile End Road. Enforcement of the waiting restrictions is outside of the scope of these proposals.
Previous proposals were considered in 2007 for a scheme to provide pedestrian refuges along Colman Road/Mile End Road which did not go ahead. Have these been considered as part of these proposals?	<b>1</b>	These proposals are based upon traffic survey data taken in 2016 and 2018 and have not been influenced by previous proposals.

**APPENDIX 2**

<b><i>Issue</i></b>	<b><i>Times Raised</i></b>	<b><i>Officers Comments</i></b>
Plans lack detail, do not include proposals for Daniels Road roundabout or take into account the daily pattern of traffic movements.	<b>1</b>	The plans show the proposals in an appropriate level of detail for consultation purposes. No physical works to the Daniels Road roundabout are proposed as part of this scheme. Traffic modelling has demonstrated that these proposals will reduce congestion along this length of Colman Road/Mile End Road. The traffic simulation model was based on analysis of current traffic movements via video surveys and traffic surveys.
<b>Pedestrian Crossings</b>		
Proposals do not improve conditions for pedestrians. The staggered crossings will increase journey times for both pedestrians and cyclists.	<b>11</b>	See Report
Proposed uncontrolled pedestrian refuges do not provide benefit or physical protection to heavy traffic flows and will lead to pedestrians feeling unsafe.	<b>8</b>	See Report
Proposed staggered crossings will contribute to congestion.	<b>7</b>	See Report
Proposed staggered pedestrian crossings are unsafe for school children and general pedestrian traffic as there is insufficient space to safely wait to cross.	<b>7</b>	See Report
Concern for high traffic speeds and reduced carriageway width for HGVs.	<b>5</b>	An appropriate carriageway width will be specified to ensure that adequate space is provided for all forms of vehicular traffic.
Longer waiting times for pedestrians to cross carriageway using proposed staggered pedestrian crossings	<b>5</b>	see report

**APPENDIX 2**

<b><i>Issue</i></b>	<b><i>Times Raised</i></b>	<b><i>Officers Comments</i></b>
Proposed staggered pedestrian crossings, pedestrian refuges and right turn lanes create pinch points for overtaking vehicles that are likely to come closer to cyclists which will contribute to a more dangerous cycling environment.	<b>2</b>	Central carriageway hatching will be provided along some of the length of Colman Road/Mile End Road which will provide additional space for vehicles to pass cyclists. All motorists should use their own judgement and only over take a cyclist when it is safe to do so.
It is not clear how the proposed staggered pedestrian crossing will work.	<b>2</b>	The staggered crossings replace the straight-across pedestrian crossings which only stop one direction of traffic at a time. This makes it easier to synchronise the green time of the crossing with the green time at the Mile End Road/Unthank Road traffic signals.
Vibration will be caused to nearby properties when the proposed staggered pedestrian crossing between Muriel Road and Mornington Road are constructed.	<b>2</b>	Appropriate construction techniques will be conducted to ensure that nearby properties are unaffected.
Do not change any of the existing controlled pedestrian crossings into staggered pedestrian crossings facilities.	<b>2</b>	The existing straight across pedestrian crossings are contributing to congestion on Colman Road/Mile End Road. The staggered crossings will only stop one direction of traffic at a time. This makes it easier to synchronise the green time of the crossing with the green time at the Mile End Road/Unthank Road traffic signals.
Experiment with timings of existing pedestrian crossings to simulate the effects of the proposed staggered pedestrian crossings between South Park Avenue and Daniels Road roundabout.	<b>1</b>	These proposals are supported by traffic modelling which has shown that they reduce journey times on Colman Road/Mile End Road for general traffic throughout the day and make journey times far more consistent. Peak hour delays for traffic on the ring road are improved and overall journey times for bus services are both quicker and more consistent. It is not necessary or practical to experiment with the existing pedestrian crossings.
Provide an additional controlled pedestrian crossing closer to the Daniels Road roundabout.	<b>1</b>	It is not currently proposed to install a pedestrian crossing at this location.

**APPENDIX 2**

<b><i>Issue</i></b>	<b><i>Times Raised</i></b>	<b><i>Officers Comments</i></b>
Consider installing a pedestrian guard rail along Colman Road from The front of the Infant School to outside 1 Colman Road.	<b>1</b>	Consideration will be given to providing pedestrian guardrails at appropriate locations. These proposals will also be subjected to a road safety audit as part of the design process and, if approved, following construction to ensure that they are operating in a safe manner.
Why have proposed uncontrolled pedestrian crossing near Highland Road and Unthank Road when a signal controlled pedestrian crossing is proposed close by?	<b>1</b>	The proposed uncontrolled pedestrian refuges are intended to provide an alternative crossing point at off peak times when the level of traffic flow is less.
Proposed uncontrolled pedestrian refuge at junction of Unthank Road is a good idea to provide protection for pedestrians crossing the carriageway at this location.	<b>1</b>	No further comment.
Proposed uncontrolled pedestrian crossing on Colman Road/Mile End Road opposite Colman Infant School is unsafe.	<b>1</b>	The proposed uncontrolled pedestrian refuges are intended to provide an alternative crossing point at off peak times when the level of traffic flow is less. In times of increased traffic flow or if it is not safe to cross then the controlled staggered pedestrian crossings could be used.
It has been observed that motorists frequently ignore the red traffic lights at the South Park Avenue junction which is putting children in danger.	<b>1</b>	This is an enforcement issue and is outside the scope of these proposals.
Change the timings of the existing signals at South Park Avenue and on Colman Road/Mile End Road rather than make comprehensive changes.	<b>1</b>	The provision of staggered crossings will make it easier to synchronise the traffic signals at the South Park Avenue junction.



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<b><i>Issue</i></b>	<b><i>Times Raised</i></b>	<b><i>Officers Comments</i></b>
<b>Waiting Restrictions</b>		
Provide double yellow line waiting restrictions along both sides of Unthank Road (between junctions with Unthank Road to Christchurch Road), Colman Road (between South Park Avenue junction and Colman Road Hall) and at Caroline Court with no provision for parking bays.	<b>5</b>	Vehicles currently park along the edge of the carriageway on Unthank Road and Colman Road/Mile End Road especially in close proximity to Colman Junior School and the Colman Hospital. The purpose of the proposed limited time parking bays is to control and manage parking along this length whilst at the same time acknowledging that some parking is still required. There are currently double yellow line waiting restrictions at the junction of Caroline Court And these are to be extended to Colman Road
Properties 13, 15 and 17 Colman Road have no off road parking and residents will not be able to park outside their homes. This will affect deliveries and the value of properties. Cars from side roads often park here which keeps HGV traffic away from the kerb line.	<b>2</b>	Deliveries are unaffected as these can be made from a double yellow line. Many properties on more major routes have no on-street parking outside and have to use side streets
Vehicles will still park on the proposed double yellow lines and this will not be enforced.	<b>2</b>	Waiting restrictions are enforced, but obviously Civil Enforcement Staff cannot be everywhere at once
General support for double yellow lines waiting restrictions.	<b>2</b>	No further comment.
Objection to double yellow line waiting restrictions on both sides of Colman Road/Mile End Road Traffic Regulation Order (TRO).	<b>2</b>	No further comment.
Vehicles occasionally park on the roadside or footway. Consider installing double yellow lines on Mile End Road.	<b>1</b>	It is proposed that double yellow line waiting restrictions will be installed on the northern side of Colman Road/Mile End Road with a combination of double yellow lines and limited waiting parking bays on the southern side between its junctions with South Park Avenue and Unthank Road.

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<b><i>Issue</i></b>	<b><i>Times Raised</i></b>	<b><i>Officers Comments</i></b>
Proposed waiting restrictions on Unthank Road will lead to vehicles parking on other nearby side roads.	<b>1</b>	It is not expected that this additional length of double yellow lines will have a significant impact on encouraging vehicles to park on adjacent side roads. It is proposed that some time limited parking spaces will also be included on Unthank Road next to the proposed waiting restrictions.
Where are the proposed double yellow line waiting restrictions going to be installed on South Park Avenue?	<b>1</b>	It is proposed that double yellow line waiting restrictions will be installed along South Park Avenue from its junction with Colman Road/Mile End Road to the entrance of The Clare school on both sides of the carriageway.
Double yellow line waiting restrictions on the north side of the carriageway and centre carriageway hatching will make it difficult for residents to reverse into their properties.	<b>1</b>	Reverse manoeuvres into properties will still be possible when there is a gap in the traffic and it is safe to do so.
Can parking permits be used for properties 13, 15 and 17 Colman Road as they have no off road parking and residents will not be able to park outside their homes	<b>1</b>	There are no proposals for permit parking in this area at the current time and this is outside the scope of this project
There is no rear vehicular access for properties 13, 15 and 17 from Muriel Road or off carriageway parking facilities.	<b>1</b>	Comment noted.
Extend double yellow line waiting restrictions either side of the Colman Hospital entrance on Unthank Road to improve visibility.	<b>1</b>	We are proposing to amend these

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<b><i>Issue</i></b>	<b><i>Times Raised</i></b>	<b><i>Officers Comments</i></b>
<b>Parking Bays</b>		
Proposed parking bays on Unthank Road will restrict traffic flow and contribute to traffic tail backs onto Colman Road/Mile End Road - especially for public transport and cyclists. Consider widening into the footway at this location to accommodate the spaces.	<b>8</b>	Traffic travelling between Unthank Road and Colman Road/Mile End Road will be managed by the traffic signals at this junction. There is not sufficient space to reduce the existing footway width.
Objection to time limited waiting parking areas on both sides of Colman Road/Mile End Road Traffic Regulation Order (TRO).	<b>8</b>	No further comment.
Purpose of the parking bays on Colman Road and Unthank Road is not clear. These appear to make it more difficult for vehicular traffic and cyclists movements.	<b>6</b>	Vehicles currently park along the edge of the carriageway on Unthank Road and Colman Road/Mile End Road especially in close proximity to Colman Junior School and the Colman Hospital. The purpose of the proposed limited time parking bays is to control and manage parking along this length whilst at the same time acknowledging that some parking is still required.
Proposed parking bays on Unthank Road could hold up and obstruct visibility to vehicles entering and exiting the Colman Hospital and for pedestrians crossing the carriageway.	<b>4</b>	Vehicles currently park along the edge of the carriageway on Unthank Road in proximity to the Colman Hospital. The purpose of the proposed limited time parking bays is to control and manage parking along this length whilst at the same time acknowledging that some parking is still required.
Traffic turning right from Colman Road/Mile End Road into Muriel Road, Mornington Road and Highland Road adjacent to proposed parking bays will hold up traffic where it can currently pass. Why not provide right turn lanes?	<b>4</b>	It is not anticipated that these right turn movements into the side roads adjoining Colman Road/Mile End Road will have a significant impact on traffic flows on the outer ring road. There is a low vehicle count turning right into the side roads and it is not considered to have a drastic impact on ORR flows - only Muriel Road is affected by on-street parking, Morning Road and Highland Road have available and protected waiting space in the hatched markings.

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<b><i>Issue</i></b>	<b><i>Times Raised</i></b>	<b><i>Officers Comments</i></b>
Proposed parking bays on Colman Road/Mile End Road and Unthank Road are unsafe and are unlikely to be used as children will be placed into the carriageway while accessing vehicles.	<b>4</b>	Vehicles currently park at these locations outside Colman Junior School and the Colman Hospital. The proposed time limited spaces can be used for short stays only.
Parking bays on Colman Road and Unthank Road will be detrimental to traffic flows and are unusual on the outer ring road.	<b>3</b>	Vehicles currently park at these locations outside Colman Junior School and the Colman Hospital. The proposed time limited spaces can be used for short stays only.
Consider providing short stay parking spaces on Christchurch Road as opposed to Unthank Road	<b>1</b>	Parking is not restricted on Christchurch Road. The parking spaces proposed for Unthank Road are recommended for removal
There are not enough parking spaces proposed outside Colman Infant School on Colman Road/Mile End Road.	<b>1</b>	It is proposed that a limited number of parking spaces will be provided, but this is restricted by the available space within the carriageway.
<b>South Park Avenue junction with Colman Road/Mile End Road</b>		
What is the advantage of not providing a straight lane and a left lane at the junction with South Park Avenue? This will hold up traffic on Colman Road as nothing can over take (especially at school times) and it will lead to cars not slowing down when turning left making the junction more dangerous for cyclists.	<b>13</b>	The main advantage is the reduction of two traffic phases (left turn and ahead) into one (ahead or left), this simplifies the junction with the introduction of segregated pedestrian crossings (where pedestrian movements are done in two phases) to allow the junction to be as efficient as possible. Previously, when a large vehicle sat in the left and ahead narrow lanes, there would be friction between the vehicles, causing slow moving traffic which would cause a temporary bottleneck.
Concerns regarding narrowed footway on the corner of South Park Avenue to accommodate the widened carriageway.	<b>7</b>	The footway is the same width as all the others in the vicinity.

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<b><i>Issue</i></b>	<b><i>Times Raised</i></b>	<b><i>Officers Comments</i></b>
No justification for removing the tree on South Park Avenue.	<b>4</b>	It will be necessary to remove approximately two trees on South Park Avenue in close proximity to the junction with Colman Road in order to provide the required space to construct these improvements. Tree replanting will be conducted to replace any trees removed as part of this scheme.
Traffic signal changes at South Park Avenue will cause greater delays to traffic on Colman Road/Mile End Road and South Park Avenue causing blocking and queueing at the junction.	<b>4</b>	The opposite it the case. The signalised junctions on Colman Road/Mile End Road are currently giving long green times at the expense of the main road traffic. This is one of the main contributing factors to congestion on the outer ring road at both Unthank Road and South Park Avenue junctions. It is proposed to rebalance the timings at these junctions to favour traffic on Colman Road/Mile End Road.
Modifications to the current tight left turn from Colman Road into South Park Avenue are welcome.	<b>1</b>	No further comment.
Provision of one traffic lane turning left into South Park Avenue and heading straight on will make the junction safer for pedestrians crossing the carriageway.	<b>1</b>	No further comment.
Shortened green phase crossing time will lead to pedestrians becoming stranded on the proposed pedestrian crossing islands.	<b>1</b>	An appropriate amount of time will be allowed for pedestrians to cross the carriageway during the green phase when it is requested. The proposed pedestrian islands at the staggered crossings will provide a safe refuge for pedestrians while waiting to cross the carriageway.
Install enforcement cameras at the South Park Avenue junction to discourage motorists from jumping red traffic lights or stopping within the yellow hatched area and pedestrian crossings.	<b>2</b>	It would not be appropriate to install enforcement cameras at this location.

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<b><i>Issue</i></b>	<b><i>Times Raised</i></b>	<b><i>Officers Comments</i></b>
Proposed widening at the corner of South Park Avenue could lead to increased vehicle speeds. However, the radii of the junctions at Muriel Road and Mornington Road being are being decreased.	<b>2</b>	It is proposed to widen the junction of South Park Avenue to provide space for a pedestrian island to be constructed while maintaining adequate carriageway width for large vehicles to turn into the junction. This is a traffic signal controlled junction which will contribute to lower vehicle speeds. It is proposed that the radii of the kerb lines at the junctions with Muriel Road and Mornington Road will be decreased to create a safer environment for pedestrians to cross the carriageway.
Change traffic lights so that they detect cycles.	<b>1</b>	The existing cycle advance stop line (ASL) will be retained at the South Park Avenue junction with Colman Road/Mile End Road. The traffic signals will accommodate vehicular and cycle traffic equally.
Disruption to public transport services.	<b>2</b>	Public transport operators have been consulted and generally support these proposals.
The proposals will contribute to greater disruption during peak time at the accesses to the schools on South Park Avenue and create a less safe environment for school children.	<b>2</b>	Consideration is being given to the existing school access to The Clare School in conjunction with these proposals. These proposals will also be subjected to a road safety audit as part of the design process and, if approved, following construction to ensure that they are operating in a safe manner.
Proposals will make it more difficult to turn into and out of the access to the Clare School which becomes very busy at peak times. Can school start and end times being staggered?	<b>2</b>	The Clare School has been consulted and consideration is being given to improving the existing access arrangements to the site in conjunction with these proposals. Managing the school start and end times are outside of the scope of these proposals.
Do not change priority at either South Park Avenue or Unthank Road.	<b>1</b>	The signalised junctions on Colman Road/Mile End Road are currently giving long green times at the expense of the main road traffic. This is one of the main contributing factors to congestion on the outer ring road at both Unthank Road and South Park Avenue junctions. It is proposed to rebalance the timings at these junctions to favour traffic on Colman Road/Mile End Road.

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<b><i>Issue</i></b>	<b><i>Times Raised</i></b>	<b><i>Officers Comments</i></b>
Motorists ignore existing yellow box road marking at South Park Avenue junction with Colman Road/Mile End Road.	<b>1</b>	This is an enforcement issue and is outside of the scope of these proposals.
<b>Unthank Road junction with Colman Road/Mile End Road</b>		
During peak times there may be more right turning traffic from Mile End Road into Unthank Road than can be contained in the right hand lane leading to blockage on the main traffic lane made worse by vehicles waiting to turn into the Mile End Road doctors surgery. Can the proposed pedestrian crossing be moved to the other side of Waldeck Road to provide more space for right turning traffic or the traffic signals rephrased to allow right turns when in use? Would a yellow 'keep clear' box be appropriate here?	<b>9</b>	The highest observed queues (morning peak) in the right hand turn lane are 60m long. The length of the proposed right turn lane is approximately 52m, but the queues are not expected to build up to the existing levels due to extended green time on Colman Road/Mile End Road. The zig zag lines and hatching will be reviewed to achieve an extended turn lane
Giving greater priority to Colman Road/Mile End Road over Unthank Road and South Park Avenue by changing traffic signals is not appropriate. This will force more traffic onto side roads adjoining Unthank Road and cause disruption to public transport.	<b>3</b>	The scheme aims to redirect traffic from the minor roads back to the major roads by addressing the inadequacies of the major road thus reducing traffic on more minor routes. Traffic modelling has demonstrated improvements to the overall journey times for public transport.
There have been accidents at the Unthank Road junction with Colman Road/Mile End Road possibly as a result of the pedestrian crossing lights being mistaken as traffic signals at the cross roads.	<b>1</b>	The pedestrian crossing is situated approximately 40m back from the junction with the ring road and it is considered unlikely that any collisions at the ring road junction are as a result of mistaking one set of signals for another. A potential risk would be that of viewing the vehicular green signal at the ring road and proceeding through a

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<b><i>Issue</i></b>	<b><i>Times Raised</i></b>	<b><i>Officers Comments</i></b>
		vehicular red at the crossing, coming into conflict with a crossing pedestrian. Analysis of Police personal injury collision data shows one pedestrian collision in the vicinity of the crossing, however, this was a hit and run involving a refuse vehicle operative and was not obviously related to the crossing.
Since previous work on the traffic light junction on Unthank Road with the outer ring road the pedestrian traffic lights on Mile End Road have not been synchronised with the main traffic lights.	<b>1</b>	The signalised junctions on Colman Road/Mile End Road are currently giving long green times at the expense of the main road traffic and this is one of the contributing factors to congestion on the outer ring road at both the Unthank Road and South Park Avenue junctions. It is proposed to rebalance the timings at these junctions to favour traffic on Colman Road/Mile End Road.
The turning lanes at the traffic lights at the Unthank Road junction with Colman Road/Mile End Road are aligned so that you cannot see the oncoming traffic if there is another vehicle larger than a car waiting in the turning lane from Colman Road going out of the city onto Unthank Road.	<b>1</b>	The existing road markings will be reviewed as part of the design process. The scheme design will also be subjected to a road safety audit process during design and, if approved, following construction to ensure that it is operating in a safe manner.
Unsafe location of the proposed pedestrian refuge just before Unthank Road junction with Colman Road/Mile End Road - motorists may be concentrating more on their movement/position rather than looking out for pedestrians.	<b>1</b>	The right turn lane is located after the proposed pedestrian refuge when traveling towards the junction so motorists will not need to change traffic lanes until they have passed the refuge. This scheme will be subjected to a road safety audit as part of the design process and, if approved, following completion of construction to ensure that it is operating in a safe manner.



<i>Issue</i>	<i>Times Raised</i>	<i>Officers Comments</i>
The proposed pedestrian refuge island at The Colman Road/ Mile End Road junction with unthank Road reduces the length of the right turn lane into Unthank Road which means that cyclists have to mix with general traffic for a longer duration. Can a separate cycle turning lane be provided?	1	Traffic modelling has demonstrated that the existing long right turn lane is not fully utilised. It is not possible to provide a separate cycle turning lane.
<b>Newmarket Road junctions with Christchurch Road, Leopold Road and Sunningdale</b>		
Main cause of congestion at the Daniels Road roundabout appears to be the traffic lights at the Leopold Road/Eaton Road and Sunningdale junctions with Newmarket Road. Can the timing frequency and duration of these two sets of lights be assessed in order to optimise flow on Newmarket Road?	2	The timing of the traffic lights at the junctions on Newmarket Road have been revised and the impacts monitored. The outcome of this exercise is yet to be reviewed.
Traffic lights at the junctions with Christchurch Road at Unthank Road and Newmarket Road can cause erratic traffic flows at Daniels Road roundabout. Further reduction of signal timing in favour of Christchurch Road or removal of the traffic lights could be tried to keep traffic moving more freely.	1	The timing of the traffic lights at the junctions on Newmarket Road have been revised and the impacts monitored. The outcome of this exercise is yet to be reviewed.

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<b><i>Issue</i></b>	<b><i>Times Raised</i></b>	<b><i>Officers Comments</i></b>
<b>Unthank Road junction with Christchurch Road</b>		
Unthank Road junction with Christchurch Road is dangerous. Christchurch Road is being used as a 'rat run' and vehicles park along the road side. Install parking restrictions along Unthank Road near to the Colman Hospital on both sides of Christchurch Road and Mornington Road.	<b>1</b>	It is proposed that double yellow line waiting restrictions will be installed on both sides of Unthank Road from its junction with Colman Road/Mile End Road to the entrance of the Priscilla Colman Hospital. The provision of additional waiting restrictions along Christchurch Road and Mornington Road is beyond the scope of this current scheme.
These proposals will have a serious effect on traffic flow along Unthank Road. Traffic is currently often tailed back past Upton Road and sometimes to Judges Walk.	<b>2</b>	It is not anticipated that these proposals will have a significant impact on traffic flow along Unthank Road.
<b>Church Avenue junction with Colman Road/Mile End Road</b>		
Provide right turn lane into Church Avenue rather than Mile End Close.	<b>2</b>	Turning lanes can be provided for both Church Lane and Mile End Close and this will be done.
<b>Melrose Road junction with Colman Road/Mile End Road</b>		
Melrose Road is sometimes used as a shortcut from Newmarket Road to Mile End Road to avoid the Daniels Road roundabout.	<b>1</b>	The impact of traffic joining Colman Road/Mile End Road from the side roads was considered as part of the traffic modelling simulation.
Is it safe to wait on either the proposed hatched areas or the right turn lane into Melrose Road when waiting to turn into properties between Waldeck Road and Melrose Close?	<b>1</b>	It is acceptable to wait within the hatched area for the purpose of accessing residential properties until it is safe to cross the oncoming lane of traffic.
Dedicated right turns into Melrose Road and Waldeck Road from Colman Road/Mile End Road are not required.	<b>1</b>	These are required to separate vehicles wishing to turn right into these side roads from the main traffic lane to reduce disruption on Colman Road/Mile End Road.

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<i>Issue</i>	<i>Times Raised</i>	<i>Officers Comments</i>
<b>Daniels Road junction with Colman Road/Mile End Road</b>		
At peak times there is currently congestion on the entry and exit on Daniels Road roundabout from Colman Road/Mile End Road. Pedestrians cross the carriageway at this location using the existing splitter island which can be especially dangerous for high volumes of school children who use this route.	<b>3</b>	Traffic modelling indicates there will be a reduction in congestion to the entry and exit of this roundabout. Video surveys show approximately 35 children crossing in a 15 minute period in the AM and PM peak. However, the road safety team does not consider this to be an issue as slow or quicker moving traffic can be equally as dangerous and there are crossing locations provided at earlier opportunities as most come from the Mile End Road direction.
Proposals will cause further congestion on Daniels Road roundabout.	<b>3</b>	Traffic modelling has indicated that the proposals will contribute to relieving congestion on the Daniels Road roundabout.
Yellow box road markings on Daniels Road roundabout need to be refreshed and enforced.	<b>2</b>	The yellow box markings were refreshed on Daniels Road roundabout in summer 2018. These are provided for an indicative purpose only. It is not possible to enforce these markings on a non-traffic signal controlled roundabout.
<b>Bus Stops</b>		
Are bus stops proposed to be removed between Highland Road and Muriel Road? These are important bus stops.	<b>2</b>	It is not proposed to remove these bus stops as part of these proposals.
Relocate proposed bus stop yellow box opposite 2 Colman Road (which is currently proposed to be located between five parking spaces to the east and four to the west) so that it is adjacent to the proposed double yellow lines and the parking bays are in a row of nine continuous spaces to the east. This will allow buses to enter the bus stop box without need to manoeuvre between parked cars.	<b>2</b>	Noted. This will be considered as part of the design process.

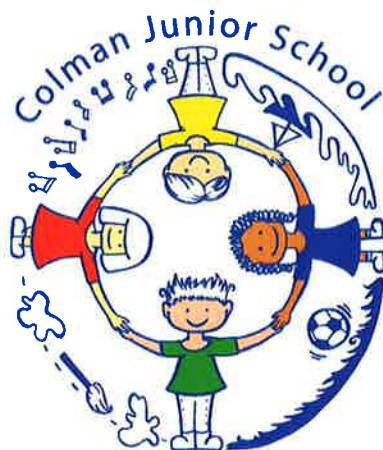
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<b><i>Issue</i></b>	<b><i>Times Raised</i></b>	<b><i>Officers Comments</i></b>
Retain existing bus stop on north side of carriageway opposite 33 Colman Road and provide on carriageway bus stop yellow box.	<b>1</b>	Noted. This will be considered as part of the design process.
Proposals do not appear to make allowance for existing bus stop on Unthank Road opposite the entrance to Colman Hospital.	<b>1</b>	Bus Stop Clearways will be installed as part of the scheme
<b>Mornington Road junction with Colman Road/Mile End Road</b>		
Tightening the junction of Mornington Road will make vehicular access onto Colman Road/Mile End Road more difficult.	<b>1</b>	Vehicle turning movements have been checked at the Mornington Road junction as part of the design process. It has been determined that the proposed tightened radius will still enable this manoeuvre to be conducted.
<b>Other issues</b>		
These proposals are disruptive and disadvantage vulnerable road users - especially children - these changes should not be made until the outcome of the changes to traffic signals at Christchurch Road/Lime Tree Road and Eaton Road/Leopold Road and the Transforming Cities Bid are known. It is difficult to determined how these proposals will impact on the issues presented by these junctions.	<b>2</b>	An Integrated Impact Assessment has been conducted which amongst other factors has considered the impact of these proposals on equality and diversity for all users of the proposed highway improvements. The overall assessment has determined the impact of this scheme to be neutral in this regard. Traffic modelling has demonstrated that these proposals will reduce congestion along this length of Colman Road/Mile End Road and it was agreed to progress these in advance of any proposals for the Newmarket Road corridor because of the benefits to the ring road.
Proposals are not sustainable - consideration should be given to more support for Park and Ride scheme and encouraging walking, cycling and public transport.	<b>2</b>	An Integrated Impact Assessment has been conducted which amongst other factors has considered the impact of these proposals on equality and diversity for all users of the proposed highway improvements. The overall assessment has determined the impact of this scheme to be neutral in this regard. The use of Park and Ride facilities is outside of the scope of these proposals.

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<b><i>Issue</i></b>	<b><i>Times Raised</i></b>	<b><i>Officers Comments</i></b>
Consider relocating the cycle contraflow from Essex Street to Trinity Street.	<b>1</b>	This is outside of the scope of these proposals.
Ensure that proposed highway works, if approved, are constructed in the shortest possible timescale to minimise disruption to local residents and through traffic.	<b>1</b>	If these proposals are approved; carefully consideration will be given to the construction programme and traffic management to minimise disruption as much as possible during the works.
Consider removing length of bus lane between Leopold Road and Daniels Road roundabout to create left turn lane into Colman Road/Mile End Road and right lane straight ahead and right turn.	<b>1</b>	It is anticipated that (subject to external funding) that proposals will be forthcoming for Newmarket Road and options will be investigated as part of that project
How has traffic modelling determined that proposals will improve traffic flow?	<b>1</b>	The traffic modelling that forms the basis of these proposals was derived from traffic counts taken in 2016 and 2018. This data has been balanced to represent typical traffic flows. Simulations of the expected traffic flows at peak times have been modelled and compared with the existing traffic conditions. This has demonstrated improvements to traffic flows along Colman Road/Mile End Road.
<b>Highland Road junction</b>		
Provide an additional traffic signal controlled pedestrian crossing on Colman Road/Mile End Road close to Highland Road to enable motorists from Highland Road to turn right onto the outer ring road.	<b>1</b>	This is not considered necessary at this location and would contribute to disruption in the traffic flow on Colman Road/Mile End Road.

Mrs Julie Sandford  
Headteacher



South Park Avenue  
Norwich NR4 7AU

Councillor John Fisher  
Chair of Norwich Highways Agency Committee  
Norwich City Council  
City Hall  
St Peter's Street  
Norwich  
NR2 1NH

Environment, Transport &  
Development Dept

FAO .....

- 7 FEB 2019

Onto.....

Action.....

File.....

PEM Ref.....

1<sup>st</sup> February 2019

Dear Councillor Fisher

We are writing jointly as the Board of Governors of Colman Junior School in response to the proposed 'Improvements to relieve congestion at the Daniels Road Roundabout'<sup>1</sup> that were presented to your Committee by Transport for Norwich on 20th December 2018.

#### Our position:

Our primary concern at all times has to be for the safety and welfare of our school community and the local community more generally. We have major concerns regarding the proposed scheme in terms of safety and whether due diligence has been carried out during its design. We must therefore register our strong opposition to the proposals.

In particular we are concerned about the introduction of staggered crossings at the South Park Avenue / Colman Road junction and the uncontrolled crossings on Colman Road that are also being suggested<sup>1</sup>. We are also unconvinced by some conclusions contained in the report that was presented to the Committee.

#### Staggered junctions and uncontrolled crossings:

We are extremely concerned that staggered crossings at the South Park Avenue / Colman Road junction will not be able to be properly patrolled as they are at the present time. You will be aware that parents at this school successfully campaigned against the removal of the road crossing patrol from the South Park Avenue / Colman Road junction during 2016/17 - their campaign video is still available to view at <https://tinyurl.com/colmancrossings>. Their research revealed that the crossings outside our school are already subject to a greater volume of cars than any other in a similar situation anywhere in Norfolk.

The crossing patrol at this junction plays a vital role in making sure that pupils can navigate this busy road safely. The crossings are also used by older students from the UEA and adult individuals. These individuals often step out onto the road when they judge the situation to be safe, even when the pedestrian lights are against them. Infant and junior school students can often follow such behaviours

instinctively - with disastrous consequences. Staggering the junctions will double the number of occasions on which pupils may accidentally step out on to the road.

The crossing patrol ensures pupils remain safe by being both a physical presence in the road when it is safe to cross and by being able to issue a vocal warning when it is not. We are alarmed that the *'principal transportation planner'* was unable to directly answer Councillor Stutely regarding *'the impact that the proposals would have the [sic] crossing patrol on South Park Avenue.'*<sup>2</sup>

The Committee minutes demonstrate that no consideration has been given to the issue of pedestrian safety. This is particularly alarming considering the location of the crossings and the high level of use by young children. We regard the proposal of installing an uncontrolled crossing directly opposite Colman Infant School as profoundly reckless.

#### **Increasing traffic volume and traffic flow:**

We are dismayed that these new proposals are aimed specifically at further increasing the number of vehicles crossing the junction, by *'encouraging general traffic to use the main road network'*<sup>1</sup>, and increasing *'traffic flow'*. We cannot envisage how an increase in the volume and flow of traffic will result in the crossings becoming safer for our pupils, parents and staff.

The effect of the proposed changes on journey times was investigated using *'microsimulation modelling software'*<sup>1</sup> according to the report. No similar analysis is reported to have been done to assess the impact on safety. It is difficult, therefore, to defend the conclusion of the *'Integrated Impact Assessment'* that, in terms of *'Safeguarding children and adults'*, the proposals would have a *'neutral effect'*<sup>1</sup>.

#### **Impact on cyclists:**

In the absence of any changes aimed specifically at cyclists it is curious that the report concludes that the proposals would *'contribute to an improved journey time for public transport and an improved cycle environment, promoting the use of sustainable travel methods.'* The minutes also record *'that the proposals would improve access for cyclists crossing from one side of Unthank Road to the other.'*<sup>2</sup> There is no evidence within the plan to support this statement. It appears to be based on no more than wishful thinking.

#### **Impact on public transport:**

Whilst the impact assessment concluded that there would be a *'positive'* impact on *'Transportation'* where *'Overall journey times for bus services are both quicker and more consistent.'*<sup>1</sup> The minutes of the Committee note that *'Bus journey times were not expected to be affected as losses in journey times on side roads would be made up by gains on the main roads.'*<sup>2</sup>

#### **Unreliable conclusions:**

*'One of the main objectives derived from the TfN strategy is to increase walking and cycling and the strategy follows a mode hierarchy principal where walking, cycling and public transport are, where appropriate, prioritised above use of the car.'*<sup>1</sup> This is a curious statement to include in an impact assessment for a scheme that proposes to interrupt pedestrians crossing roads by introducing staggered crossings in an attempt to increase traffic volume and flow and includes no specific measures aimed at improving the cycle environment.

The *'General Traffic Journey Time results'* presented in Figs. 1 to 4 as Appendix 2 in the report are astonishing. *'Peak hour delays for traffic on the ring road are almost eradicated.'*<sup>1</sup>

This, of course, does not mean that the rush hour has vanished. It means more vehicles travelling more quickly. Neither the increase in number of vehicles per minute nor the increase in average speed at peak times appear to have been calculated. We are especially concerned about this since peak periods on the roads also coincide with periods when the crossing is most used by members of our school community.

An opportunity also appears to have been missed at reporting on a more detailed analysis. How significant, for example, would be the effect of changing the sequencing of traffic lights alone?

**Driver negligence:**

One of the biggest dangers at the South Park Avenue / Colman Road junction currently is driver negligence - mainly the running of red lights. These proposals are not aimed at resolving this problem. In fact, staggering the crossings will make it impossible, as at present, for one crossing patrol to manage young pedestrians across both lanes of traffic. Thus, the proposals as they stand will leave young children at the mercy of frequent poor driver behaviour.

**Our suggestion:**

We believe many of the benefits sought by the proposals will be able to be achieved solely by implementing the changes in timings of lights as already suggested in the 'Report to Norwich Highways Agency Committee'<sup>1</sup> in points 4 and 6. We would be interested to see the results of analysis where only the changing of the timings of lights were included.

The money saved by not implementing the proposed changes to crossings could be better spent by installing cameras to monitor the crossings to encourage improvements in driver behaviour. This would benefit both drivers and pedestrians - preventing backlogs from cars stranded on junctions and reducing the impact of cars driving across crossings whilst pupils are on them.

We encourage all the councillors to visit the junction on a school morning to judge for themselves whether staggering the junction and installing uncontrolled crossings seems like a sensible idea.

Finally, we would like to reiterate our grave concerns for our school community regarding the proposed changes. We invite you to watch the video at <https://tinyurl.com/colmancrossings> which graphically illustrates the hazards our young pupils already face on this stretch of road. Introducing staggered and uncontrolled crossings whilst also encouraging higher volumes of faster moving traffic to drive across them will leave our pupils even more vulnerable.

We urge you to reject the current proposals.

Regards

Ed Rose  
Chair of Governors  
On behalf of the Board of Governors

c.c. Nick Woodruff, Project Engineer, Community & Environmental Services, Norfolk County Council.

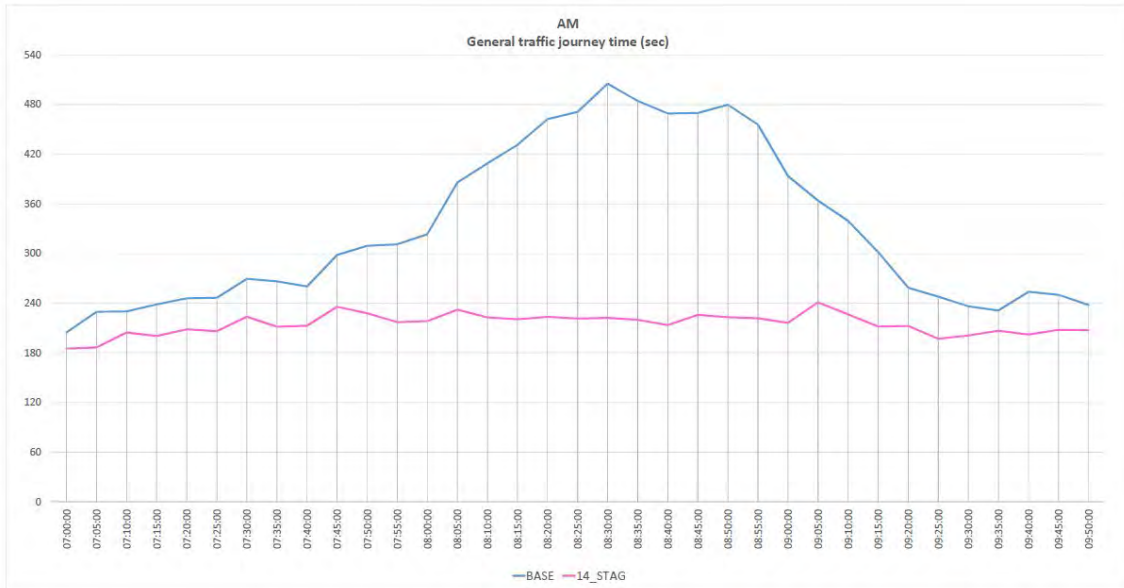


1. Report to Norwich Highways Agency Committee, Item 5, 20 December 2018: Transport for Norwich - A11 Newmarket Road - A140 Mile End Road Improvements to relieve congestion at the Daniels Road Roundabout.
2. Minutes of the Norwich Highways Agency committee, 20 December 2018.

- The **A.M.** testing period was carried out between 07:00 – 10:00
- The **P.M.** testing period was carried out between 15:00 – 19:00

**A. General Traffic Journey Time results – Daniels Road roundabout to The Avenues**

**Fig 1. A.M. Results**

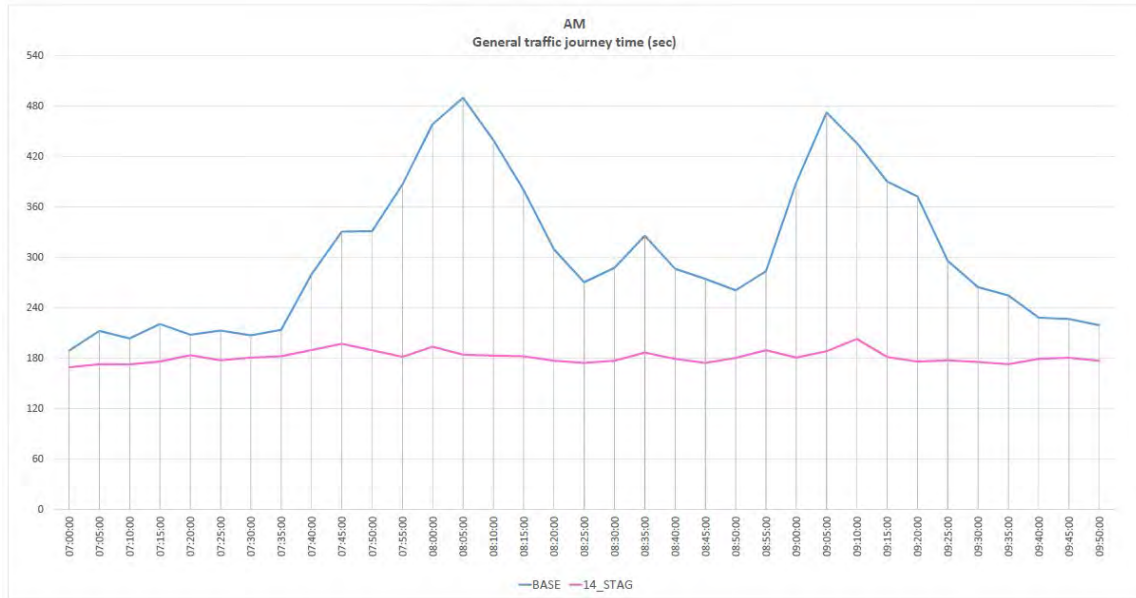


**Fig 2. P.M. Results**

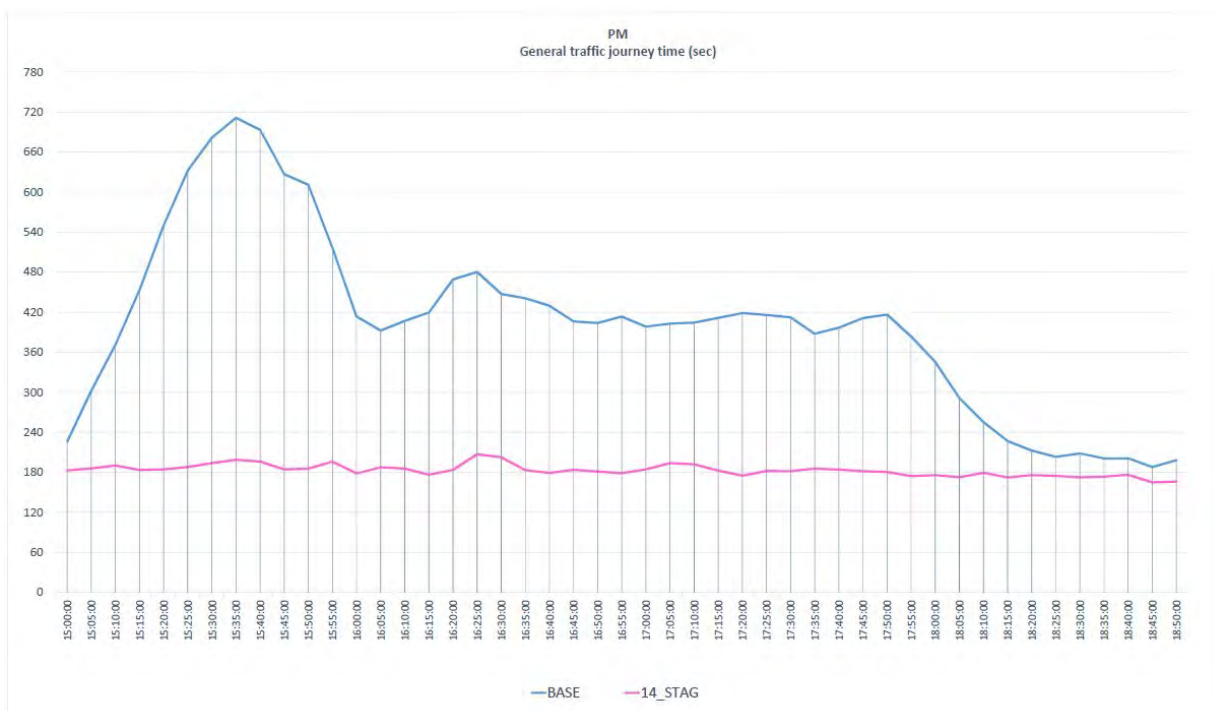


**B. General Traffic Journey Time results – The Avenues to Daniels Road roundabout**

**Fig 3. A.M. Results**



**Fig 4. P.M. Results**



Bus Journey Times

C. Bus Journey Time results – Unthank Road to South Park Avenue

Fig 5. A.M. Results

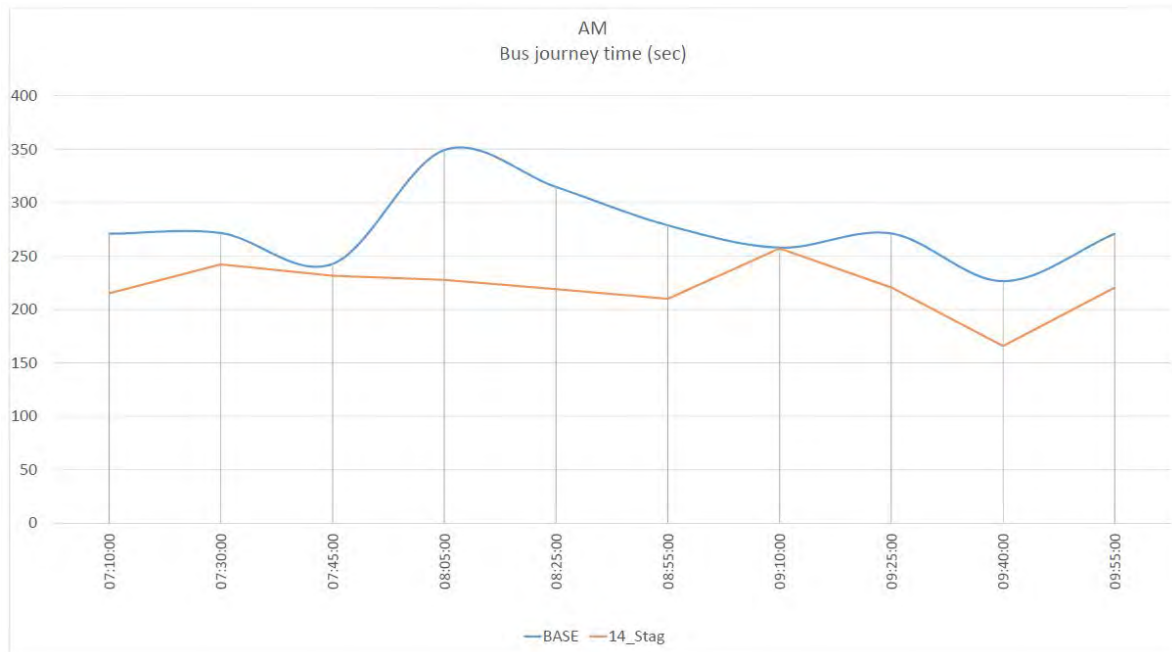
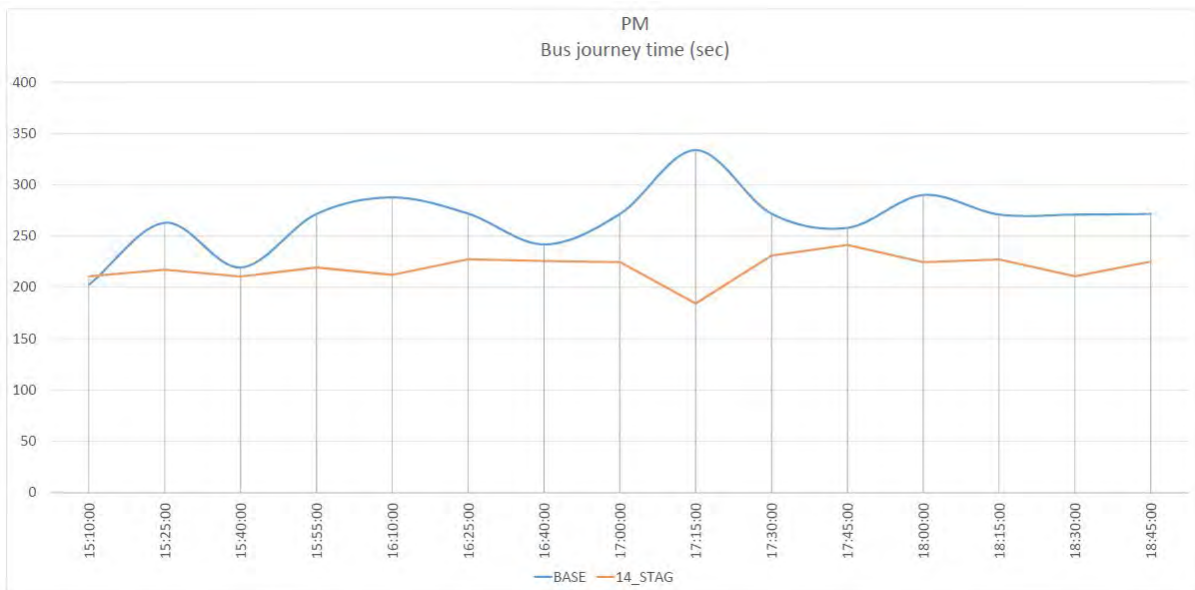


Fig 5. P.M. Results



D. Bus Journey Time results – South Park Avenue to Unthank road

Fig 7. A.M. Results

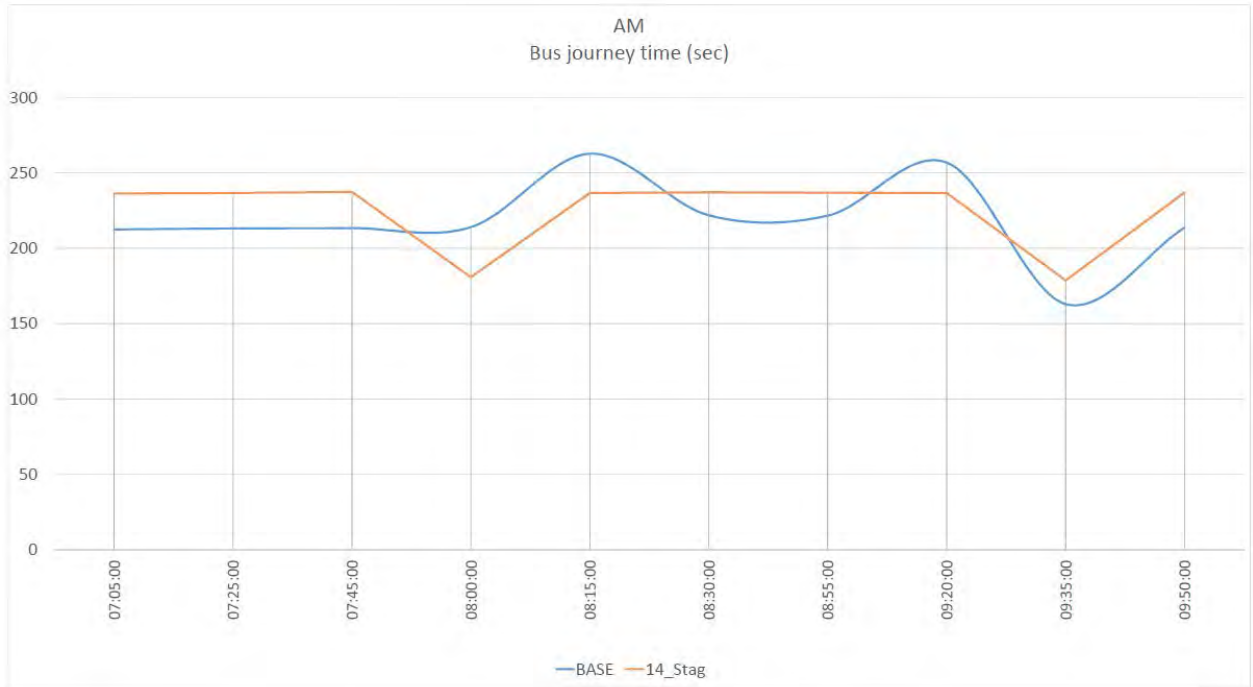


Fig 8. P.M. Results

