

Expression of Interest Form: 2021/22 and 2022/23 proposals

This form is for proposals to be funded by DfT in 2021/22 and 2022/23. Proposals should demonstrate the benefit to local businesses, and improvements to productivity on completing the project. The proposal should indicate the range of funding sought from the Department for Transport, e.g. £5 million to £10 million, £10 million to £15 million, or over £15 million.

The closing date for Expressions of Interest is **31 January 2020**.

For proposals submitted by components of a Combined Authority a separate EOI form should be completed for each one, then the CA should rank them in order of preference.

Applicant Information

Local authority name:

Transport for West Midlands (TfWM) in partnership with Birmingham City Council (BCC)

Manager Name and position:

Danny Gouveia, Senior Development Manager (TfWM)

Contact telephone number:

Danny Gouveia – 0121 214 7288

Email address:

danny.gouveia@tfwm.org.uk

Postal address:

Birmingham City Council
1 Lancaster Circus Queensway
Birmingham
B2 2JE

Transport for West Midlands
16 Summer Lane
Birmingham
B16 3SD

Combined Authorities

If the proposal is from a local highway authority within a Combined Authority, please specify the contact and ensure that the Combined Authority has submitted a Combined Authority Application Ranking Form.

Name and position of Combined Authority Co-ordinator for CA proposals:

Mark Corbin, Key Route Network Manager

Contact telephone number: 0121 214 7355

Email address: Mark.Corbin@tfwm.org.uk

Postal address:

16 Summer Lane
Birmingham
B16 3SD

SECTION A – Description of works**A1. Name of proposal:**

Unlocking Birmingham Cross City Bus: North-South and East-West (Line 2 & 3) Route Enhancements

A2. Geographic area:

Please provide information about the location of the proposal (in no more than 50 words)

The proposal comprises 5 radial corridors into Birmingham city centre comprising:

1. A441 - Pershore Road, Birmingham to Stirchley
2. B4284 Harborne Road, Bartley Green to Harborne
3. B4114 Washwood Heath Road, Castle Bromwich to Birmingham city centre
4. A41 Soho Road, Birmingham to Handsworth
5. B4128 Bordesley Green, Birmingham to Meadway

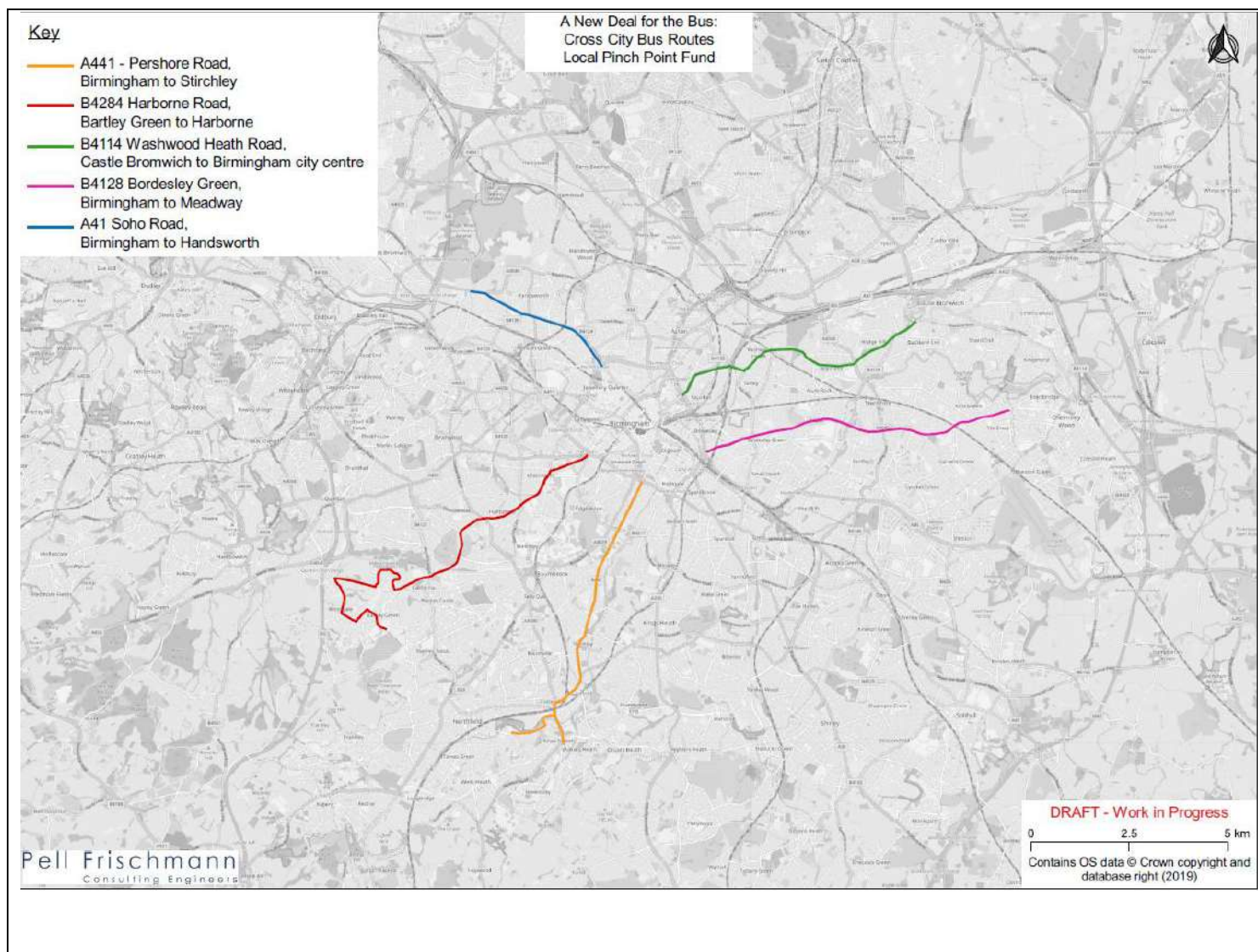
OS Grid Reference:

A441 - Pershore Road, Birmingham to Stirchley - SP055817
B4284 Harborne Road, Bartley Green to Harborne - SP040848
B4114 Washwood Heath Road, Castle Bromwich to Birmingham city centre - SP098884
A41 Soho Road, Birmingham to Handsworth - SP047894
B4128 Bordesley Green, Birmingham to Meadway - SP104866

Postcode:

A441 - Pershore Road, Birmingham to Stirchley – B29
B4284 Harborne Road, Bartley Green to Harborne – B17
B4114 Washwood Heath Road, Castle Bromwich to Birmingham city centre – B8
A41 Soho Road, Birmingham to Handsworth – B21
B4128 Bordesley Green, Birmingham to Meadway – B9

You might wish to append a map showing the location (and route) of the proposal, existing transport infrastructure and other points of particular interest.



A3. Description of existing problems and how the proposal would address them. Please set out which other options have been considered:

Bus travel is the transport lifeblood of Birmingham, with an all too often undervalued role in powering the city's economy. Buses reach every corner of Birmingham, providing an essential mobility service to access employment, education, leisure and other key facilities as well as providing integration with other modes of transport.

The scale and importance of bus use in the city centre is huge. Birmingham city centre alone generates 73 million bus trips each year, carrying over 10 million more passengers than generated by the four city centre railway stations¹ and the entire Midland Metro network combined.

Building on the Government's recent announcement for investment in the region's bus network, this proposal would deliver the second tranche of Birmingham's cross city (XC) bus network. The proposition will unlock growth and increase productivity, not only through transformational reductions in bus journey times and enhanced reliability but also in creating new and direct intra-city connections between major trip attractors across the city centre core and beyond.

The cross-city proposition comprises a total of nine corridors of which five (delivering 2 XC lines) are proposed to be brought forward for improvement as part of this investment proposition.

A schematic plan showing the extent of the cross-city bus network is shown in the figure below:

¹ New Street, Snow Hill, Moor Street, Five Ways



The problem

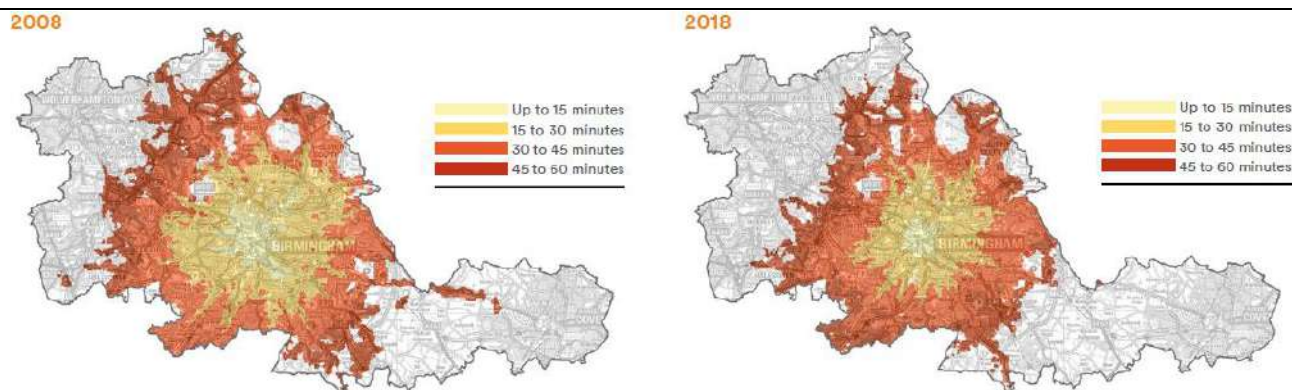
The congestion challenge

The Birmingham Development Plan sets out an ambitious inclusive growth agenda for Birmingham, delivering 51,000 additional homes and 150,000 new jobs by 2031 resulting in 400,000 additional trips on the transport network each day. The city centre is the engine for this growth; it has the potential to expand by 25% by 2031, accommodating a further 50,000 jobs and 10,000 new homes to boost the city's economy by £2.1 billion each year.

Transport is a strategic enabler for growth but much of the road and public transport network in Birmingham is operating at capacity during peak periods, inhibiting the city's growth potential. Delay and unreliability on the highway network is particularly crippling the bus network. Record levels of traffic² have inevitably caused record levels of delay and unreliability on the city's roads. Peak hour bus journeys into the city centre now take 20% longer on average than two years ago; it can take 20 minutes alone for buses to clear the Birmingham city centre's ring road during PM peak periods.

Congestion means fewer people can access jobs, education and other key facilities within decent journey times. 216,000 fewer people are within a 45-minute bus journey to the city centre compared to 10 years ago – the equivalent population of Solihull. The change in accessibility by bus between 2008 and 2018 is illustrated within the figure below:

² <https://www.gov.uk/government/statistical-data-sets/road-traffic-statistics-tra#traffic-by-local-authority-tra89>



The impact of congestion

The result of delay and congestion to the city's productivity is stark – research completed by Transport for West Midlands on the impact of actual bus journey times relative to scheduled (timetable) journey time concludes that delay to buses results in around £300 million of GVA being lost each year as well as £200m of lost passenger time each year³.

Accommodating the growth of the city centre and the associated travel demands, in the context of record levels of traffic in the region presents acute challenges. Fundamentally, this means accommodating growth and, at the same time, not exacerbating existing delay and unreliability.

If nothing changes, the increased demands on the network from the rise in population and business will result in even more congestion, more unreliable journeys for workers & businesses and increased levels of harmful emissions, which are already frequently above safe target levels affecting people's health and exacerbating the climate emergency declared by Birmingham City Council and the West Midlands Combined Authority.

Reducing inequality

Congestion disproportionately affects bus users. Bus passengers seldom have other route/mode choices during periods of network delay and cannot readily compensate for poor reliability. Slower, less reliable and less efficient bus networks create a cycle of fewer passengers, with those who can switching modes, leading to more car trips and creating more congestion. This vicious circle will continue if measures are not put into place to reduce congestion and to improve bus journey reliability and reduce journey times.

Moreover, the poorest in society make three times more trips by bus compared to the highest income quintile and are ten times more likely to use the bus over rail⁴. Bus is therefore vital to unlocking job and skill catchments, opening economic participation, increasing productivity and enhancing social capital. However, where people are reliant on the bus network, they are being held back from reaching their potential because of a reduction in the city's effective size and labour catchments caused by delay and unreliability on the network.

Delivering the Clean Air Zone (CAZ)

Poor air quality in Birmingham is acknowledged as a major public health burden. It is estimated that poor air quality was responsible for around 900 premature deaths a year in the city. To combat the health emergency caused by poor air quality, the Government issued the UK Plan for Tackling Roadside Nitrogen Dioxide Concentrations in July 2017 which identified Birmingham as one of the

³ TfWM / ODI Leeds research – real journey time <https://odileeds.org/blog/2018-09-27-real-journey-time>

⁴ NTS0705

areas experiencing the greatest problem with nitrogen dioxide exceedances. The Government's Plan requires the City Council to deliver the best CAZ option to achieve statutory nitrogen dioxide limit values within the shortest possible time.

A full business case for delivering a CAZ in Birmingham⁵ has been approved and is due to be implemented by July 2020 with a target of transferring 30% of existing car trips on to public transport. The scale of the bus network in the city means it will play a vital role in supporting this objective, but in doing so the bus network must be reliable and offer a realistic and attractive alternative to the car.

The solution – XC

Building on the strong foundations of partnership already in place through the West Midlands Bus Alliance, Transport for West Midlands (TfWM), National Express West Midlands (NX) and Birmingham City Council (BCC) are working together to deliver a renaissance for buses in Birmingham, underpinned by a new network of XC bus routes.

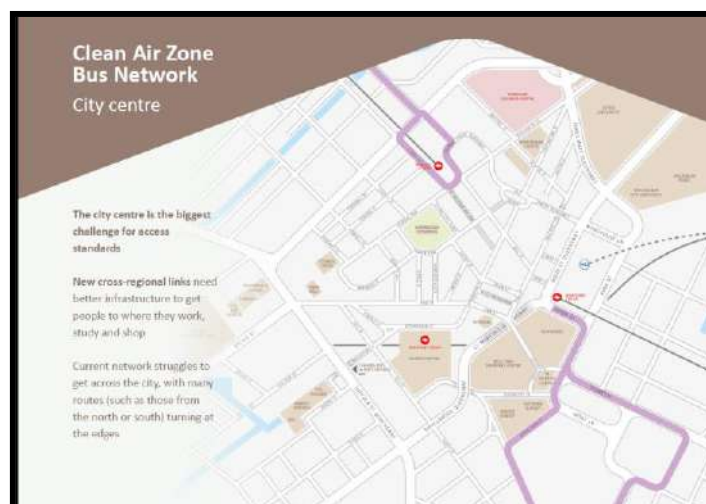
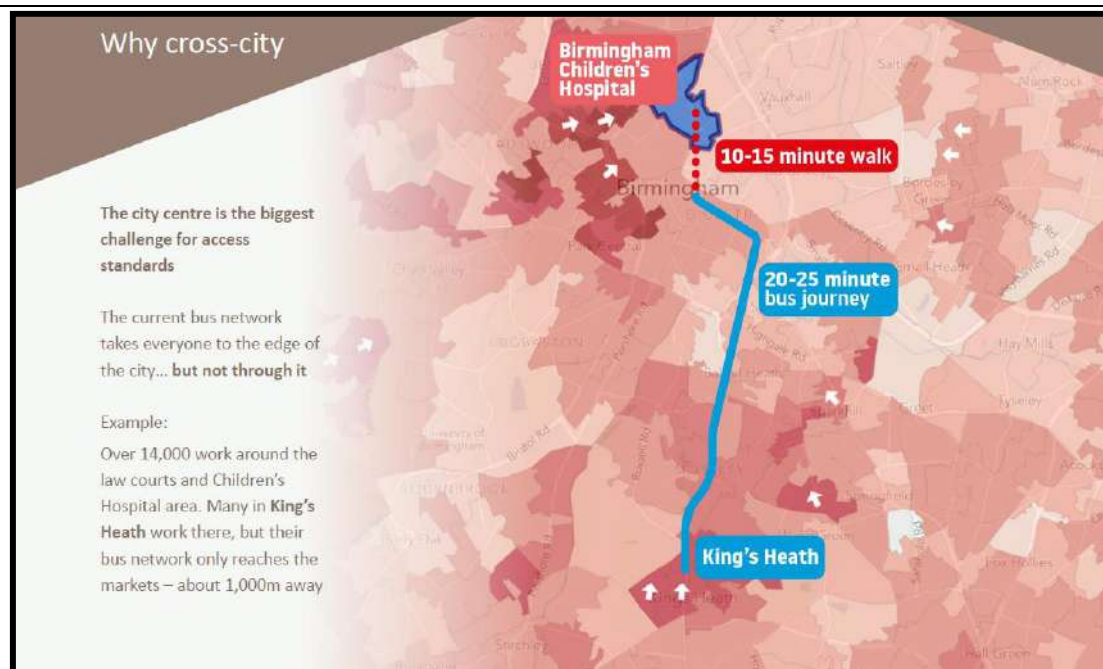
XC will increase capacity and accessibility on the transport network through making bus travel more attractive and providing new connections to trips attractors, freeing up road space for other modes of transport to support the city's continued growth agenda.

XC means complementing committed Sprint (Bus Rapid Transit - BRT), Metro (Light Rail Transit) and rail to deliver a truly integrated multi-modal city, creating a genuine step change in intra-city connectivity, increasing the city's effective size and providing links to new productive socio-economic markets.

XC means a reduction in bus movements through the city centre core, helping to reduce the severance caused by bus densities, freeing up road space and further abating emissions to support the CAZ. XC also means delivering the greenest fleet and the highest standard of buses to change the perception of bus travel in the city, with reliable journey times and high quality, attractive travel.

XC is not only about creating new connections between major trip attractors within the city; most benefit is derived from opening new connections across the city centre. Most bus services into Birmingham city centre do not penetrate its heart, instead stopping at existing termini on the fringes of the city centre. This size of the city centre means bus passengers still have significant journeys to make, either on foot or by other modes, incurring an interchange penalty. It also discourages the bus as a realistic mode of transport by not providing links to where people want to go; the images below show the challenge in intra-city connectivity by bus and how XC will close this connectivity gap.

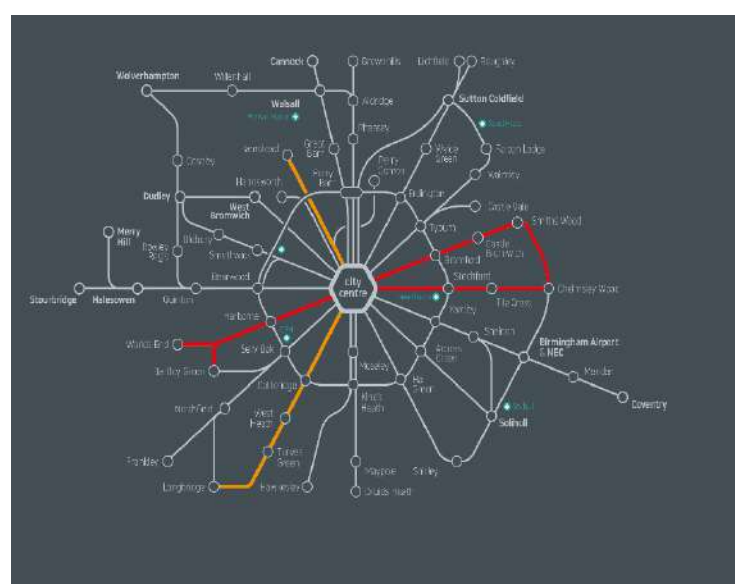
⁵ https://birmingham.cmis.uk.com/birmingham/Decisions/tabid/67/ctl/ViewCMIS_DecisionDetails/mid/391/Id/dbb0a2ee-0e5c-4c26-bb25-5e8ffacb8066/Default.aspx



XC can only be realised if reliable journey times can be achieved. In the context of record levels of delay and unreliability on Birmingham's highway network, a suite of measures to improve journey times and reliability is required to unlock XC.

XC Lines 2 & 3 – Birmingham East-West & North-South

Following the XC line 1 enhancements along the A435 Alcester Road & A457 Dudley Road (secured as part of the Government's better deal for bus users⁶), this investment opportunity to DfT will bring forward route enhancements on XC lines 2 & 3. This covers five radial routes into/from the city centre as shown in the adjacent figure. This forms part of a wider £10m funding package to additionally green up existing bus fleets.



⁶ <https://www.gov.uk/government/news/government-takes-the-first-steps-in-a-bus-revolution>

The route enhancements would include a package of highway and traffic improvements including bus priority measures and additional measures to improve flow for all vehicles.

The package will tackle specific bottlenecks and pinch-points, delivering a cumulative transformation in bus journey times with general highway & junction improvements and bus priority measures, covering the following corridors:

1. A441 - Pershore Road, Birmingham to Stirchley
2. B4284 Harborne Road, Bartley Green to Harborne
3. B4114 Washwood Heath Road, Castle Bromwich to Birmingham city centre
4. A41 Soho Road, Birmingham to Handsworth
5. B4128 Bordesley Green, Birmingham to Meadway

Importantly, working in partnership with National Express West Midlands, the proposition will also be complemented by a £1.5m upgrade in the bus fleet to provide the greenest buses on the market. This will, at a minimum, result in Euro 6 buses along lines 2 and 3 but we will work closely with NX to provide even greater emission standards.

Options Considered

A feasibility study has been undertaken which has identified, sifted (using multi-criteria analysis) and prioritised the extent of interventions along the identified corridors. The preferred schemes are outlined within this expression of interest. The schemes have been developed to preliminary design, accompanied by a high-level benefit and deliverability assessment. The schemes are anticipated to deliver very high value for money and have been determined to be deliverable within the pinch point time frame as no further statutory consents, including planning permissions and Compulsory Purchase Orders are required.

The emerging scheme for Pershore Road is attached as **Appendix A**

The emerging scheme for Washwood Heath Road is attached as **Appendix B**

The emerging scheme for Harborne is attached as **Appendix C**

The emerging scheme for Bordesley Green is attached as **Appendix D**

The emerging scheme for A41 is attached as **Appendix E**

SECTION B – The Business Case

B1. The Financial Case – Project Costs and Profile

Please indicate the anticipated cost of the proposal in the table below. **Figures should be entered in £000s** (i.e. £10,000 = 10).

Funding profile (Nominal terms)

£000s	2021-22	2022-23
<i>DfT Funding Sought</i>	£3,000	£4,000
<i>LA/TfWM Contribution</i>		£500
<i>Other Third Party Funding*</i>		£1,500

** National Express West Midlands investment in bus fleet*

Notes:

- 1) Department for Transport funding will be granted in the 2021-22 and 2022-23 financial years but local highway authorities may carry that funding over to following financial years if necessary.*
- 2) There is no specific amount for a local contribution by the local authority and/or a third party but if additional funding is proposed please state what this is expected to be.*

B2. Timetable

Proposed start date: Q2 2021

Estimated completion date: Q4 2023

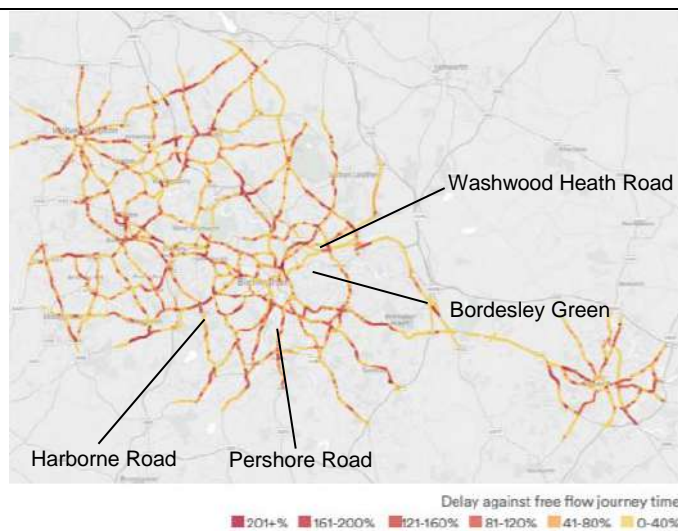
B3. Further information in support of the proposal

The proposition involves the delivery of bus priority and highway improvement on five key radial routes into Birmingham city centre, which together will deliver lines 2 & 3 XC - *Birmingham North-South* and *Birmingham East-West*.

The corridors have been selected based on an initial feasibility study completed which has identified significant scope for journey time savings and potential to unlock major trips generators, particularly across the city centre. This will have the effect of increasing the city's effective size, reducing work catchments to open new markets, helping to close the productivity gap.

The case for change & Benefit Realisation

The figure below shows the extent of delay on Birmingham

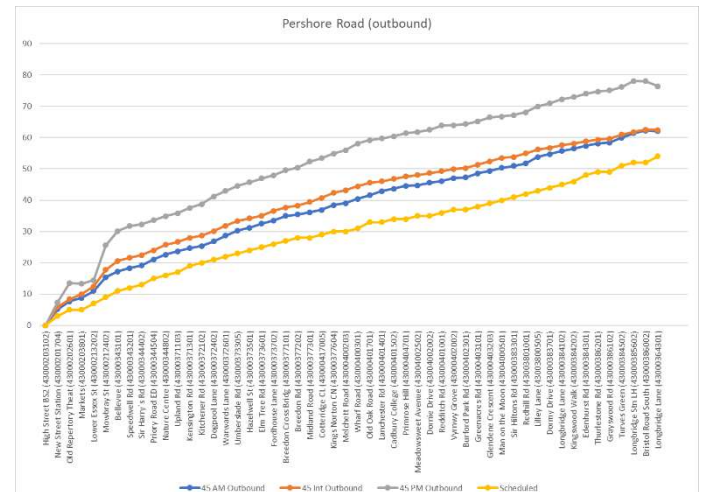
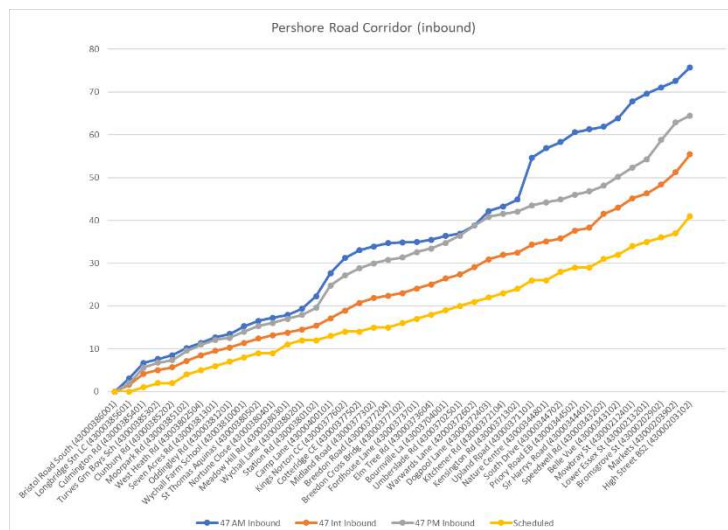


A441 Pershore Road

The A441 Pershore Road corridor carries c.30,000 vehicles daily forming part of the wider regional Key Route Network (KRN) which comprises the principal routes within the region, serving the main strategic demand flows of people, goods and services and providing connections to the strategic road network.

The A441 forms part of the Birmingham cross city KRN, linking M42 J2 within Birmingham city centre. In a local context, the A441 provides important links into the city centre from the urban areas of Longbridge, Cotteridge and Stirchley. The corridor provides eleven buses per hour, generating five million bus trips annually.

The corridor experiences severe congestion at peak times along the majority of the route between Stirchley and Birmingham. This has a detrimental effect on bus reliability and journey times with a number of junctions along the route forming some of the most congested in the region⁷. The graph below shows bus journey times relative to timetable journey time, demonstrating the significant congestion challenges faced by bus services along the corridor. Delay created in the AM peak is particularly pronounced.

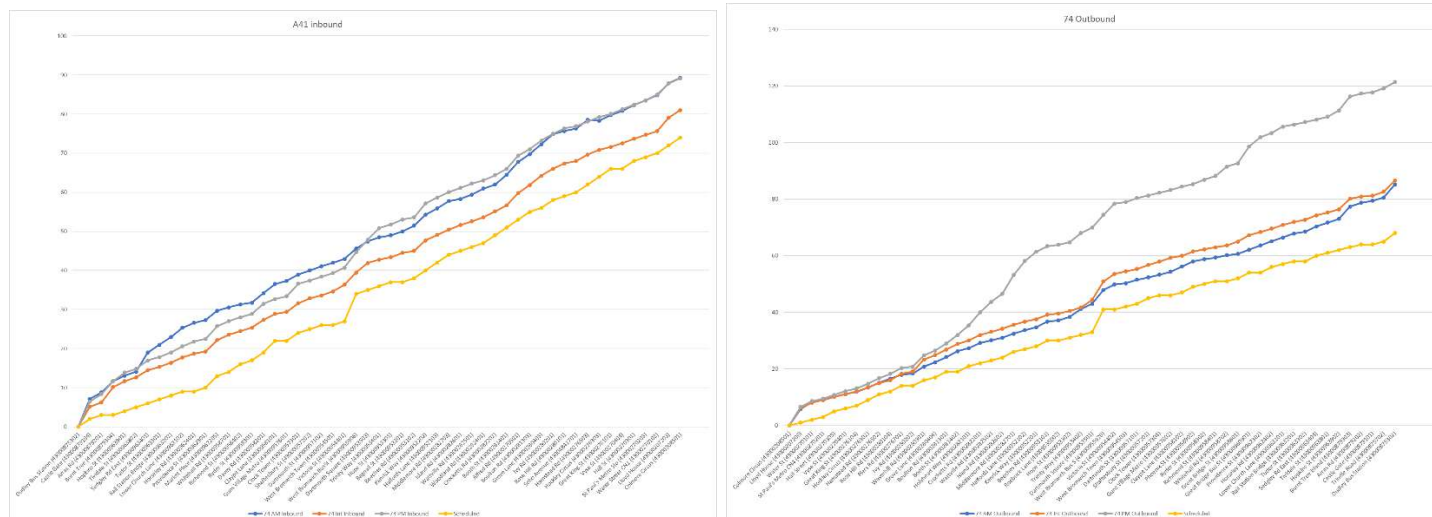


A41 Soho Road

⁷ <https://www.tfwm.org.uk/media/3030/1-birmingham-cross-city.pdf>

The A41 Soho Road corridor carries c.25,000 vehicles daily forming part of the Birmingham to Black Country KRN, linking Birmingham city centre with Wednesbury, West Bromwich and Wolverhampton. The corridor provides fifteen buses per hour, generating seven million bus trips annually.

The graph below shows bus journey times relative to timetable journey time. The graphs demonstrate that delay to services mean end to end journey times are up to 20 mins longer than scheduled journey times with particular pinch points along the route which create spikes in journey times.

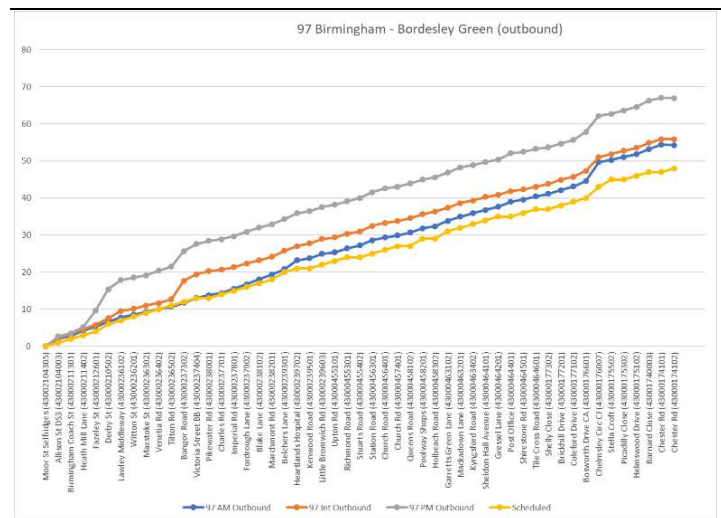
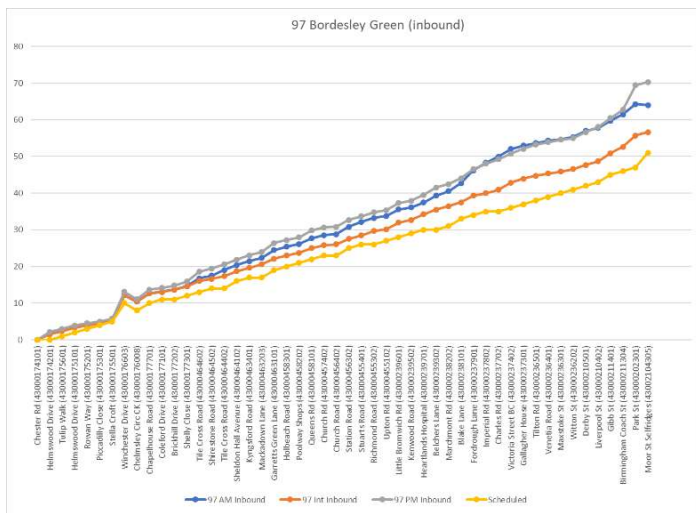


B4128 Bordesley Green

The B4128 corridor is an important radial route connecting the East Birmingham North Solihull (EBNS) regeneration area to economic activity within Birmingham city centre. The route connects Chelmsley Wood, Stechford and Bordesley Green. The EBNS area contains some of the most deprived wards in the UK, where relatively high unemployment is coupled with a residual workforce that is relatively unskilled. Combined with low levels of car ownership, where only half of all residents have access to a car, the area has long been a focus of policy to drive growth and enhance social capital with connectivity at its heart.

The corridor provides connectivity to fifteen buses per hour, generating nearly 5 million passengers a year. The route does however experience persistent congestion at peak times, which has a detrimental effect on bus reliability and journey times⁸. The graph below shows bus journey time relative to timetable journey time, demonstrating that AM and PM peak end to end journey times are 20 mins longer than the scheduled journey times.

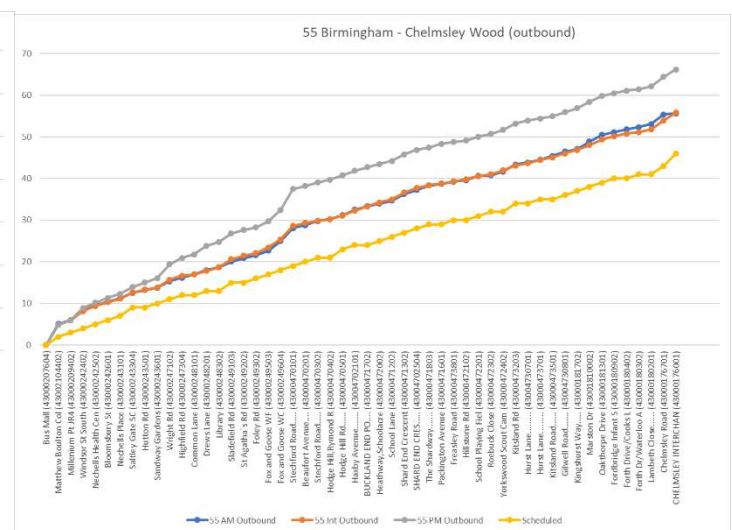
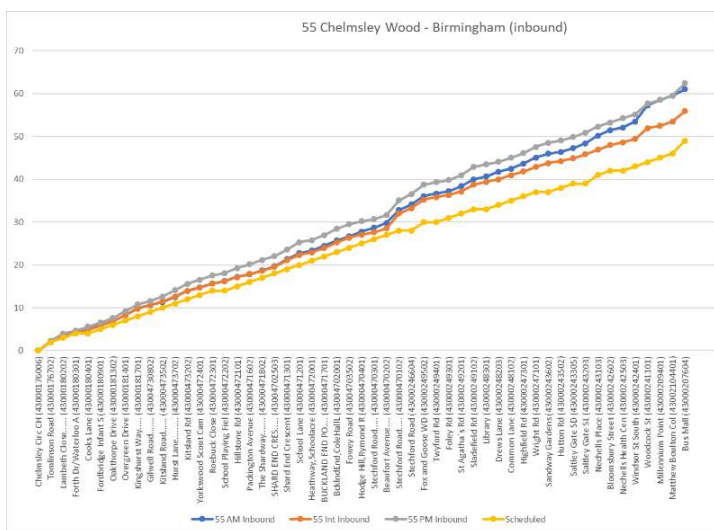
⁸ <https://www.tfwm.org.uk/media/3030/1-birmingham-cross-city.pdf>



B4114 Washwood Heath Road

The B4114 corridor is a further radial route connecting the EBNS regeneration area to economic activity within Birmingham city centre. The route connects Castle Bromwich, Washwood Heath and Alum Road with Birmingham city centre. The route generates traffic volumes of 20,000 vehicles a day and 10 bus services per hour, generating 4 million passengers a year. As above, EBNS area contains some of the most deprived wards in the UK, where relatively high unemployment is coupled with a residual workforce that is relatively unskilled.

The graph below shows bus journey time relative to timetable journey time, demonstrating that bus services experience significant delay. The PM peak is most pronounced where end to end journey are over 20 mins longer than the scheduled journey times.

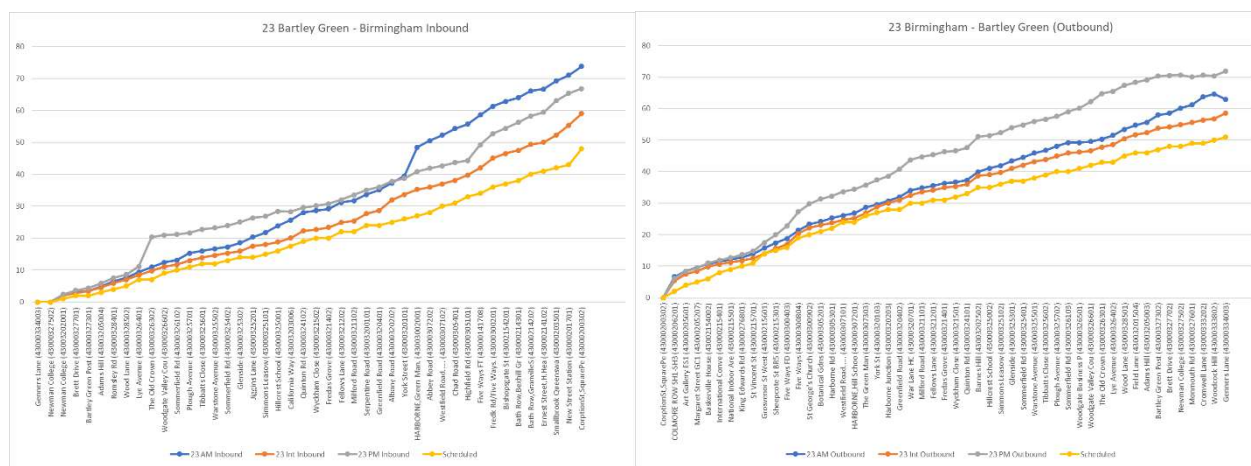


Harborne Road

The B4284 Harborne Road corridor forms part of the West Birmingham KRN, linking South Birmingham, Halesowen and Stourbridge with Birmingham city centre. The corridor generates fourteen buses per hour and 5 million bus passengers each year. In a local context, the corridor serves the areas of Selly Oak, Edgbaston, Bartley Green and Harborne.

Residents of Bartley Green and Harborne moreover do not benefit from rail connectivity nor is any further rail/mass transit proposed in these areas within the region's or city's transport delivery plan. The bus therefore plays a vital role in supporting accessibility for the people living and working in these areas; it is, therefore, unsurprising that more people travel on buses between Harborne and the city centre than any other road user, including those in cars.

Bus journey times are significant with the AM peak experiencing particular levels of delay with end to end journey times over 20 mins longer than scheduled journey times. Delays become most pronounced as buses route through Harborne.



Benefit Realisation

Intervention focuses on delivering whole route corridor improvement through bus priority to maintain journey time reliability. At particular pinch points along the route, junction improvements will be brought forward which have the potential to benefit all traffic.

The emerging designs (except for the A41 where intervention is less pronounced) focus on delivering journey time reductions in both peak periods by an average of 30%. As well promoting modal shift, thereby creating increased capacity on the highway network, the proposals will help support the city's productivity gap, reducing the level of lost GVA as a result of delay and unreliability on the bus network.

SECTION C: Declarations

C. Senior Responsible Owner Declaration

As Senior Responsible Owner for *Unlocking Birmingham Cross City Bus: North-South and East-West (Line 2 & 3) Route Enhancements* I hereby submit this request for approval to DfT on behalf of Transport for West Midlands and confirm that I have the necessary authority to do so.

I confirm that Transport for West Midlands will have all the necessary powers in place to ensure the planned timescales in the application can be realised.

Name: Danny Gouveia

Position: Senior Development Manager

Signed:

Submission of Expression of Interest:

The deadline for the Expression of Interest submission is 5pm on **31 January 2020**
Successful proposals for EOIs in the Local Pinch Point Fund are to be funded by DfT in 2021/22 and 2022/23.

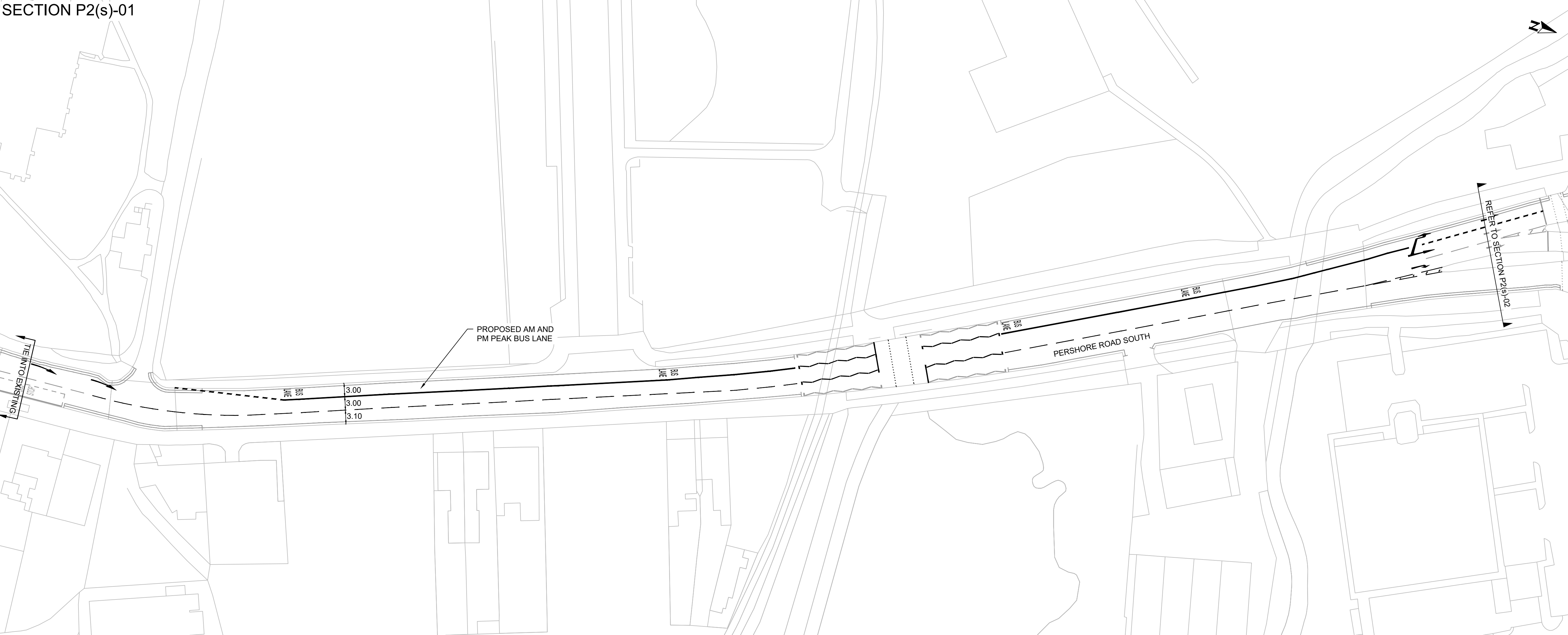
There are two phases to the application process:

- this Expression of Interest stage where we will assess the proposal based on the eligibility criteria as set out in Section 3 of the published Guidance.
- for authorities successful in passing to Phase 2, we will expect a further and detailed submission. Further guidance will be issued to the successful authorities when they are notified

An electronic copy only of the EOI should be submitted to:

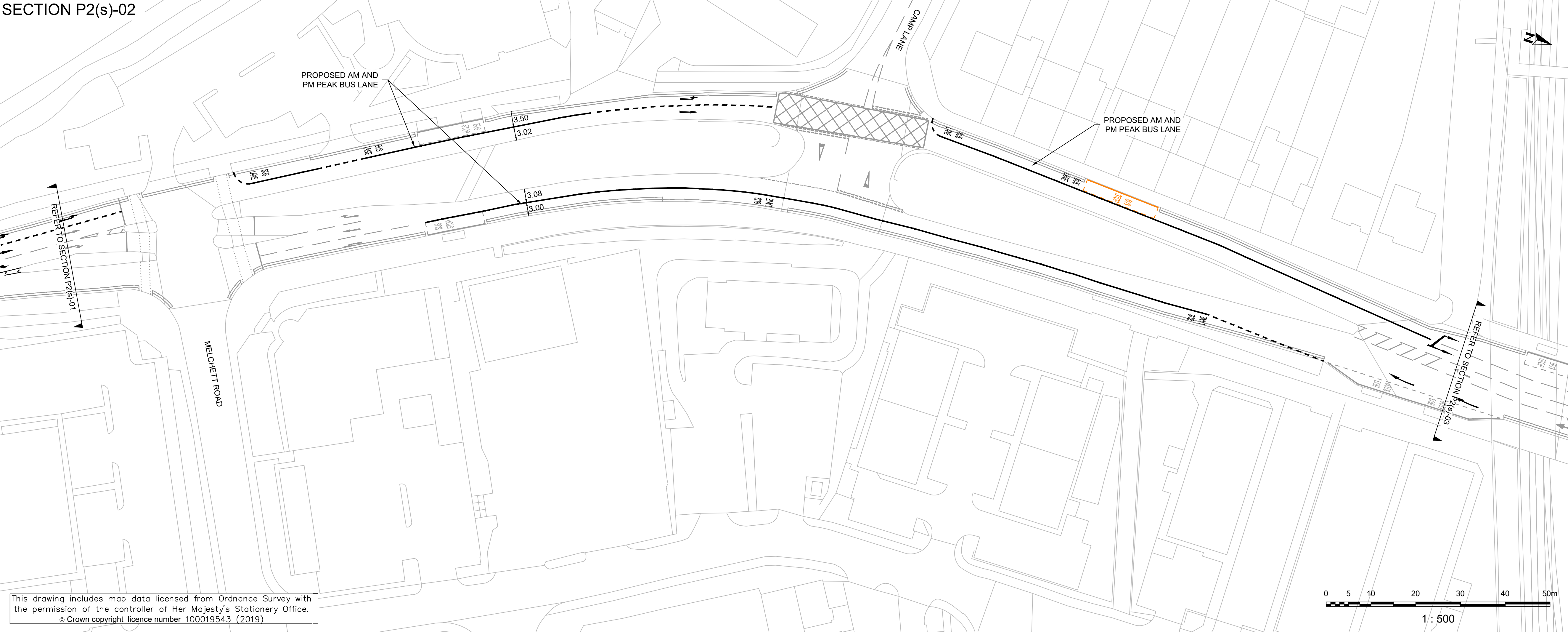
LT.Plans@dft.gov.uk copying in Paul.O'Hara@dft.gov.uk

SECTION P2(s)-01



- KEY**
- EXISTING ROAD MARKINGS
 - PROPOSED WHITE ROAD MARKINGS
 - PROPOSED YELLOW ROAD MARKINGS
 - PROPOSED KERB REALIGNMENT
- NOTES**
- ALL DIMENSIONS IN METRES UNLESS OTHERWISE STATED.
 - NOTES PLACED DIRECTLY ON THE LAYOUT DRAWING SUPERSEDE THOSE DETAILED IN KEYS.
 - ALL DIAGRAMS ARE TO THE TRAFFIC SIGNS REGULATIONS AND GENERAL DIRECTIONS 2016 (TSRGD).
 - ALL DESIGNS ARE BASED ON ORDNANCE SURVEY MAPPING.
 - EXISTING ROAD MARKINGS ARE TO BE REFRESHED WHERE NECESSARY TO PROVIDE A SAFE AND COHERENT SCHEME. HOWEVER, THIS IS NOT INCLUDED IN THE INDICATIVE SCHEME COSTS.
 - WHERE NO CHANGE IS SHOWN, EXISTING RESTRICTIONS APPLY.
 - TRAFFIC SIGNAL BUS PRIORITY IS COSTED FOR AS A SEPARATE MEASURE COVERING ALL PACKAGES.

SECTION P2(s)-02



LOCATION PLAN

DRAFT

PO1	CONCEPT DESIGN	DS	NY	NY	DD-MM-YY
REV	DESCRIPTION	DRN	CHK	APP	DATE

Pell Frischmann
100 BROAD STREET BIRMINGHAM B15 1AE
Telephone +44 (0)121 456 1616
Email: pfbirmingham@pellfrischmann.com
www.pellfrischmann.com

Architect/Client/Contractor

West Midlands Combined Authority

Project

A New Deal for the Bus Cross-City Bus

Drawing Title

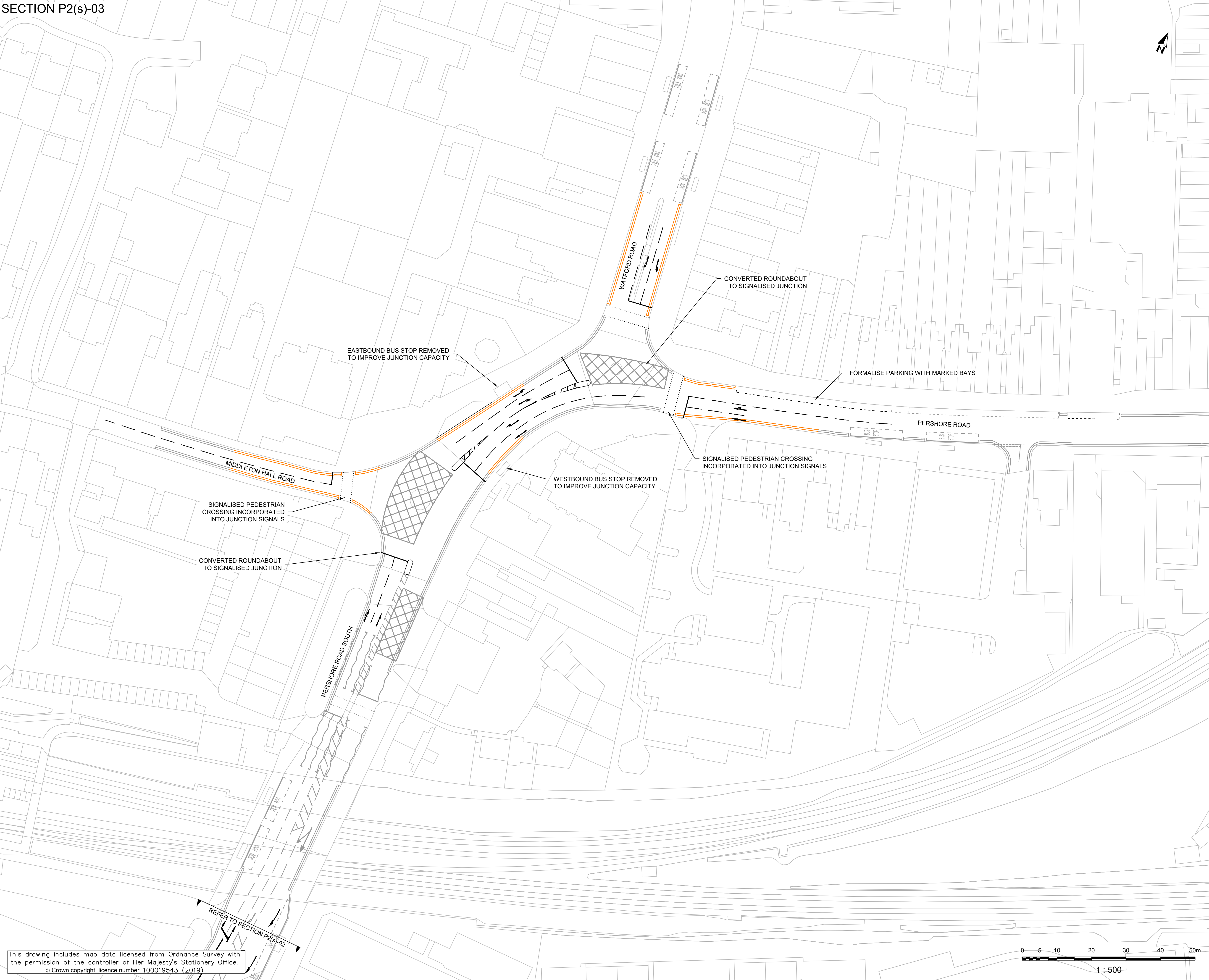
**Package 2 (south)
Concept Design
Sheet 1 of 14**

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Checked	NY	01-10-19	Drawing Status CONCEPT DESIGN
Approved	NY	01-10-19	

Drawing No. 102927-PF-100-P2S-DR-TR-001

Revision P01

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KEY

- EXISTING ROAD MARKINGS
- PROPOSED WHITE ROAD MARKINGS
- PROPOSED YELLOW ROAD MARKINGS
- PROPOSED KERB REALIGNMENT

NOTES

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LOCATION PLAN

DRAFT

P01	CONCEPT DESIGN	DS	NY	NY	DD-MM-YY
REV	DESCRIPTION	DRN	CHK	APP	DATE

Pell Frischmann
100 BROAD STREET BIRMINGHAM B15 1AE
Telephone +44 (0)121 456 1616
Email: pfbirmingham@pellfrischmann.com
www.pellfrischmann.com

Architect/Client/Contractor

West Midlands Combined Authority

Project

A New Deal for the Bus Cross-City Bus

Drawing Title

**Package 2 (south)
Concept Design
Sheet 2 of 14**

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Approved	NY	01-10-19		

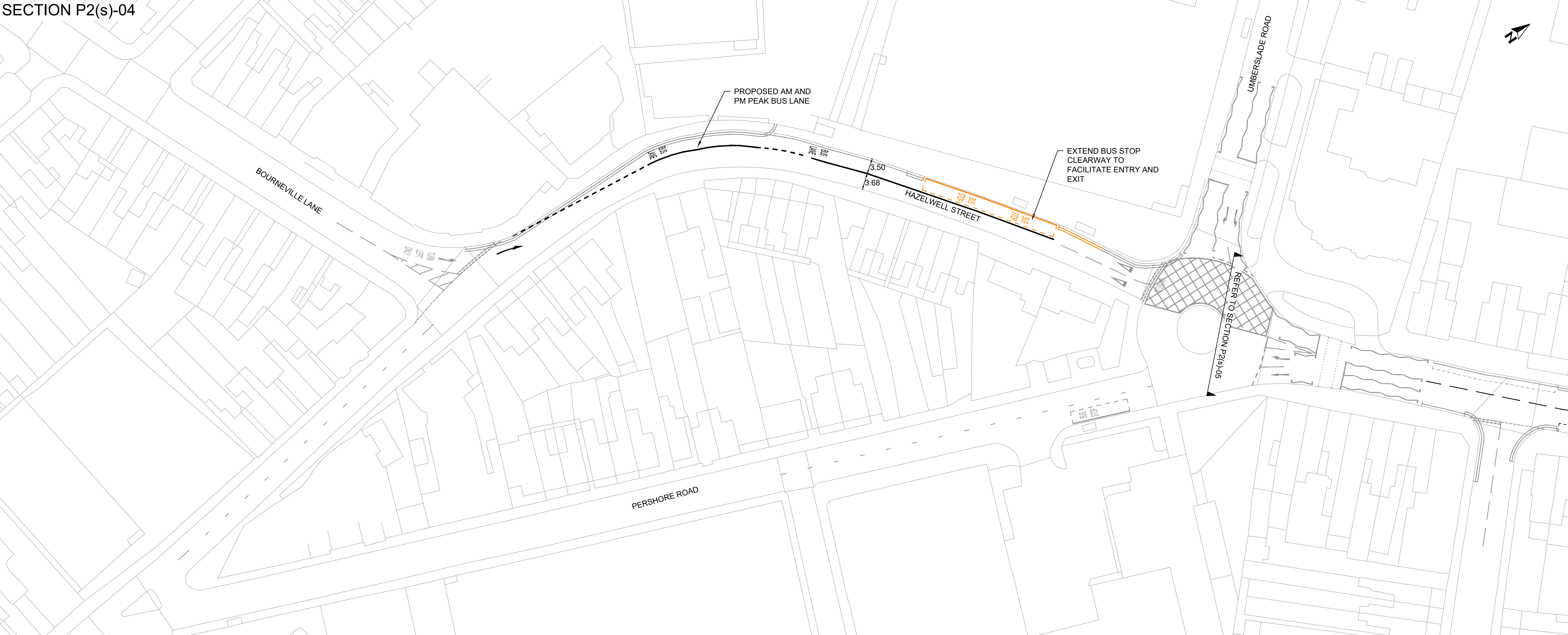
Drawing No.	Revision
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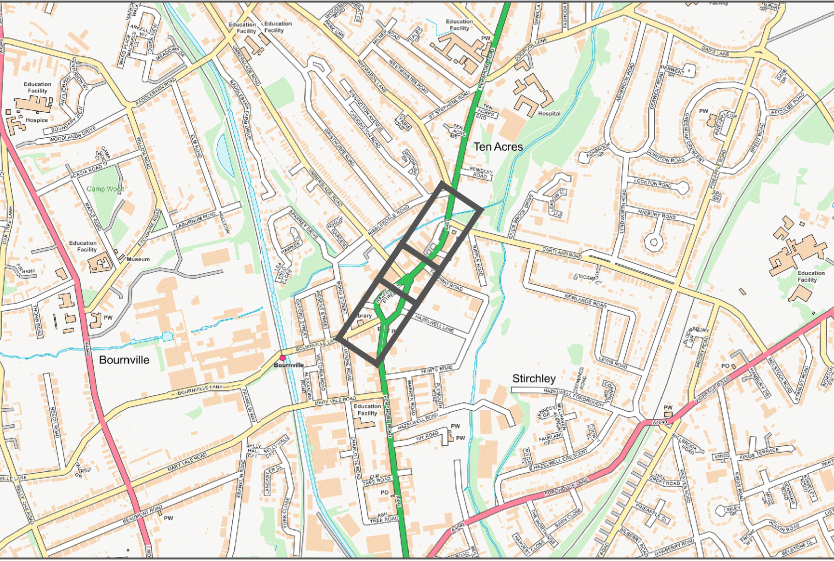
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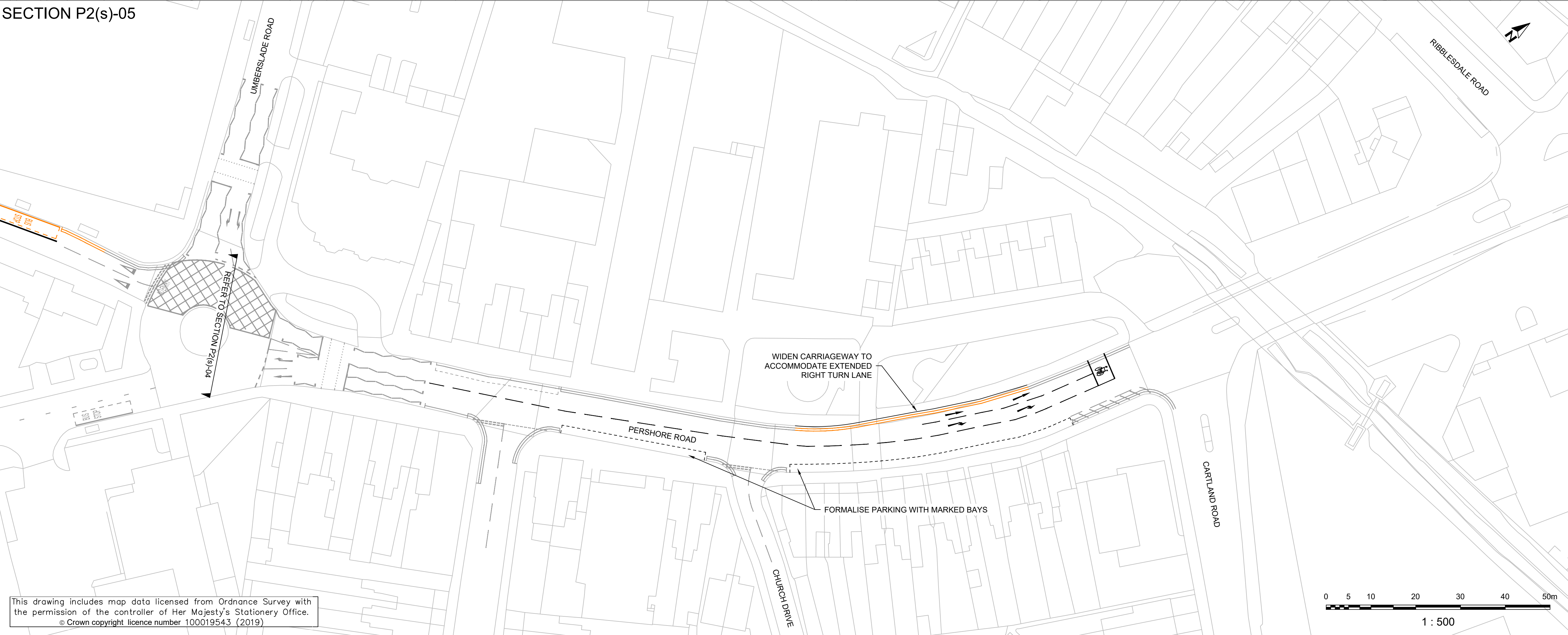
KEY	
	EXISTING ROAD MARKINGS
	PROPOSED WHITE ROAD MARKINGS
	PROPOSED YELLOW ROAD MARKINGS
	PROPOSED KERB REALIGNMENT

- NOTES
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LOCATION PLAN



SECTION P2(s)-05



DRAFT

P01	CONCEPT DESIGN	DS	NY	NY	DD-MM-YY
REV	DESCRIPTION	DRN	CHK	APP	DATE

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A New Deal for the Bus Cross-City Bus

Drawing Title

**Package 2 (south)
Concept Design
Sheet 3 of 14**

	Name	Date	Scale	1:500 @ A1
Drawn	DS	01-10-19		
Designed	DS	01-10-19	File No.	102927-PF-100-P2S-DR-TR
Checked	NY	01-10-19	Drawing Status	CONCEPT DESIGN
Approved	NY	01-10-19		

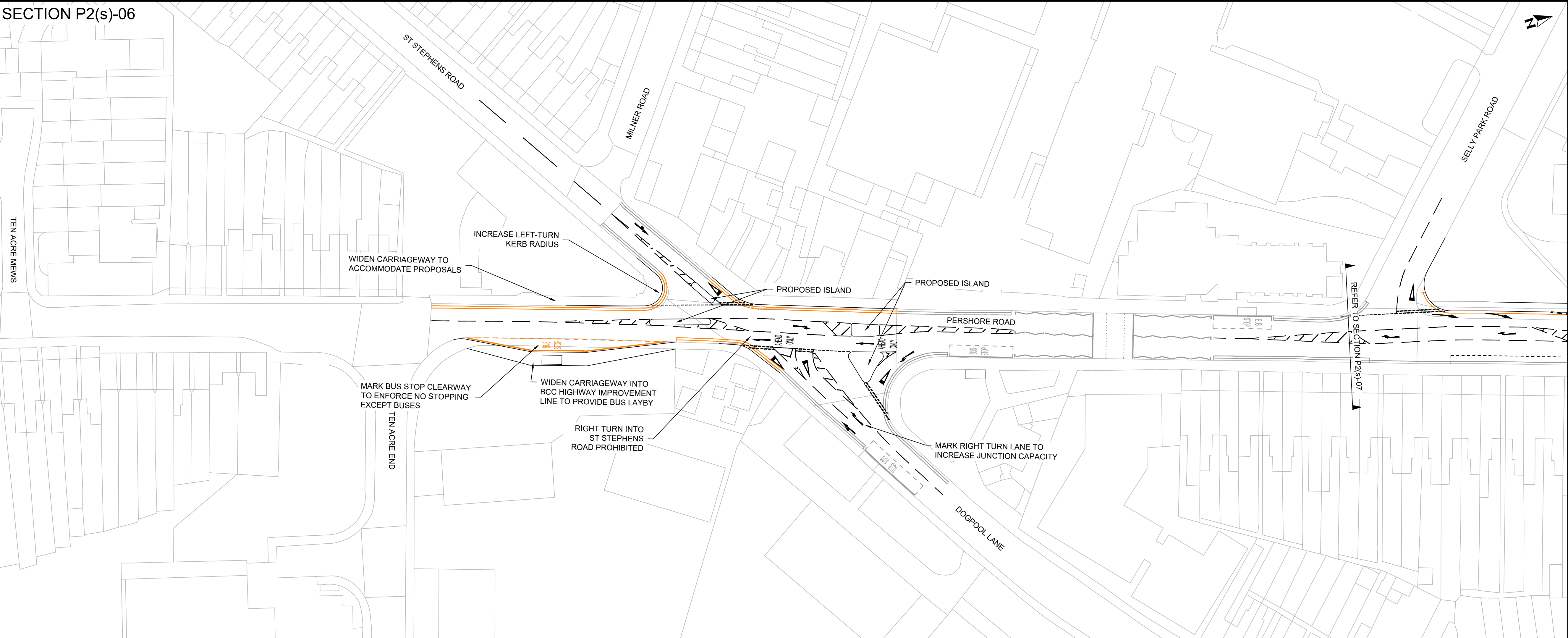
Drawing No.	Revision
102927-PF-100-P2S-DR-TR-003	P01

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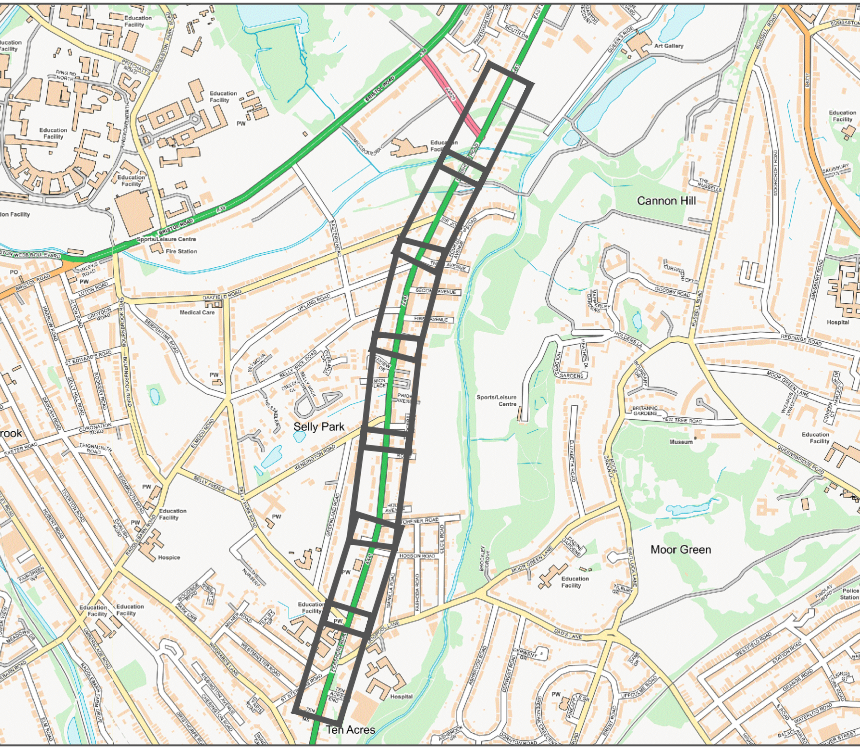
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SECTION P2(s)-06



- KEY
- EXISTING ROAD MARKINGS
 - PROPOSED WHITE ROAD MARKINGS
 - PROPOSED YELLOW ROAD MARKINGS
 - PROPOSED KERB REALIGNMENT
- NOTES
- ALL DIMENSIONS IN METRES UNLESS OTHERWISE STATED.
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LOCATION PLAN



SECTION P2(s)-07



DRAFT

P01	CONCEPT DESIGN	DS	NY	NY	DD-MM-YY
REV	DESCRIPTION	DRN	CHK	APP	DATE

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**A New Deal for the Bus
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Drawing Title

**Package 2 (south)
Concept Design
Sheet 4 of 14**

	Name	Date	Scale	
Drawn	DS	01-10-19	1:500 @ A1	
Designed	DS	01-10-19	File No.	102927-PF-100-P2S-DR-TR
Checked	NY	01-10-19	Drawing Status	CONCEPT DESIGN
Approved	NY	01-10-19		

Drawing No. **102927-PF-100-P2S-DR-TR-004** Revision **P01**

SECTION P2(s)-08

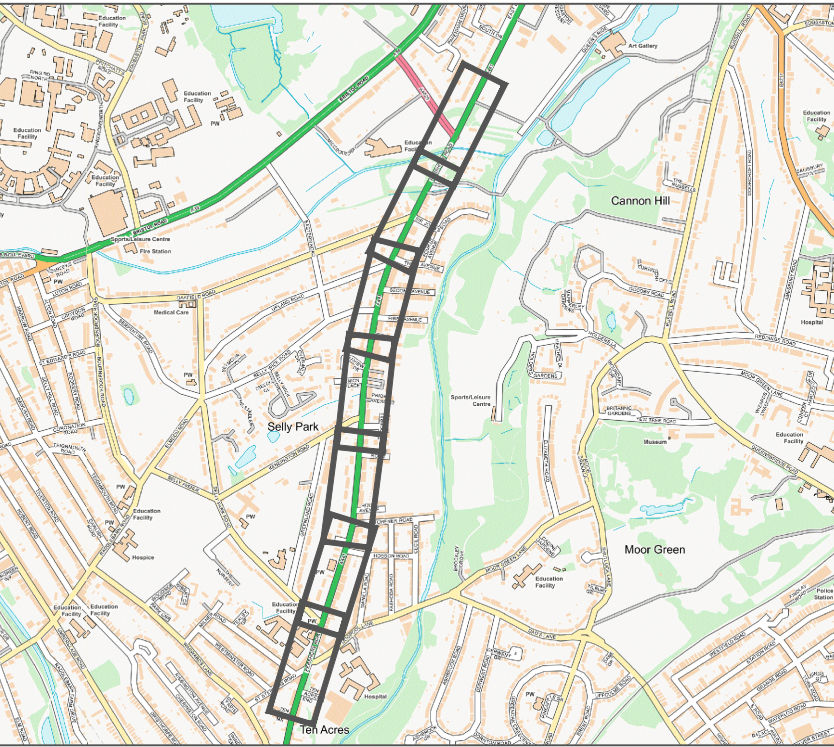


- KEY**
- EXISTING ROAD MARKINGS
 - PROPOSED WHITE ROAD MARKINGS
 - PROPOSED YELLOW ROAD MARKINGS
 - PROPOSED KERB REALIGNMENT
- NOTES**
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SECTION P2(s)-09



LOCATION PLAN



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REV	DESCRIPTION	DRN	CHK	APP	DATE

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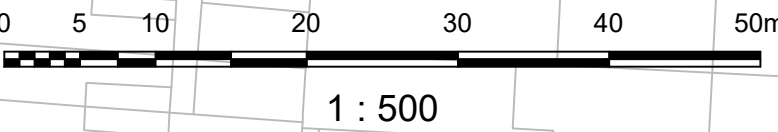
Drawing Title

**Package 2 (south)
Concept Design
Sheet 5 of 14**

Drawn	Name	Date	Scale	1:500 @ A1
Designed	DS	01-10-19	File No.	102927-PF-100-P2S-DR-TR
Checked	NY	01-10-19	Drawing Status	CONCEPT DESIGN
Approved	NY	01-10-19		

Drawing No. **102927-PF-100-P2S-DR-TR-005** Revision **P01**

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SECTION P2(s)-10



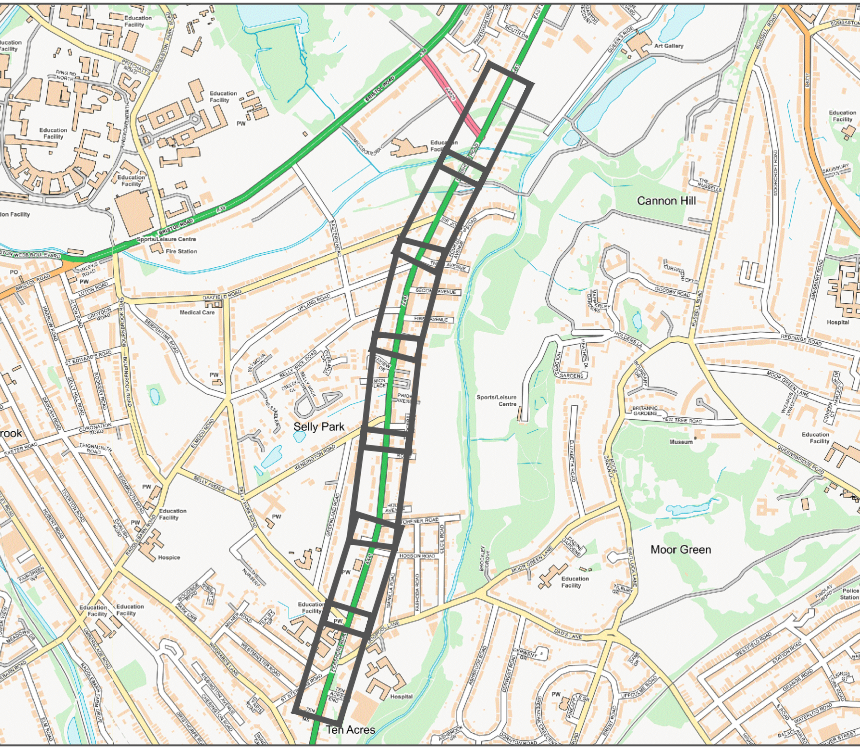
KEY

- EXISTING ROAD MARKINGS
- PROPOSED WHITE ROAD MARKINGS
- PROPOSED YELLOW ROAD MARKINGS
- PROPOSED KERB REALIGNMENT

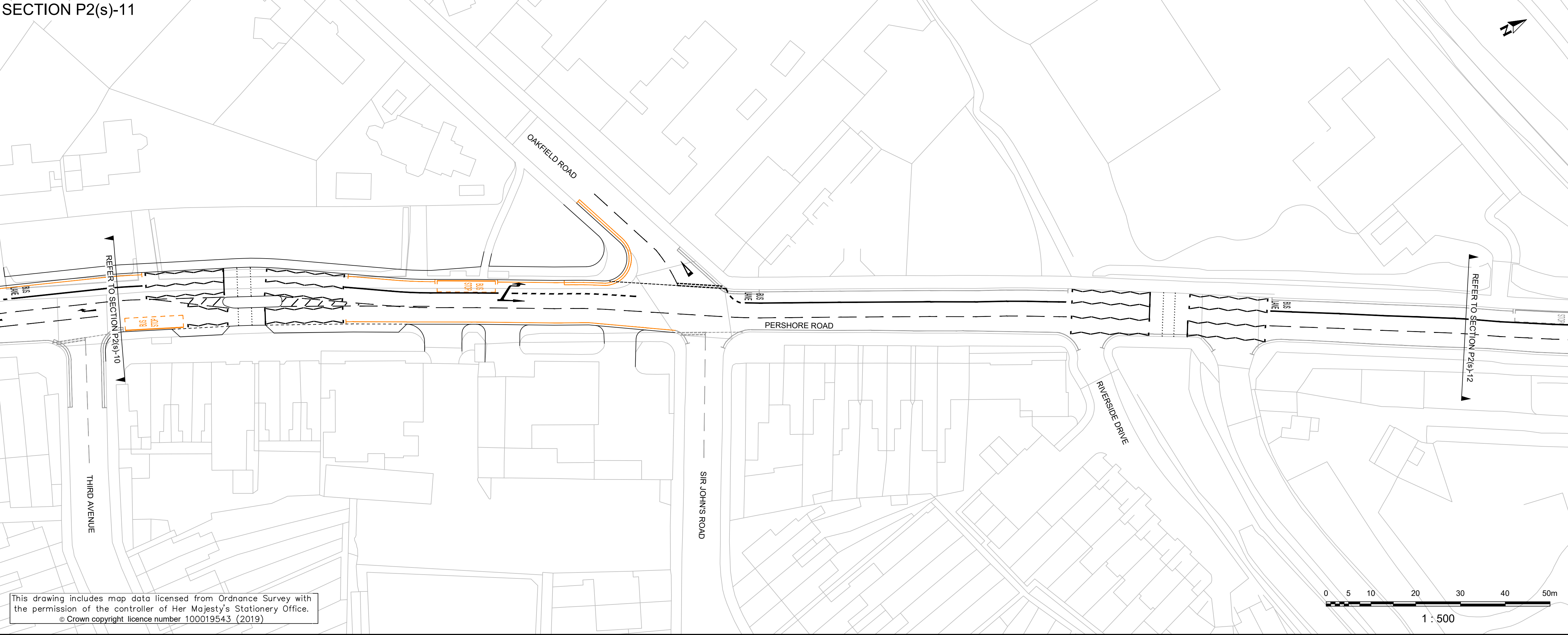
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LOCATION PLAN



SECTION P2(s)-11



DRAFT

P01	CONCEPT DESIGN	DS	NY	NY	DD-MM-YY
REV	DESCRIPTION	DRN	CHK	APP	DATE

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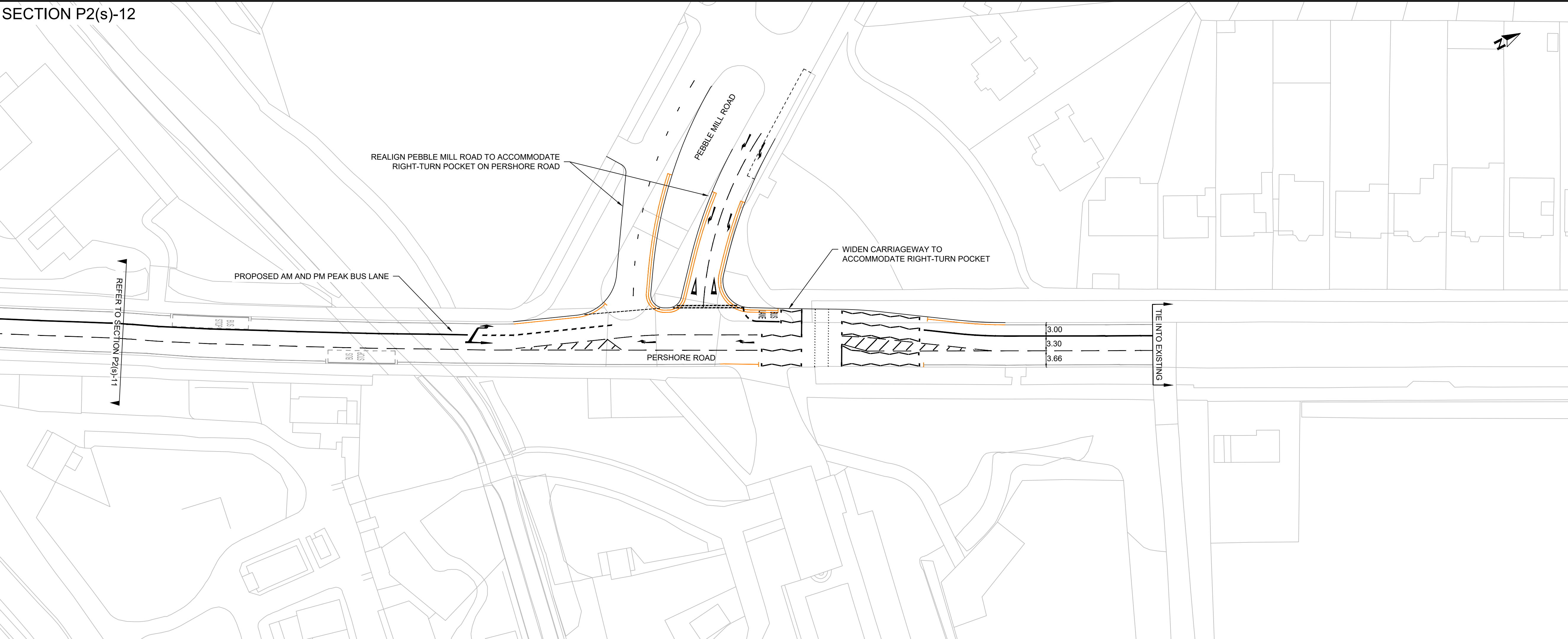
Drawing Title
**Package 2 (south)
Concept Design
Sheet 6 of 14**

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Designed	DS	01-10-19	Drawing Status	CONCEPT DESIGN
Checked	NY	01-10-19		
Approved	NY	01-10-19		

Drawing No.
102927-PF-100-P2S-DR-TR-006

Revision
P01

SECTION P2(s)-12

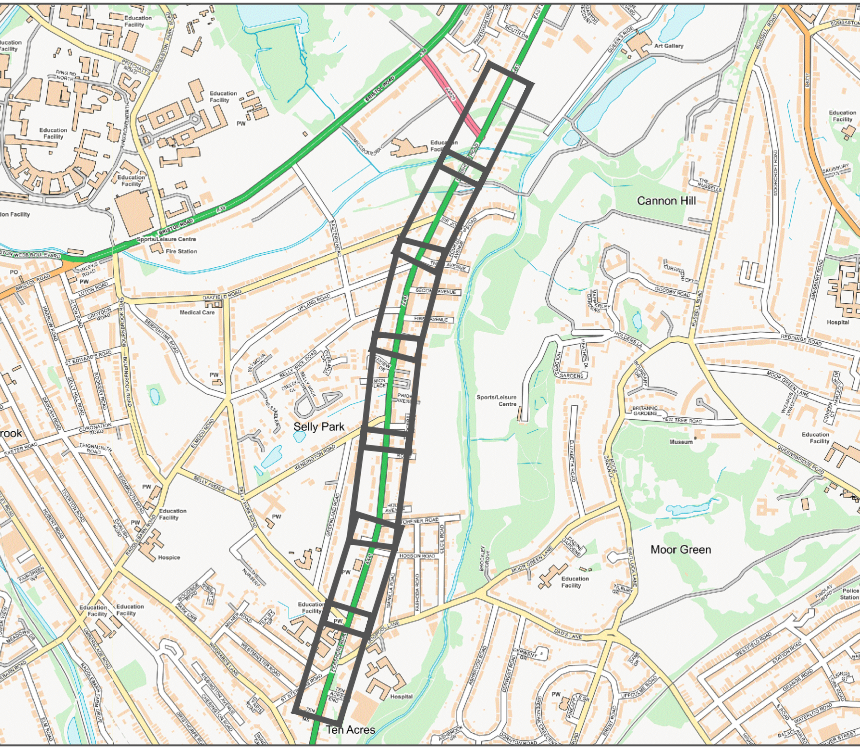


KEY

- EXISTING ROAD MARKINGS
- PROPOSED WHITE ROAD MARKINGS
- PROPOSED YELLOW ROAD MARKINGS
- PROPOSED KERB REALIGNMENT

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LOCATION PLAN



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P01	CONCEPT DESIGN	DS	NY	NY	DD-MM-YY
REV	DESCRIPTION	DRN	CHK	APP	DATE

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A New Deal for the Bus Cross-City Bus

Drawing Title

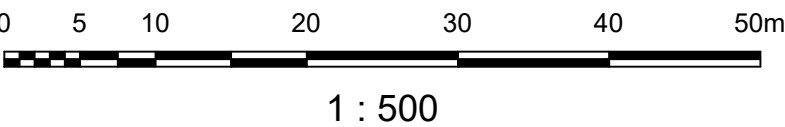
**Package 2 (south)
Concept Design
Sheet 7 of 14**

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Checked	NY	01-10-19		
Approved	NY	01-10-19		

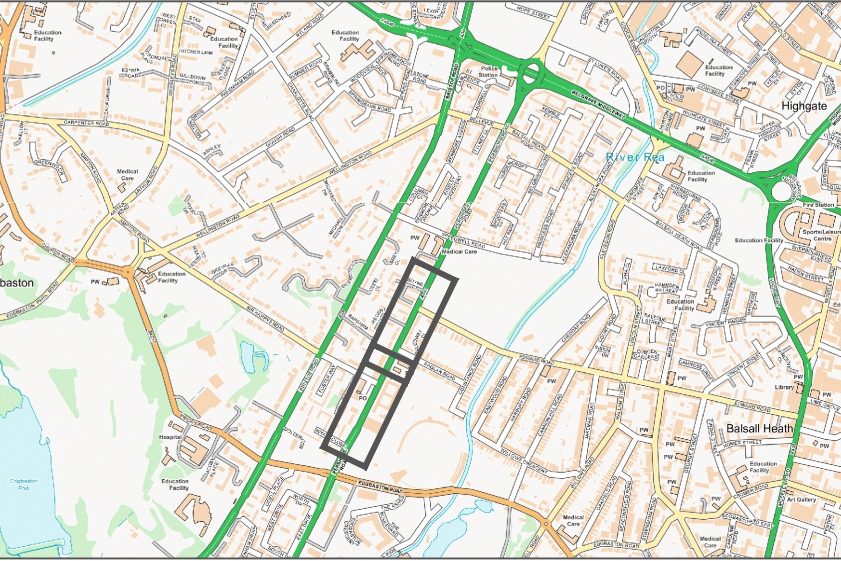
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Revision **P01**

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- ## LOCATION PLAN



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EV	DESCRIPTION	DRN	CHK	APP	DATE

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	Name	Date	Scale
Drawn	DS	01-10-19	1:500 @ A1
Designed	DS	01-10-19	File No. 102927-PF-100-P2S-DR-TR
Checked	NY	01-10-19	Drawing Status CONCEPT DESIGN
Approved	NY	01-10-19	

SECTION P2(s)-14

PROPOSED AM AND PM PEAK BUS LANE

REGENT CLOSE

ABOVE CLOSE

PERSHORE ROAD

RAGLAN ROAD

EDWARD ROAD

REFER TO SECTION P2(s)-13

TIE INTO EXISTING

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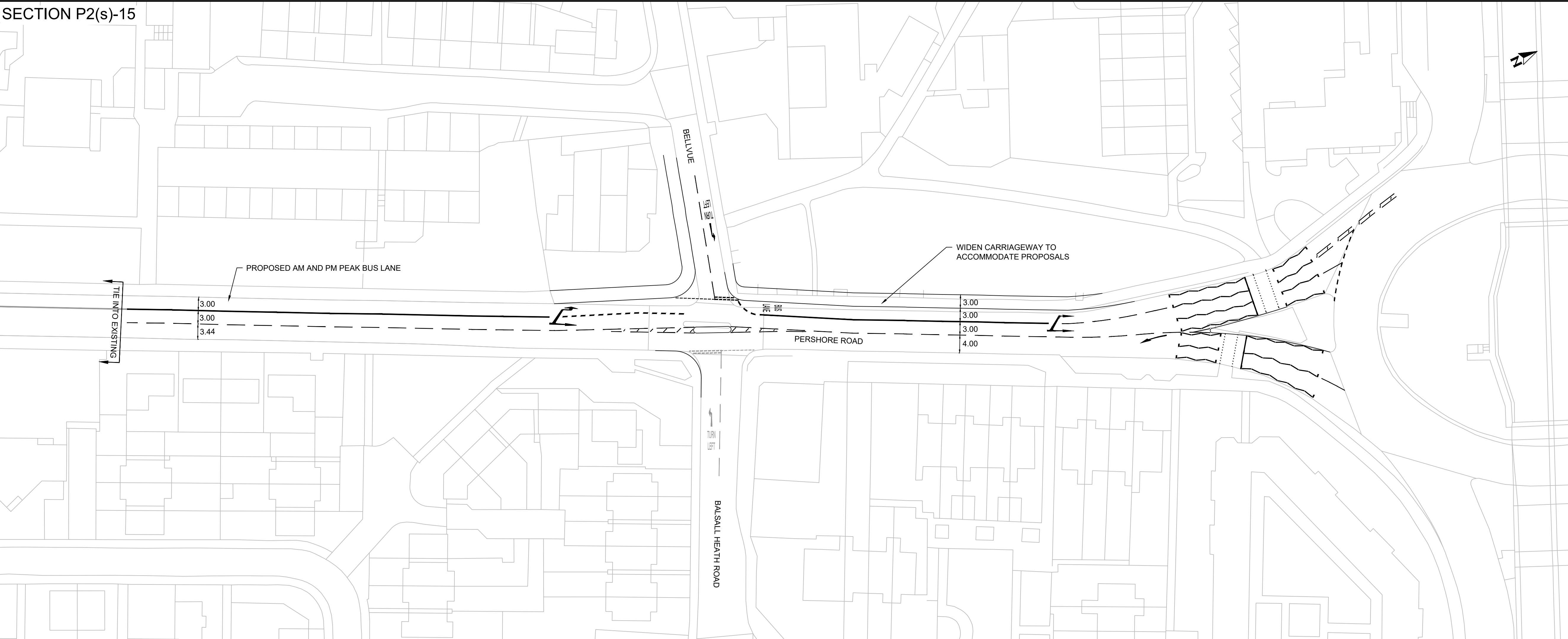
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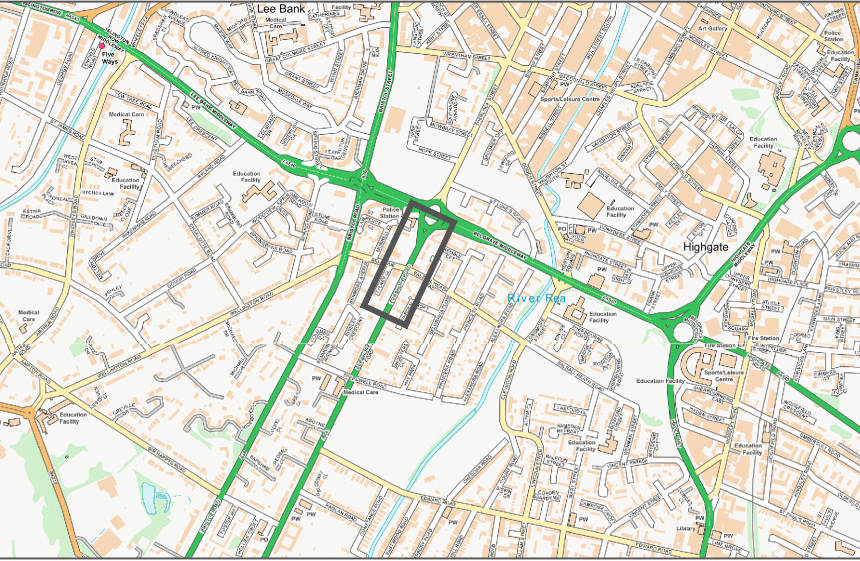
SECTION P2(s)-15



KEY	
	EXISTING ROAD MARKINGS
	PROPOSED WHITE ROAD MARKINGS
	PROPOSED YELLOW ROAD MARKINGS
	PROPOSED KERB REALIGNMENT

- NOTES
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LOCATION PLAN



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P01	CONCEPT DESIGN	DS	NY	NY	DD-MM-YY
REV	DESCRIPTION	DRN	CHK	APP	DATE

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Architect/Client/Contractor

**West Midlands
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**A New Deal for the Bus
Cross-City Bus**

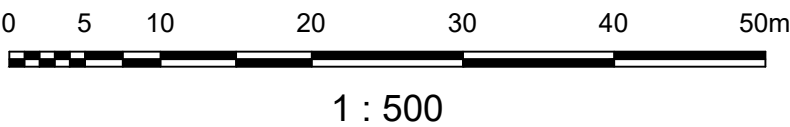
Drawing Title

**Package 2 (south)
Concept Design
Sheet 9 of 14**

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Designed	DS	01-10-19	Drawing Status	CONCEPT DESIGN
Checked	NY	01-10-19		
Approved	NY	01-10-19		

Drawing No.	Revision
102927-PF-100-P2S-DR-TR-009	P01

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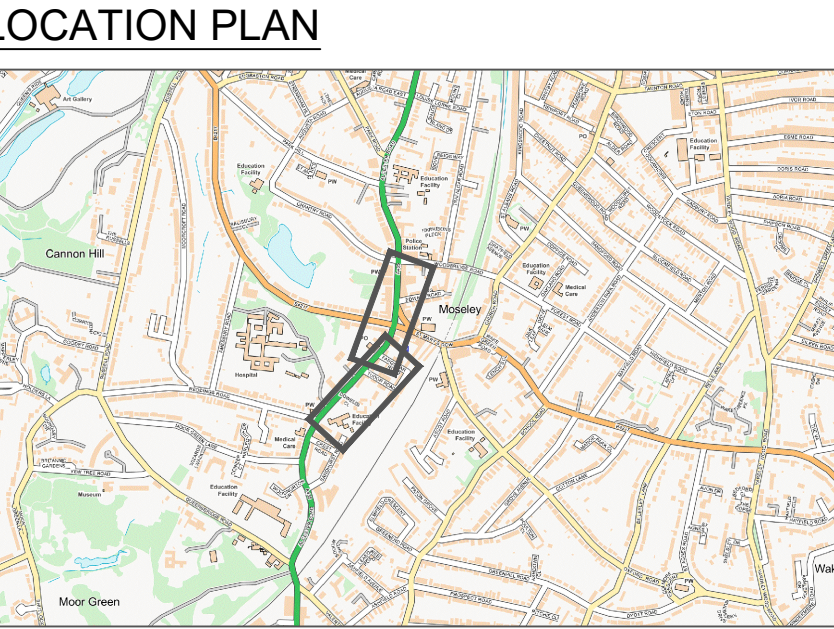
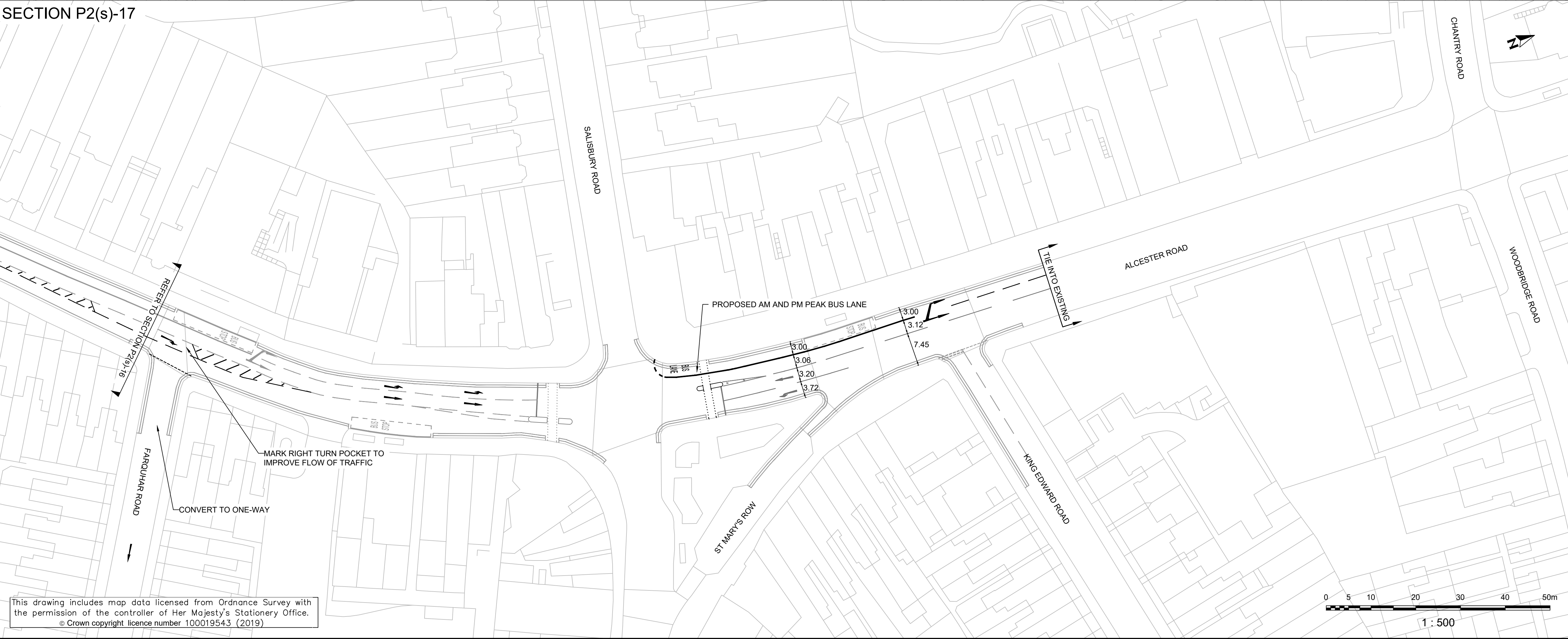
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KEY	
	EXISTING ROAD MARKINGS
	PROPOSED WHITE ROAD MARKINGS
	PROPOSED YELLOW ROAD MARKINGS
	PROPOSED KERB REALIGNMENT

- NOTES
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SECTION P2(s)-17



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P01	CONCEPT DESIGN	DS	NY	NY	DD-MM-YY
REV	DESCRIPTION	DRN	CHK	APP	DATE

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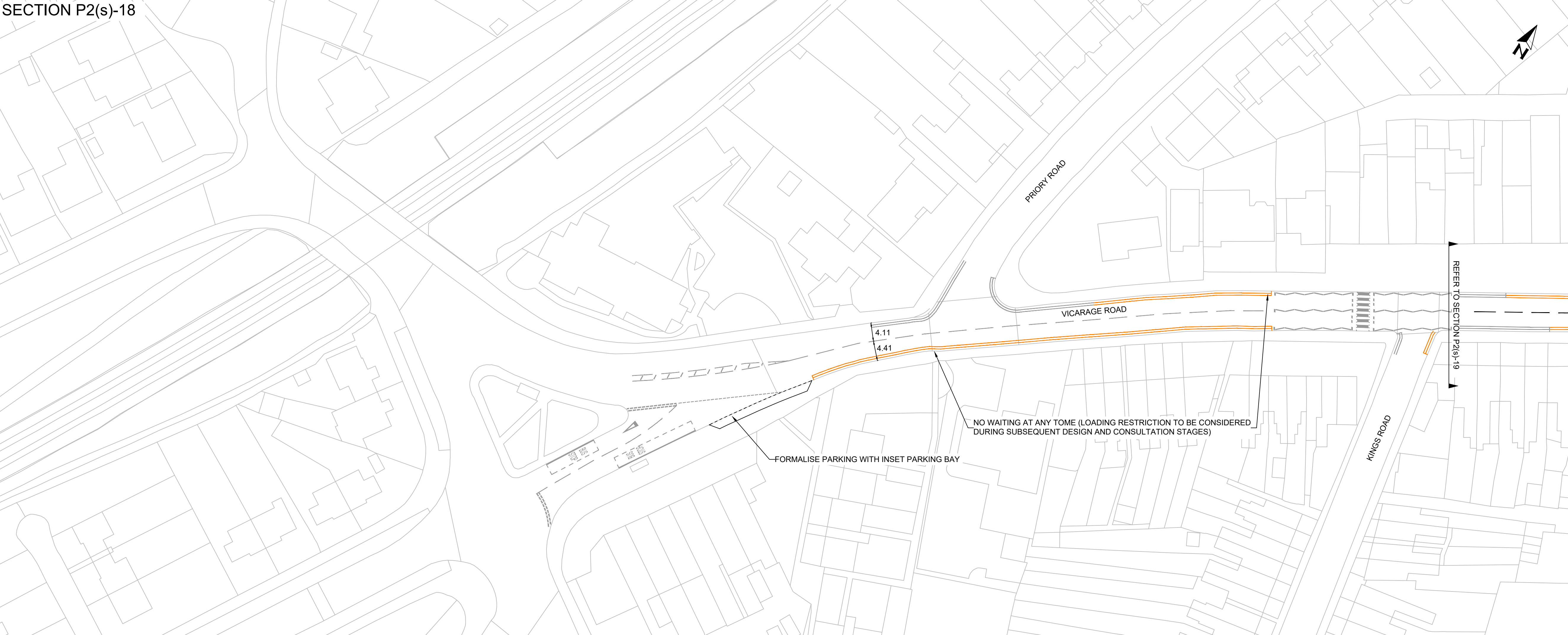
**A New Deal for the Bus
Cross-City Bus**

Drawing Title

**Package 2 (south)
Concept Design
Sheet 10 of 14**

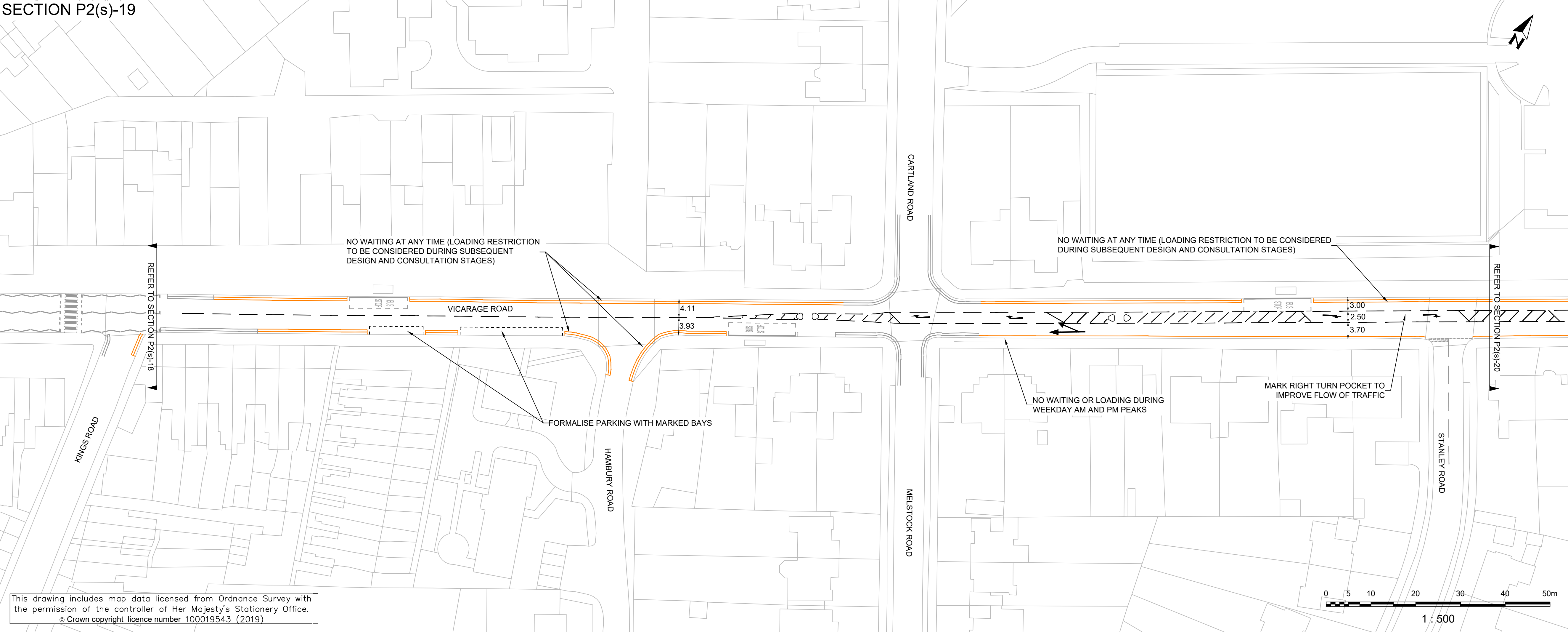
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Checked	NY	01-10-19	Drawing No.	102927-PF-100-P2S-DR-TR-010
Approved	NY	01-10-19	Revision	P01

SECTION P2(s)-18



- KEY**
- EXISTING ROAD MARKINGS
 - PROPOSED WHITE ROAD MARKINGS
 - PROPOSED YELLOW ROAD MARKINGS
 - PROPOSED KERB REALIGNMENT
- NOTES**
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SECTION P2(s)-19



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**A New Deal for the Bus
Cross-City Bus**

Drawing Title

**Package 2 (south)
Concept Design
Sheet 11 of 14**

	Name	Date	Scale	
Drawn	DS	01-10-19	1:500 @ A1	
Designed	DS	01-10-19	File No.	102927-PF-100-P2S-DR-TR
Checked	NY	01-10-19	Drawing Status	CONCEPT DESIGN
Approved	NY	01-10-19		

Drawing No. **102927-PF-100-P2S-DR-TR-011** Revision **P01**

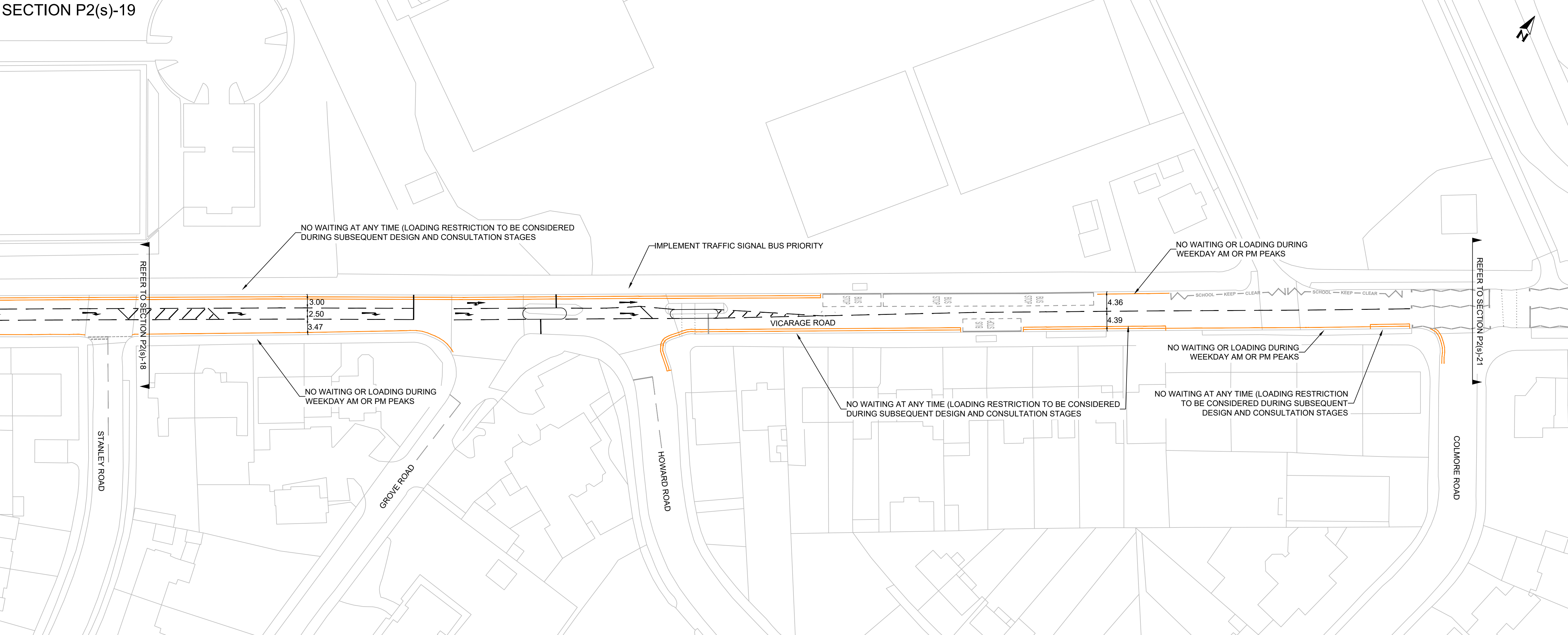
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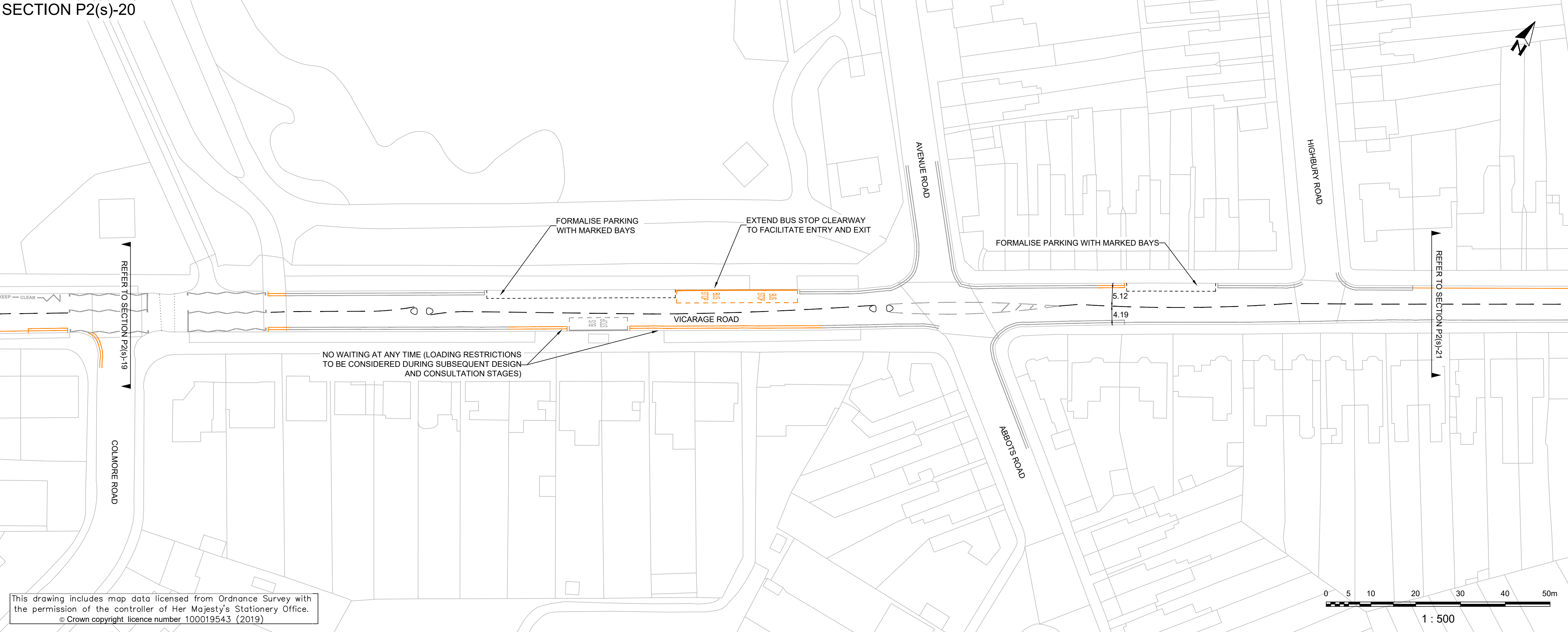
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SECTION P2(s)-19



- KEY**
- EXISTING ROAD MARKINGS
 - PROPOSED WHITE ROAD MARKINGS
 - PROPOSED YELLOW ROAD MARKINGS
 - PROPOSED KERB REALIGNMENT
- NOTES**
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SECTION P2(s)-20



LOCATION PLAN

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P01	CONCEPT DESIGN	DS	NY	NY	DD-MM-YY
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A New Deal for the Bus Cross-City Bus

Drawing Title

**Package 2 (south)
Concept Design
Sheet 12 of 14**

	Name	Date	Scale	
Drawn	DS	01-10-19	1:500 @ A1	
Designed	DS	01-10-19	File No.	102927-PF-100-P2S-DR-TR
Checked	NY	01-10-19	Drawing Status	CONCEPT DESIGN
Approved	NY	01-10-19		

Drawing No. **102927-PF-100-P2S-DR-TR-012** Revision **P01**

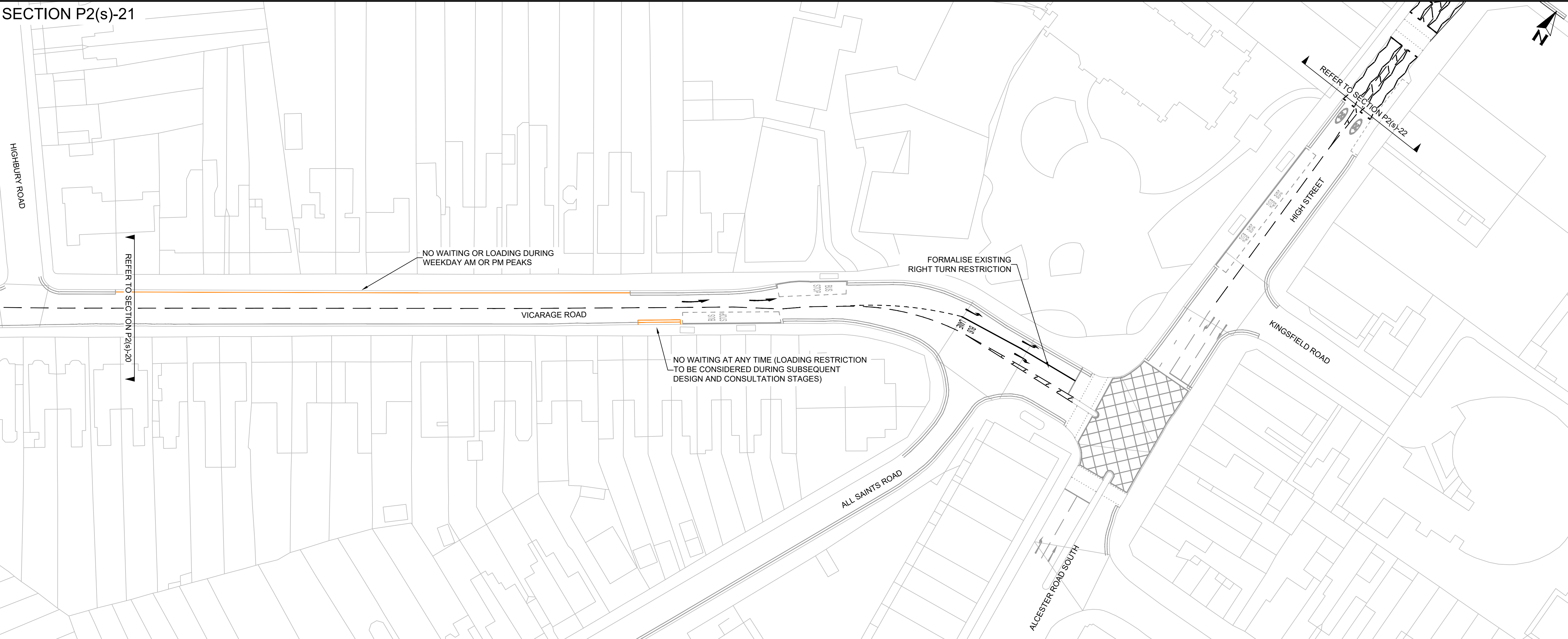
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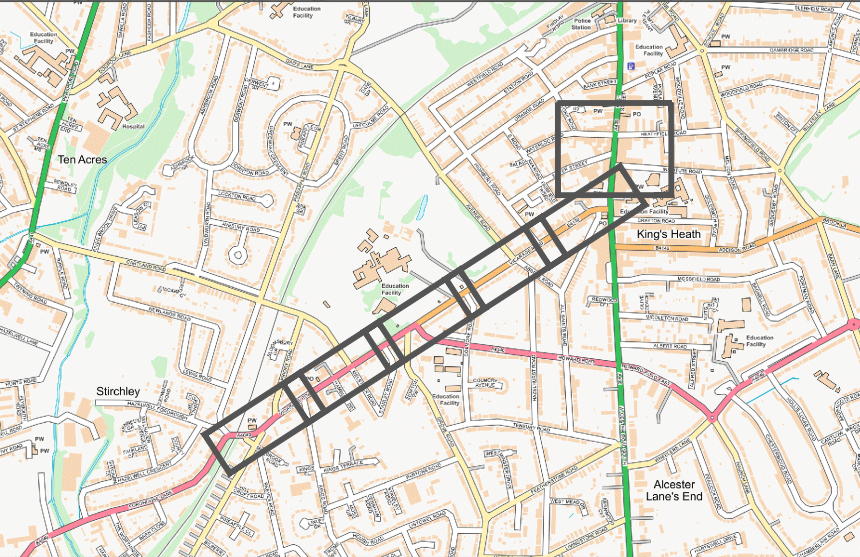
SECTION P2(s)-21



KEY	
	EXISTING ROAD MARKINGS
	PROPOSED WHITE ROAD MARKINGS
	PROPOSED YELLOW ROAD MARKINGS
	PROPOSED KERB REALIGNMENT

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P01	CONCEPT DESIGN	DS	NY	NY	DD-MM-YY
REV	DESCRIPTION	DRN	CHK	APP	DATE

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Project

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Cross-City Bus

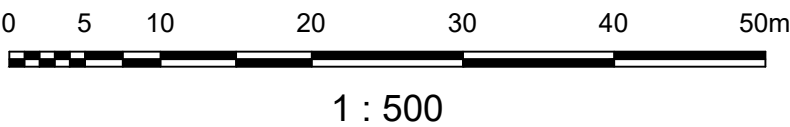
Drawing Title

Package 2 (south)
Concept Design
Sheet 13 of 14

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Designed	DS	01-10-19	Drawing Status	CONCEPT DESIGN
Checked	NY	01-10-19		
Approved	NY	01-10-19		

Drawing No.	Revision
102927-PF-100-P2S-DR-TR-013	P01

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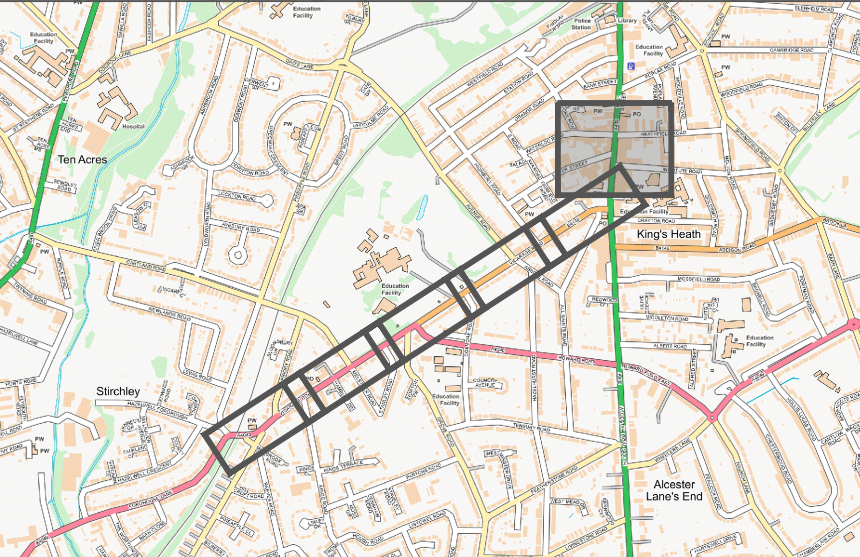


KEY

- EXISTING ROAD MARKINGS
- PROPOSED WHITE ROAD MARKINGS
- PROPOSED YELLOW ROAD MARKINGS
- PROPOSED KERB REALIGNMENT

- NOTES**
- ALL DIMENSIONS IN METRES UNLESS OTHERWISE STATED.
 - NOTES PLACED DIRECTLY ON THE LAYOUT DRAWING SUPERSEDE THOSE DETAILED IN KEYS.
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LOCATION PLAN



DRAFT

P01	CONCEPT DESIGN	DS	NY	NY	DD-MM-YY
REV	DESCRIPTION	DRN	CHK	APP	DATE

Pell Frischmann
100 BROAD STREET BIRMINGHAM B15 1AE
Telephone +44 (0)121 456 1616
Email: pfbirmingham@pellfrischmann.com
www.pellfrischmann.com

Architect/Client/Contractor

West Midlands Combined Authority

Project

**A New Deal for the Bus
Cross-City Bus**

Drawing Title

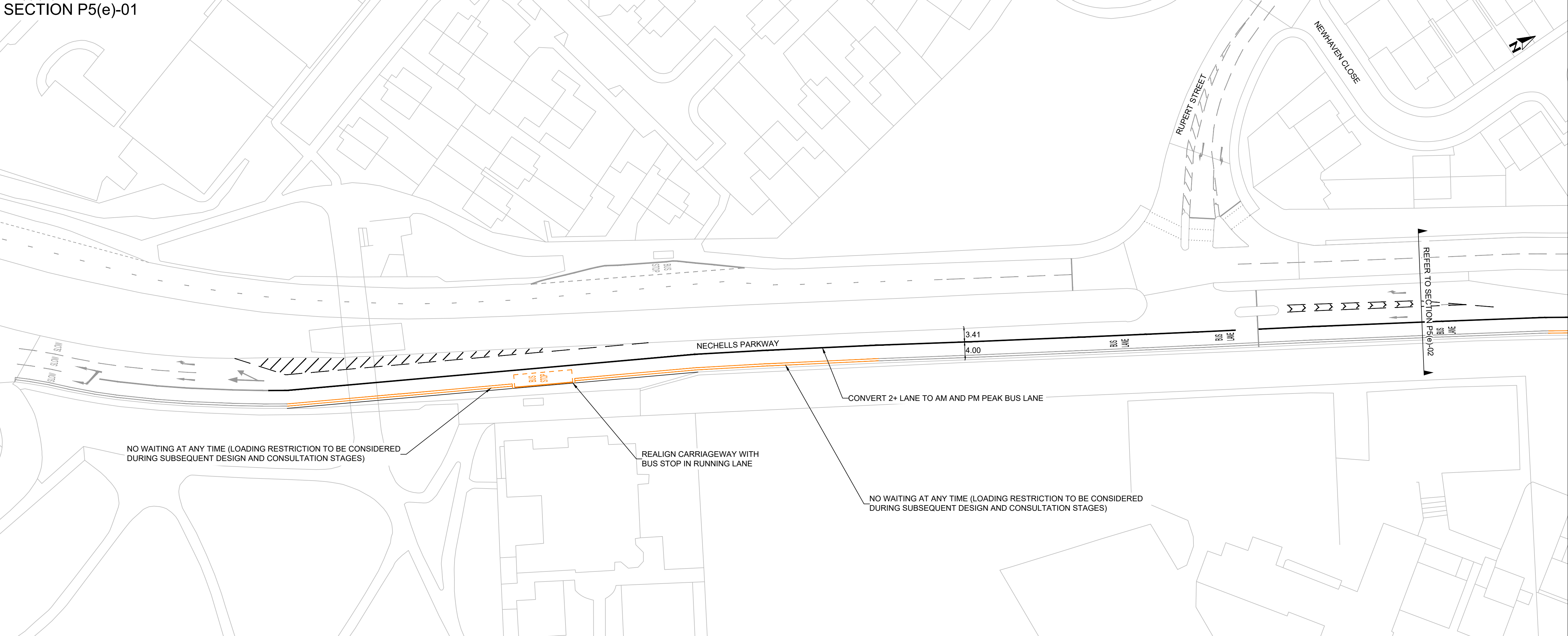
**Package 2 (south)
Concept Design
Sheet 14 of 14**

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Designed	DS	01-10-19	Drawing Status	CONCEPT DESIGN
Checked	NY	01-10-19		
Approved	NY	01-10-19		

Drawing No. **102927-PF-100-P2S-DR-TR-014** Revision **P01**

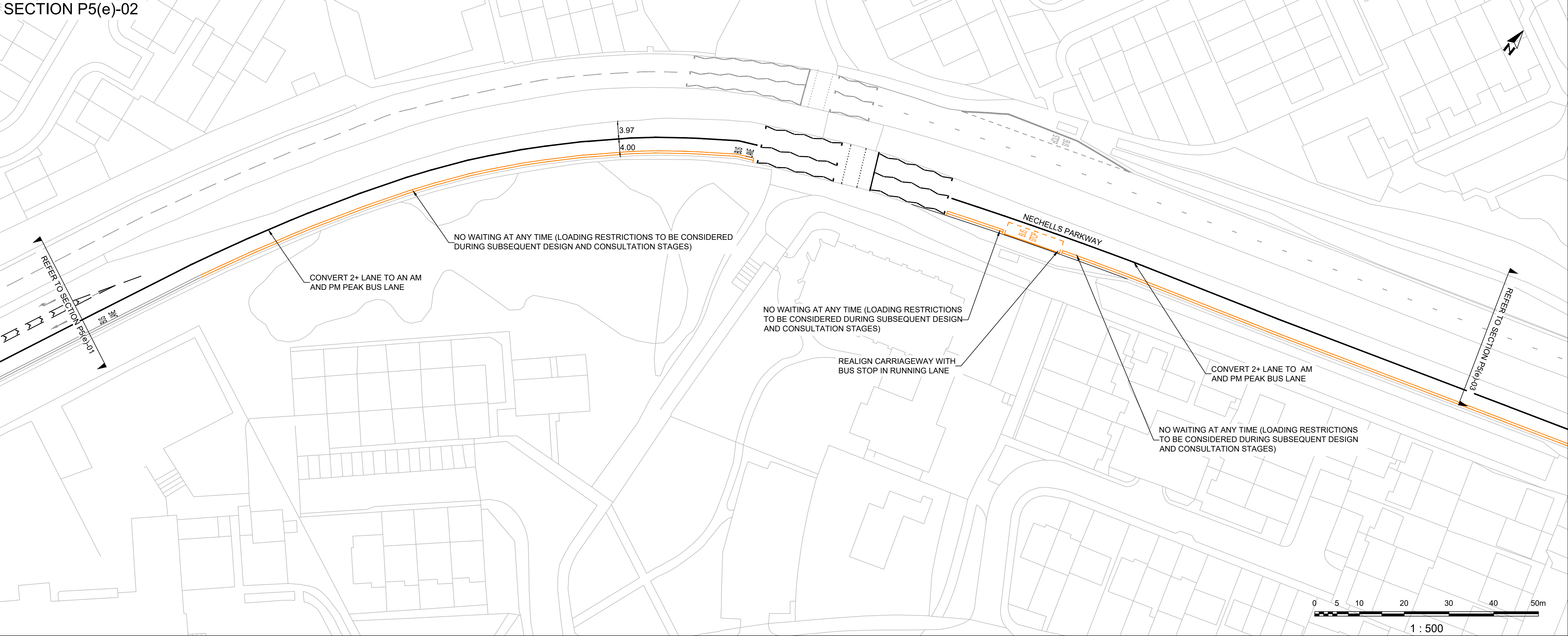
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SECTION P5(e)-01

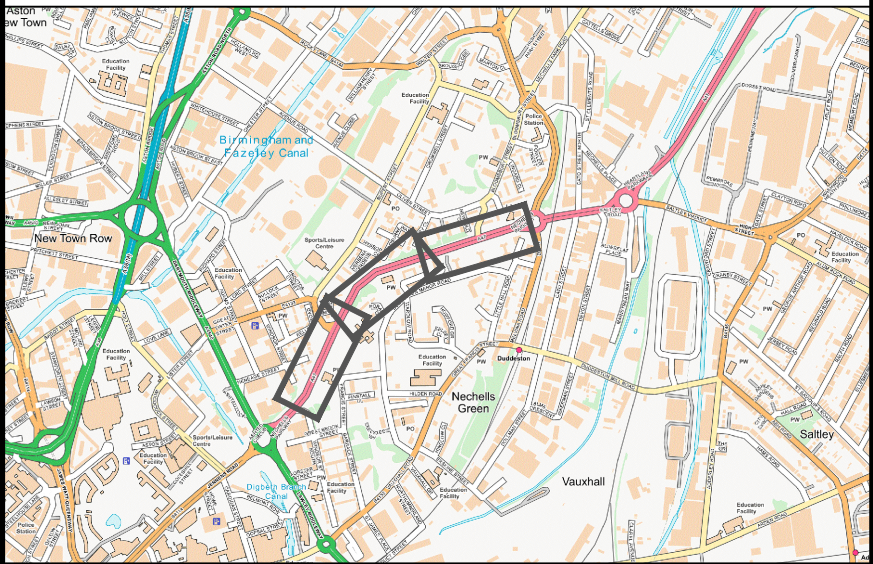


- KEY**
- EXISTING ROAD MARKINGS
 - PROPOSED WHITE ROAD MARKINGS
 - PROPOSED YELLOW ROAD MARKINGS
 - PROPOSED KERB REALIGNMENT
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SECTION P5(e)-02



LOCATION PLAN



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P01	CONCEPT DESIGN	DS	NY	NY	25-10-19
REV	DESCRIPTION	DRN	CHK	APP	DATE

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West Midlands Combined Authority

Project

A New Deal for the Bus Cross-City Bus

Drawing Title

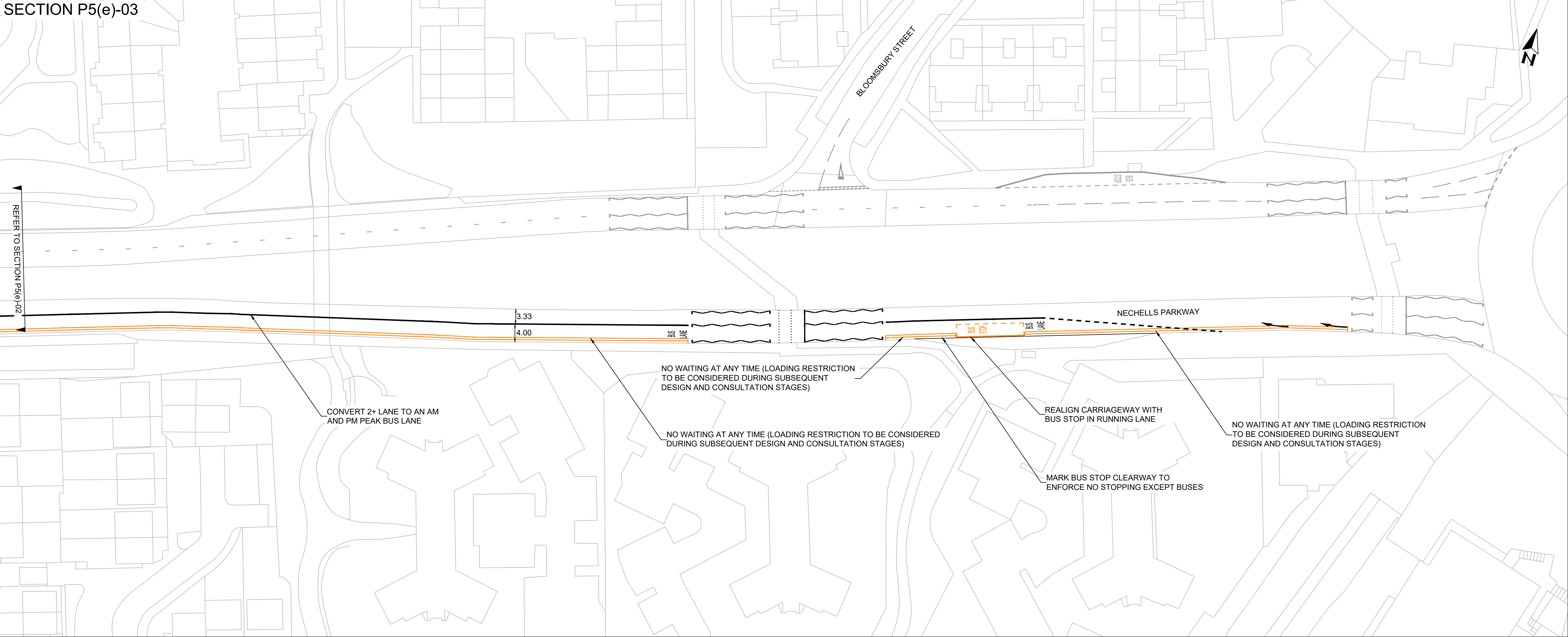
**Package 5 (east)
Concept Design
Sheet 1 of 10**

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Designed	DS	25-10-19	Drawing Status	CONCEPT DESIGN
Checked	NY	25-10-19		
Approved	NY	25-10-19		

Drawing No. 102927-PF-100-P5E-DR-TR-001

Revision P01

SECTION P5(e)-03



KEY

- EXISTING ROAD MARKINGS
- PROPOSED WHITE ROAD MARKINGS
- PROPOSED YELLOW ROAD MARKINGS
- PROPOSED KERB REALIGNMENT

NOTES

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LOCATION PLAN

DRAFT

P01	CONCEPT DESIGN	DS	NY	NY	25-10-19
REV	DESCRIPTION	DRN	CHK	APP	DATE

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Architect/Client/Contractor

West Midlands Combined Authority

Project

**A New Deal for the Bus
Cross-City Bus**

Drawing Title

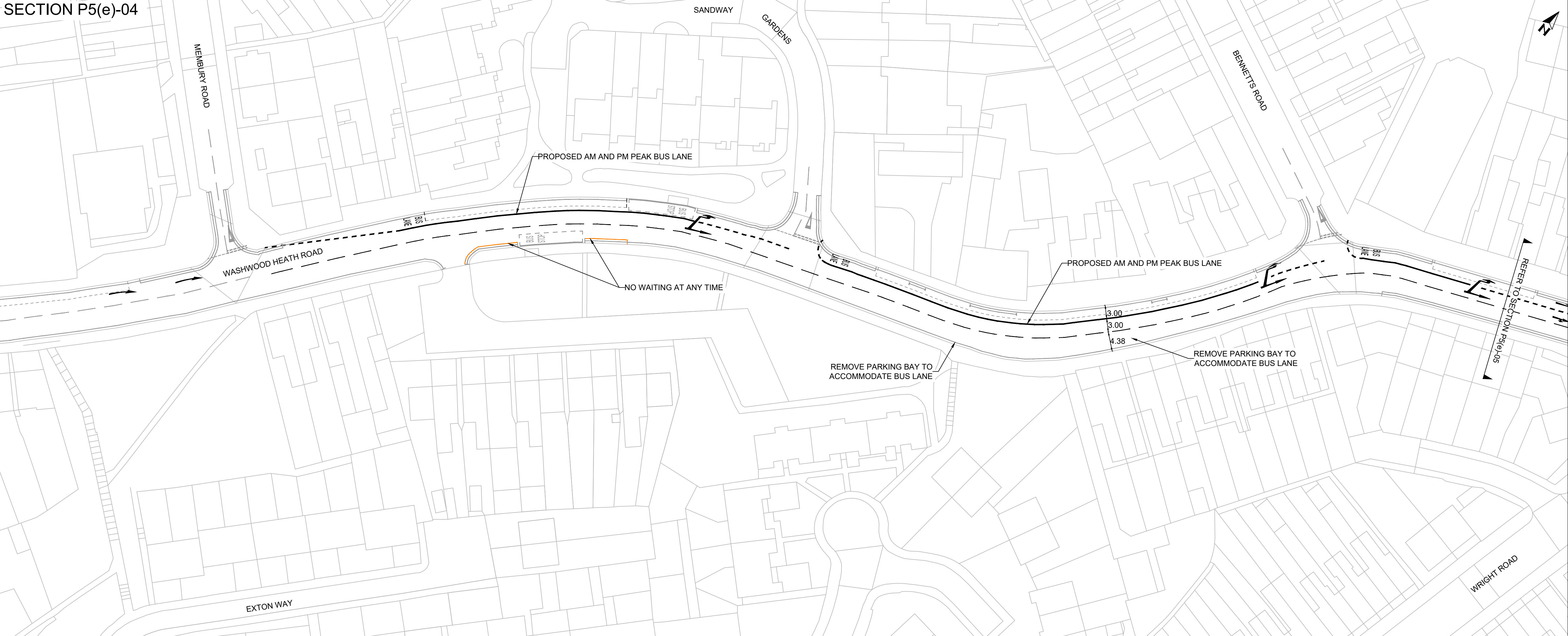
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Concept Design
Sheet 2 of 10**

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Approved	NY	25-10-19	Revision	P01

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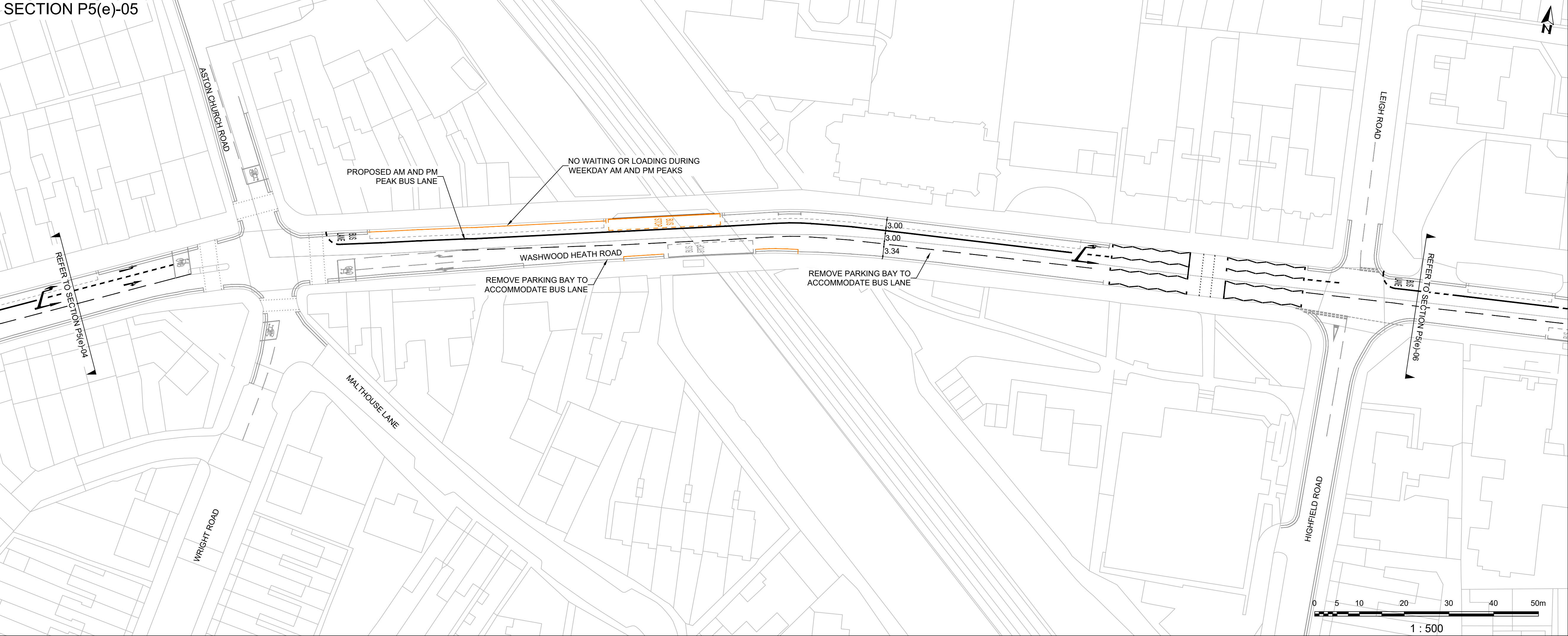
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SECTION P5(e)-04

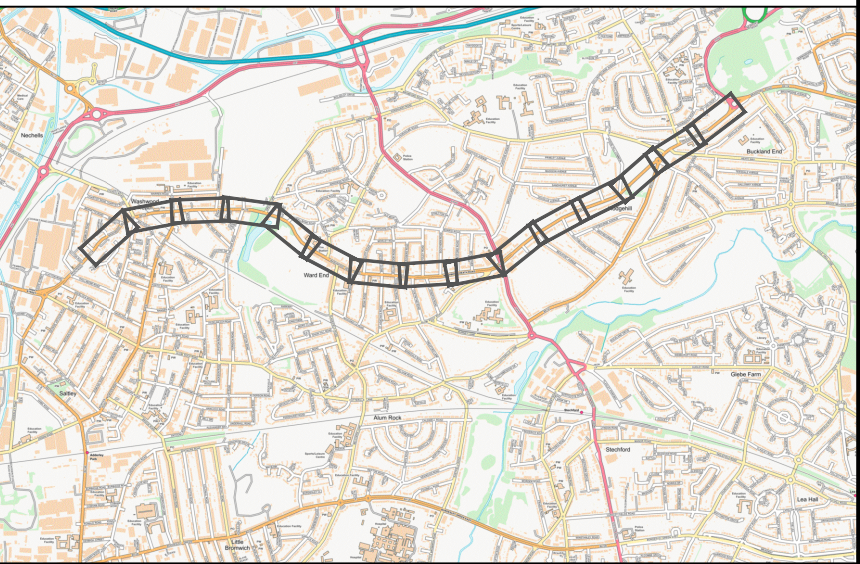


- KEY**
- EXISTING ROAD MARKINGS
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SECTION P5(e)-05



LOCATION PLAN



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P01	CONCEPT DESIGN	DS	NY	NY	25-10-19
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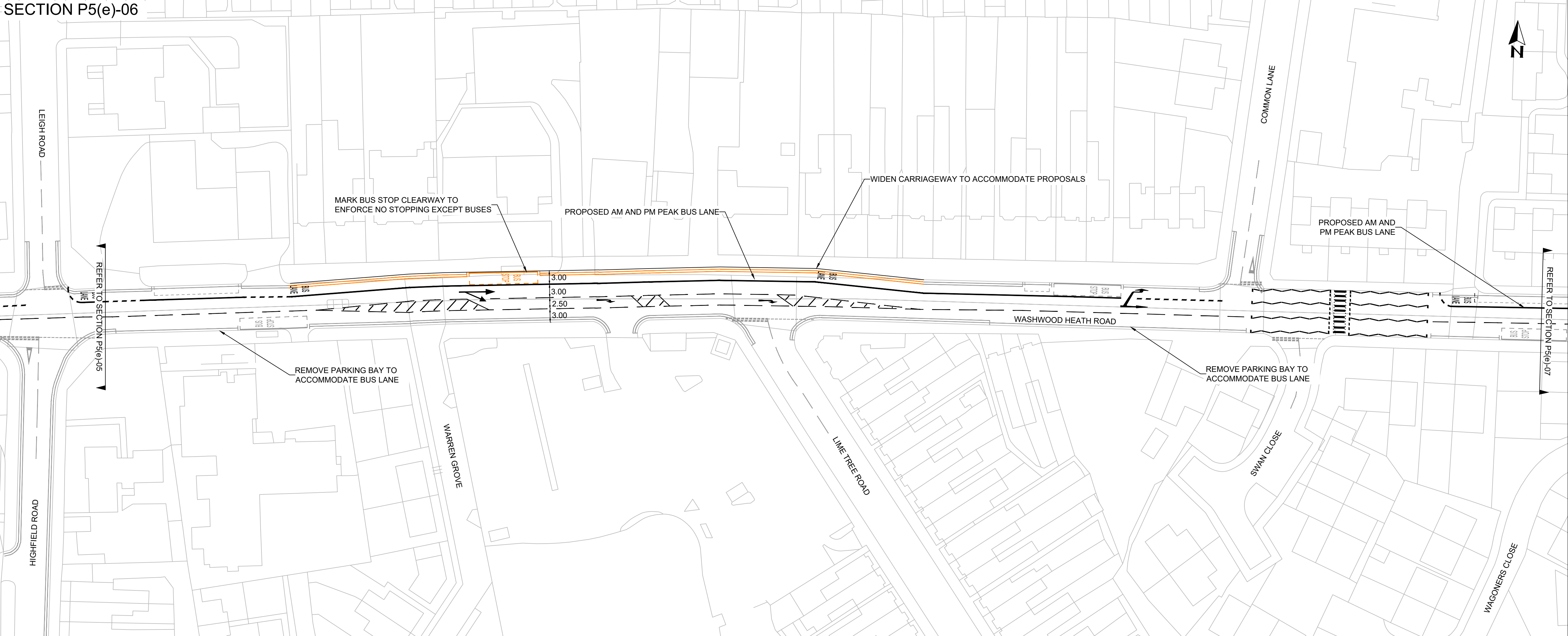
**A New Deal for the Bus
Cross-City Bus**

Drawing Title

**Package 5 (east)
Concept Design
Sheet 3 of 10**

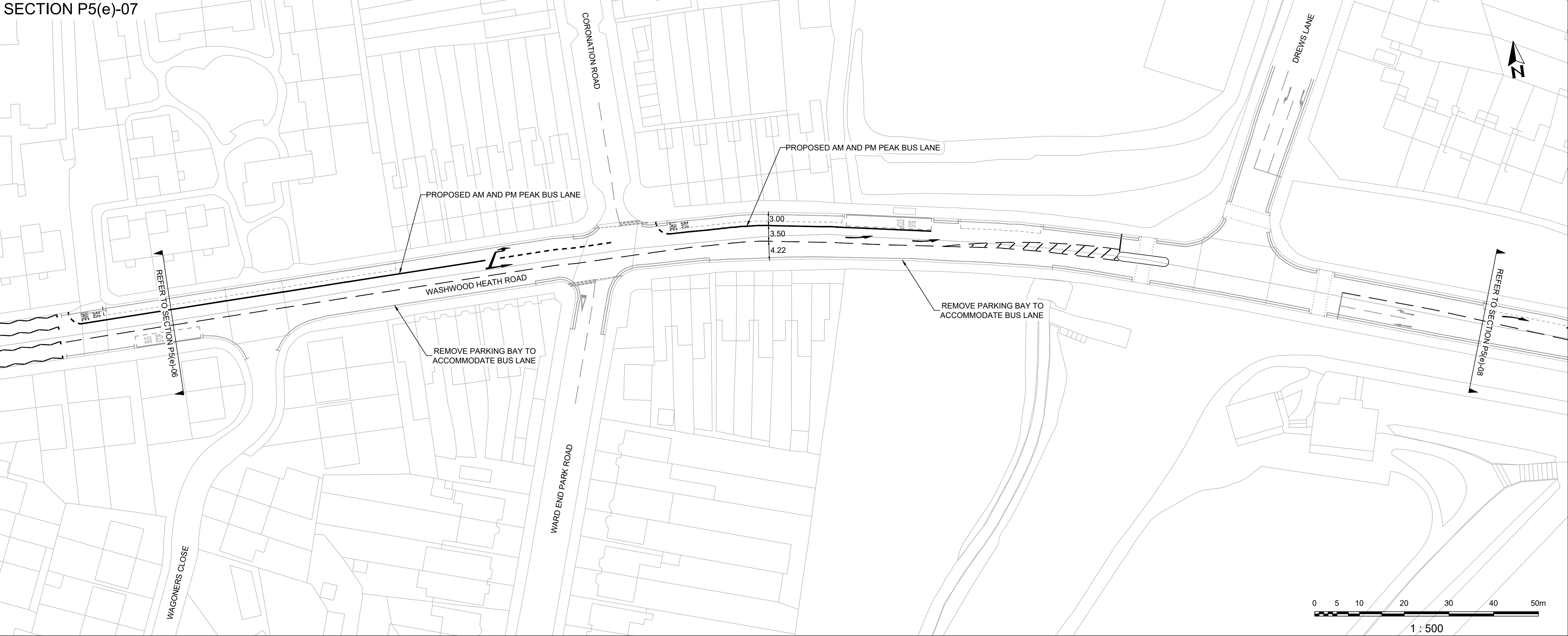
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Designed	DS	25-10-19	Drawing Status	CONCEPT DESIGN
Checked	NY	25-10-19		
Approved	NY	25-10-19		
Drawing No.	102927-PF-100-P5E-DR-TR-003			Revision P01

SECTION P5(e)-06

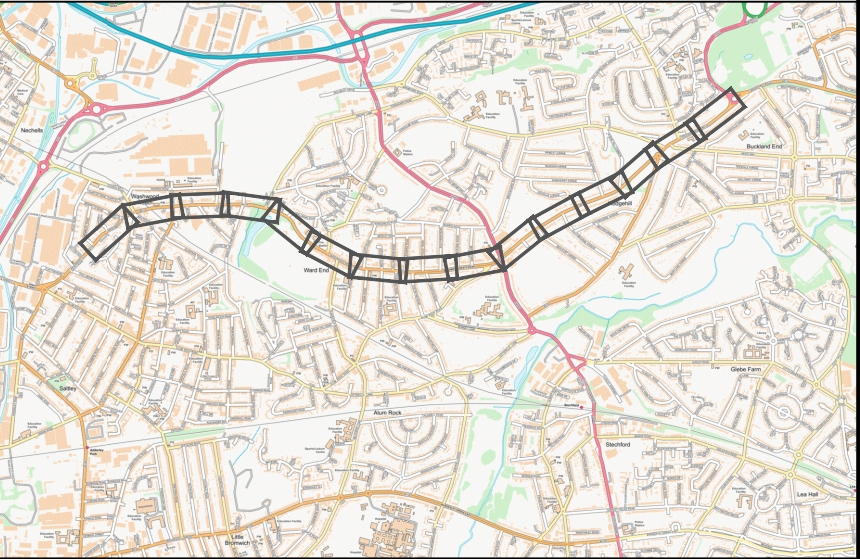


- KEY**
- EXISTING ROAD MARKINGS
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SECTION P5(e)-07



LOCATION PLAN



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P01	CONCEPT DESIGN	DS	NY	NY	25-10-19
REV	DESCRIPTION	DRN	CHK	APP	DATE

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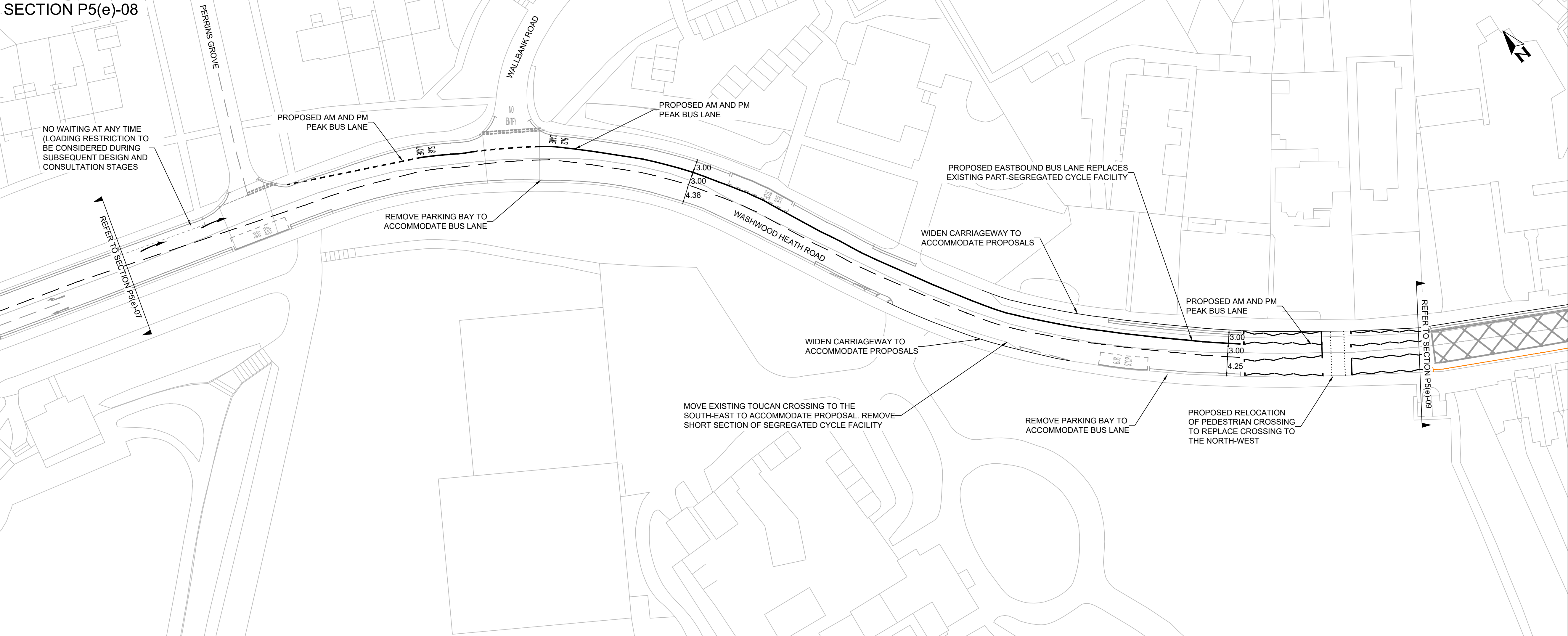
A New Deal for the Bus
Cross-City Bus

Drawing Title

Package 5 (east)
Concept Design
Sheet 4 of 10

	Name	Date	Scale	1:500 @ A1
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Designed	DS	25-10-19	Drawing Status	CONCEPT DESIGN
Checked	NY	25-10-19	Drawing No.	102927-PF-100-P5E-DR-TR-004
Approved	NY	25-10-19	Revision	P01

SECTION P5(e)-08

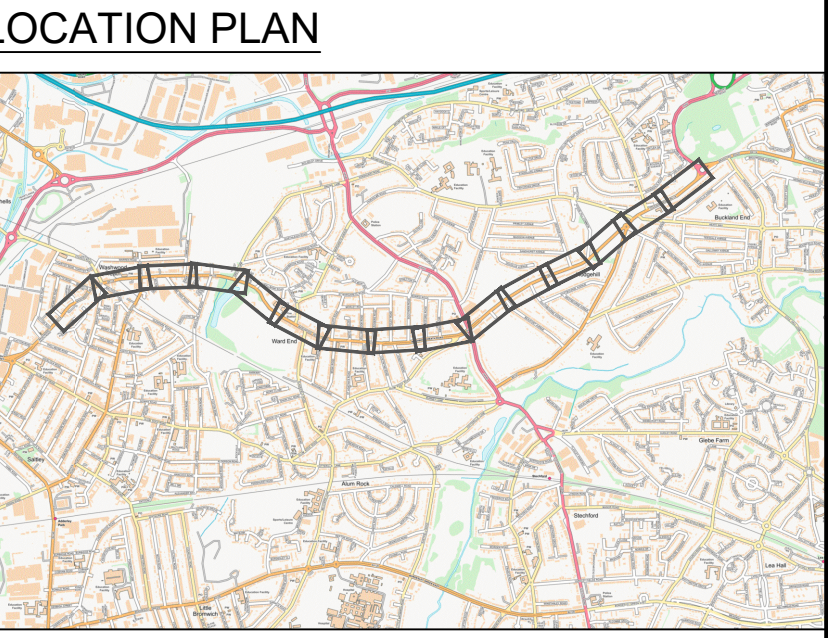
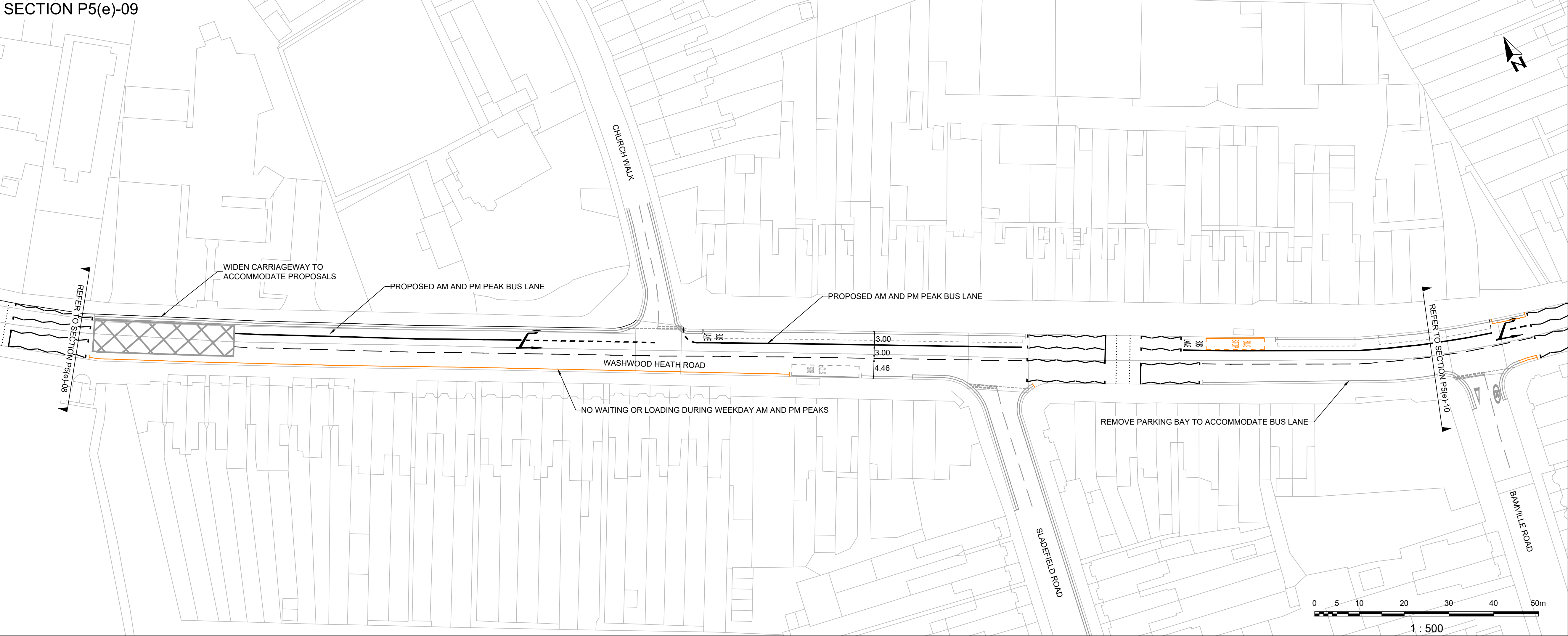


KEY

- EXISTING ROAD MARKINGS
- PROPOSED WHITE ROAD MARKINGS
- PROPOSED YELLOW ROAD MARKINGS
- PROPOSED KERB REALIGNMENT

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SECTION P5(e)-09



DRAFT

P01	CONCEPT DESIGN	DS	NY	NY	25-10-19
REV	DESCRIPTION	DRN	CHK	APP	DATE

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Project

A New Deal for the Bus Cross-City Bus

Drawing Title

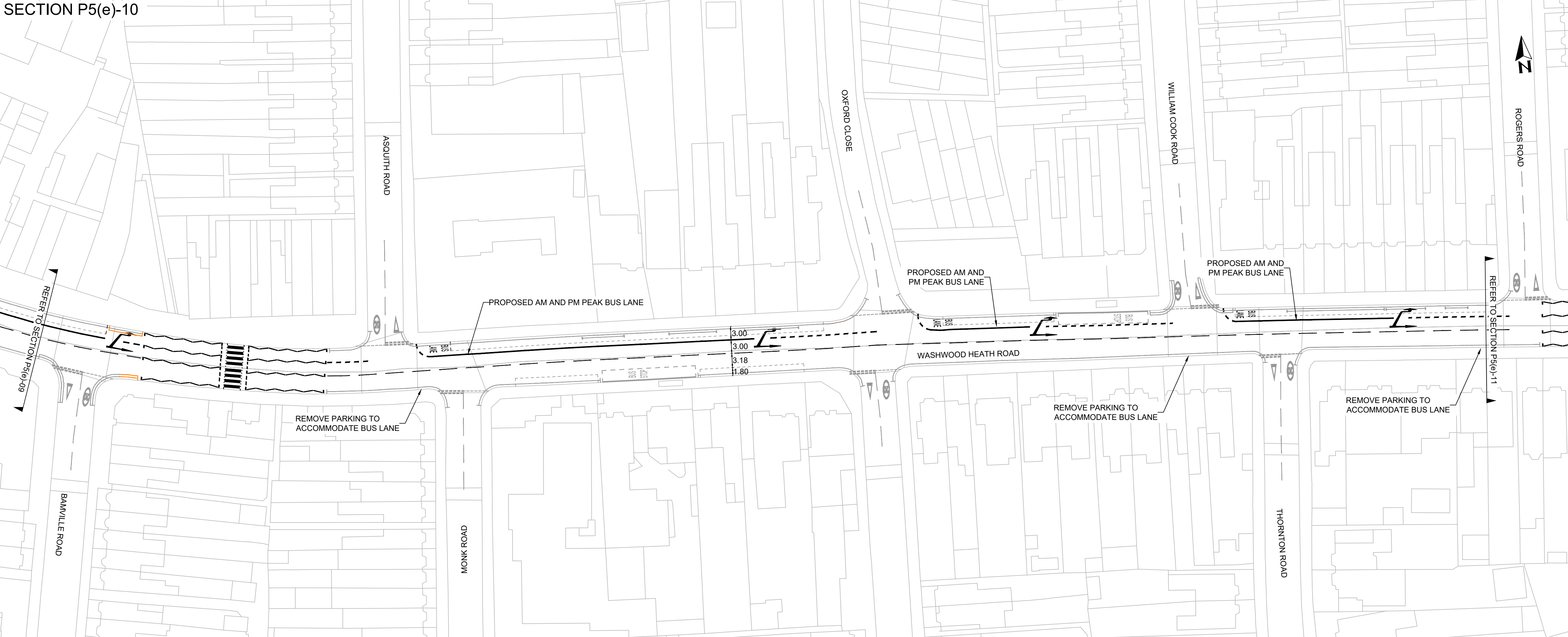
**Package 5 (east)
Concept Design
Sheet 5 of 10**

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Designed	DS	25-10-19		102927-PF-100-P5E-DR-TR
Checked	NY	25-10-19	Drawing Status	CONCEPT DESIGN
Approved	NY	25-10-19		

Drawing No. 102927-PF-100-P5E-DR-TR-005

Revision P01

SECTION P5(e)-10

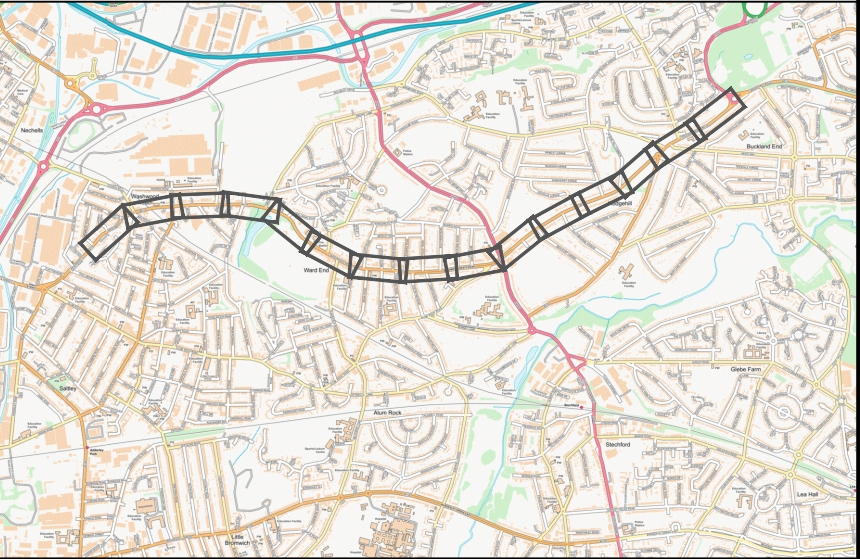


- KEY**
- EXISTING ROAD MARKINGS
 - PROPOSED WHITE ROAD MARKINGS
 - PROPOSED YELLOW ROAD MARKINGS
 - PROPOSED KERB REALIGNMENT
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SECTION P5(e)-11



LOCATION PLAN



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P01	CONCEPT DESIGN	DS	NY	NY	25-10-19
REV	DESCRIPTION	DRN	CHK	APP	DATE

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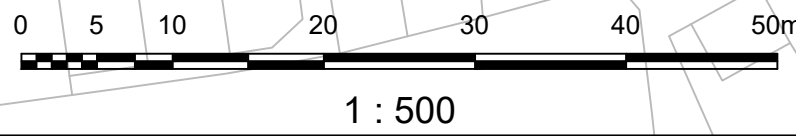
Project

A New Deal for the Bus
Cross-City Bus

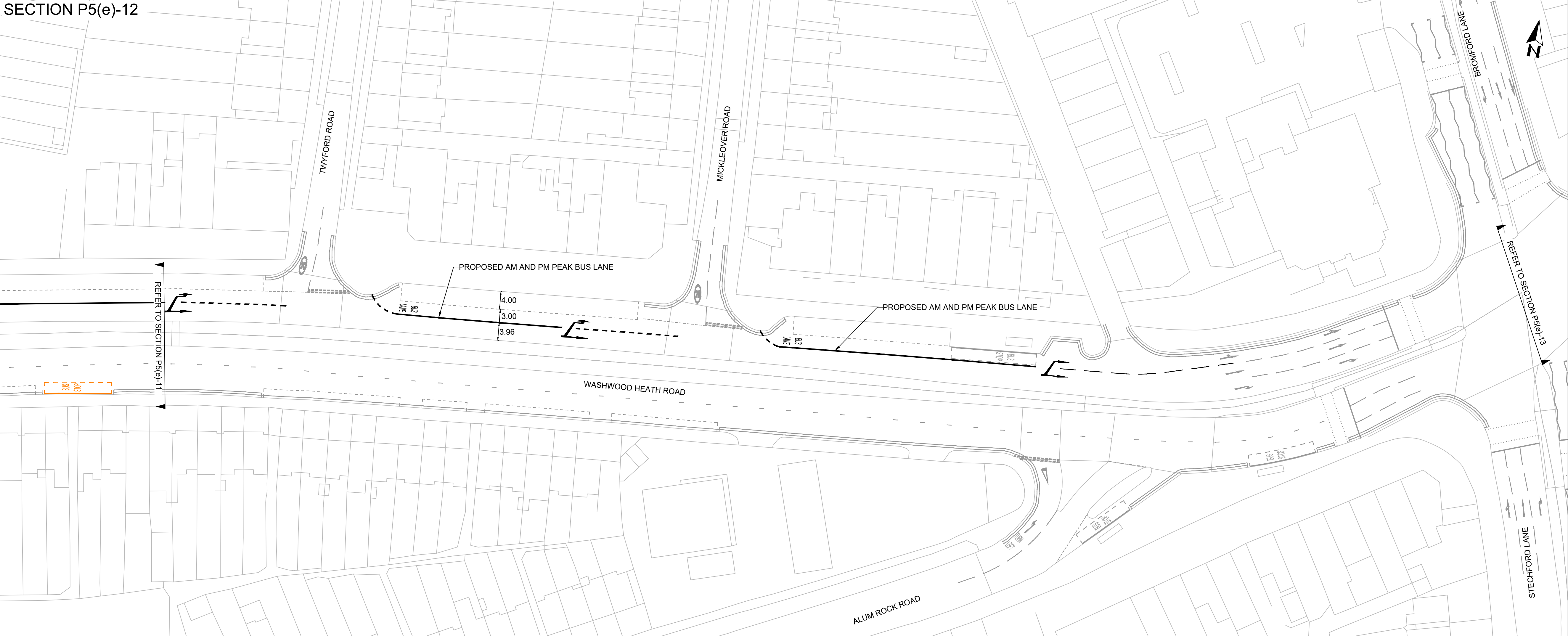
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Package 5 (east)
Concept Design
Sheet 6 of 10

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Designed	DS	25-10-19	Drawing Status	CONCEPT DESIGN
Checked	NY	25-10-19	Drawing No.	102927-PF-100-P5E-DR-TR-006
Approved	NY	25-10-19	Revision	P01



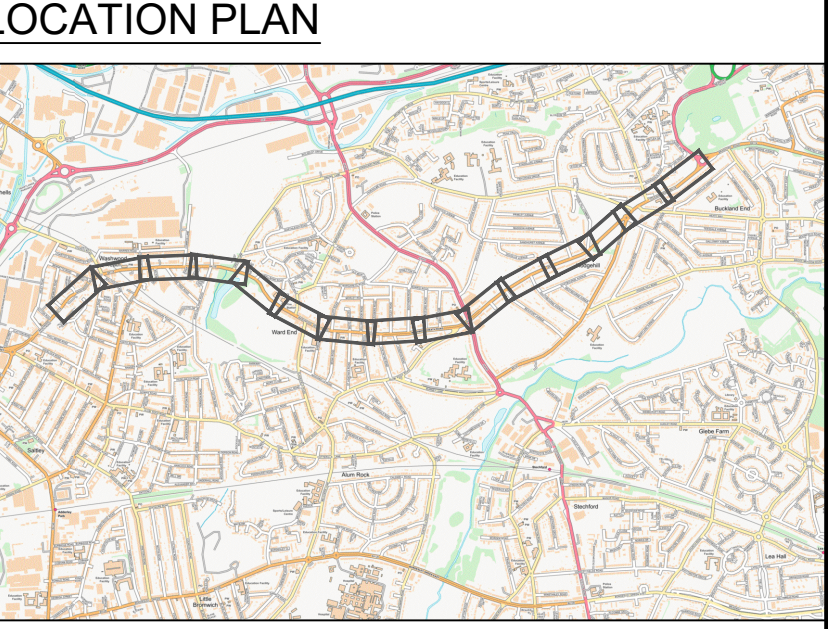
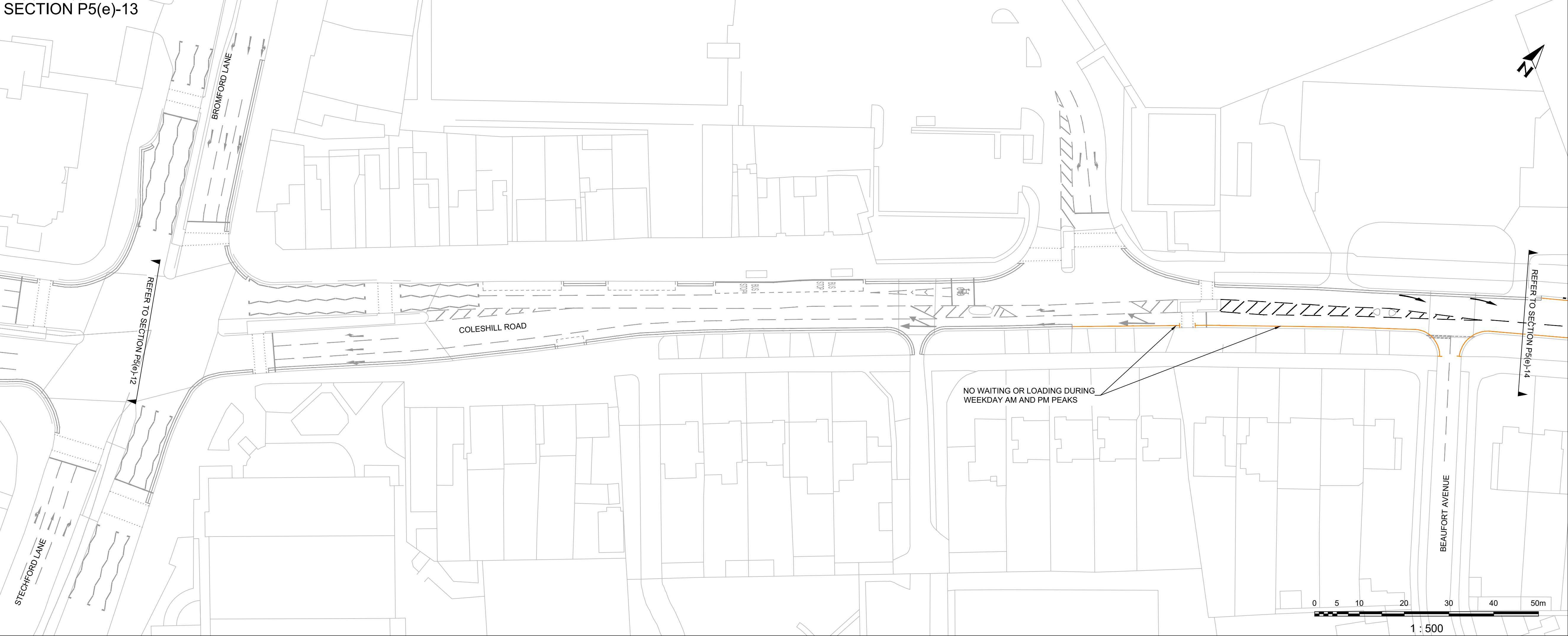
SECTION P5(e)-12



KEY	
	EXISTING ROAD MARKINGS
	PROPOSED WHITE ROAD MARKINGS
	PROPOSED YELLOW ROAD MARKINGS
	PROPOSED KERB REALIGNMENT

- NOTES
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SECTION P5(e)-13



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P01	CONCEPT DESIGN	DS	NY	NY	25-10-19
REV	DESCRIPTION	DRN	CHK	APP	DATE

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**A New Deal for the Bus
Cross-City Bus**

Drawing Title

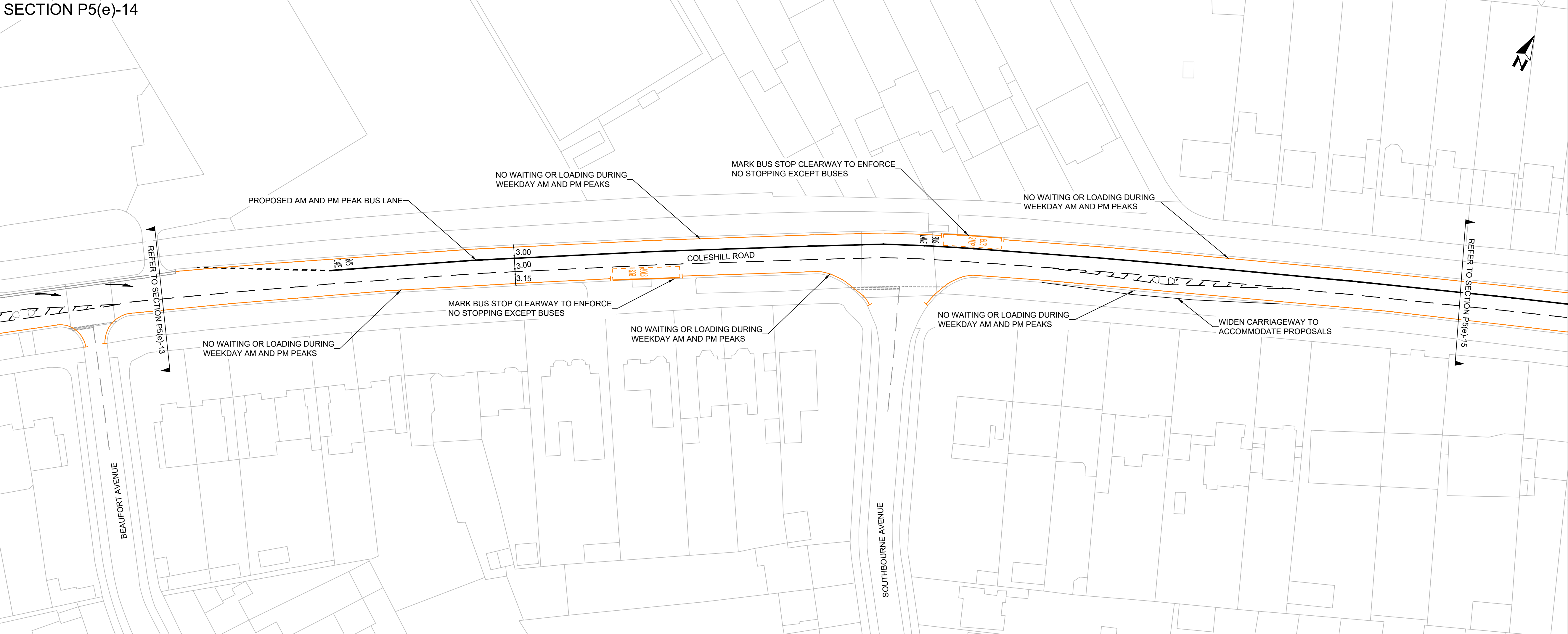
**Package 5 (east)
Concept Design
Sheet 7 of 10**

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Designed	DS	25-10-19	File No.	102927-PF-100-P5E-DR-TR
Checked	NY	25-10-19	Drawing Status	CONCEPT DESIGN
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Drawing No. **102927-PF-100-P5E-DR-TR-007**

Revision **P01**

SECTION P5(e)-14



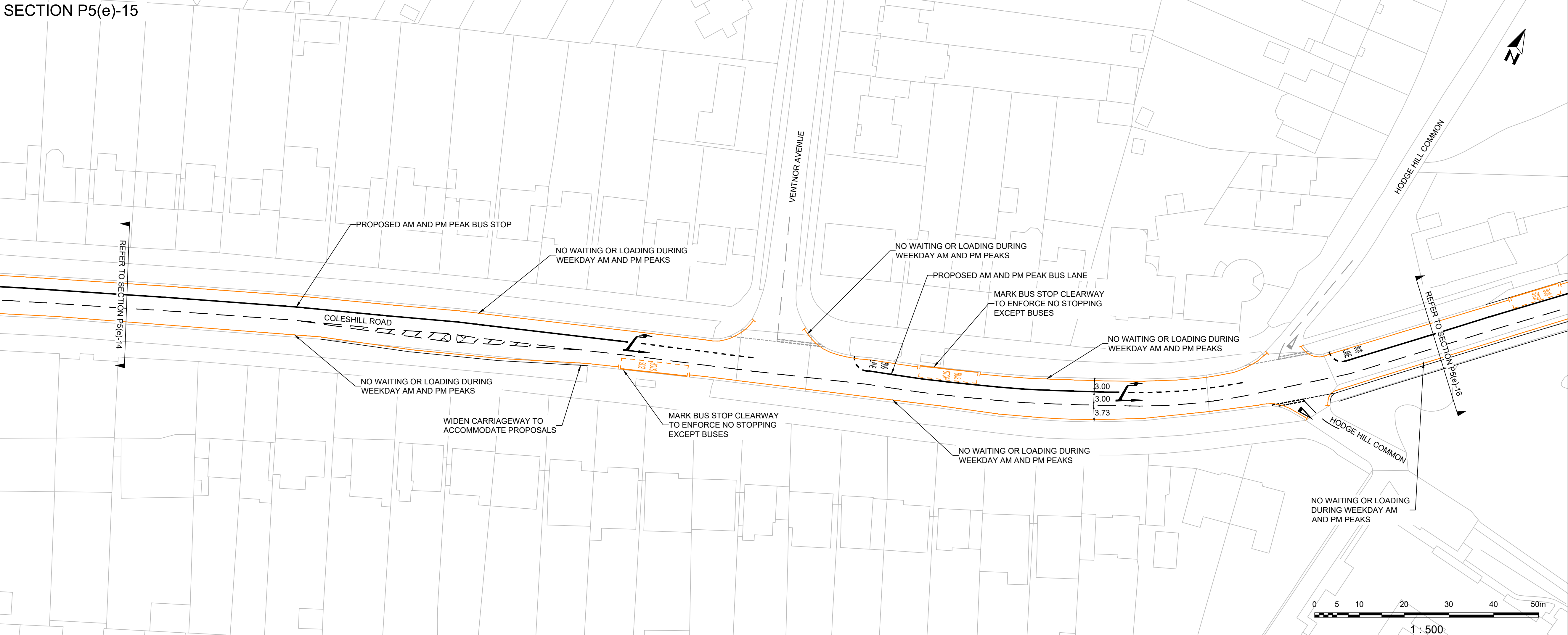
KEY

- EXISTING ROAD MARKINGS
- PROPOSED WHITE ROAD MARKINGS
- PROPOSED YELLOW ROAD MARKINGS
- PROPOSED KERB REALIGNMENT

NOTES

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SECTION P5(e)-15



LOCATION PLAN

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P01	CONCEPT DESIGN	DS	NY	NY	25-10-19
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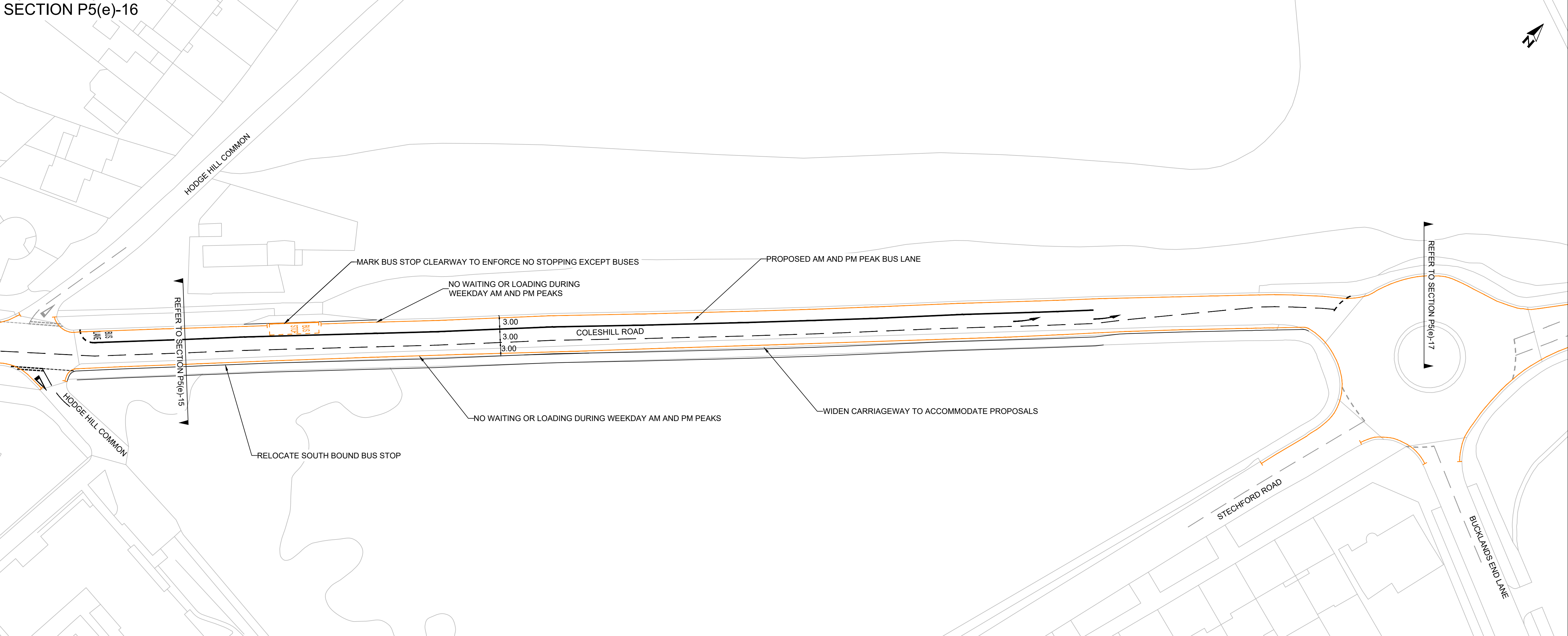
A New Deal for the Bus Cross-City Bus

Drawing Title

**Package 5 (east)
Concept Design
Sheet 8 of 10**

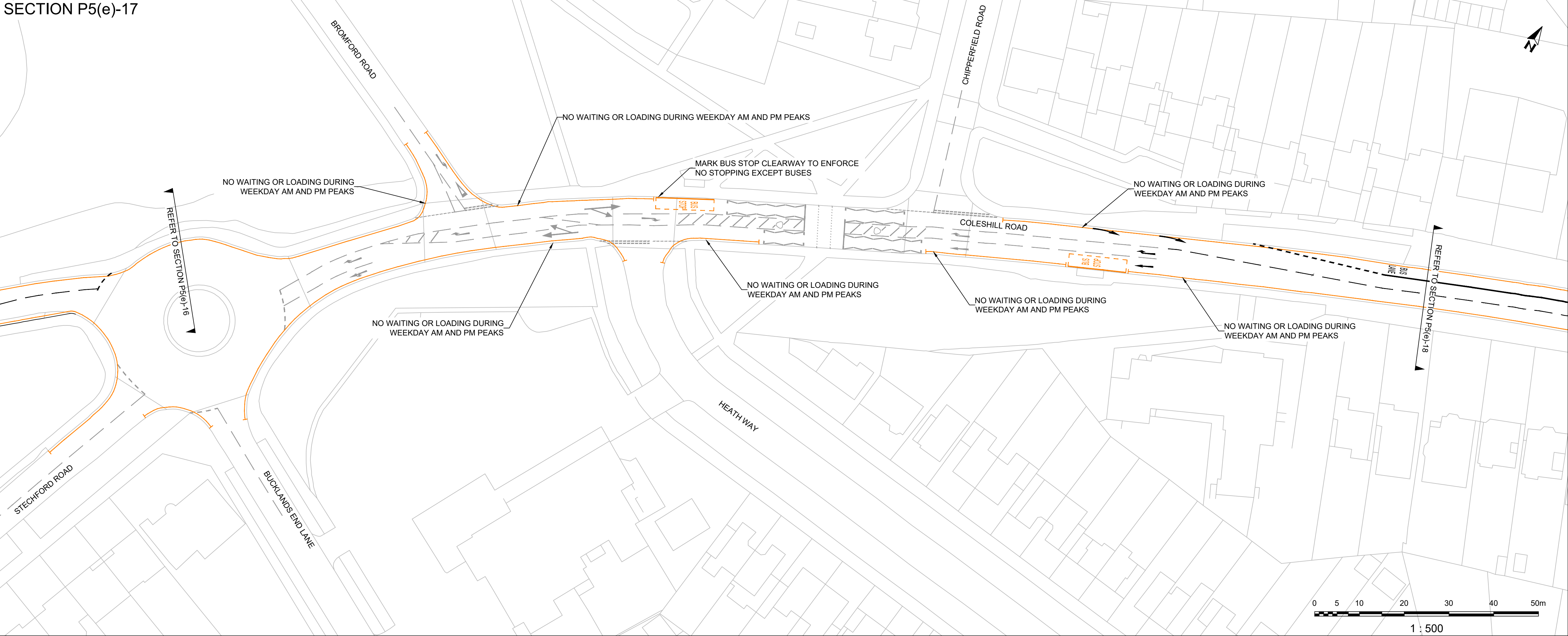
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				Revision	P01

SECTION P5(e)-16

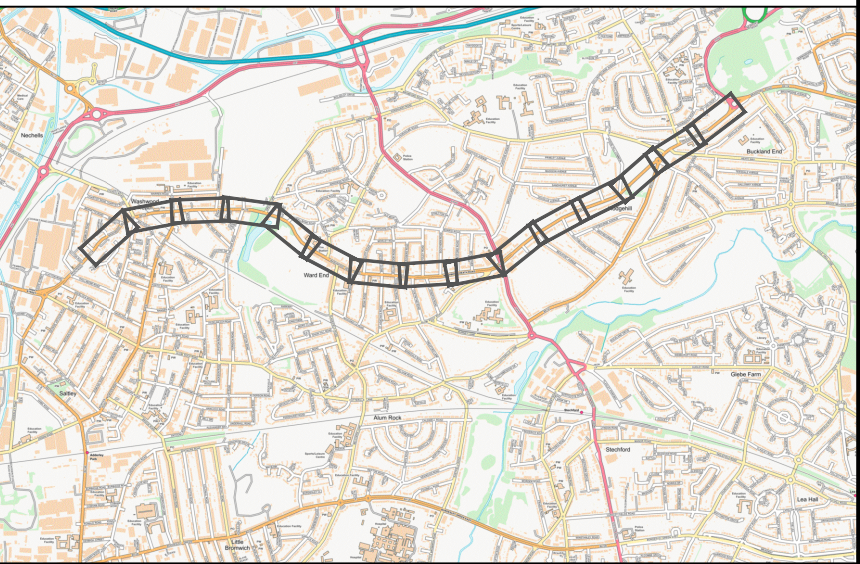


- KEY**
- EXISTING ROAD MARKINGS
 - PROPOSED WHITE ROAD MARKINGS
 - PROPOSED YELLOW ROAD MARKINGS
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SECTION P5(e)-17



LOCATION PLAN



DRAFT

P01	CONCEPT DESIGN	DS	NY	NY	25-10-19
REV	DESCRIPTION	DRN	CHK	APP	DATE

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Project

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Cross-City Bus

Drawing Title

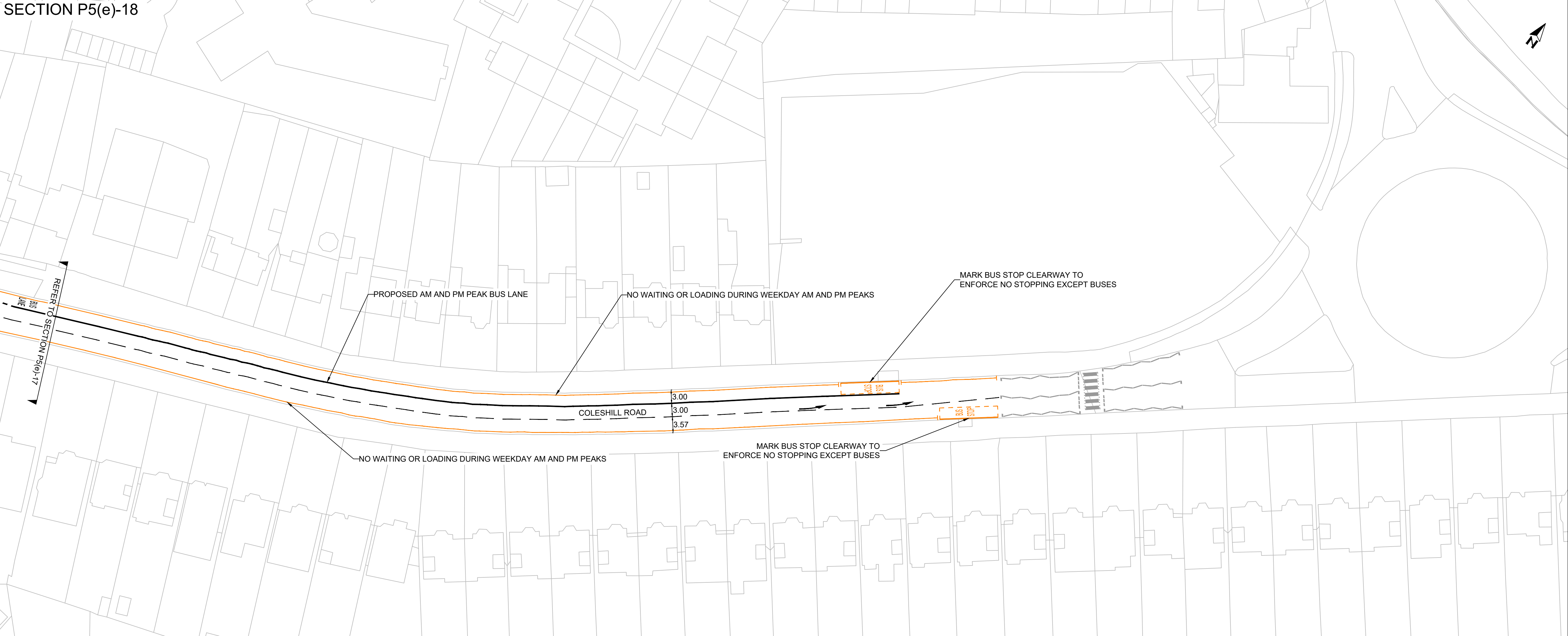
Package 5 (east)
Concept Design
Sheet 9 of 10

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Drawn	DS	25-10-19	File No.	102927-PF-100-P5E-DR-TR
Designed	DS	25-10-19	Drawing Status	CONCEPT DESIGN
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Approved	NY	25-10-19	Revision	P01



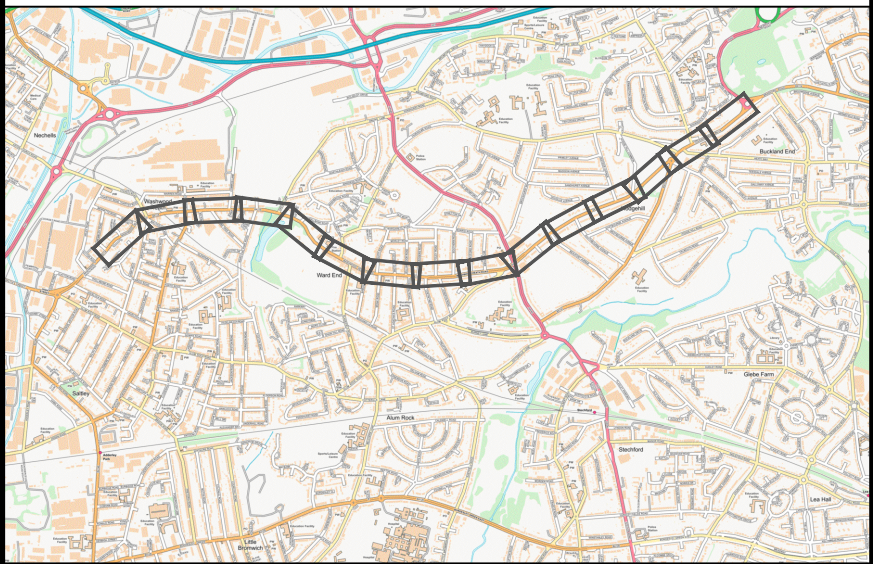
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SECTION P5(e)-18



- KEY**
- EXISTING ROAD MARKINGS
 - PROPOSED WHITE ROAD MARKINGS
 - PROPOSED YELLOW ROAD MARKINGS
 - PROPOSED KERB REALIGNMENT
- NOTES**
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P01	CONCEPT DESIGN	DS	NY	NY	25-10-19
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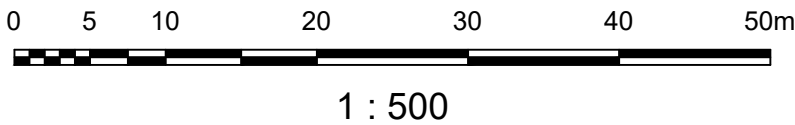
Project

A New Deal for the Bus
Cross-City Bus

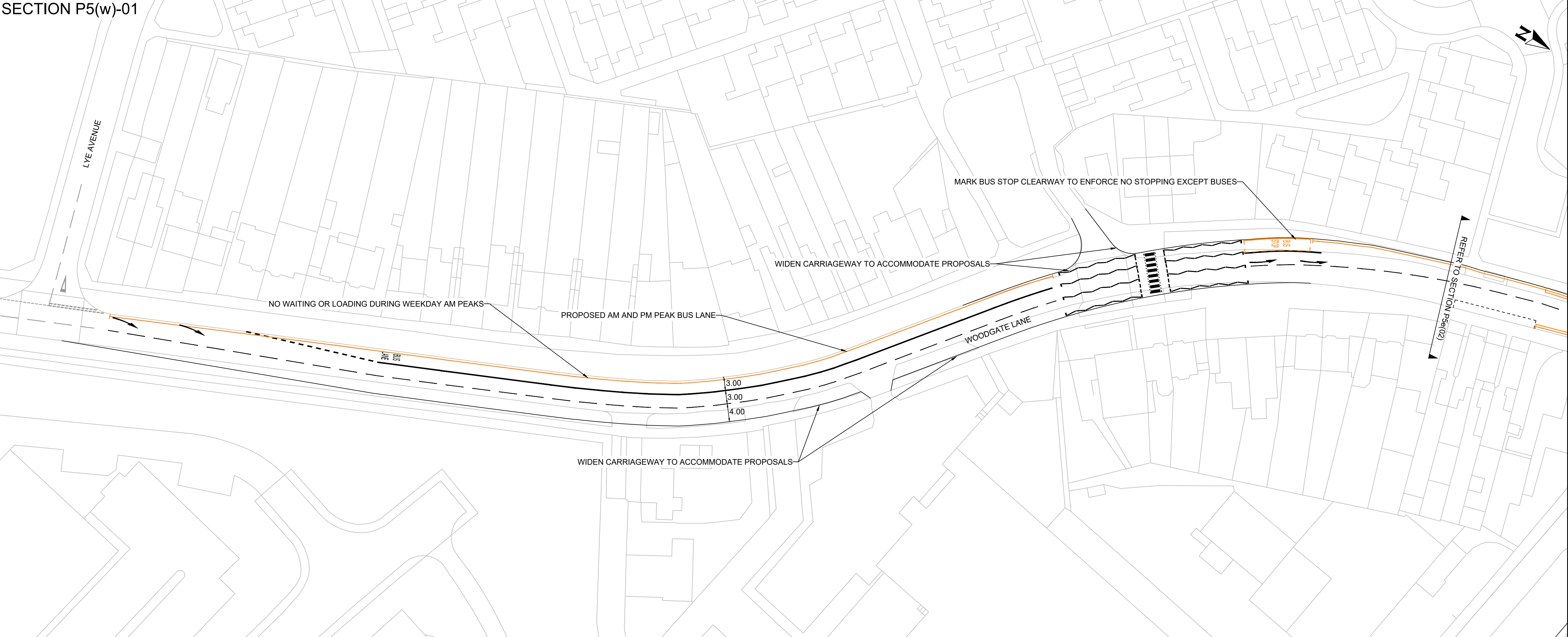
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Package 5 (east)
Concept Design
Sheet 10 of 10

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Designed	DS	25-10-19	Drawing Status	CONCEPT DESIGN
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Approved	NY	25-10-19	Revision	P01

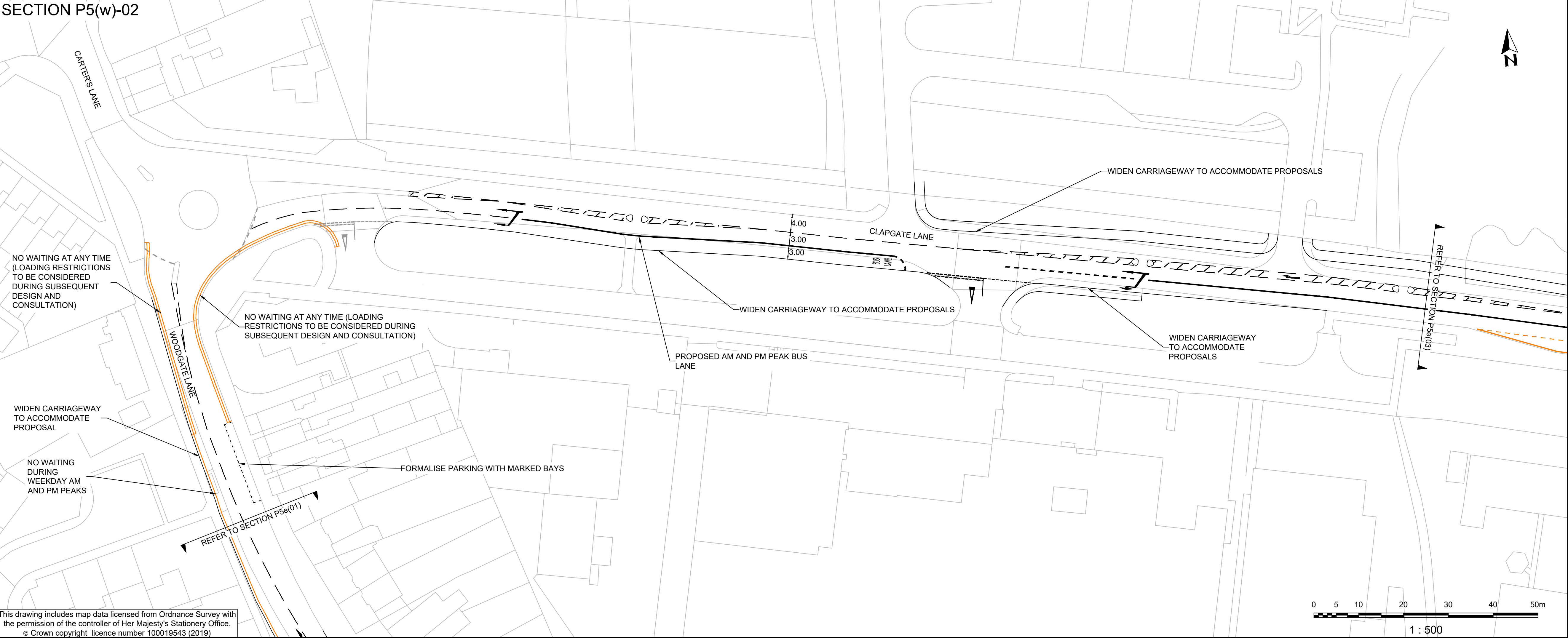


SECTION P5(w)-01

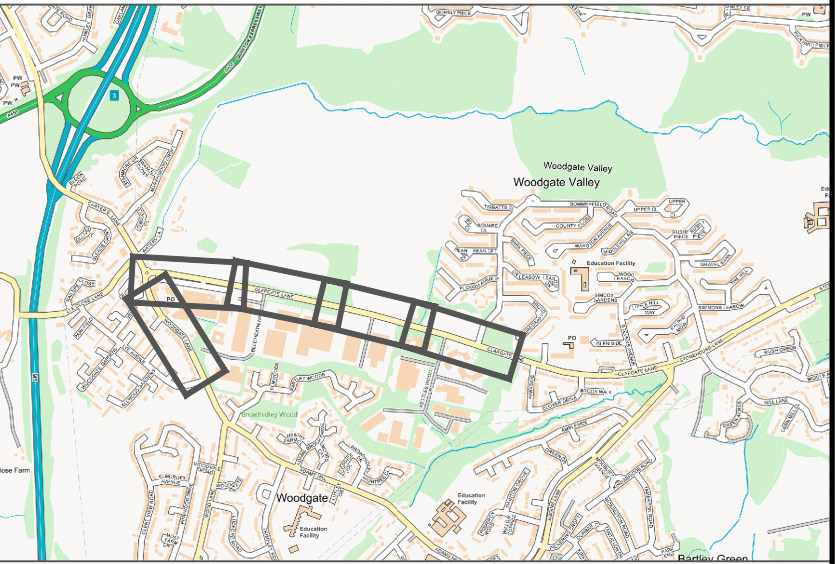


- KEY**
- EXISTING ROAD MARKINGS
 - PROPOSED WHITE ROAD MARKINGS
 - PROPOSED YELLOW ROAD MARKINGS
 - PROPOSED KERB REALIGNMENT
- NOTES**
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SECTION P5(w)-02



LOCATION PLAN



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Drawing Title

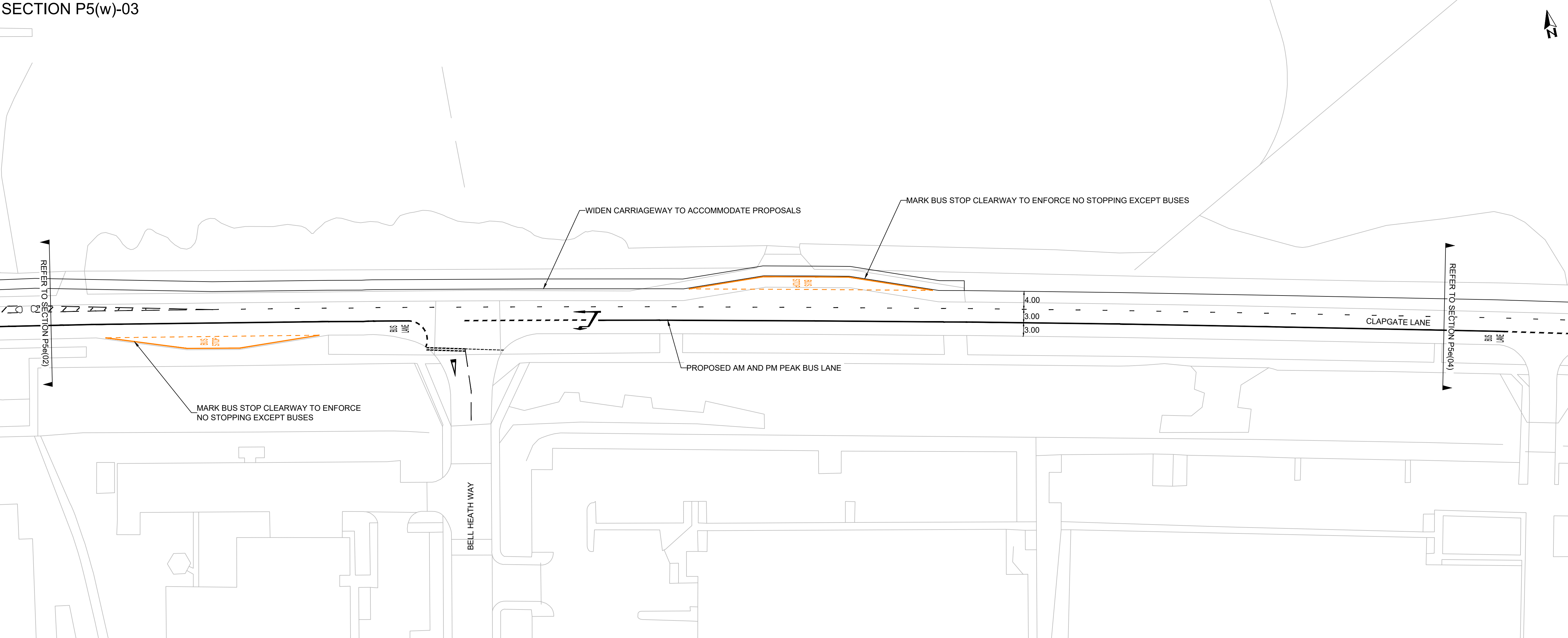
Package 5 (west)
Concept Design
Sheet 1 of 15

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Checked	NY	25-10-19	Drawing Status	CONCEPT DESIGN
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Drawing No.	Revision
102927-PF-100-P5W-DR-TR-001	P01

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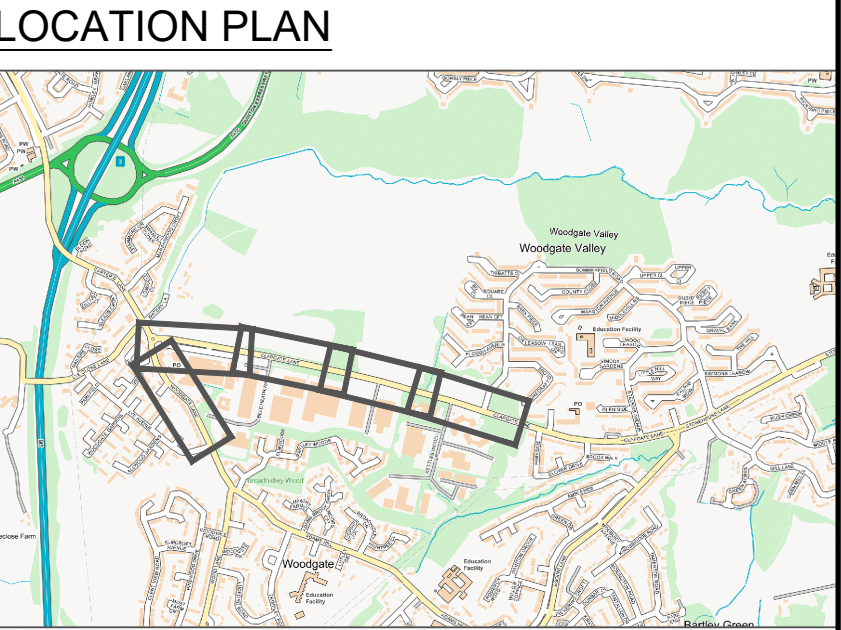
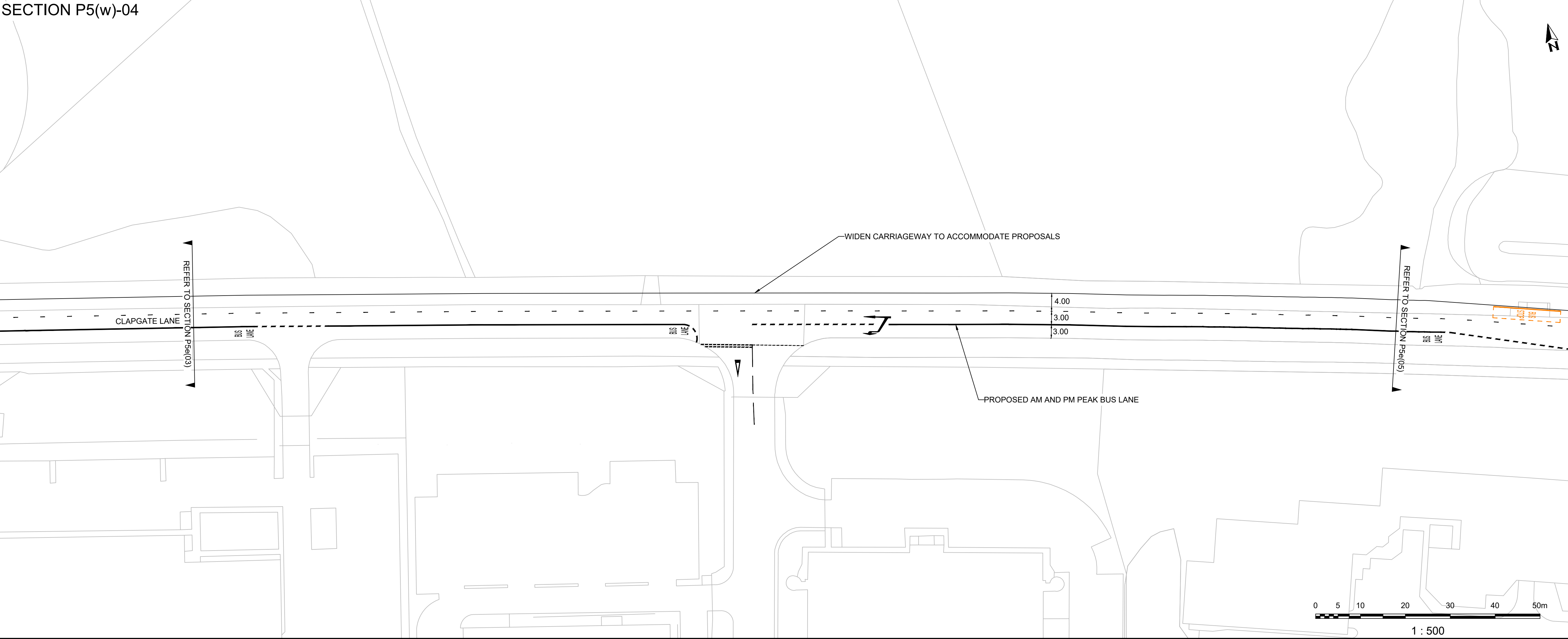
SECTION P5(w)-03



KEY	
	EXISTING ROAD MARKINGS
	PROPOSED WHITE ROAD MARKINGS
	PROPOSED YELLOW ROAD MARKINGS
	PROPOSED KERB REALIGNMENT

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SECTION P5(w)-04



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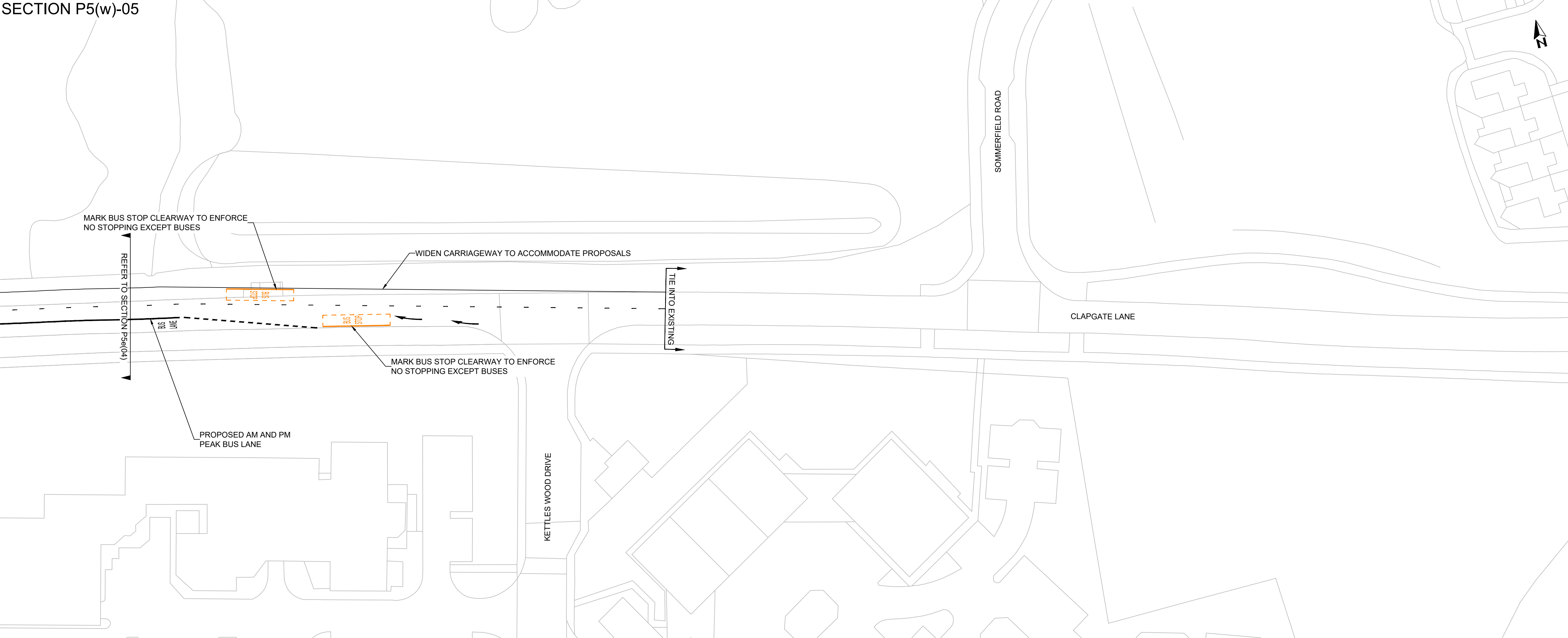
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**Package 5 (west)
Concept Design
Sheet 2 of 15**

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Designed	DS	25-10-19	Drawing Status	CONCEPT DESIGN
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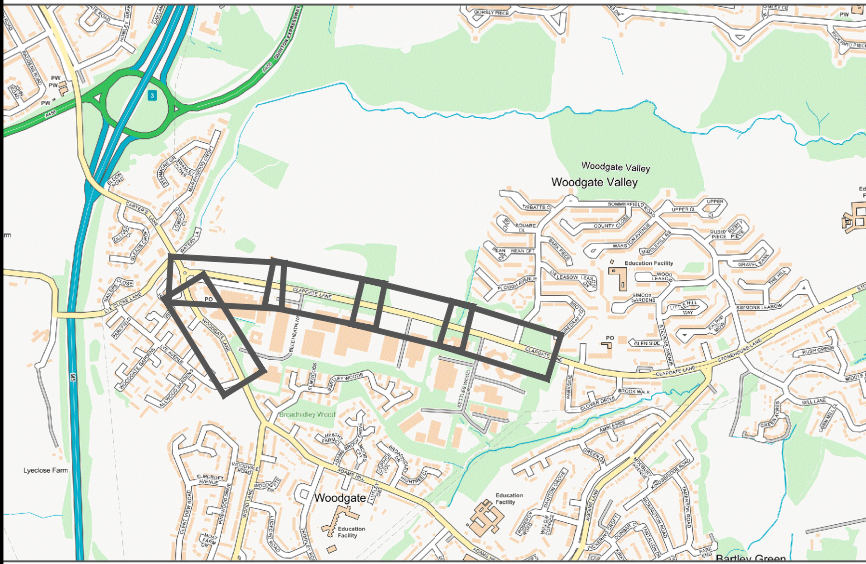
Revision P01



KEY	
	EXISTING ROAD MARKINGS
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	PROPOSED YELLOW ROAD MARKINGS
	PROPOSED KERB REALIGNMENT

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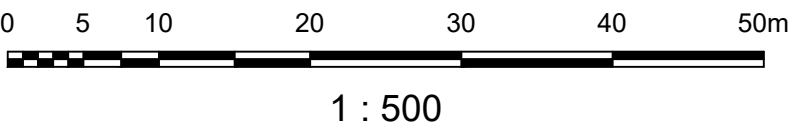


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Cross-City Bus

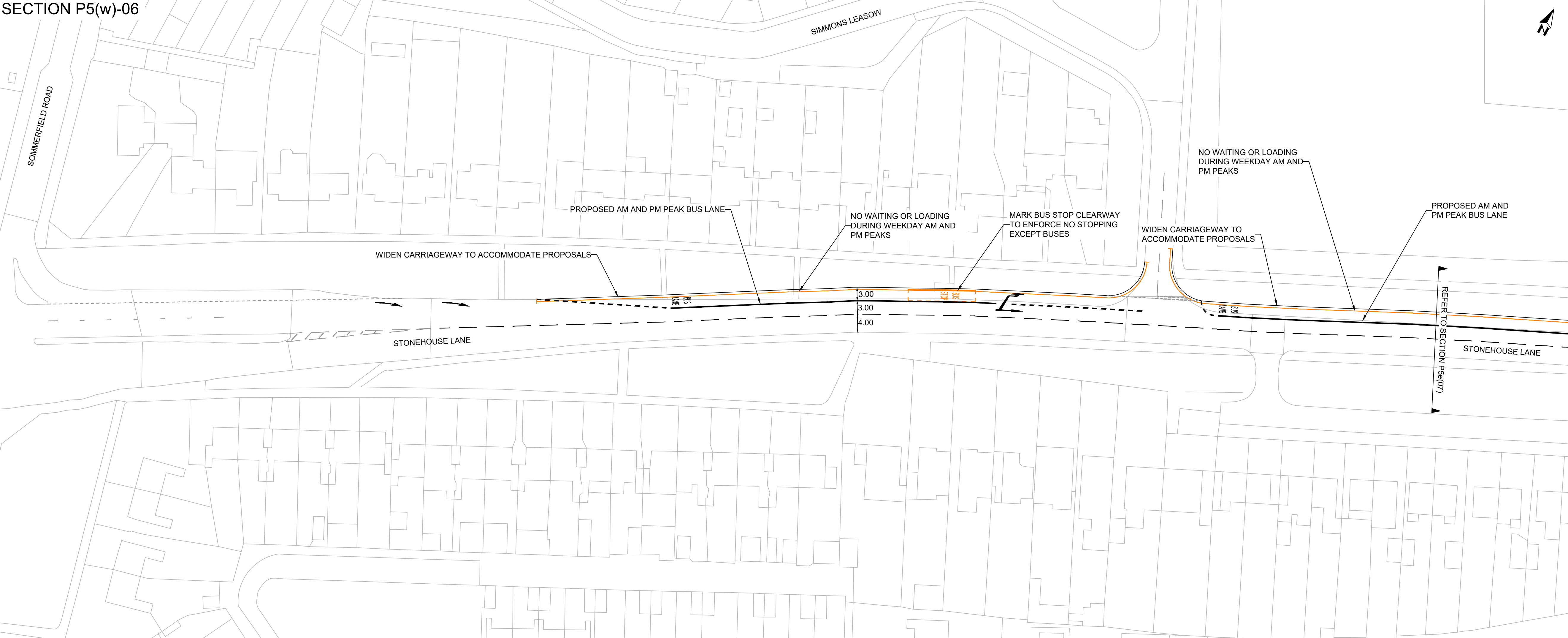
Package 5 (west)
Concept Design
Sheet 3 of 15

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Drawing No.	Revision
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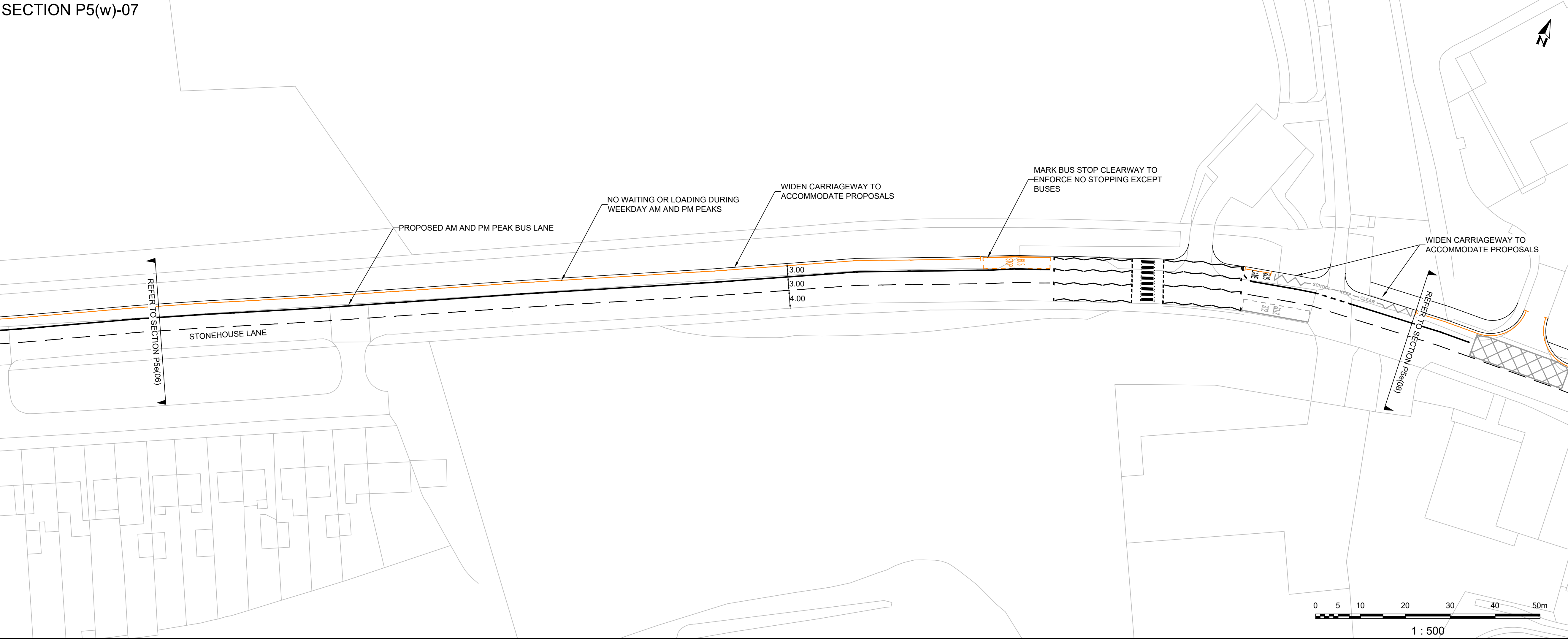


SECTION P5(w)-06

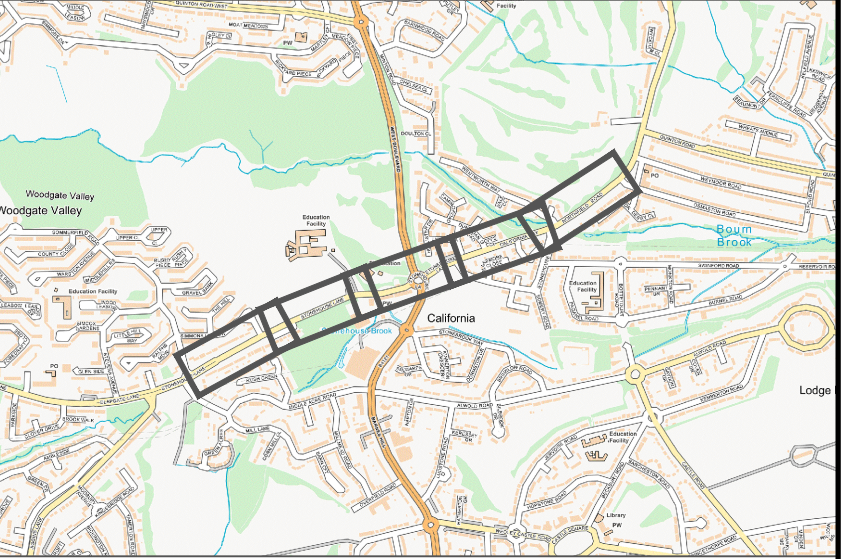


- KEY**
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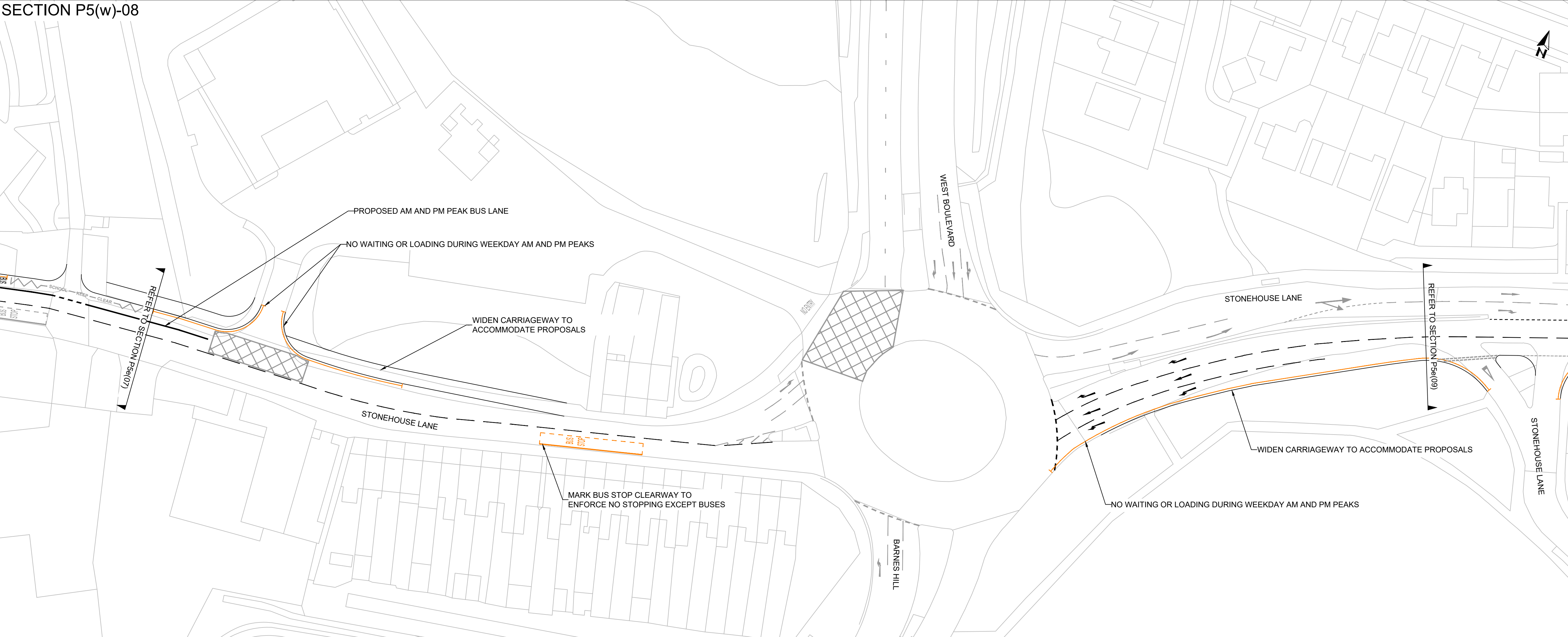
Project
A New Deal for the Bus Cross-City Bus

Drawing Title
**Package 5 (west)
Concept Design
Sheet 4 of 15**

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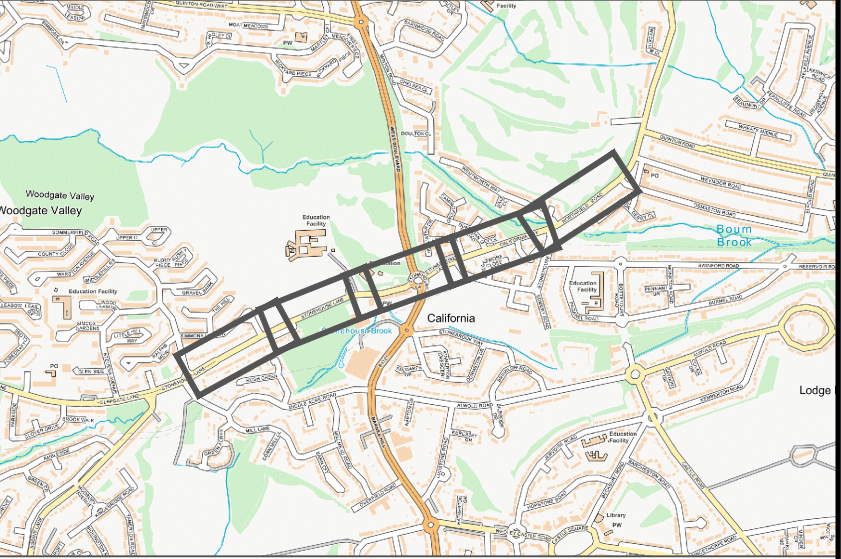
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SECTION P5(w)-08

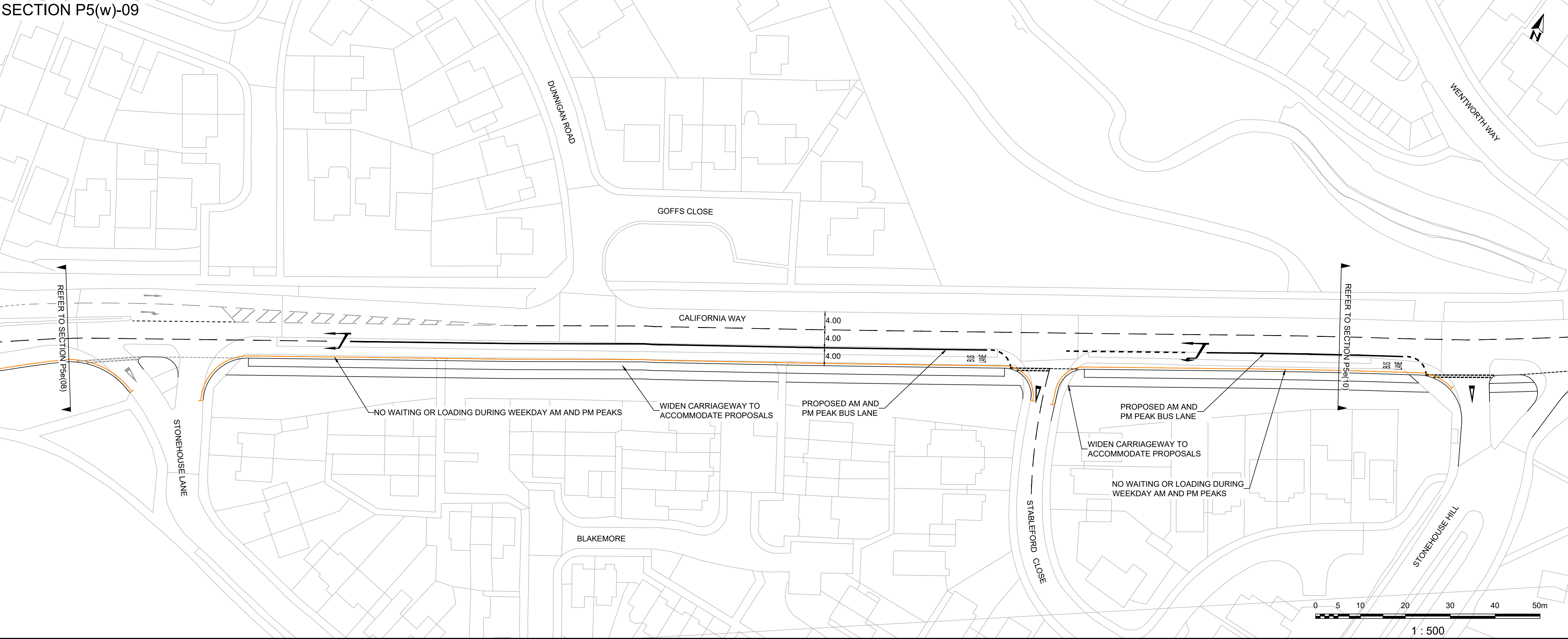


- KEY**
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Drawing Title

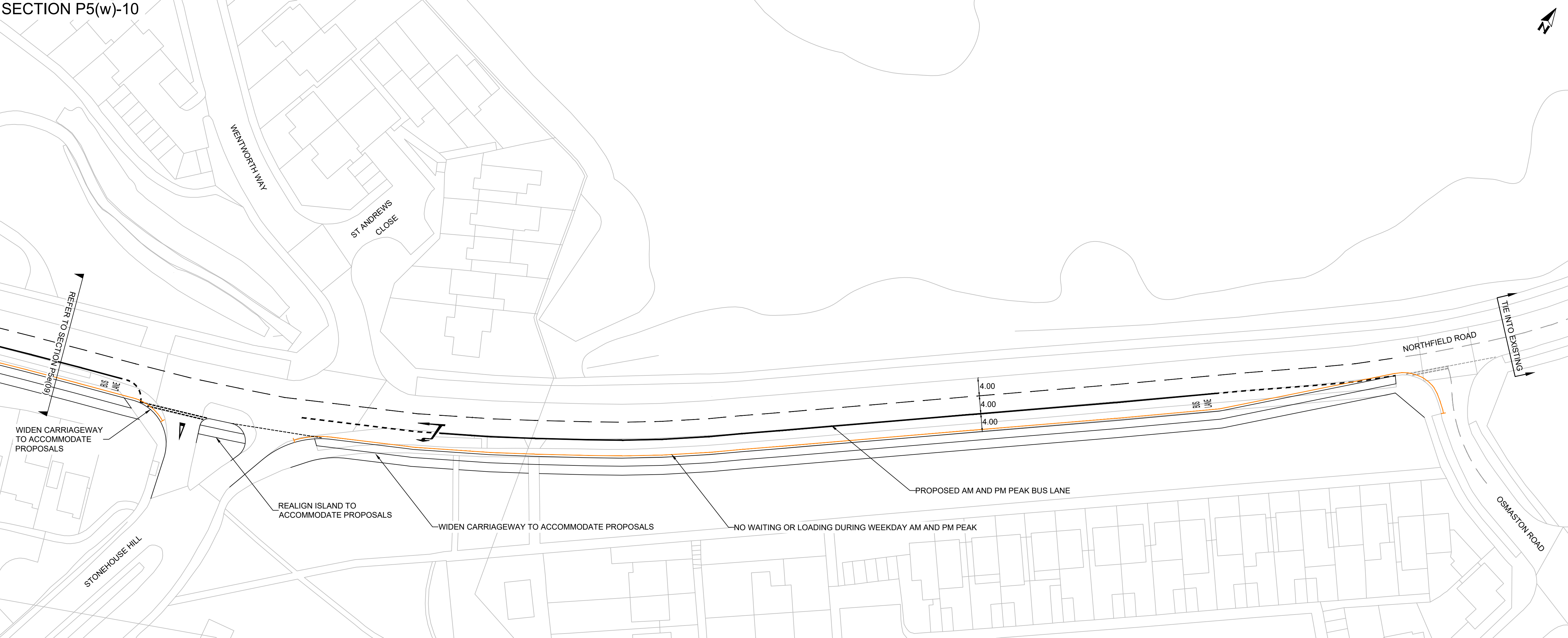
Package 5 (west) Concept Design Sheet 5 of 15

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Approved	NY	25-10-19		

Drawing No. 102927-PF-100-P5W-DR-TR-005

Revision P01

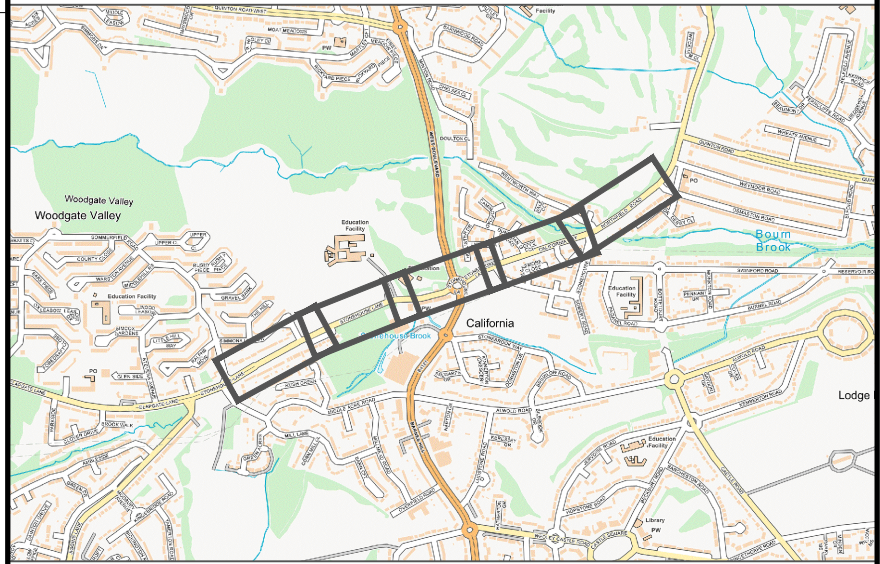
SECTION P5(w)-10



KEY	
	EXISTING ROAD MARKINGS
	PROPOSED WHITE ROAD MARKINGS
	PROPOSED YELLOW ROAD MARKINGS
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P01	CONCEPT DESIGN	DS	NY	NY	25-10-19
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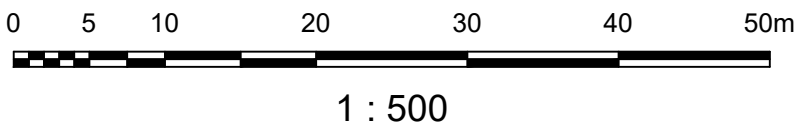
A New Deal for the Bus
Cross-City Bus

Drawing Title

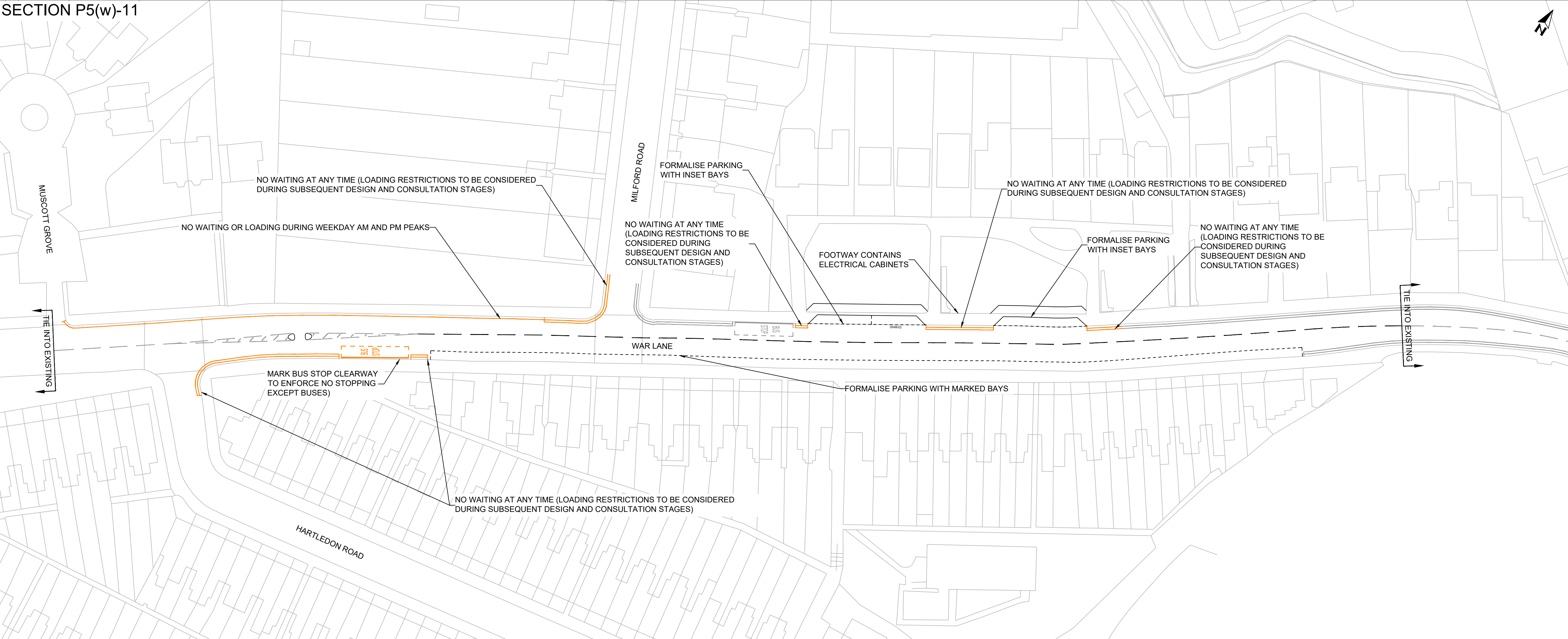
Package 5 (west)
Concept Design
Sheet 6 of 15

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Checked	NY	25-10-19		
Approved	NY	25-10-19		

Drawing No.	Revision
102927-PF-100-P5W-DR-TR-006	P01



SECTION P5(w)-11



KEY

EXISTING ROAD MARKINGS

PROPOSED WHITE ROAD MARKINGS

PROPOSED YELLOW ROAD MARKINGS

PROPOSED KERB REALIGNMENT

NOTES

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Package 5 (west) Concept Design Sheet 7 of 15

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Drawn	DS	25-10-19		
Designed	DS	25-10-19	File No.	102467-PF-1200-00-DR-TR
Checked	NY	25-10-19	Drawing Status	CONCEPT DESIGN
Approved	NY	25-10-19		

Drawing No.

102927-PF-100-P5W-DR-TR-007

Revision

P01

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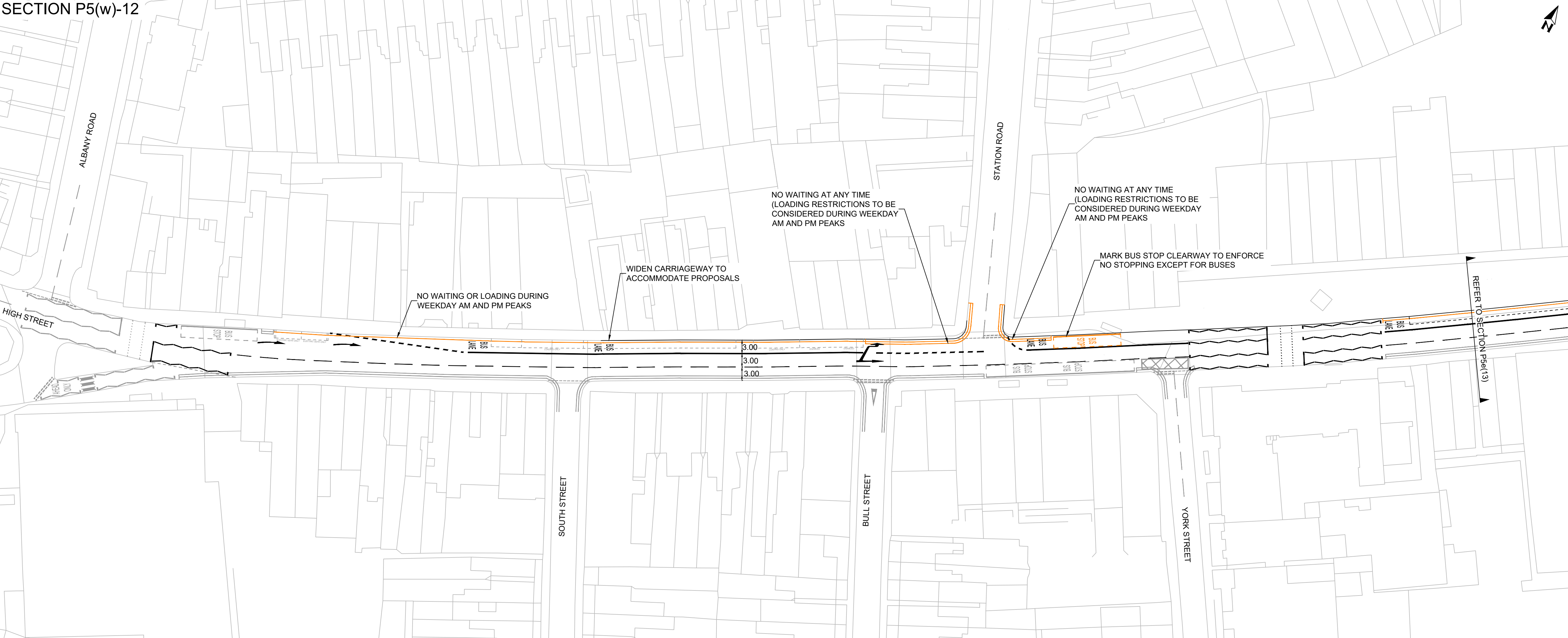
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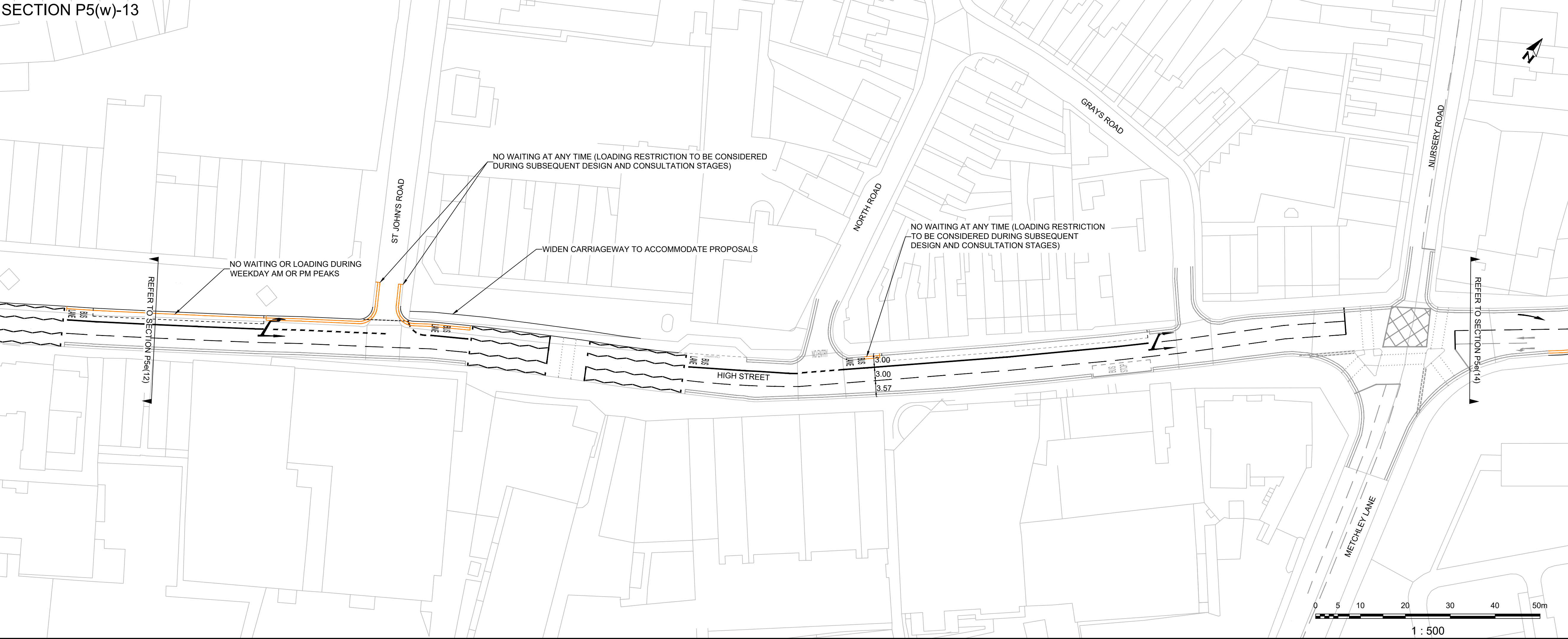
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SECTION P5(w)-12

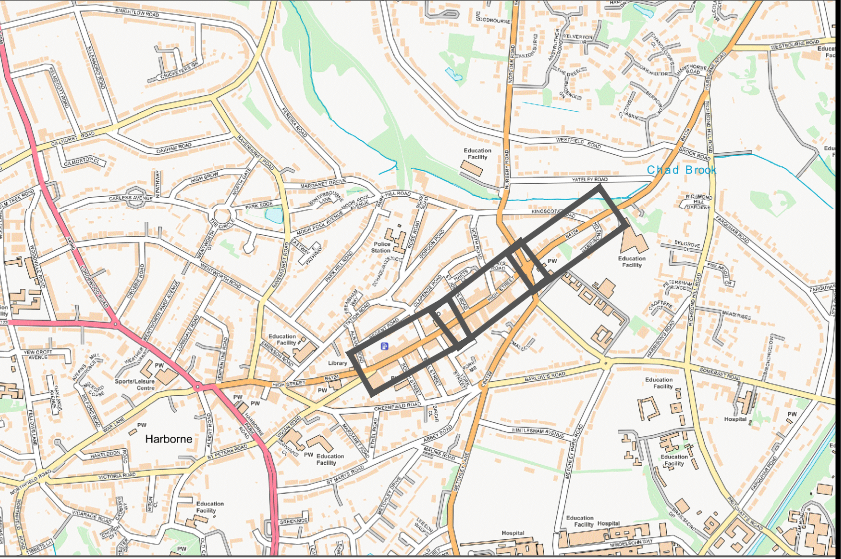


- KEY**
- EXISTING ROAD MARKINGS
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Package 5 (west)
Concept Design
Sheet 8 of 15

	Name	Date	Scale	1:500 @ A1
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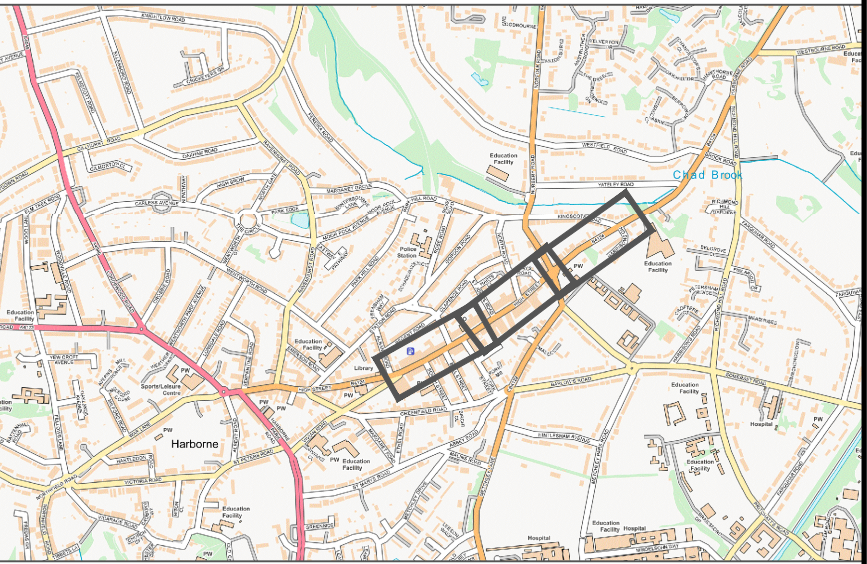
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KEY	
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	PROPOSED WHITE ROAD MARKINGS
	PROPOSED YELLOW ROAD MARKINGS
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LOCATION PLAN



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P01	CONCEPT DESIGN	DS	NY	NY	25-10-19
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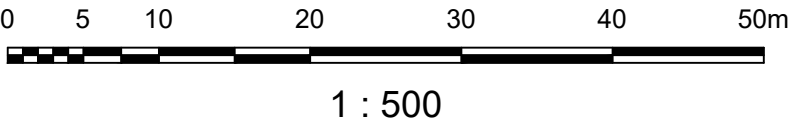


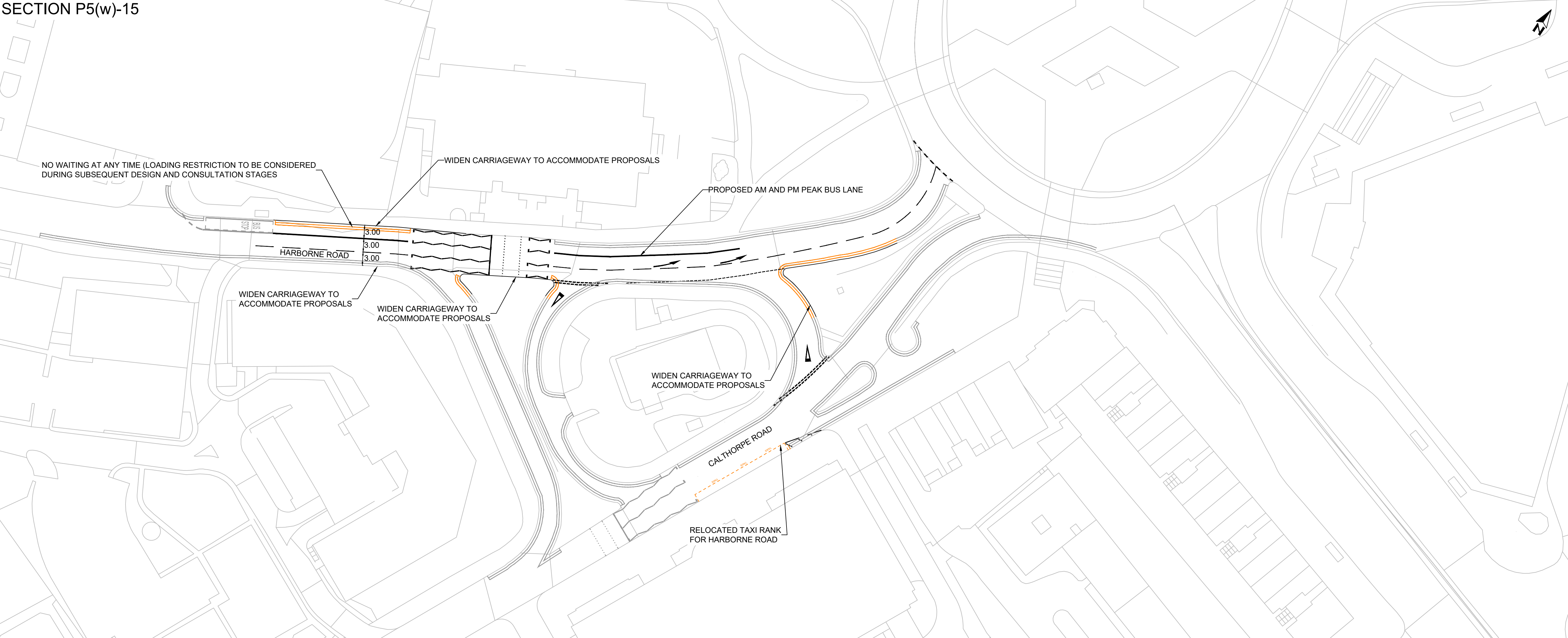
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Cross-City Bus

Package 5 (west)
Concept Design
Sheet 9 of 15

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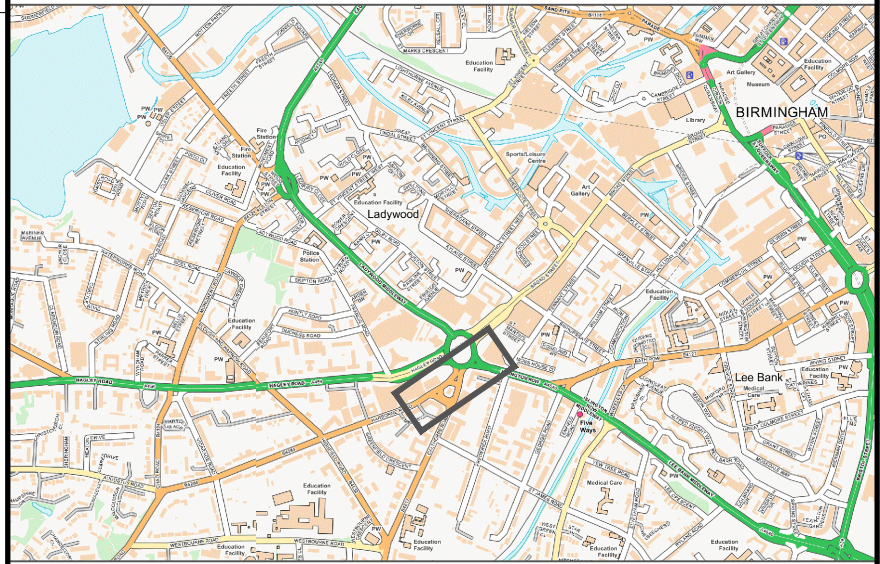




KEY	
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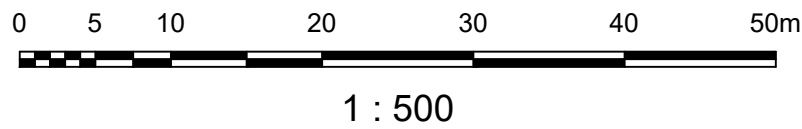
A New Deal for the Bus
Cross-City Bus

Drawing Title

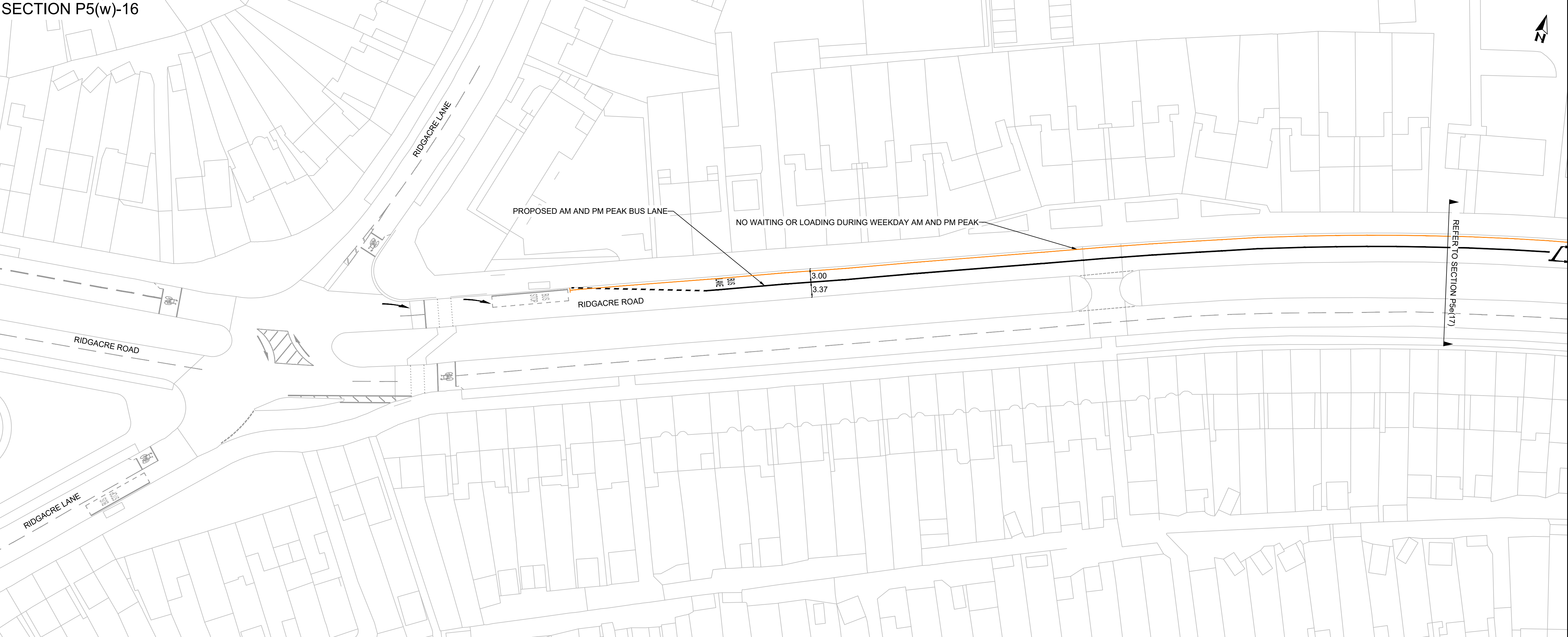
Package 5 (west)
Concept Design
Sheet 10 of 15

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Designed	DS	25-10-19	Drawing Status	CONCEPT DESIGN
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Approved	NY	25-10-19		

Drawing No.	Revision
102927-PF-100-P5W-DR-TR-010	P01



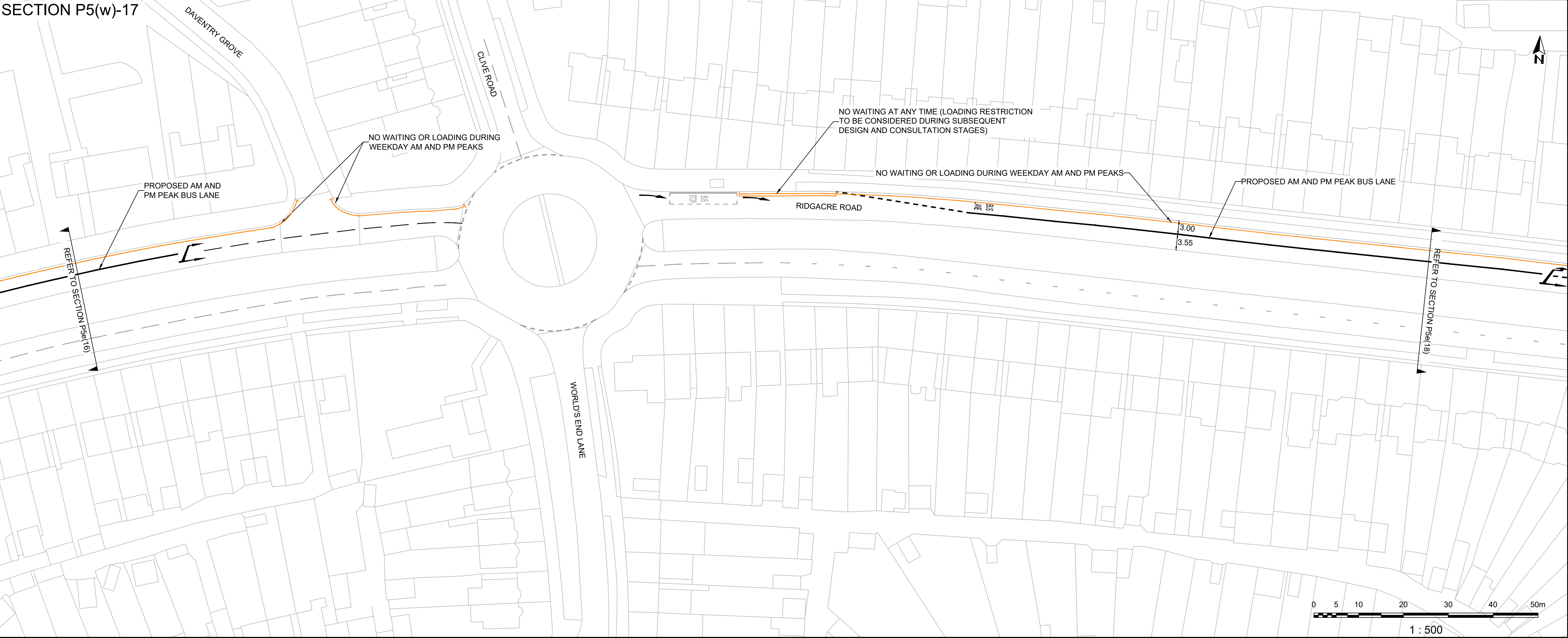
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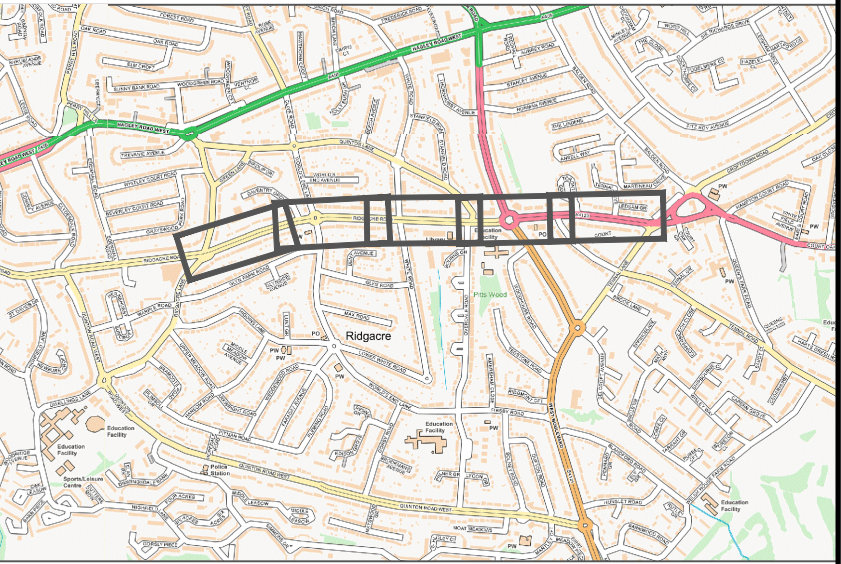
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	EXISTING ROAD MARKINGS
	PROPOSED WHITE ROAD MARKINGS
	PROPOSED YELLOW ROAD MARKINGS
	PROPOSED KERB REALIGNMENT

- NOTES
- ALL DIMENSIONS IN METRES UNLESS OTHERWISE STATED.
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SECTION P5(w)-17



LOCATION PLAN



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P01	CONCEPT DESIGN	DS	NY	NY	25-10-19
REV	DESCRIPTION	DRN	CHK	APP	DATE

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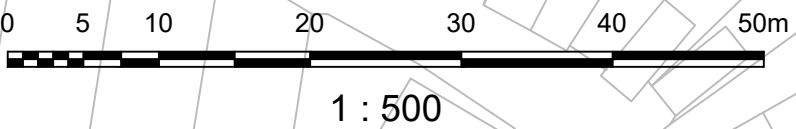
A New Deal for the Bus Cross-City Bus

Drawing Title

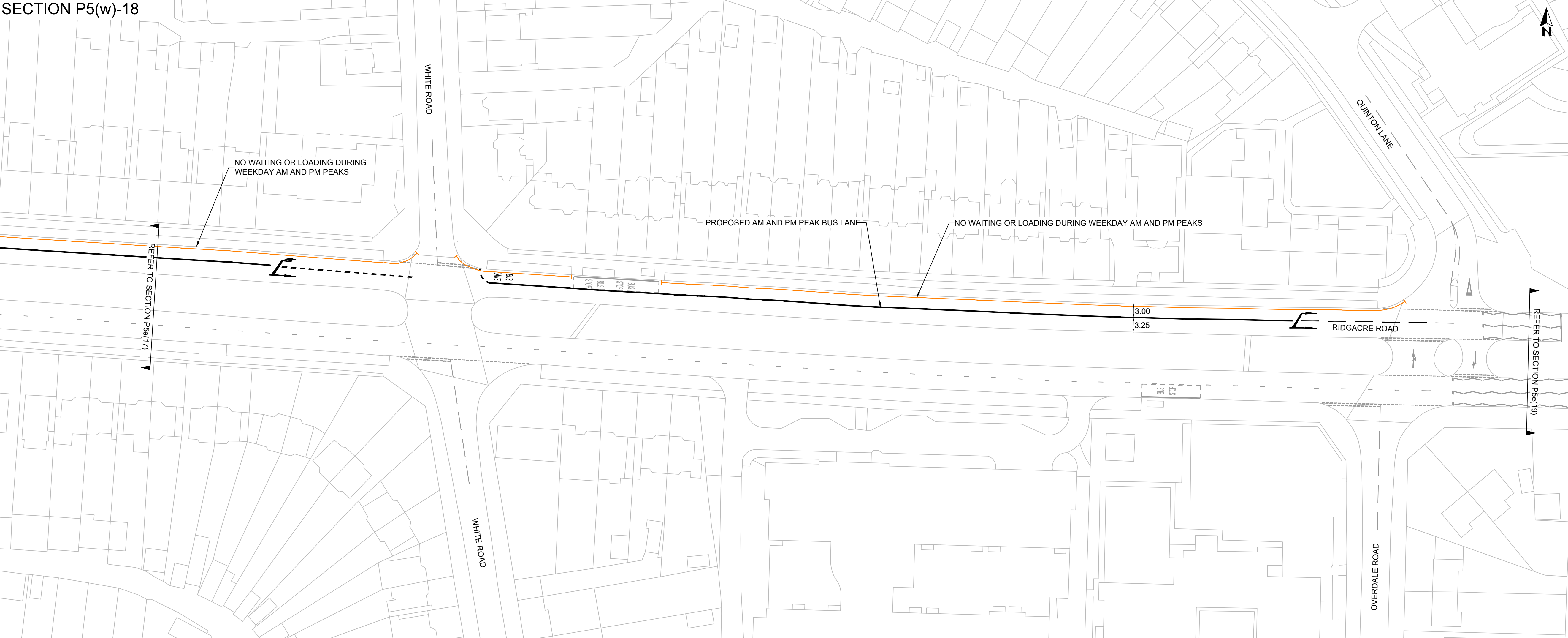
**Package 5 (west)
Concept Design
Sheet 11 of 15**

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Drawing No.	Revision
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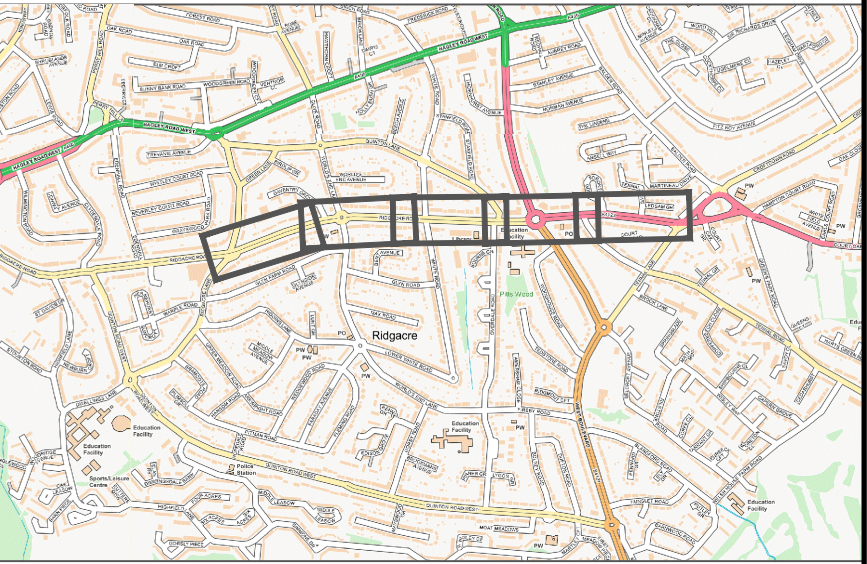


SECTION P5(w)-18



- KEY**
- EXISTING ROAD MARKINGS
 - PROPOSED WHITE ROAD MARKINGS
 - PROPOSED YELLOW ROAD MARKINGS
 - PROPOSED KERB REALIGNMENT
- NOTES**
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LOCATION PLAN



SECTION P5(w)-19



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P01	CONCEPT DESIGN	DS	NY	NY	25-10-19
REV	DESCRIPTION	DRN	CHK	APP	DATE

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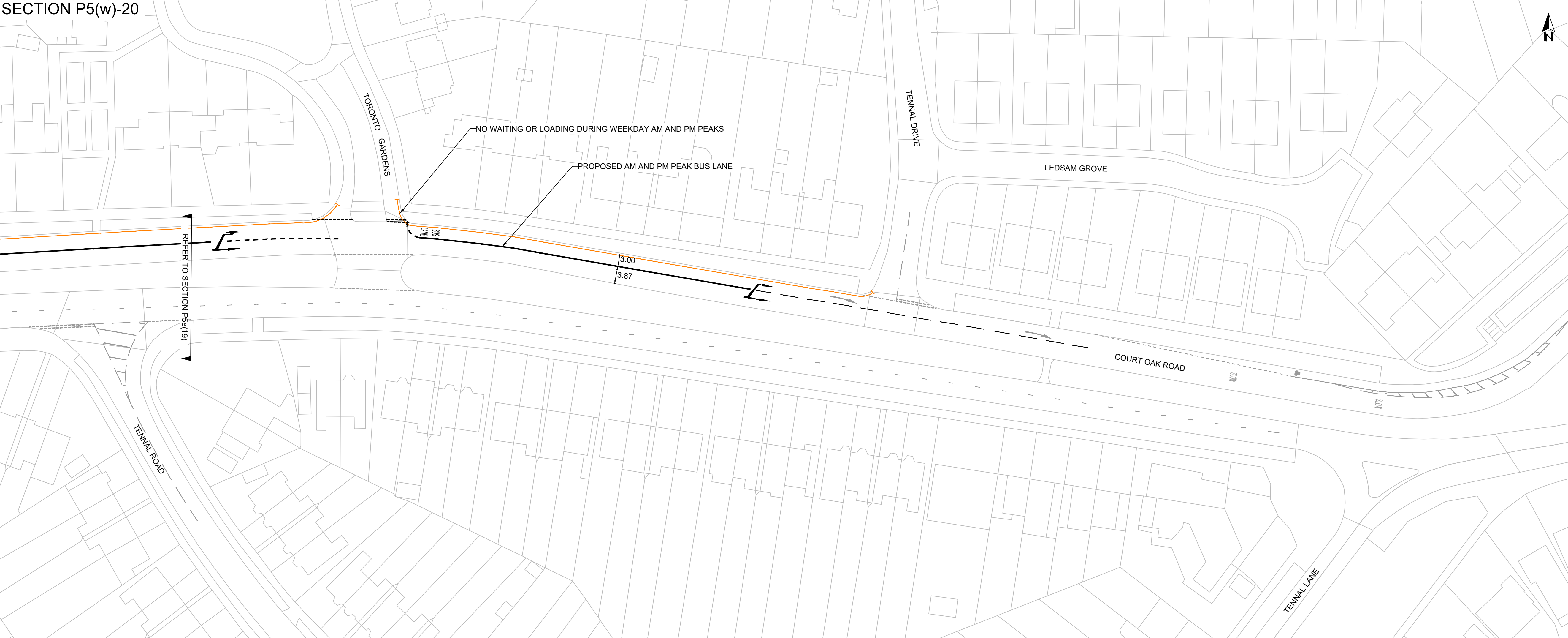
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Package 5 (west)
Concept Design
Sheet 12 of 15

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Designed	DS	25-10-19	Drawing Status	CONCEPT DESIGN
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Approved	NY	25-10-19		

Drawing No.	Revision
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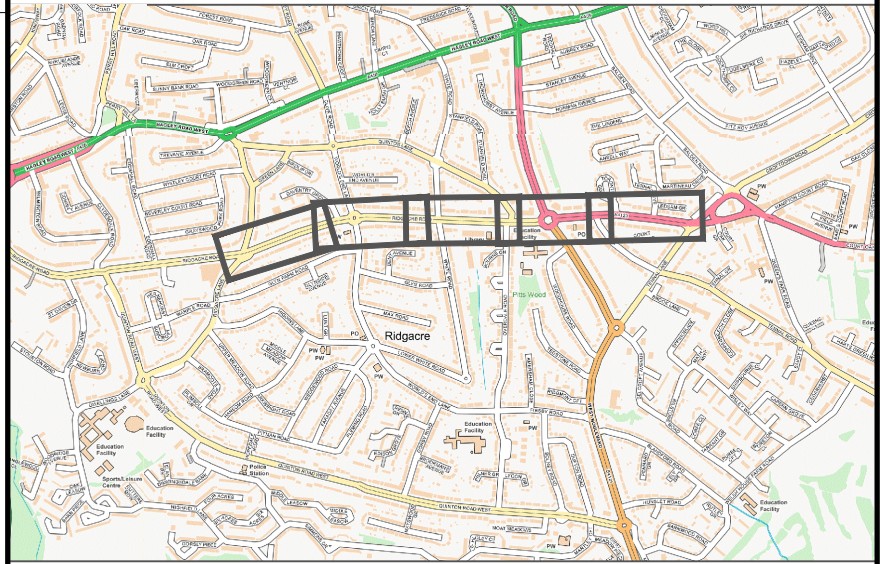
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KEY	
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	PROPOSED WHITE ROAD MARKINGS
	PROPOSED YELLOW ROAD MARKINGS
	PROPOSED KERB REALIGNMENT

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LOCATION PLAN



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P01	CONCEPT DESIGN	DS	NY	NY	25-10-19
REV	DESCRIPTION	DRN	CHK	APP	DATE

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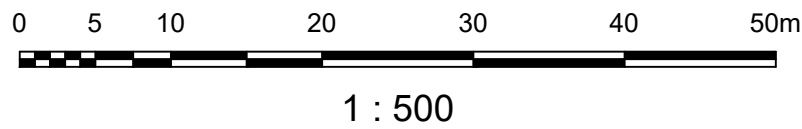
A New Deal for the Bus
Cross-City Bus

Drawing Title

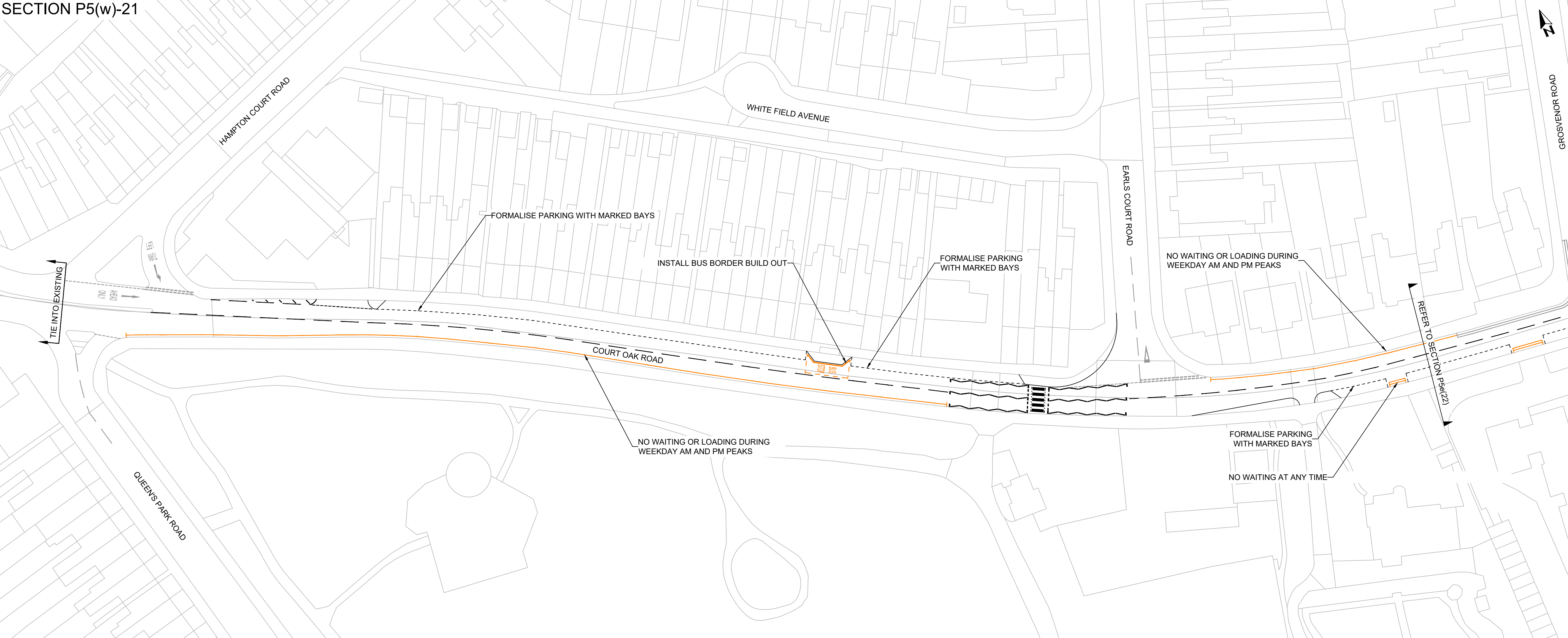
Package 5 (west)
Concept Design
Sheet 13 of 15

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102927-PF-100-P5W-DR-TR-013	P01



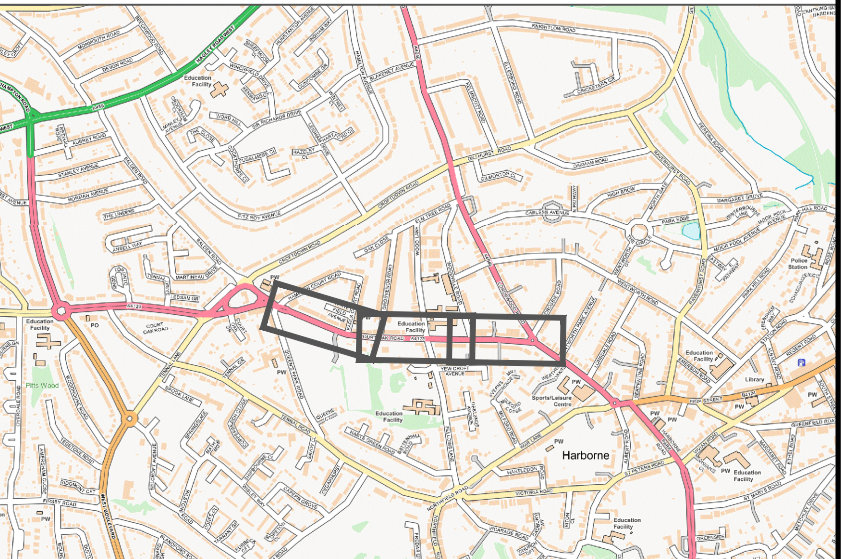
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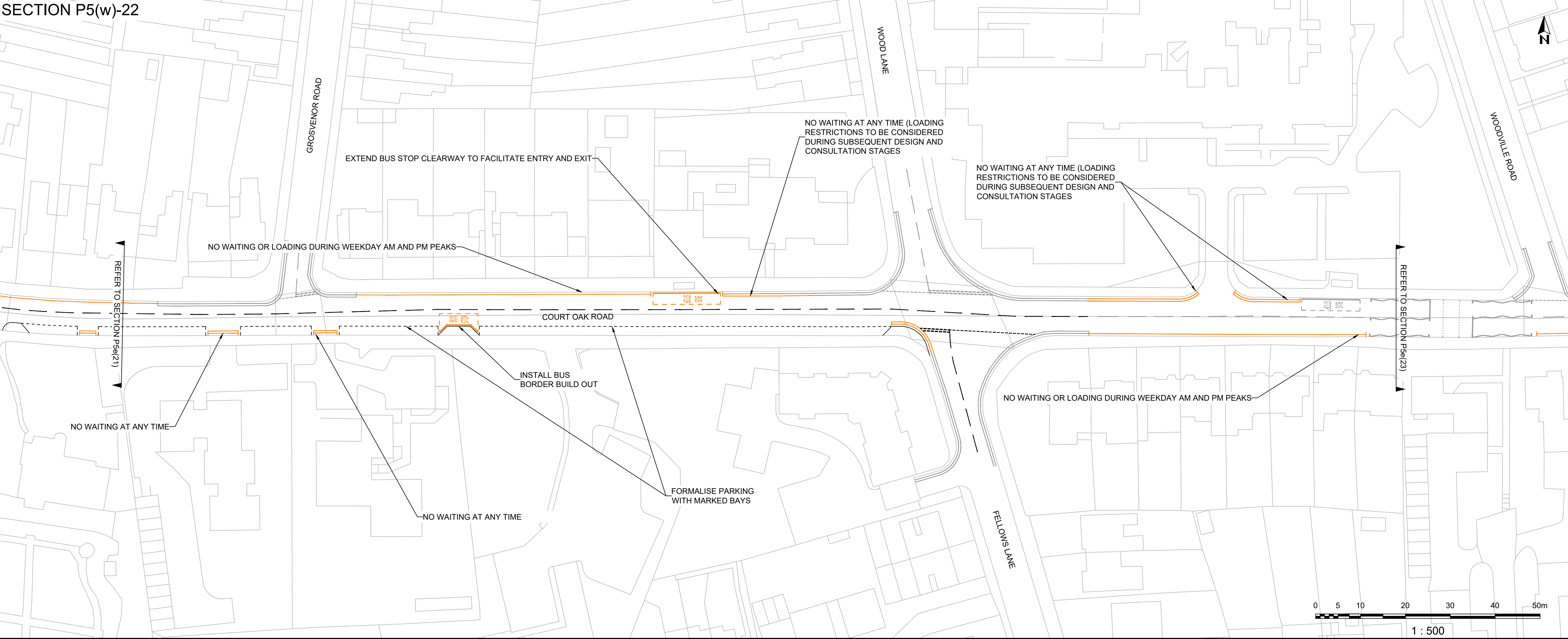
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	PROPOSED WHITE ROAD MARKINGS
	PROPOSED YELLOW ROAD MARKINGS
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LOCATION PLAN



SECTION P5(w)-22



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P01	CONCEPT DESIGN	DS	NY	NY	25-10-19
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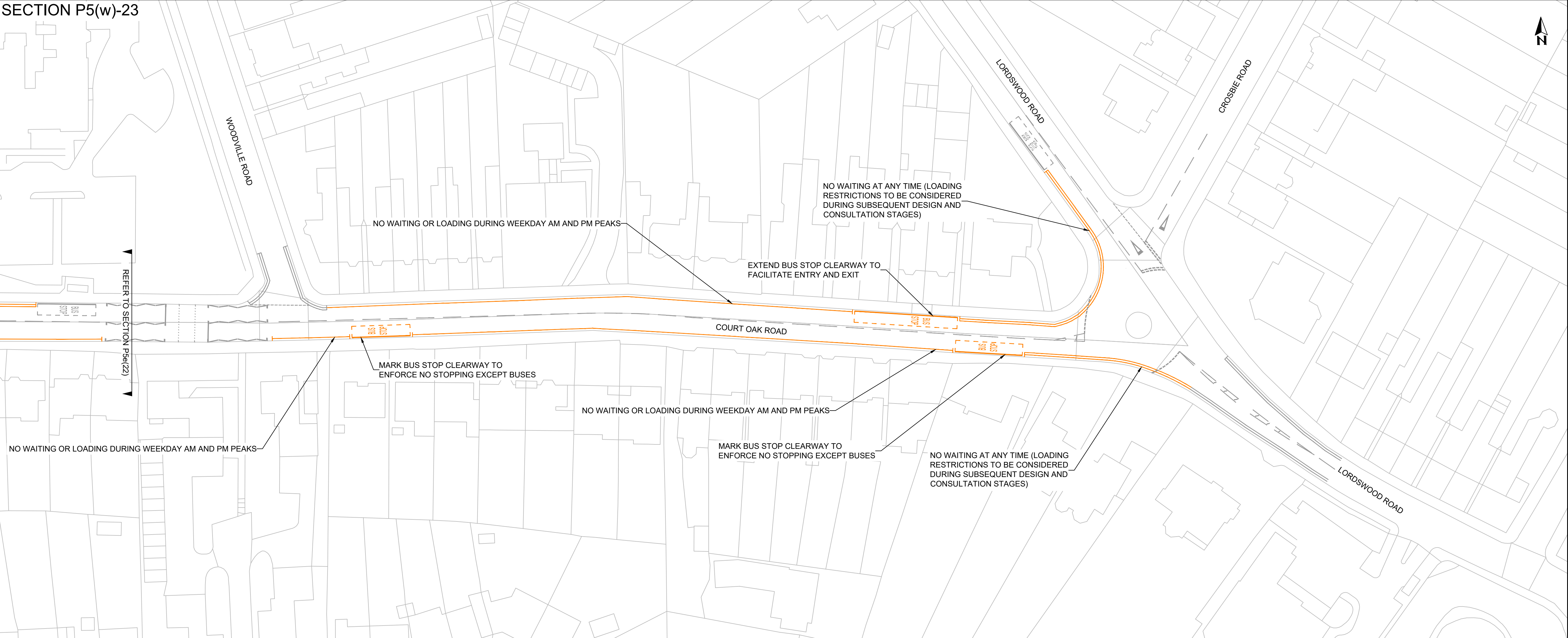
Project
**A New Deal for the Bus
Cross-City Bus**

Drawing Title
**Package 5 (west)
Concept Design
Sheet 14 of 15**

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Checked	NY	25-10-19	Drawing Status	CONCEPT DESIGN
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Drawing No. **102927-PF-100-P5W-DR-TR-014** Revision **P01**

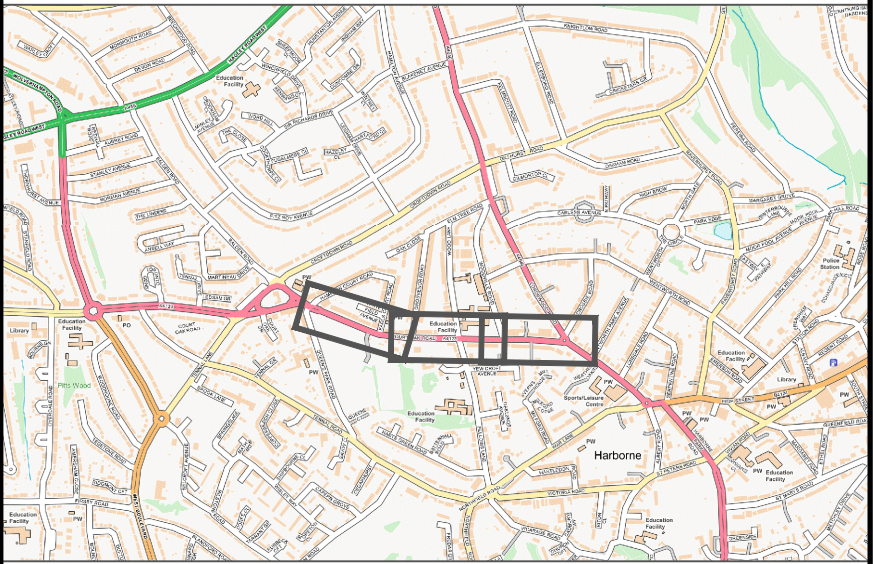
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KEY	
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	PROPOSED KERB REALIGNMENT

- NOTES
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LOCATION PLAN



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P01	CONCEPT DESIGN	DS	NY	NY	25-10-19
REV	DESCRIPTION	DRN	CHK	APP	DATE

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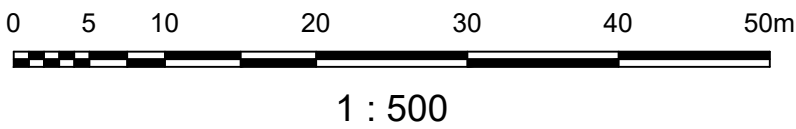
A New Deal for the Bus
Cross-City Bus

Drawing Title

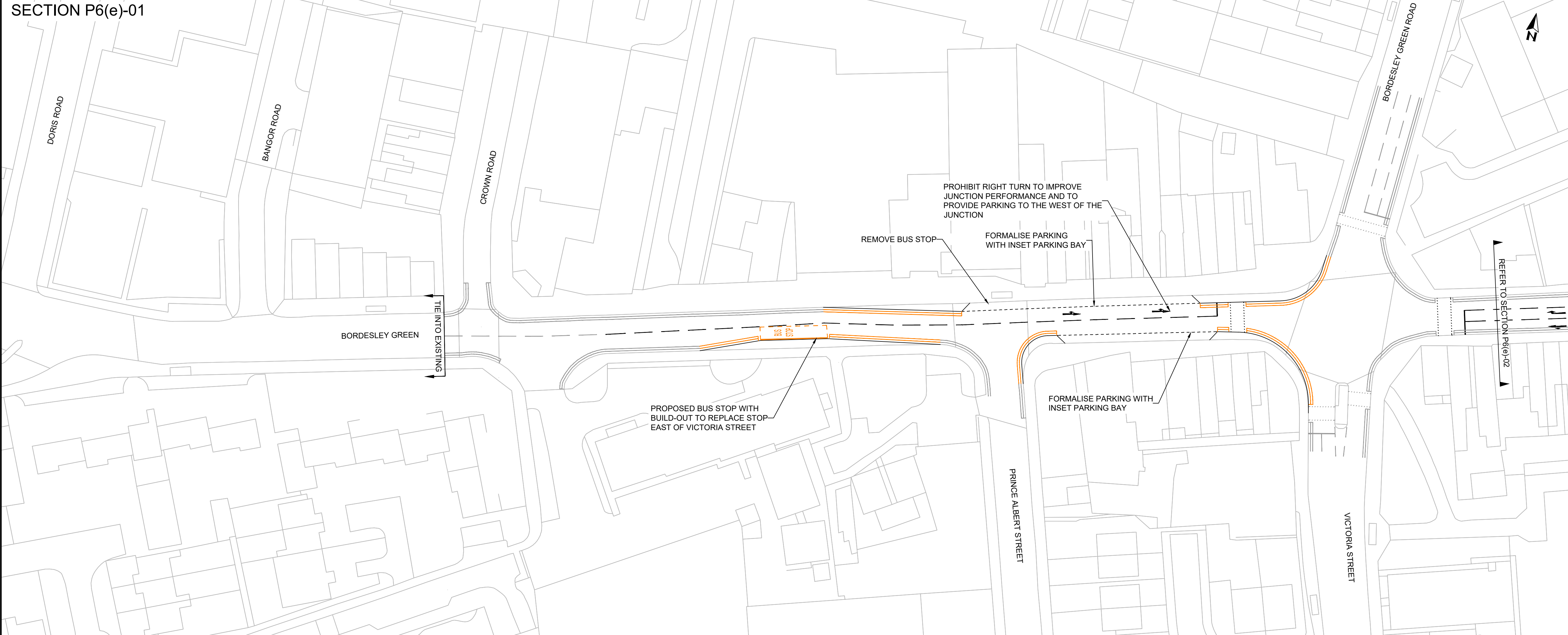
Package 5 (west)
Concept Design
Sheet 15 of 15

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Approved	NY	25-10-19		

Drawing No.	Revision
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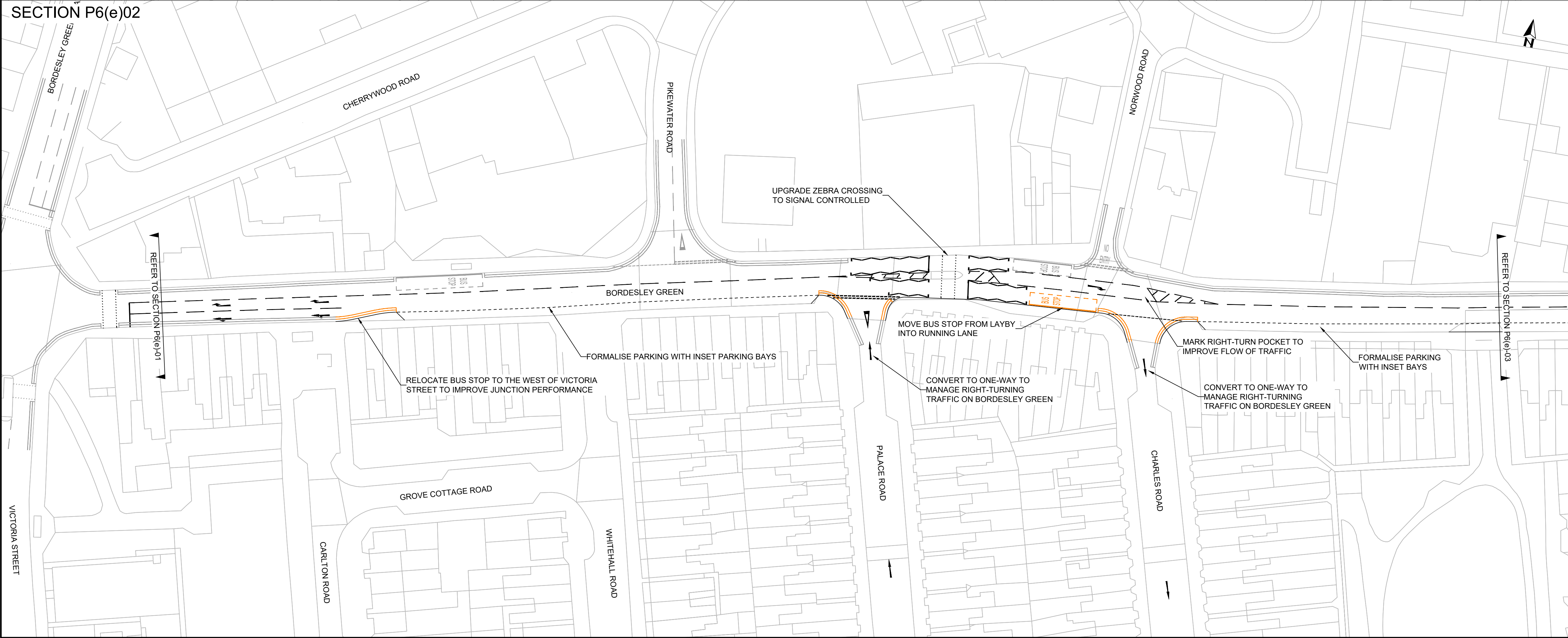


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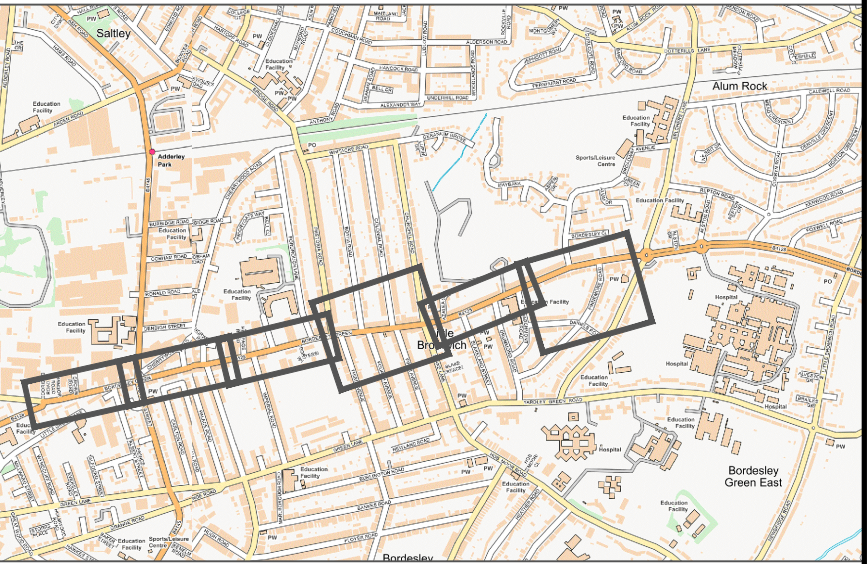


- KEY**
- EXISTING ROAD MARKINGS
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SECTION P6(e)02



LOCATION PLAN



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P01	CONCEPT DESIGN	DS	NY	NY	25-10-19
REV	DESCRIPTION	DRN	CHK	APP	DATE

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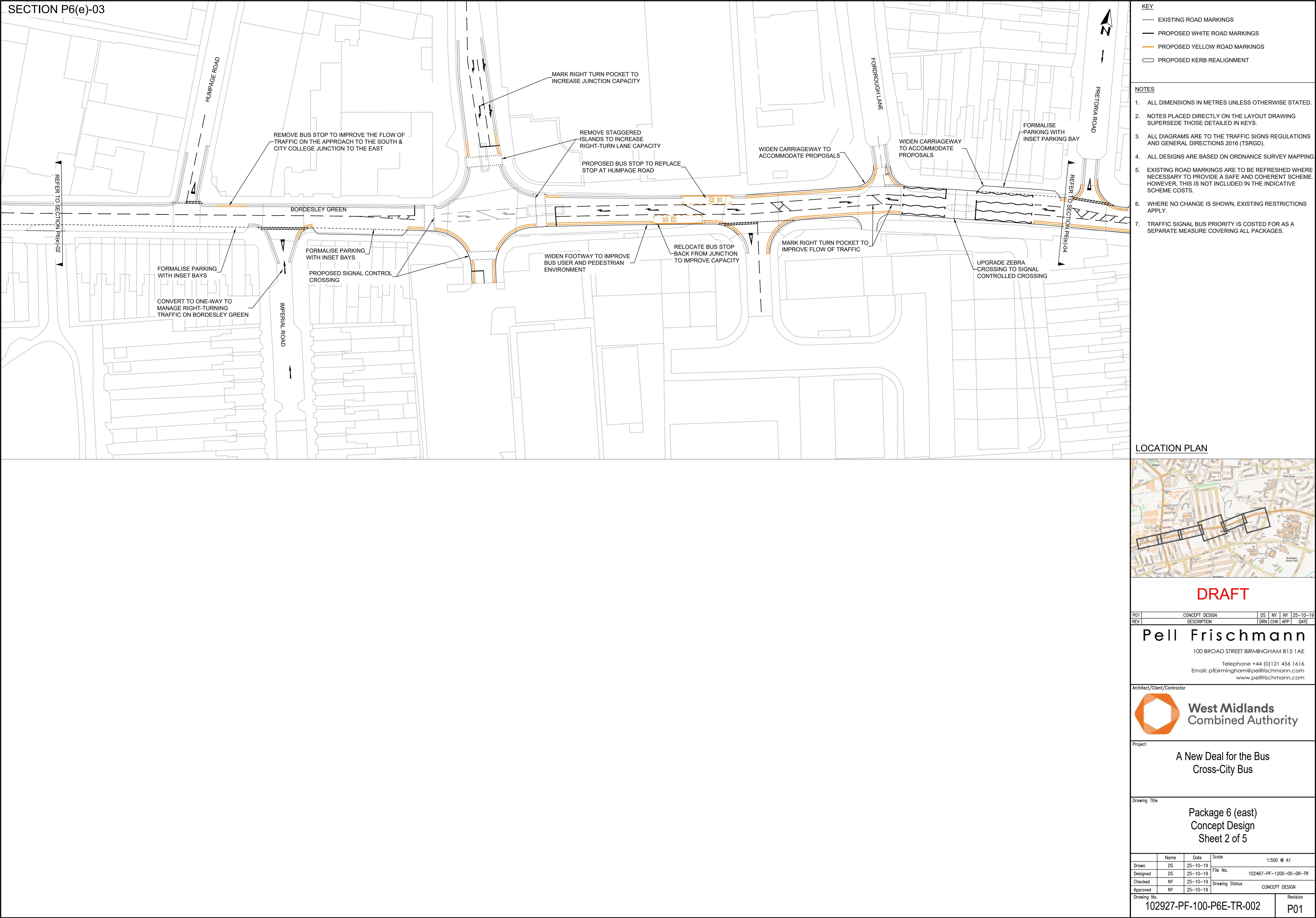
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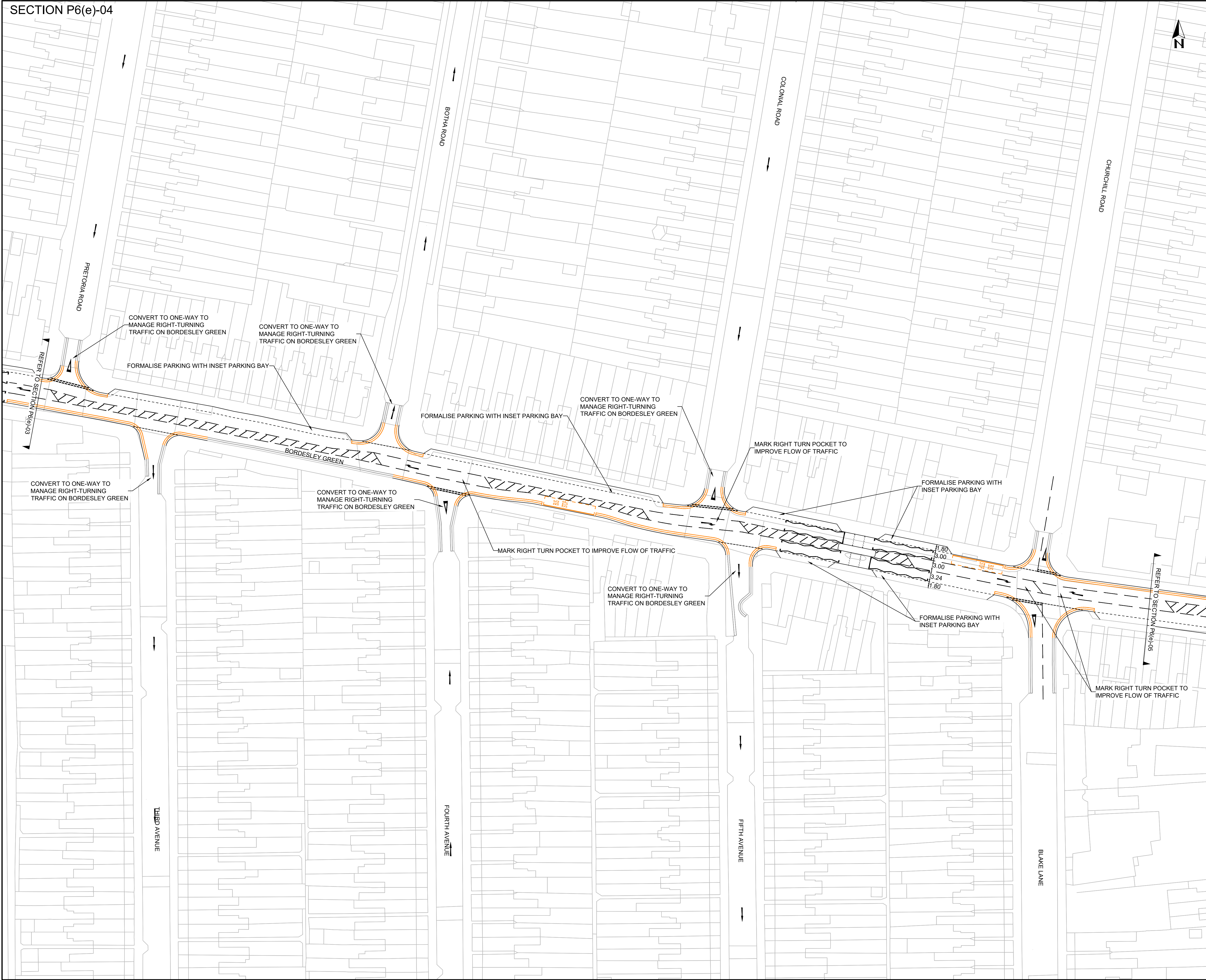
Package 6 (east)
Concept Design
Sheet 1 of 5

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Approved	NY	25-10-19		

Drawing No.
102927-PF-100-P6E-TR-001

Revision
P01

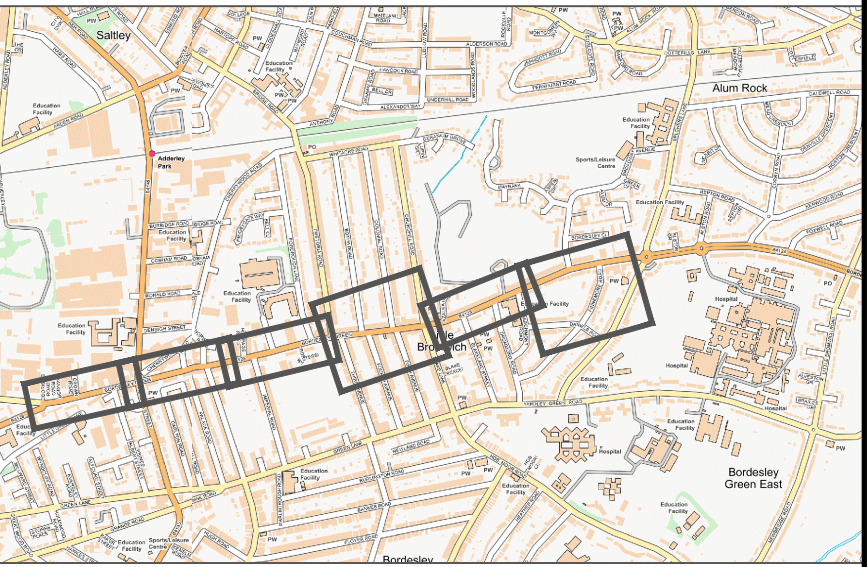




KEY	
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	PROPOSED WHITE ROAD MARKINGS
	PROPOSED YELLOW ROAD MARKINGS
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LOCATION PLAN



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P01	CONCEPT DESIGN	DS	NY	NY	25-10-19
REV	DESCRIPTION	DRN	CHK	APP	DATE

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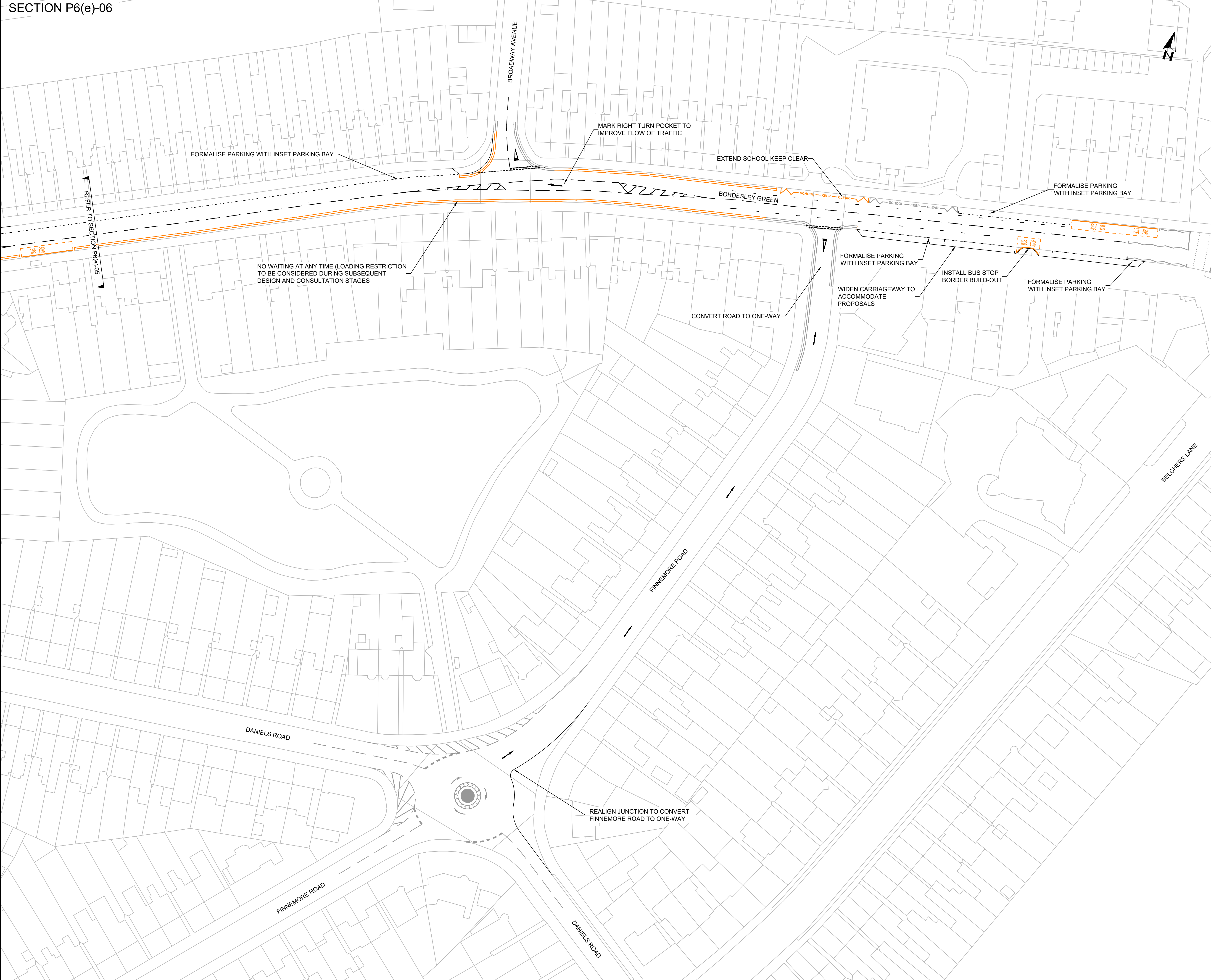
Drawing Title

Package 6 (east)
Concept Design
Sheet 3 of 5

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Checked	NY	25-10-19	Drawing Status	CONCEPT DESIGN
Approved	NY	25-10-19		

Drawing No.	Revision
102927-PF-100-P6E-TR-003	P01





KEY

- EXISTING ROAD MARKINGS
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LOCATION PLAN

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P01	CONCEPT DESIGN	DS	NY	NY	25-10-19
REV	DESCRIPTION	DRN	CHK	APP	DATE

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Drawing Title

**Package 6 (east)
Concept Design
Sheet 5 of 5**

	Name	Date	Scale	1:500 @ A1
Drawn	DS	25-10-19		
Designed	DS	25-10-19	File No.	102467-PF-1200-00-DR-TR
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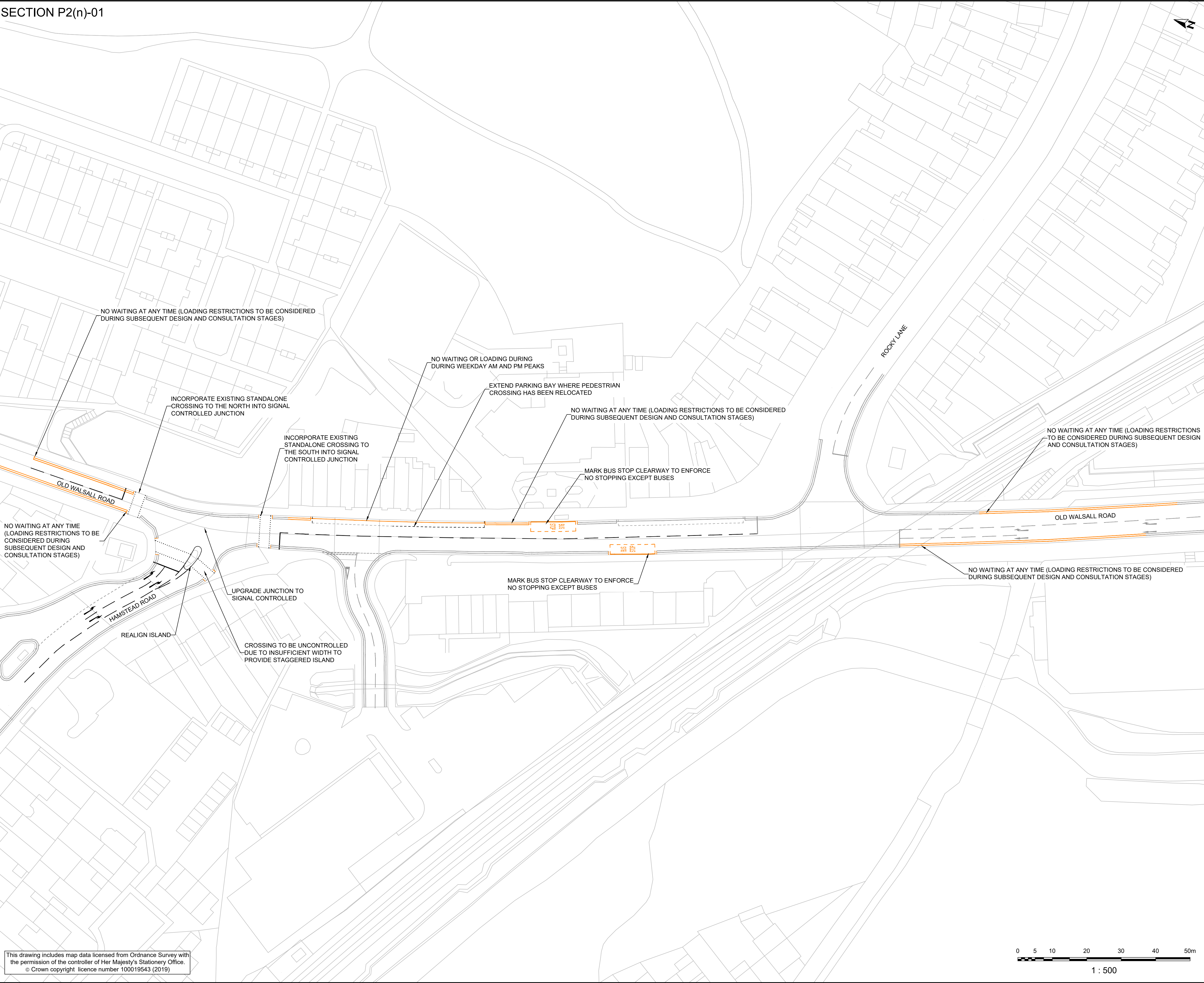
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Revision

P01

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KEY

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LOCATION PLAN

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P01	DETAILED DESIGN	DS	NY	NY	11-10-19
REV	DESCRIPTION	DRN	CHK	APP	DATE

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**A New Deal for the Bus
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Drawing Title

**Package 2 (north)
Concept Design
Sheet 1 of 1**

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Designed	DS	11-10-19	File No.	102927-PF-100-P2N-DR-TR
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Approved	NY	11-10-19		

Drawing No.	Revision
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