

List of Appendices

Transport

East Hemel Hempstead

- Appendix 1: Transport Extract of East Hemel Hempstead Landowner/Developer Engagement Stage 2 Presentations and follow up report (PPC Nov 2015)
- Appendix 2: Maylands Growth Corridor Study: Progress Meeting Slides 4-8
- Appendix 3: Maylands Growth Corridor Study: Stage 2 Scheme Concepts 1 & 2 Model Sensitivity Testing Report April 2016
- Appendix 4: East Hemel Hempstead Transport Assessment

North West Harpenden

- Appendix 5: Transport Extract of North West Harpenden Landowner/Developer Engagement Stage 2 Presentations and follow up report (PPC Nov 2015)
- Appendix 6: Commercial Estates Group Regulation 19 Response January 2016
- Appendix 7: Legal and General NW Harpenden Transport Assessment Scoping Report February 2016
- Appendix 8: Brookbanks NW Harpenden Local Plan Transportation Study June 2016

East St Albans

- Appendix 9: Transport Extract of East St Albans Landowner/Developer Engagement Stage 2 Presentations and follow up report (PPC Nov 2015)
- Appendix 10: AECOM St Albans East Emerging Transport Strategy Jan 2016
- Appendix 11: AECOM St Albans East Initial Assessment of Highway Impacts March 2016

Hertfordshire County Council

- Appendix 12: Hertfordshire County Council COMET progress Slides April 2016
- Appendix 13: Hertfordshire County Council COMET Report:
 - A. Hertfordshire County Council Transport Planning Framework: St Albans Local Plan Support Technical Note
 - B. Hertfordshire County Council COMET: AECOM TN 07 – Pattern of Travel across Hertfordshire

Water Infrastructure

- Appendix 14: Water Study Project for Hertfordshire Project Brief
- Appendix 15: Hertfordshire Planning Group Committee 25 May 2016- Water Study Project Update Extract
- Appendix 16: Water Study Project for Hertfordshire Interim Report

Appendix 17: Water Study Project for Hertfordshire Final Report (when available)

Education

- Appendix 18: Education Facilities Extract of East Hemel Hempstead
Landowner/Developer Engagement Stage 2 Presentations and follow up
report (PPC Nov 2015)
- Appendix 19: Education Facilities Extract of North West Harpenden
Landowner/Developer Engagement Stage 2 Presentations and follow up
report (PPC Nov 2015)
- Appendix 20: Education Facilities Extract of East St Albans Landowner/Developer
Engagement Stage 2 Presentations and follow up report (PPC Nov 2015)
- Appendix 21: HCC Education Response Regulation 19 Consultation February 2016
Appendix B
- Appendix 22: HCC Meeting the Rising Demand for School Places: Primary Schools Mid-
Year 2015/16
- Appendix 23: HCC Meeting the Rising Demand for School Places: Secondary Schools
Mid-Year 2015/16

Community Infrastructure

- Appendix 24: Community Infrastructure Extract of East Hemel Hempstead
Landowner/Developer Engagement Stage 2 Presentations and follow up
report (PPC Nov 2015)
- Appendix 25: Community Infrastructure Extract of North West Harpenden
Landowner/Developer Engagement Stage 2 Presentations and follow up
report (PPC Nov 2015)
- Appendix 26: Community Infrastructure Extract of East St Albans Landowner/Developer
Engagement Stage 2 Presentations and follow up report (PPC Nov 2015)

Green Infrastructure

- Appendix 27: Green Infrastructure Extract of East Hemel Hempstead
Landowner/Developer Engagement Stage 2 Presentations and follow up
report (PPC Nov 2015)
- Appendix 28: Green Infrastructure Extract of North West Harpenden
Landowner/Developer Engagement Stage 2 Presentations and follow up
report (PPC Nov 2015)
- Appendix 29: Green Infrastructure Extract of East St Albans Landowner/Developer
Engagement Stage 2 Presentations and follow up report (PPC Nov 2015)

Transport

East Hemel Hempstead

Appendix 1: Transport Extract of East Hemel Hempstead Landowner/Developer Engagement Stage 2 Presentations and follow up report (PPC Nov 2015)



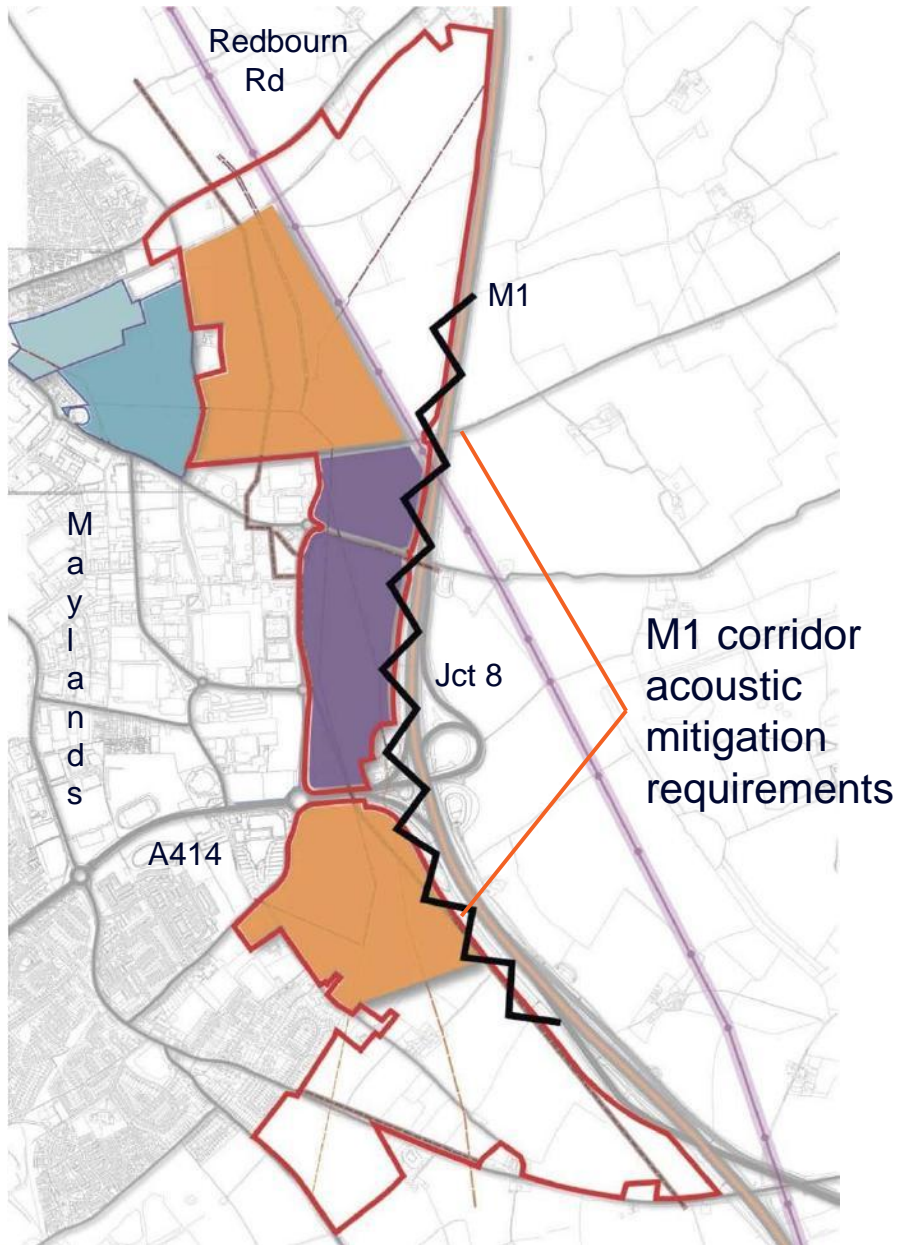
Your Objective:

“To provide a major urban extension of Hemel Hempstead to meet the needs of the St Albans housing market area and sub regional economic development objectives for growth in the M1 corridor.”

Draft SLP Policy 13

The objective

East Hemel

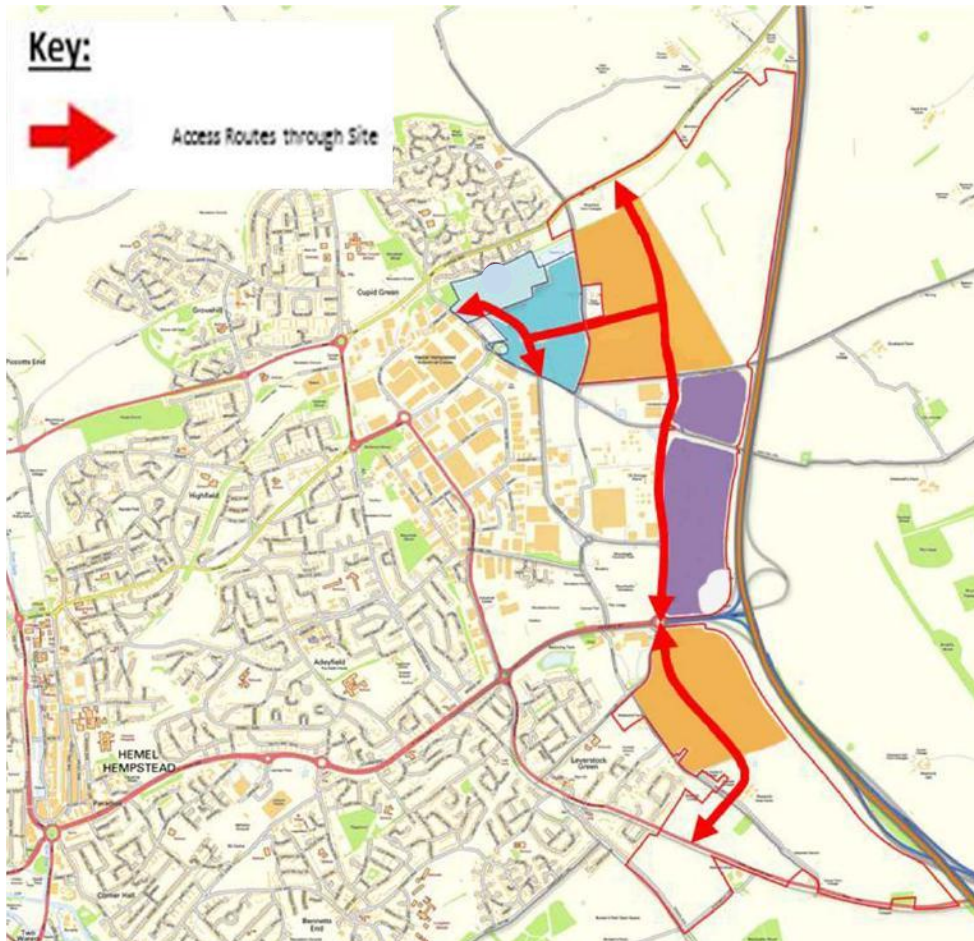


Main influences

M1 Motorway

- M1 noise and air quality issues recognised and addressed
- Mix of bunding, fencing and buildings
- Operations under review
- Mitigation forms part of landscape concept
- There are no showstoppers

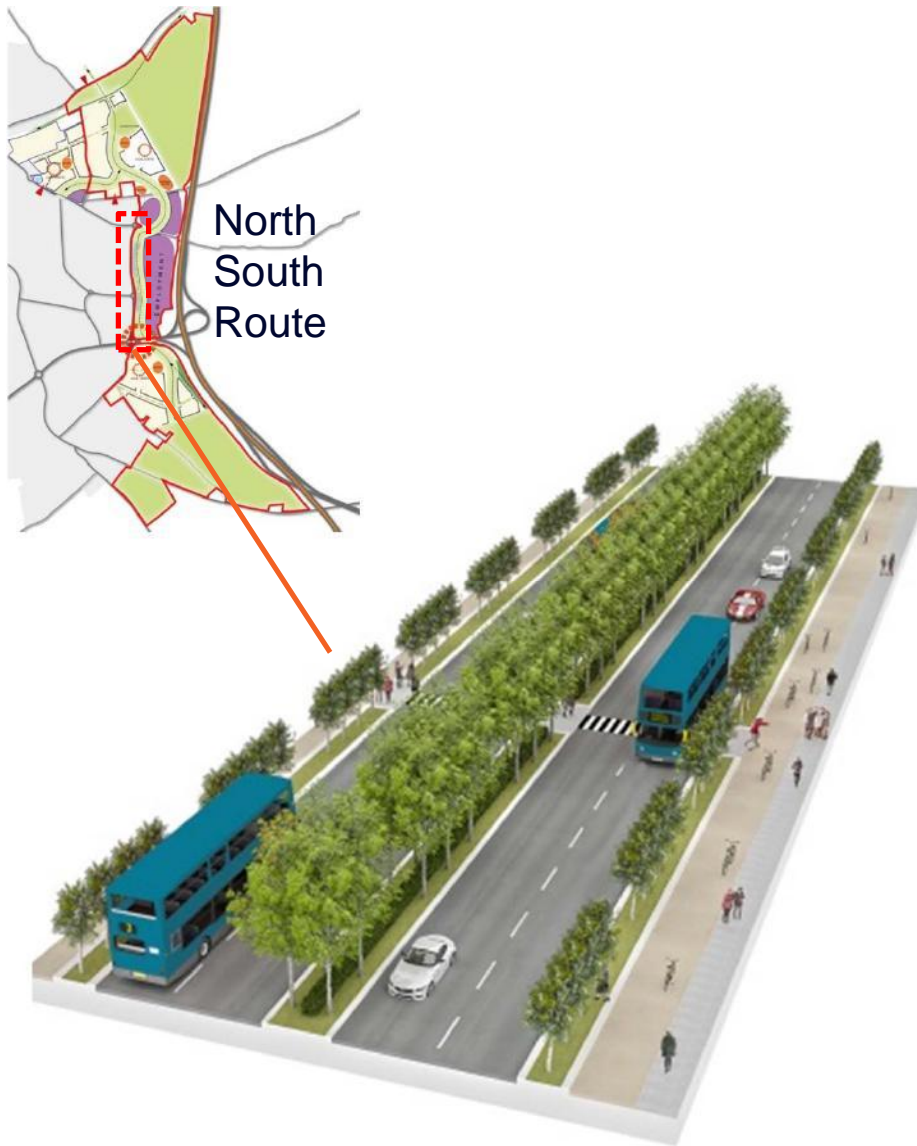
East Hemel



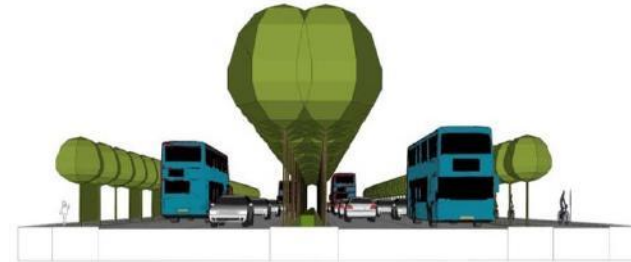
- Good highway links
- A414 - links to Hemel Hempstead & St Albans
- North / South spine road with Maylands links
- Significant employment locally means people can live & work in the area, reducing impact on M1
- East Hemel's transport proposals will benefit St Albans & Hemel Hempstead residents
- No Show Stoppers

Local highway network

East Hemel



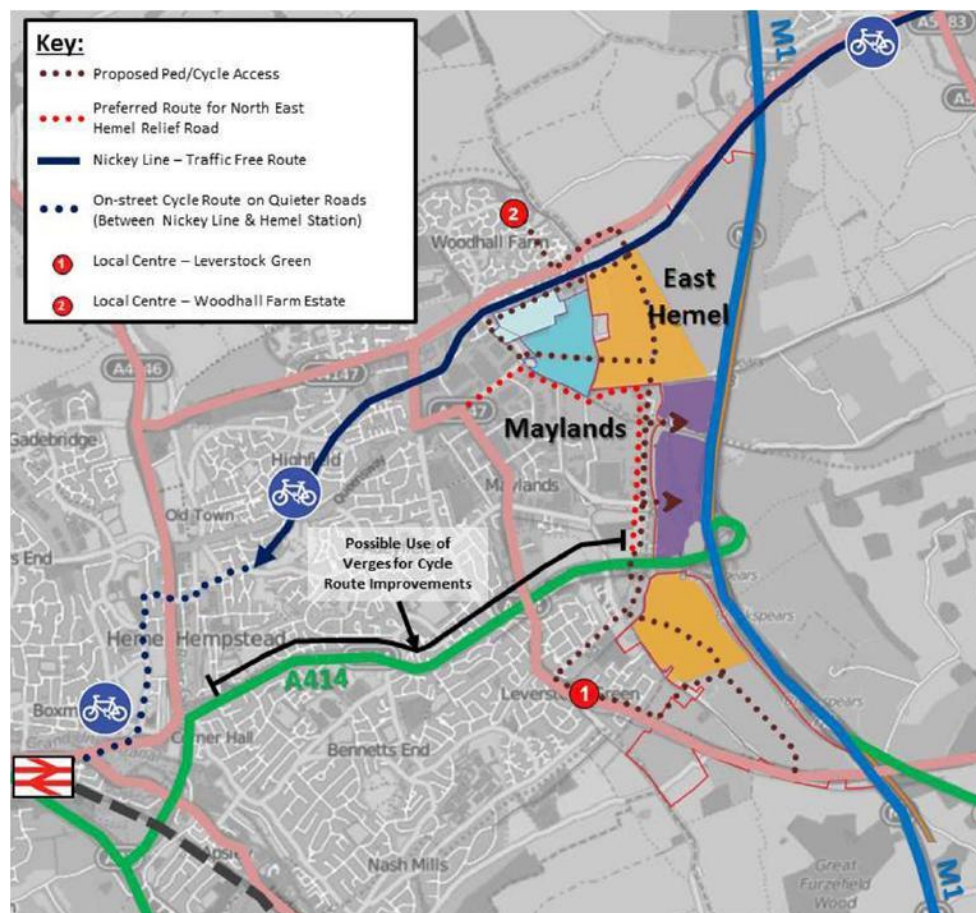
- An enhanced road link will improve connections between A414, Maylands & new residential areas
- A new high quality front door to the proposed commercial plots
- A greatly improved connection to the new homes
- Green link for safe cycle & pedestrian connectivity



The north / south route

East Hemel

New Walking and Cycling Links

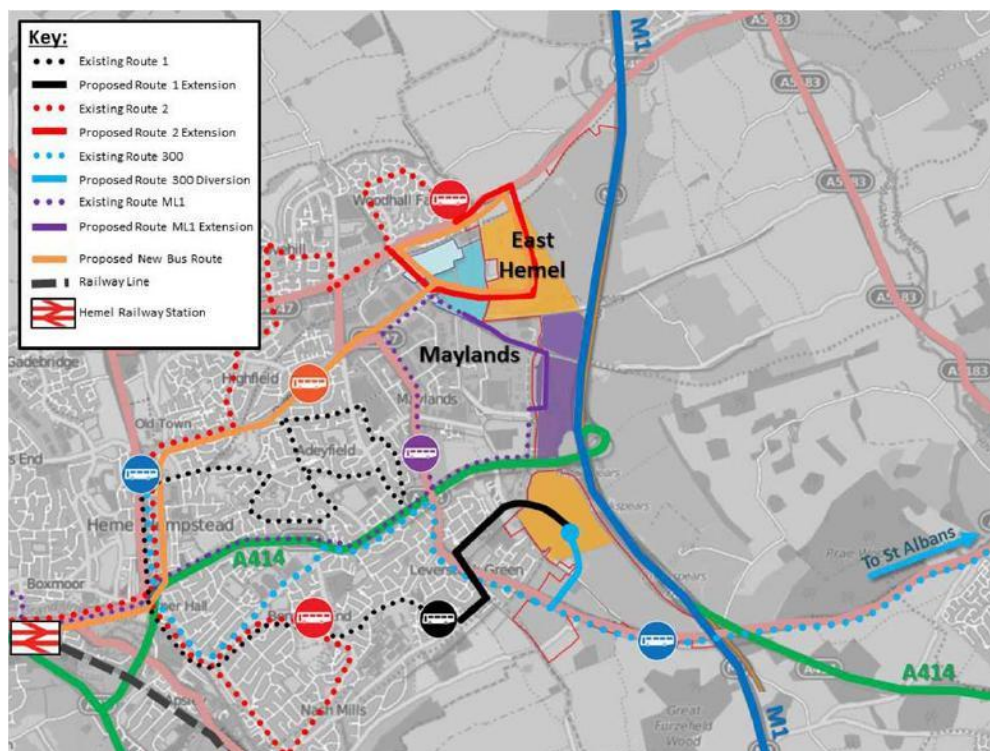


- Creation of key desire lines for pedestrians and cyclists
- Enables linkages to the Nickey Line through to the railway station & town Centre
- Creates a hierarchy of routes through the site
- Potential cycle route within grass verges along the A414

Sustainable transport strategy

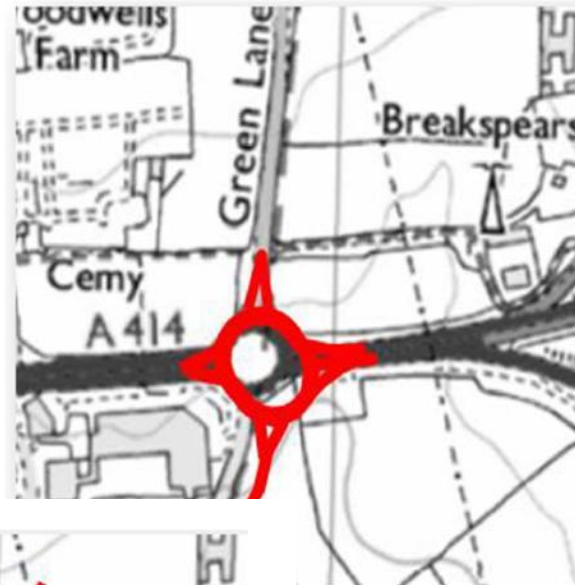
East Hemel

New Public Transport Links



- Creates a wide range of bus routes serving the site:
 - New routes
 - Diverted existing routes
 - Improved frequency
- Creates enhanced links to Hemel Hempstead train station and to St Albans
- Improved bus services are also a benefit to the existing community

Breakspear
roundabout
improvement
options



- TCE are working with both the Hertfordshire LEP and HCC to examine transport improvements in the Maylands area
- AECOM (for the LEP) options as part of the Maylands Growth Corridor Study
- The options require further testing and discussion with stakeholders
- The proposed improvements will address existing congestion issues thus providing community benefit.

Potential highways
improvements

East Hemel


- Preliminary Ecological Appraisal Report
(May 2015) Wardell Armstrong
- Archaeological and Cultural Heritage Appraisal
(May 2015) Wardell Armstrong
- Preliminary Ground Conditions Assessment
(May 2015) Wardell Armstrong
- Soil and Agricultural Land Classification
(May 2015) Wardell Armstrong
- Noise Feasibility Report [draft]
(August 2014) Wardell Armstrong
- Consultation Distance Report [re. HSE] Update
(November 2014) RPS Group
- Baseline Utilities Report
(May 2015) M-EC
- Economic Benefits Reports [draft]
(September 2013) Nathaniel Lichfield & Partners

Technical reports

East Hemel

 – Master planners

 – Highways & Transport

 – Noise, Air quality, Ecology,
Ground conditions, Services &
Infrastructure

 – PR

 – Landscape

 – Sustainability

 – Community Management
Advisor



Client

 – Planning

 – Project management &
Commercial Advice

 – Legals

East Hemel Team

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East Hemel

based on the Ordnance Survey Map with the permission of the Controller of
This information has been prepared for presentation on 12 October 2015

29 October 2015

Ref: RMS/CRO/GOR/15008

C Briggs
St Albans City and District Council
Civic Centre
St Peters Street
St Albans
Hertfordshire AL1 3JE

Email

Dear Mr Briggs

SLP : Stage 2 Presentation : East Hemel Hempstead

Thank you for the opportunity to present to your Members on the 12th October 2015. At the end of the meeting we were invited to review some of the points raised. This letter summarises the response of The Crown Estate (TCE).

TCE is happy to reconfirm all of its commitments contained in its Stage 2 presentation. In addition, this letter sets out how the package of proposals has been further enhanced to reflect Member concerns. The aim of this letter is to provide your Members with complete confidence that, if East Hemel Hempstead is allocated, the wider planning benefits will be delivered.

The Unique Selling Points of East Hemel

Whilst this was covered in our Stage 2 presentation, these are

- the scale of East Hemel (a total of 1,325 ha west of the M1)
- the benefits of the involvement of TCE, as sole landowner.

Looking at each of these in turn,

Scale

- allows the provision of a wide mix of land uses. This helps build a sustainable and walkable community that can minimise external vehicle trips
- creates 'financial muscle' to fund and deliver the social and physical infrastructure
- delivers a planning package which provides benefits to both the new and existing communities.

The Crown Estate (TCE)

- Ethos of long term management and social responsibility
- All profits returned to the Treasury
- A commitment to high quality and innovation in design and technology
- Control over all the land necessary to deliver the scheme
- The creation of a Community Management Organisation (CMO) as a common thread which binds the new community together and gives the community long term control over the quality and maintenance of their environment.

Wider Community Benefits

We take the provision of 40% affordable housing (in a variety of tenures), a mix of housing tailored to meet the local needs set out in the SHLAA and the prospect of creating up to 8,000 jobs as pre requisites of the development of East Hemel. In view of this, the remainder of this letter focusses on other parts of the planning package which should be reflected in the adopted Policies 13 (a) and (b).

The main elements of The East Hemel package delivered by The Crown Estate are set out below.

Education

- Providing the site and funding the buildings to accommodate an 8FE Secondary School. TCE would like to work with St Albans and HCC to link the new school with the Green Triangle initiative.
- Providing the sites and funding the buildings to accommodate one 2FE and one 3FE Primary School. It is suggested that the site for the 2FE school is large enough to be expanded to 3FE, to provide long term flexibility.

Community

- Providing mixed use local centres in both East Hemel North and South. TCE would like to investigate with you the creation of multi use buildings capable of providing education, community hall space and health (doctors, dentists and associated health professionals). The nature of these facilities will be such that they can benefit a wider area than just EHH. There would also be a local level of 'A' class floorspace and small office provision in the local centres.

Employment

- Providing a hub building in the employment area providing retail and business support for the employment area. This could be linked to the CMO controlled incubator space (see below) and provides a focus for the new business community.

- TCE will speculatively construct some starter units / incubator space as part of the first phase of the employment area. This will form part of the CMO 'dowry' and will be managed by the CMO.

Open Space/Community Food Park

- A range of open spaces from local areas of play to playing fields and parkland which will also serve existing residents.
- The creation of a community food zone (including orchards, vegetable growing areas, informal recreation and education / interpretation) in the Green Belt north of East Hemel. This would be owned and managed by the CMO.

Affordable Housing

- In conjunction with St Albans Council, investigate the potential for some of the 1,000 affordable homes to be rural exception housing (or its equivalent) and for some affordable housing to be vested in the CMO.
- The provision of 600 rented affordable homes. Of these, 200 would be provided to the Council (or Registered Provider) at a nil land cost. This will maximise the opportunity for these properties to be offered for social rent rather than affordable rent.
- As an illustration, if it was assumed that the value of each completed affordable home was £150,000, the value of the 1,000 affordable homes would be £150m.

Transportation

- New footpath and cycle links into both Hemel Hempstead and east into St Albans, including improvements to the Nickey Line.
- Improvements to the A414 and a new north / south vehicular route through the whole of East Hemel. This will both provide for the development proposals and improve access for existing residents and businesses in St Albans, Hemel Hempstead and Redbourn.
- New / extended bus routes and increased frequencies which will both serve the development and existing communities.

Gypsy and Travellers

- Two, fifteen pitch Gypsy and Traveller sites which will make a significant contribution to meeting identified G&T needs in the plan period to 2031.

Dacorum Uses

- Actively investigate the inclusion of uses sought by Dacorum Core Strategy, and supported by St Albans Council, such as a 'Green Energy Park' and a community sports facility.

Other Uses

Other elements such as the TCE commitment to high quality design and innovative low carbon / renewable energy solutions were set out in the Stage 2 presentation. In combination, these should deliver lower running costs for the occupiers of both market and affordable homes at East Hemel.

Community Management Organisation

It will be apparent from the above that the CMO is a central focus of TCE's concept for East Hemel. The role and constitution of the CMO was set out in the Stage 2 slides. However, it may be of assistance to spell out in more detail the scope of the organisation. It would

- manage all open space
- manage and own all community buildings
- part of its funding will come from a service charge on businesses and homes
- the CMO will receive a dowry of assets from TCE. This is likely to focus on commercial assets in the employment area that will generate a long term and stable income. Part of this will include the first phase starter units / incubator space in the employment area
- the CMO will be responsible for liaison with businesses to foster an East Hemel Apprenticeship scheme
- CMO staff to act as 'community initiators' in the early years of the development
- whilst the legislative and policy basis for the provision of "affordable" housing is evolving at present, TCE is willing to investigate the potential for the CMO to be vested with some affordable housing which it could manage on behalf of the community.

Although it is not yet possible to put a value on the total TCE package for East Hemel, it will include

- Secondary School (estimated cost £35m)
- Two Primary Schools (estimated cost £15m)
- Affordable housing (£150m based on the assumption that the completed value of the average affordable home is £150,000).

Even without costing the remainder of the package, this has a value which approaches £200m.

In realising these benefits, both your Council and TCE is constrained by the CIL Regulations. This means that any S106 obligation must meet the three legal tests for it to be lawful and be given any weight in a planning determination. Obligations which do not meet the tests risk being challenged in the Courts.

Having said this, TCE is sympathetic to the objectives of your Members which is to ensure that any strategic allocations also generate benefits for the wider community. Having carefully considered how this can be achieved within the constraints imposed by the CIL tests, we consider that the best way forward would be to specify your Council's full requirements in Policy 13(a) and (b). Once the SLP is adopted, any planning application would need to comply with the terms of the statutory policies applying to the site. Such an approach would ensure that wider community benefits are achieved within a lawful statutory policy framework.

We consider that your current Policy 13(a) and 13(b) wording, as amended by the suggestions set out above, will ensure that the East Hemel proposal is CIL compliant.

Please do not hesitate to contact me if you have any queries on the above.

Yours sincerely

A handwritten signature in black ink, appearing to read 'R M Sellwood', with a long horizontal flourish underneath.

R M Sellwood
Sellwood Planning Ltd

Appendix 2: Maylands Growth Corridor Study: Progress Meeting Slides 4-8

East Hemel Hempstead Note:

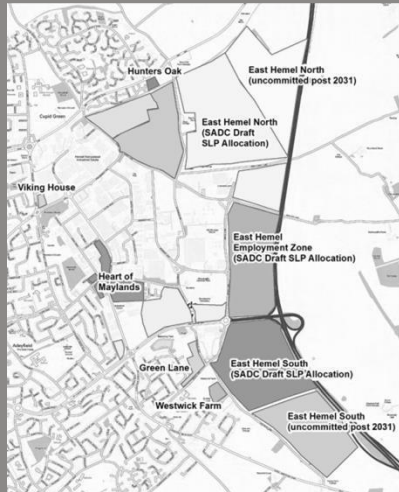
At the 31 January 2014 Planning Policy Committee, it was resolved that:

That the Council should initiate discussions with Dacorum Borough Council, the Hertfordshire Infrastructure and Planning Partnership (HIPP) and the Hertfordshire Local Enterprise Partnership (LEP) about co-operation and infrastructure funding/project support for potential major cross boundary housing and employment development at East Hemel Hempstead.

The following sections represent the main components of this collaborative transport work to date for the East Hemel Hempstead area.

It should be noted that the Maylands Progress Meeting Slides represent the progression of on-going work and the information contained does not always represent the agreed position by all parties.

Maylands Growth Corridor Study Progress Meeting 4



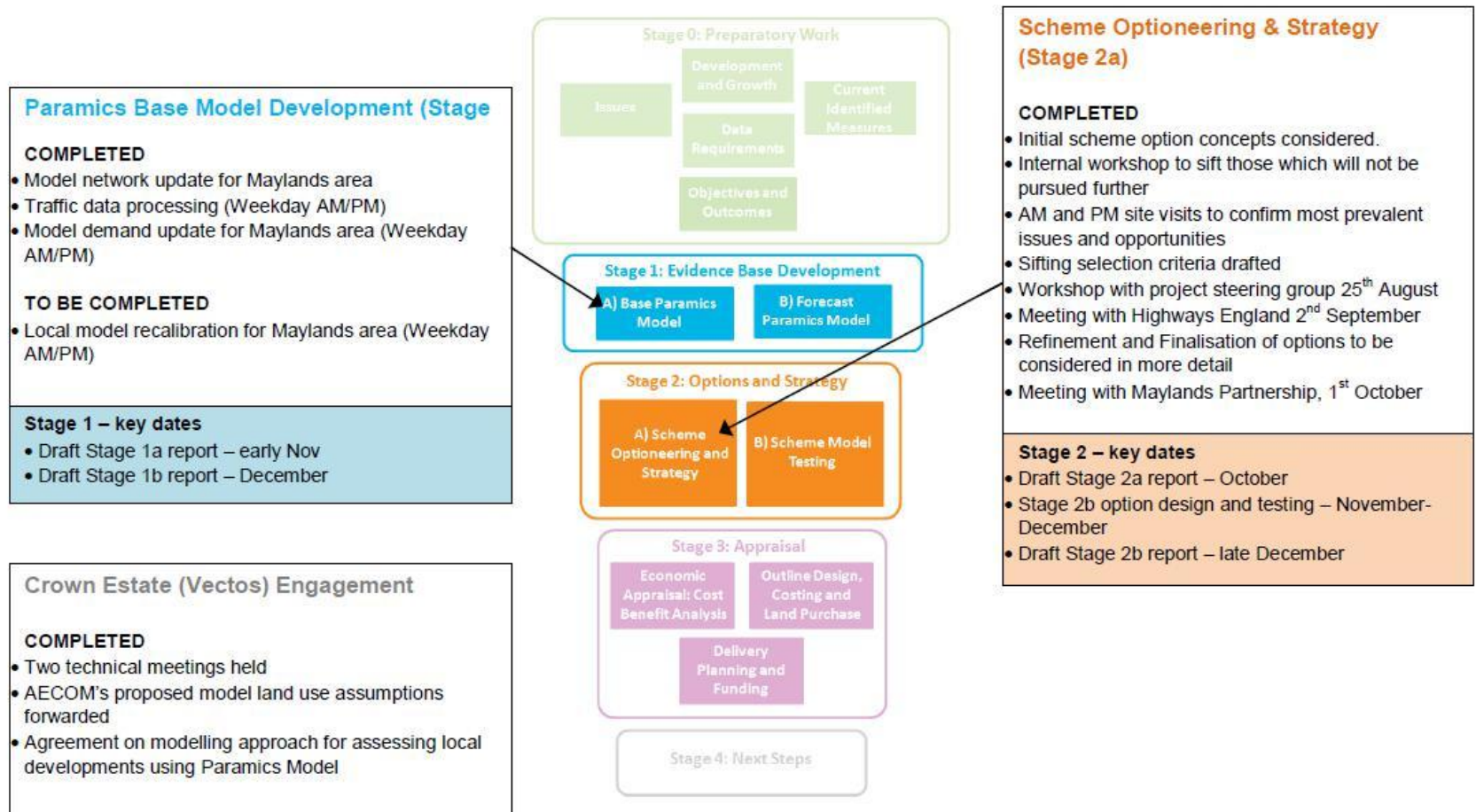
November 3, 2015

AECOM

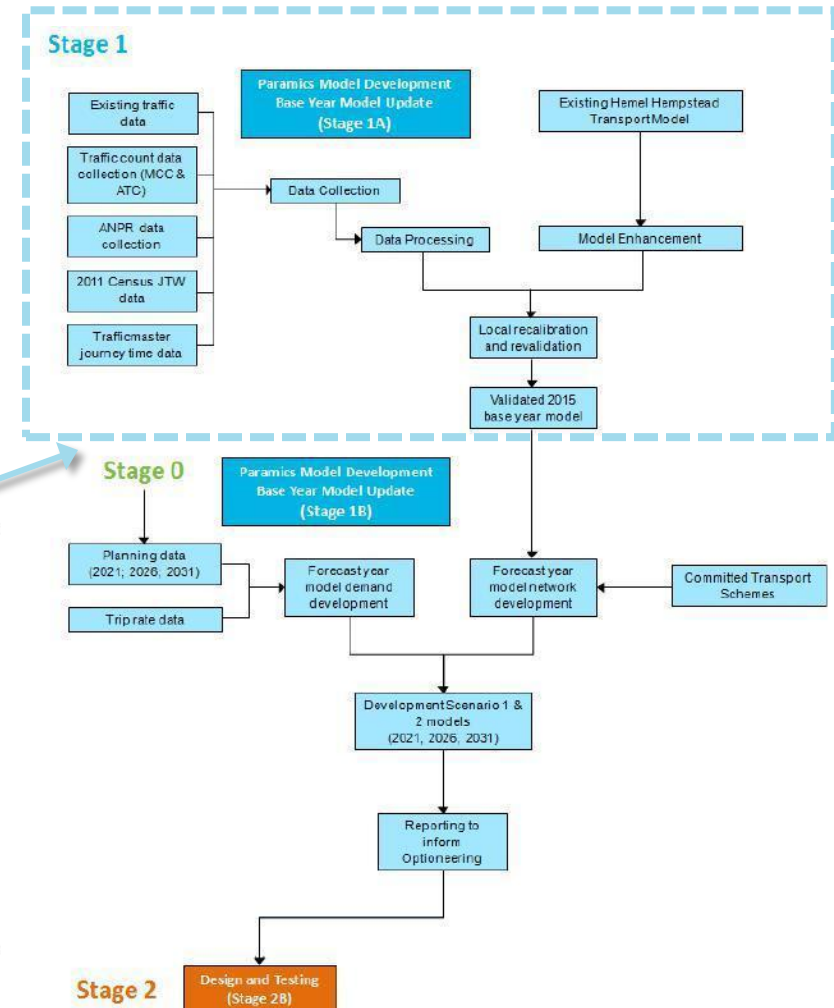
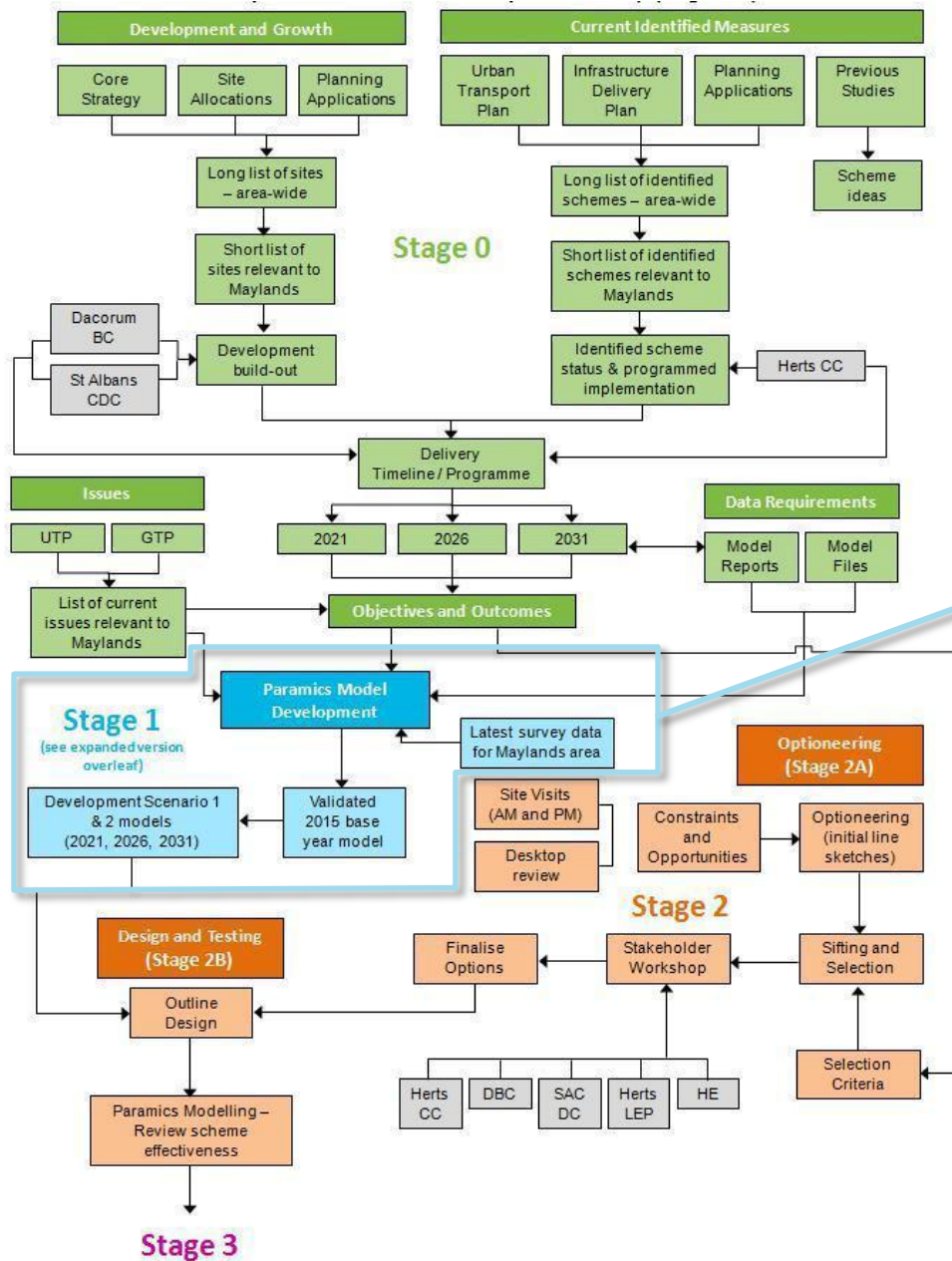
Agenda

- Overview of the commission, timescales and progress against deliverables
- Stage 1a Paramics Modelling – base year modelling and proposed approach for forecast year testing (reference case and scenarios)
- Development modelling – Crown Estate/Vectos
- Next Steps

Progress

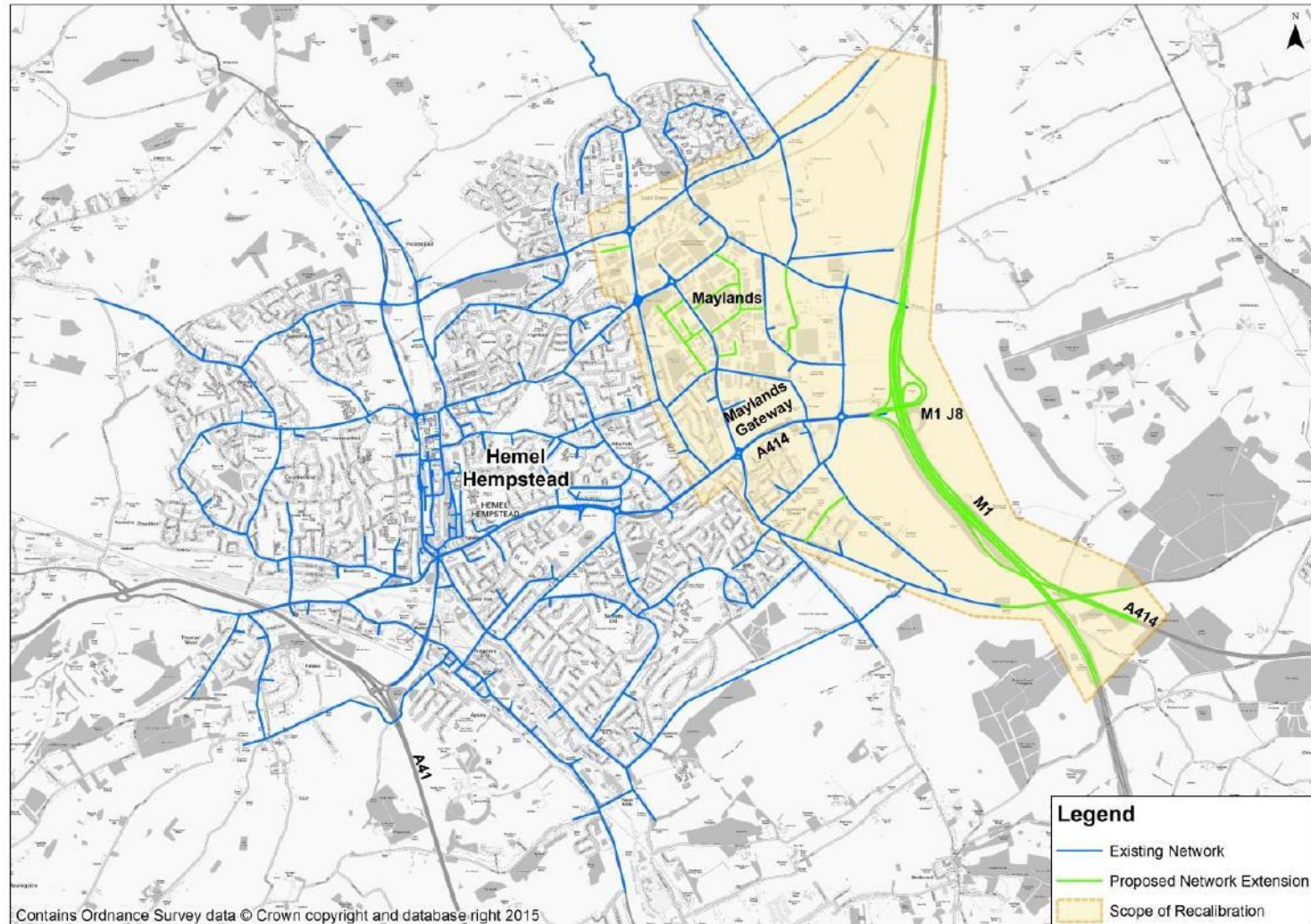


Process Map



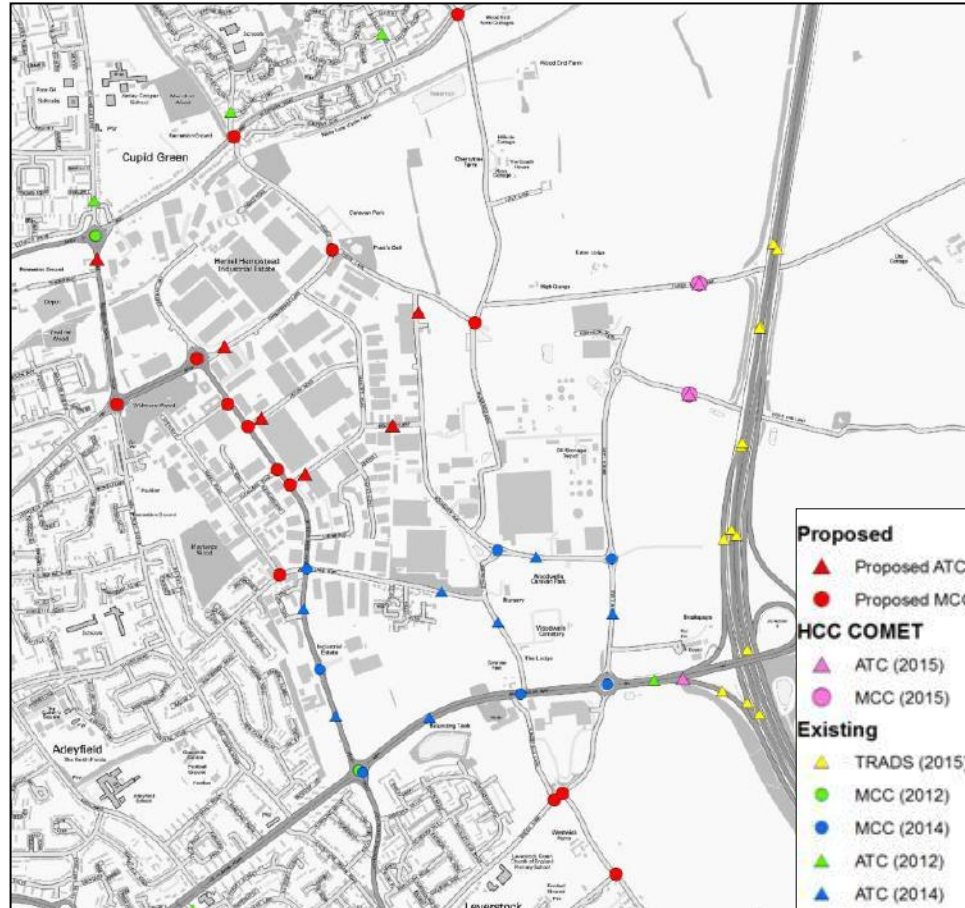
Modelling Overview

Area of Recalibration

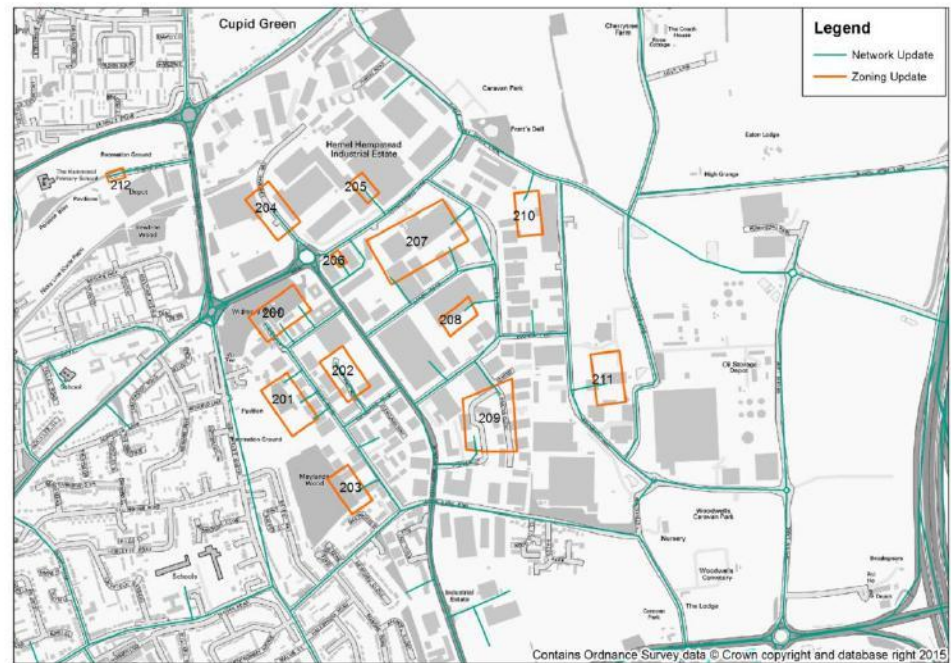
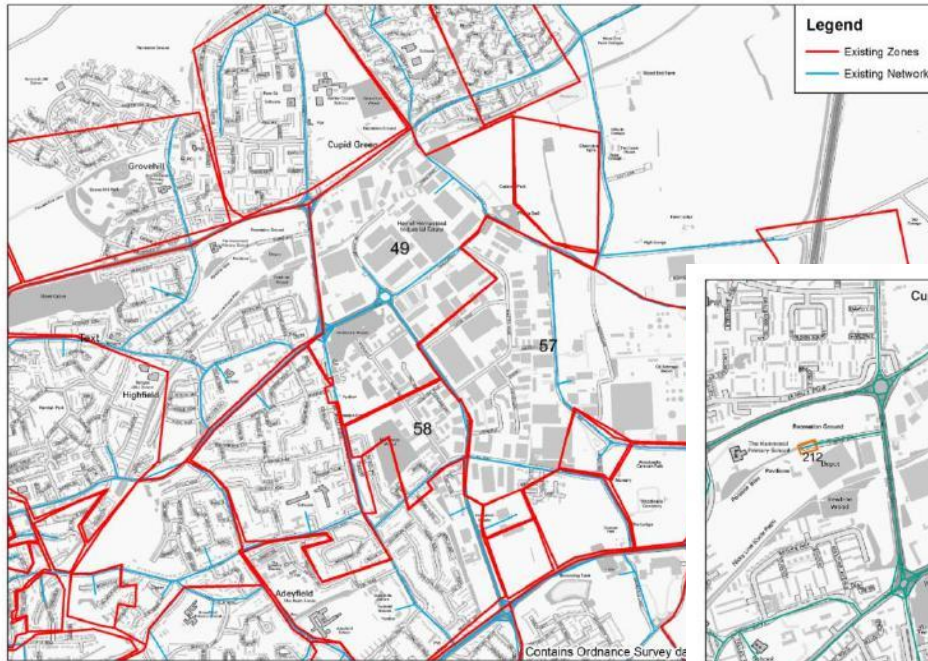


Modelling Overview

Area of Recalibration

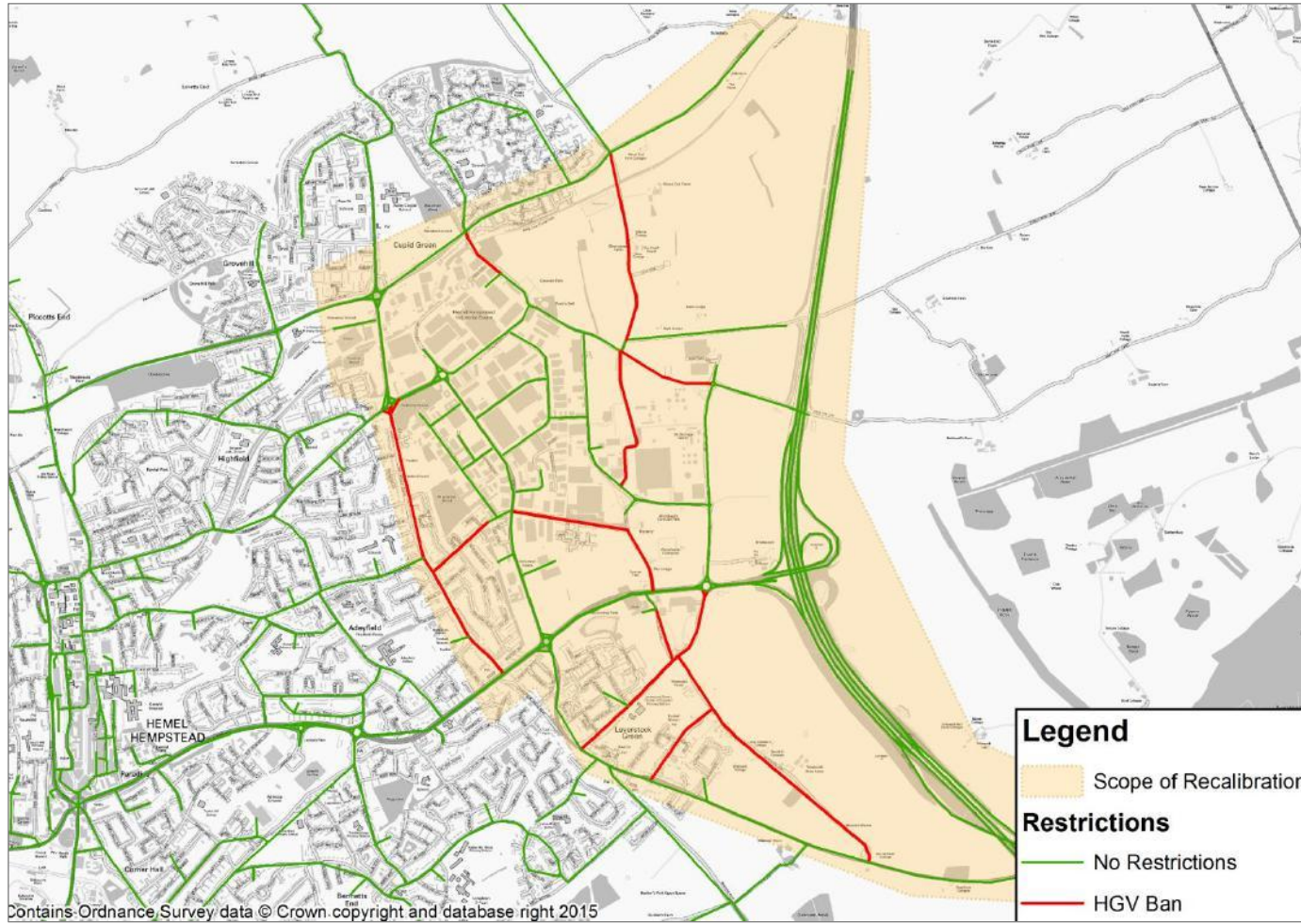


Area of Recalibration



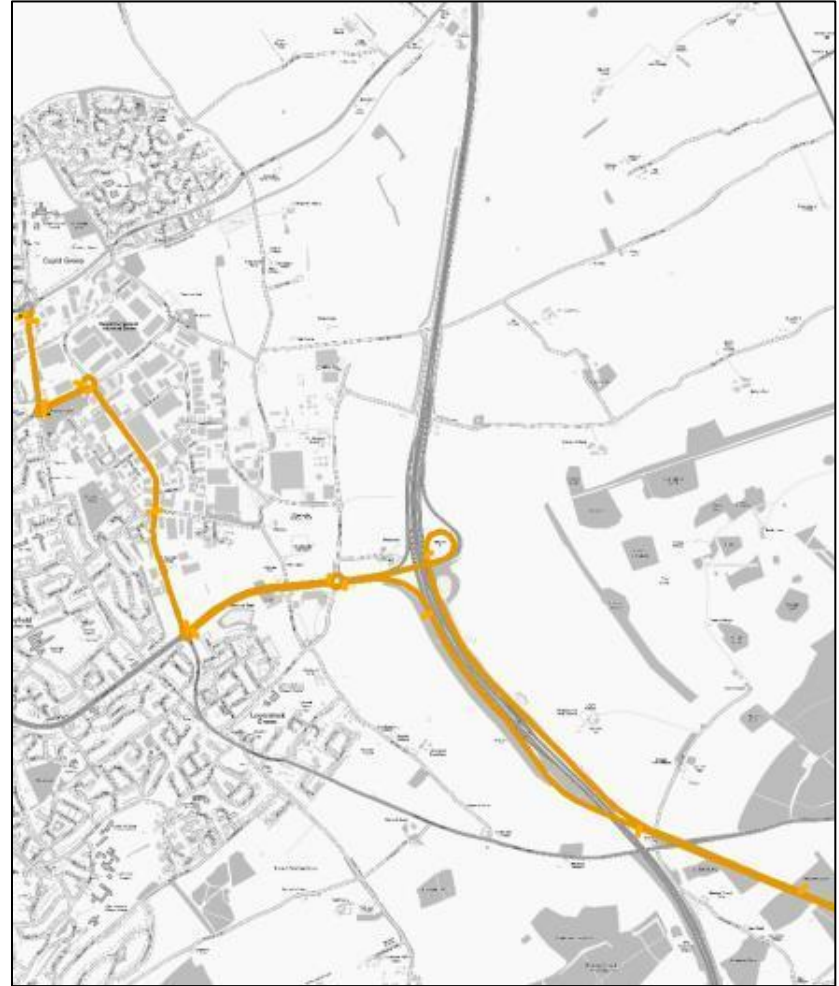
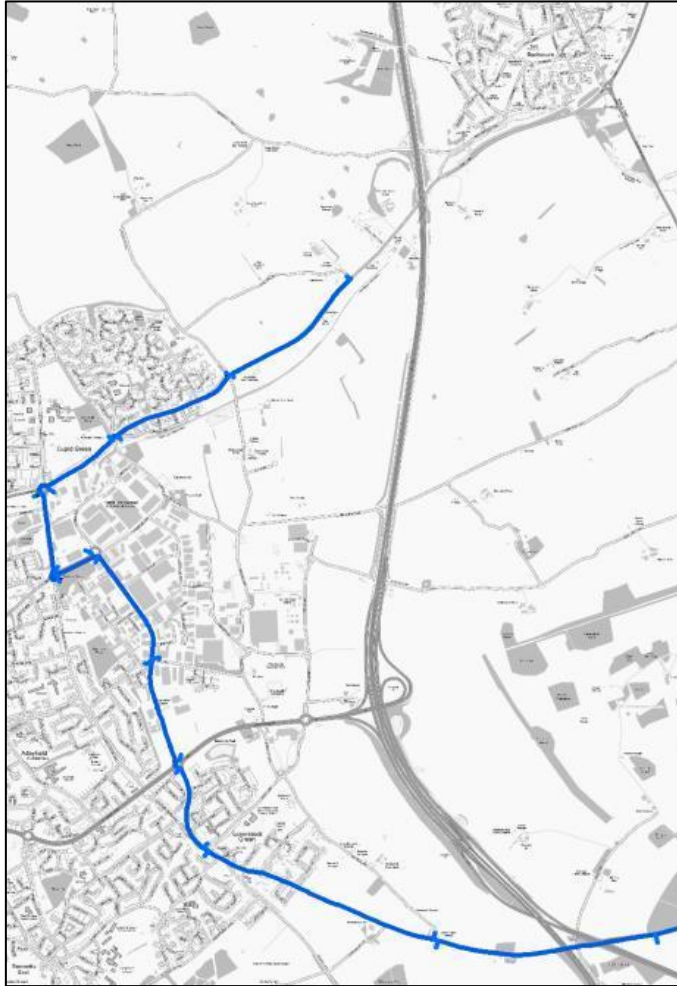
Modelling Overview

Area of Recalibration



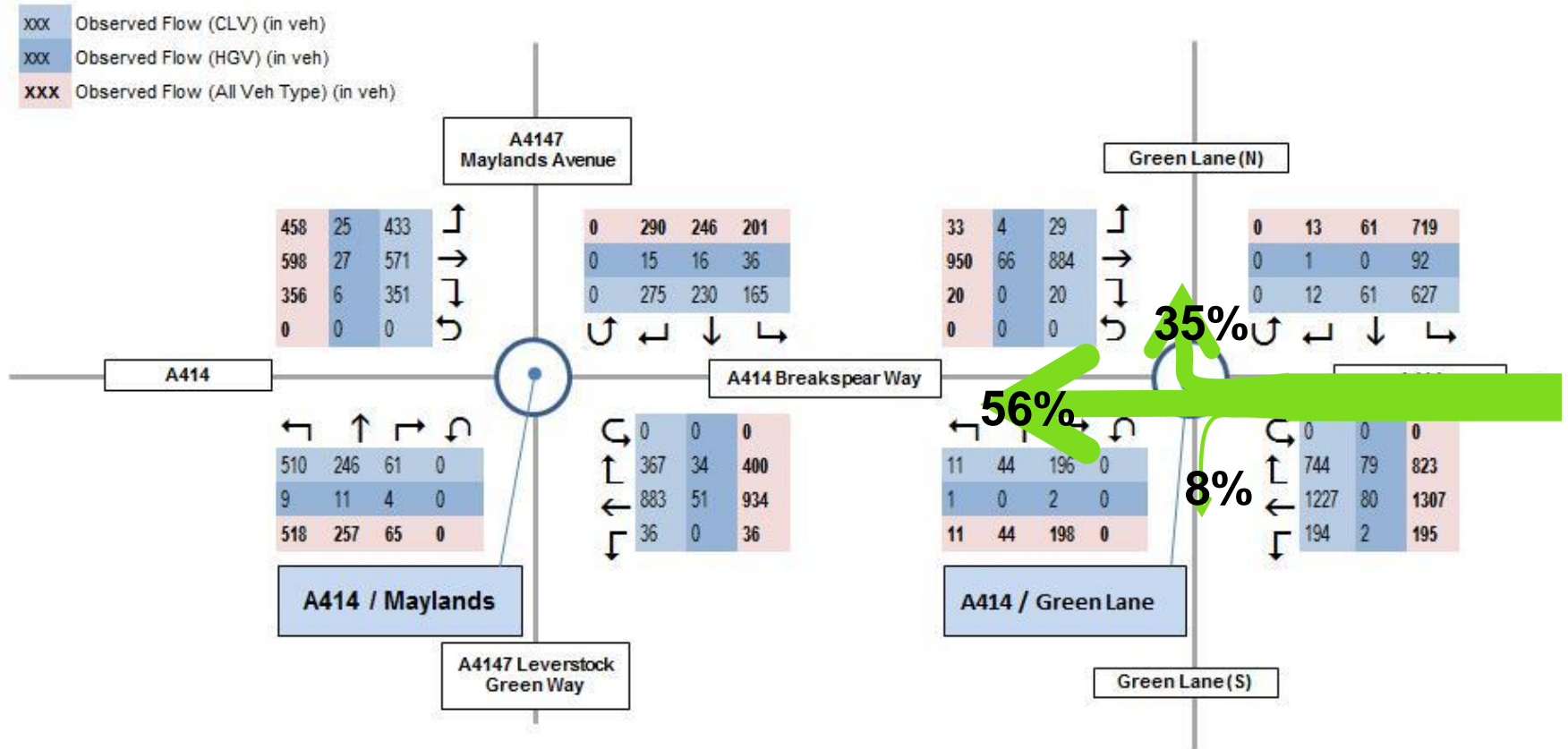
Modelling Overview

Journey Time Validation



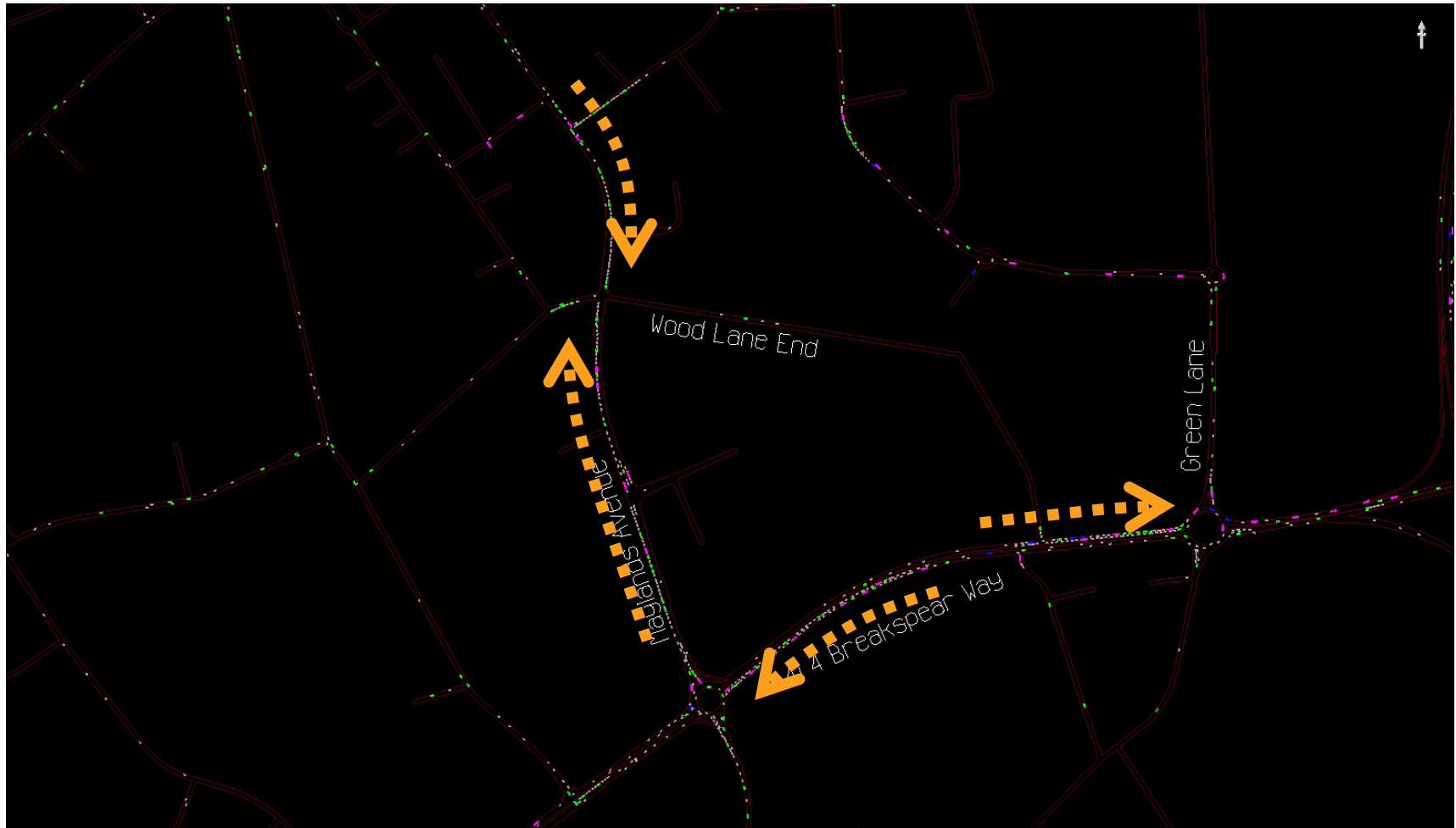
A414 Breakspear Way (Observed Turning Movements)

Morning Peak Hour



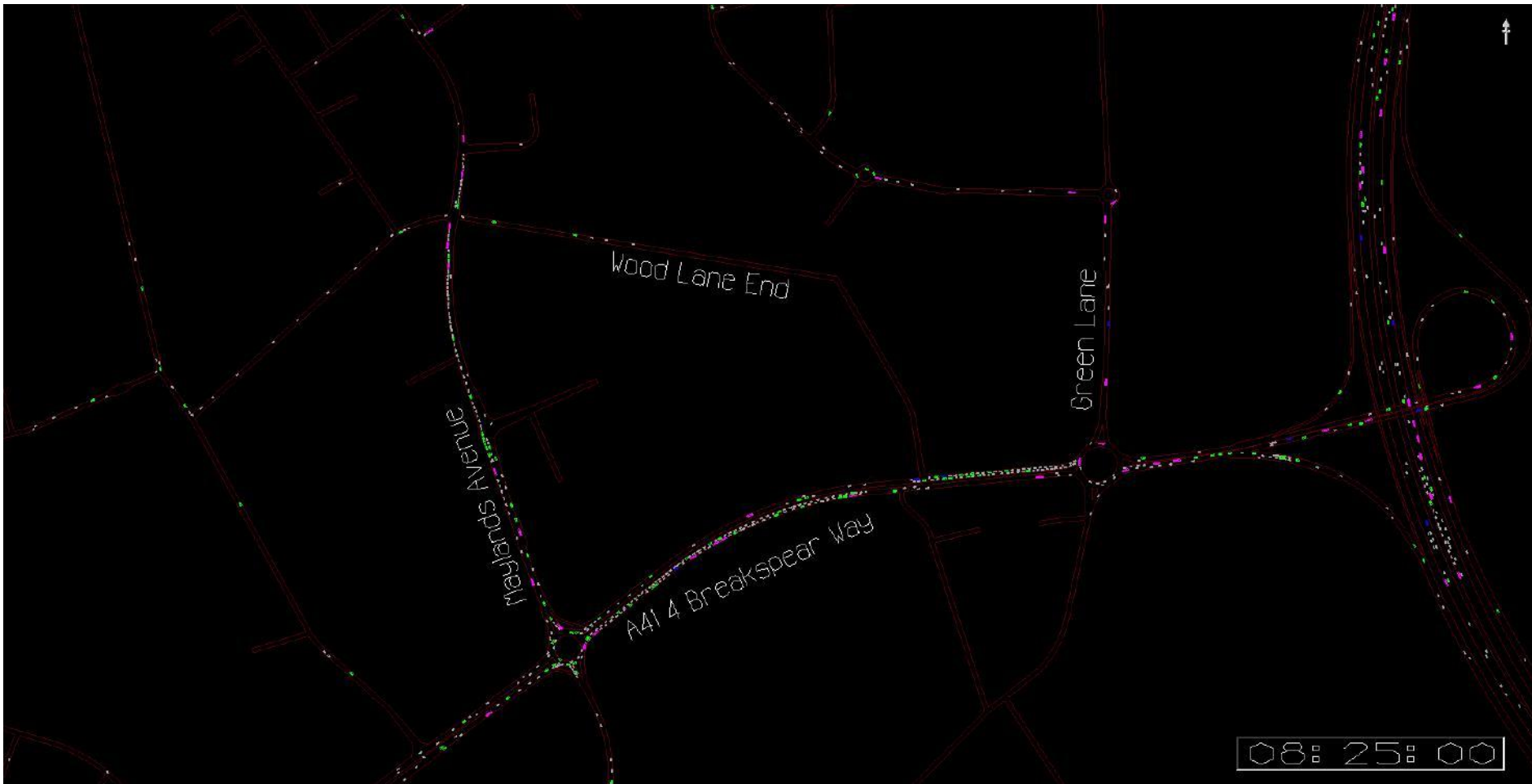
2015 Base Year Model

Morning Peak Hour



2015 Base Year Model

Morning Peak Hour



2015 Base Year Model

Evening Peak Hour

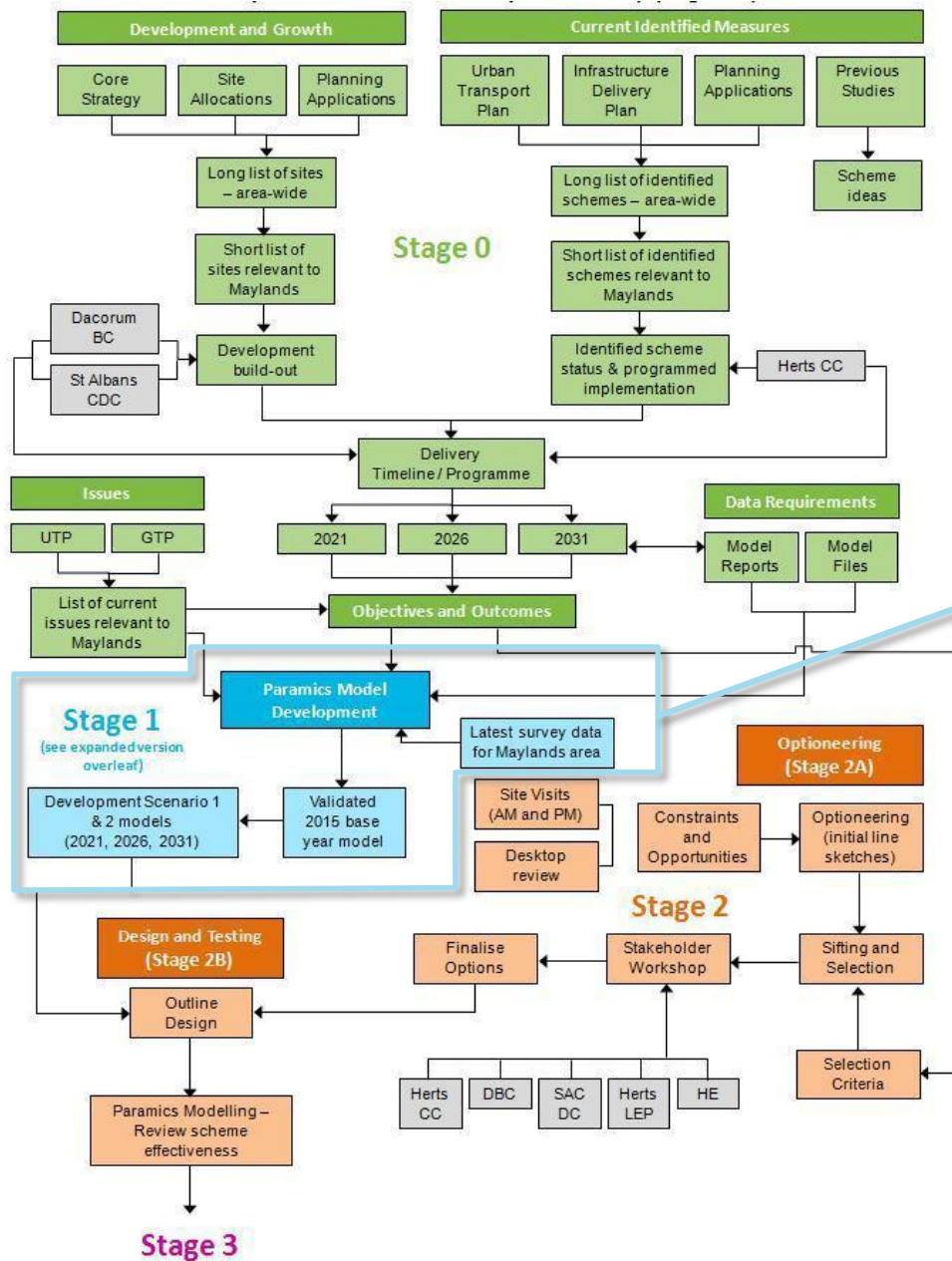


2015 Base Year Model

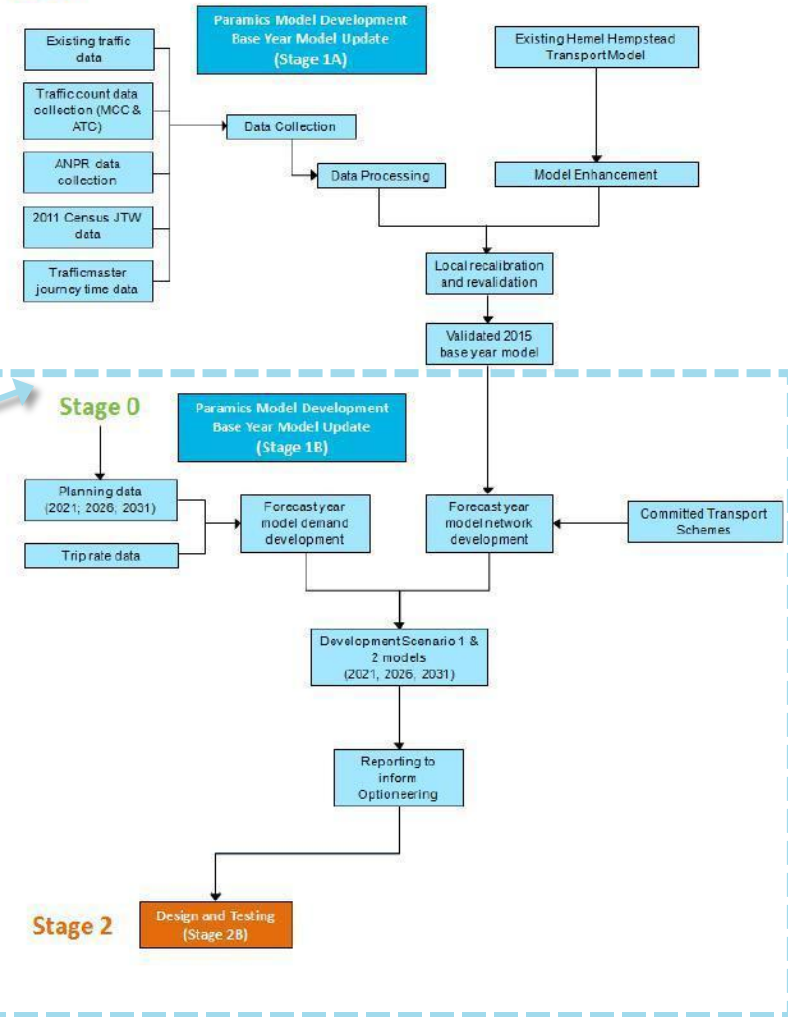
Evening Peak Hour



Process Map



Stage 1

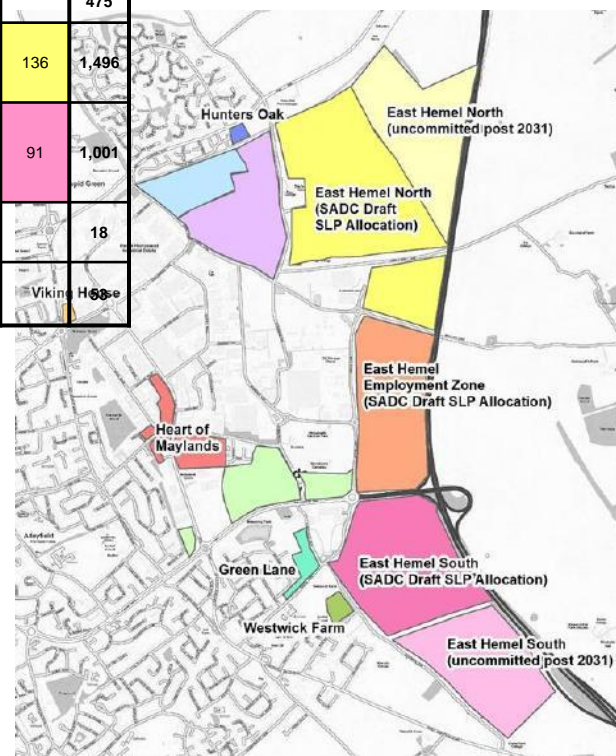


Future Growth

Stage 1b – Forecast Year Reference Case – Development and Growth

Development Site	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	Total
Buncefield Lane / Green Lane / & St Margrets Way / Datchworth Turn		45			16	16											77
Land at NE Hemel Hempstead, Three Cherry Trees Lane (Spencers Park) – Phase 1	57	100	100	100													357
Spencers Park Phase 2+						100	100	100	100	137							537
Viking House, Swallodale Lane	32	32															64
Within Heart of Maylands		65	65	195		50						50	50				475
East of Hemel Hempstead North (draft SLP allocation)						136	136	136	136	136	136	136	136	136	136	136	1,496
East of Hemel Hempstead South (draft SLP allocation)						91	91	91	91	91	91	91	91	91	91	91	1,001
Land adj. Hunters Oak, Redbourn Road					18												18
H/3 Land at Westwick Farm, Pancake Lane	13	13	13	14													53

- Key developments sites and their build-out identified



Model Testing

Stage 1b – Forecast Year Reference Case – Model Scenarios

– Forecast Year

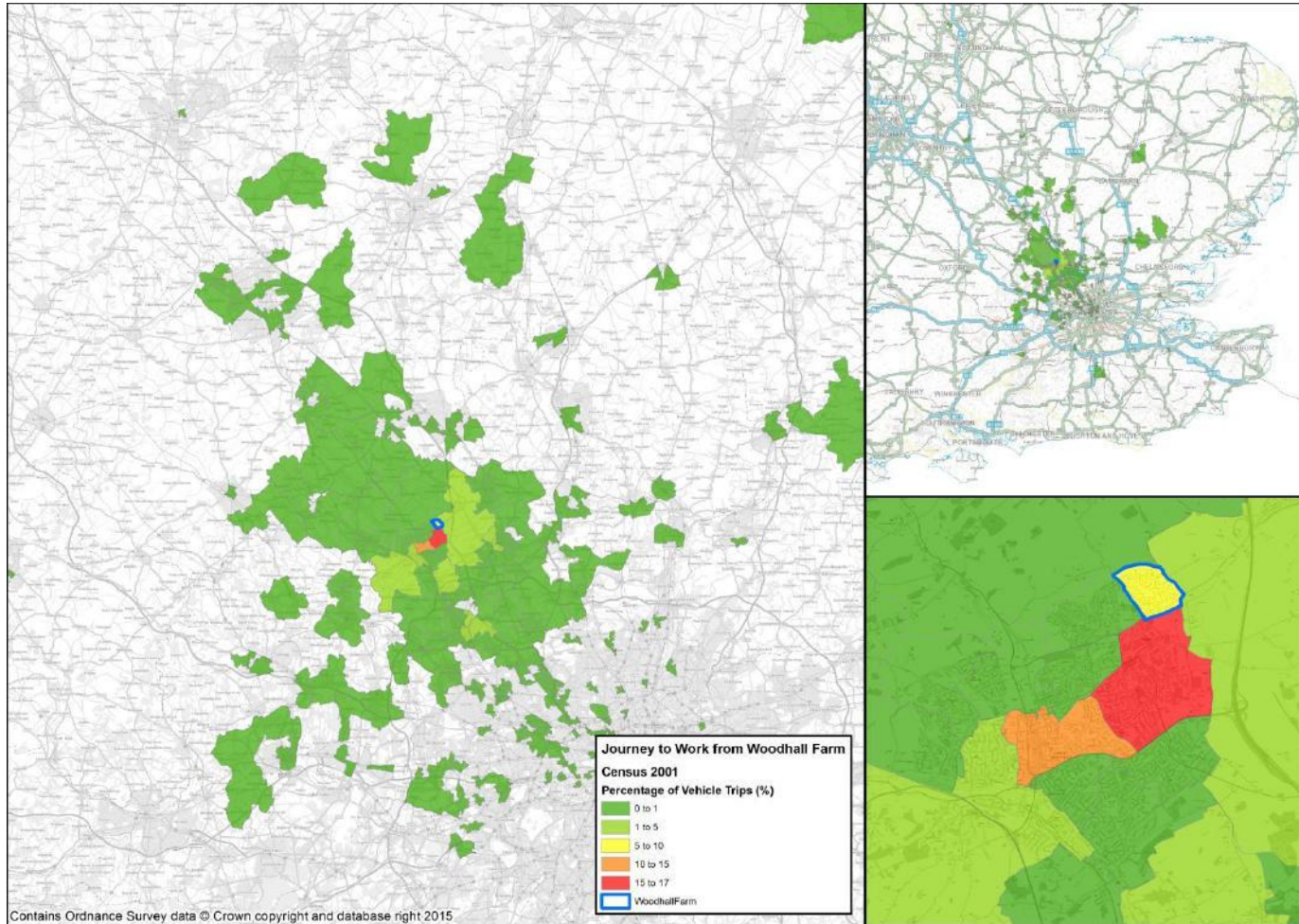
- 2021, 2026, 2031

– Demand Scenarios

- **Scenario 1** – B/G growth + Spencers Park, Maylands Gateway, Heart of Maylands etc.
- **Scenario 2** – Scenario 1 + East Hemel Development (2,500 dwellings)
- **Scenario 2+ (2031 Sen Test)** – Scenario 2 + Further East Hemel Dev (2,500 dwellings)

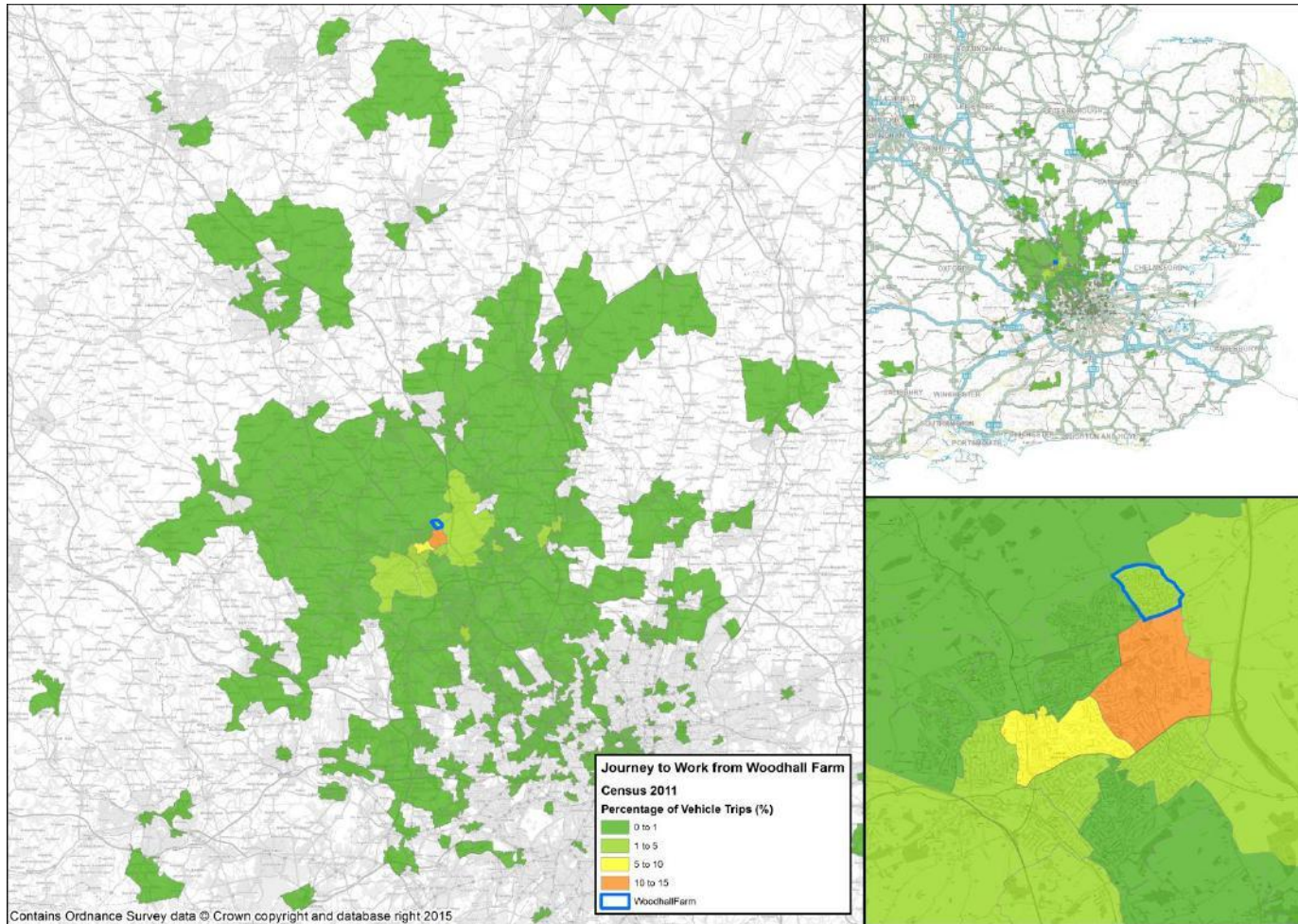
Model Testing

Stage 1b – Forecast Year Reference Case – JtW Census Data Analysis (2001)



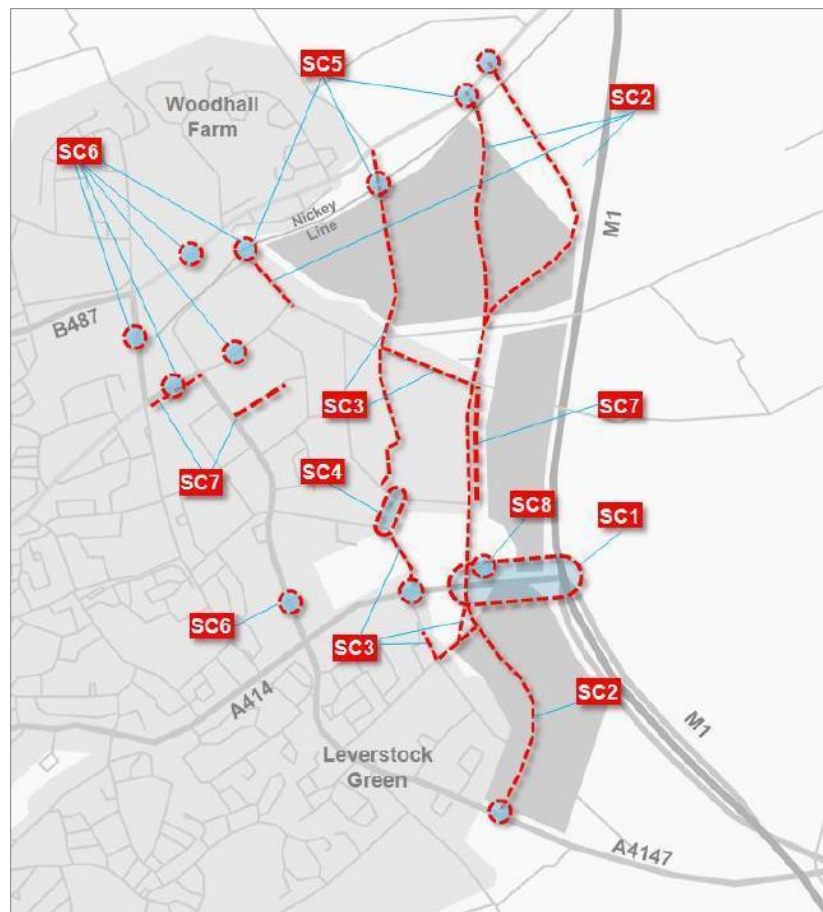
Model Testing

Stage 1b – Forecast Year Reference Case – JtW Census Data Analysis (2011)



Schemes

Stage 2b – Scheme Concept Options



SC1 - A414 Breakspear Way/Green Lane Junction Improvement

SC1a: Enlarged signalised roundabout with a 'hamburger' roundabout.

SC1b: Compact grade-separated junction

SC1c: Reconfigured M1 J8 with new Maylands eastern gateway access to the north

SC1d: Reconfigured M1 J8 with new Maylands western gateway access to the north

SC1e: Full signalisation of the existing roundabout plus widening on Green Lane (north & south), Breakspear Way eastern arm and the circulatory.

SC2 - East Hemel Hempstead North-South Spine Road

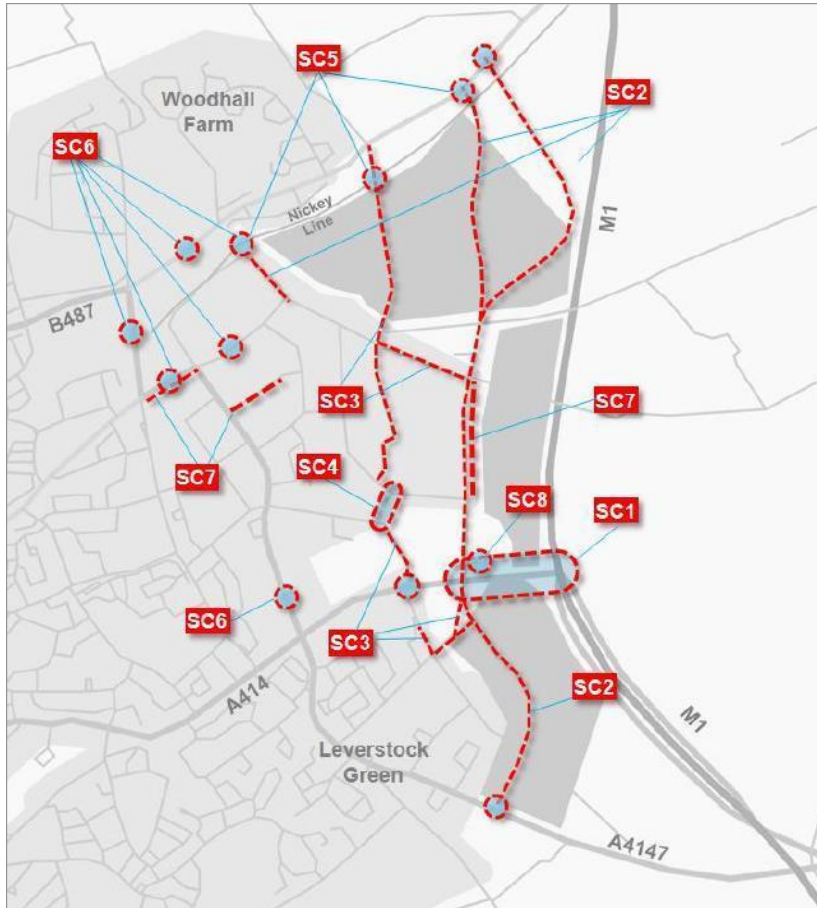
SC2a: Spine road connecting all parts of the proposed development, with links onto the A4147 Leverstock Green Road, A414 Breakspear Way and B487 Hemel Hempstead Road.

SC2b: Alignment runs closer to the M1.

SC2c: Follows upgraded Three Cherry Trees Lane.

Schemes

Stage 2b – Scheme Concept Options



SC3: Cherry Trees Lane, Buncefield Lane and Green Lane (South) Quietways

SC4: Wood End Lane-Boundary Way Link

SC5: Nickey Line Access Improvements and 'branch line' to East Hemel Hempstead

SC6: Pedestrian/Cyclist Crossings

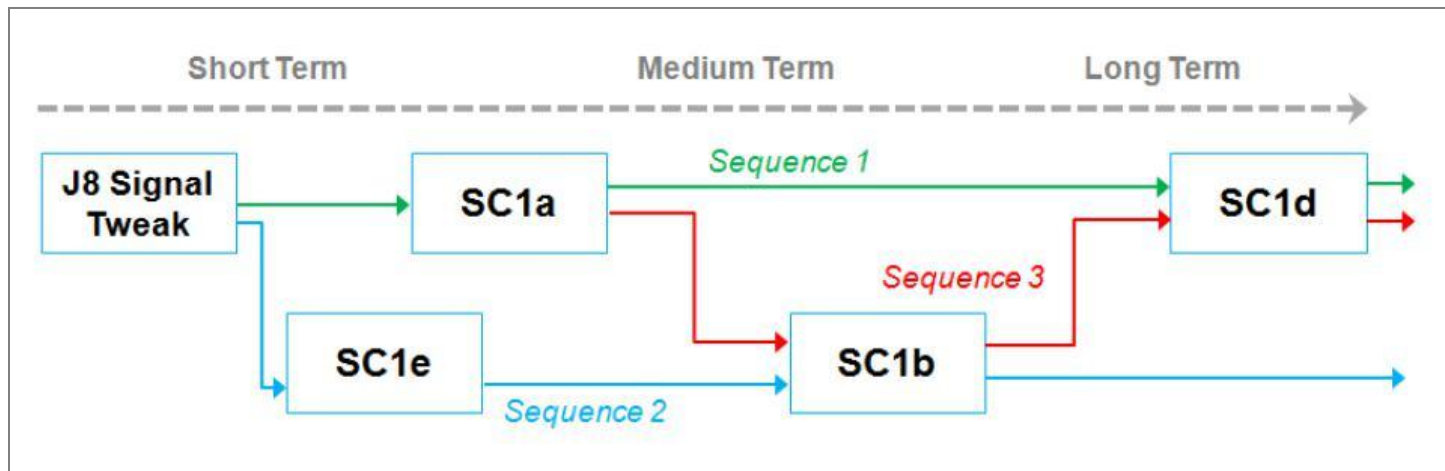
SC7: Lorry Parking

SC8: Circular Bus Service and N-S-E-W bus interchange adjacent to A414

Next Stages

Stage 2b – Defining model scenarios

- For modelling purposes, the proposal is to generate model scenarios based on groups of schemes packaged around the various SC1 options
- It is envisaged that not all of the SC1 options will deliver long term capacity - a sequence of delivery could be explored...



Next Stages

Stage 2b – Defining network scenarios

SC1	Existing	incl. HCC improvement	SC1a	SC1b	SC1c	SC1d	SC1e
		Amendment to M1 J8 signals	Hamburger	Compact grade separation		Enlarged J8	Localised widening
2015	✓	✓	✓	✗	✗	✗	✓
2021	✓	✓	✓	✗	✗	✗	✓
2026	✓	✓	✓	✓	✗	✗	✗
2031	✓	✓	✗	✓	✗	✓	✗
2031 Sensitivity	✓	✓	✗	✓	✗	✓	✗

SC2	SC2a	SC2b	SC2c
	Central alignment (with HGV ban)	Alignment closer to M1 (open to HGVs)	Improved Three Cherry Trees Lane (with new Nickey Line bridge)
2015	✗	✗	✗
2021	✓	✓	✓
2026	✓	✓	✓
2031	✓	✓	✓
2031 Sensitivity	✓	✓	✓

Next Stages

Stage 2b – Possible Model Scenarios

Study Stage	Scenario ID (YYYY-NetworkScenario-DemandScenario)	Network				Demand					Purpose of Scenario		Variants	Scenario Tests AM	Scenario Tests PM
		Do Nothing	N1 + Committed Highway Schemes	N2 + Maylands Concepts	N3 + Development Infrastructure (i.e. Spine Road)	Do Nothing	D1 + Background Growth	D2 + Development Scenario 1 (without East HH)	D2 + Development Scenario 2 (with East HH)	D2+ + Development Scenario 2+ (with East HH Sensitivity Test)					
1a	2015-1	✓	✗	✗	✗	✓	✗	✗	✗	✗	Base Year Model (existing traffic conditions)	REQUIRED	Single variant	1	1
2b	2015-2	✓	✓	✓	✗	✓	✗	✗	✗	✗	Test the performance of short term Maylands Concepts under existing traffic conditions	REQUIRED	2 variants	2	2
1b	2021-N1-D1	✓	✓	✗	✗	✓	✓	✓	✗	✗	Test the performance of the existing network under forecasting mode, with no proposed scheme options. This scenario will be used as benchmark to which the performance of proposed scheme options will be compared against.	REQUIRED	Single variant	1	1
2b	2021-N2-D1	✓	✓	✓	✗	✓	✓	✓	✗	✗	Test the performance of Maylands Concepts.	REQUIRED	2 variants	2	2
2b	2021-N3-D1	✓	✓	✓	✓	✓	✓	✓	✗	✗	Not required - no major development infrastructure is expected in 2021 (?)	NOT REQUIRED	N/A	0	0
2b	2021-N1-D2	✓	✓	✗	✗	✓	✓	✓	✓	✗	Not required - as according phasing assumption, there are no development on East HH in 2021 (?)	REQUIRED	Single variant	2	2
2b	2021-N2-D2	✓	✓	✓	✗	✓	✓	✓	✓	✗	Not required - as according phasing assumption, there are no development on East HH in 2021 (?)	REQUIRED	2 variants	2	2
2b	2021-N3-D2	✓	✓	✓	✓	✓	✓	✓	✓	✗	Not required - as according phasing assumption, there are no development on East HH in 2021 (?)	NOT REQUIRED	N/A	0	0
1b	2025-N1-D1	✓	✓	✗	✗	✓	✓	✓	✗	✗	Test the performance of the existing network under forecasting mode, with no proposed scheme options. This scenario will be used as benchmark to which the performance of proposed scheme options will be compared against.	REQUIRED	Single variant	1	1
2b	2025-N2-D1	✓	✓	✓	✗	✓	✓	✓	✗	✗	Test the performance of Maylands Concepts.	REQUIRED	2 variants	2	2
2b	2025-N3-D1	✓	✓	✓	✓	✓	✓	✓	✗	✗	Demonstrate the impact of potential development infrastructure. Can't have N3 with D1.	NOT REQUIRED	N/A	0	0
2b	2025-N1-D2	✓	✓	✗	✗	✓	✓	✓	✓	✗	Demonstrate the impact of East HH development.	REQUIRED	Single variant	1	1
2b	2025-N2-D2	✓	✓	✓	✗	✓	✓	✓	✓	✗	Test the performance of Maylands Concepts, and impact of East HH development	REQUIRED	2 variants	2	2
2b	2025-N3-D2	✓	✓	✓	✓	✓	✓	✓	✓	✗	Demonstrate the impact of potential development infrastructure, and impact of East HH development	REQUIRED	6 variants	6	6
1b	2031-N1-D1	✓	✓	✗	✗	✓	✓	✓	✗	✗	Test the performance of the existing network under forecasting mode, with no proposed scheme options. This scenario will be used as benchmark to which the performance of proposed scheme options will be compared against.	REQUIRED	Single variant	1	1
2b	2031-N2-D1	✓	✓	✓	✗	✓	✓	✓	✗	✗	Test the performance of Maylands Concepts. Let's assume full 2031 E Hemel development is not feasible without the spine road	NOT REQUIRED	N/A	0	0
2b	2031-N3-D1	✓	✓	✓	✓	✓	✓	✓	✗	✗	Demonstrate the impact of potential development infrastructure.	REQUIRED	6 variants	6	6
1b	2031-N1-D2	✓	✓	✗	✗	✓	✓	✓	✓	✗	Demonstrate the impact of East HH development.	REQUIRED	Single variant	1	1
2b	2031-N2-D2	✓	✓	✓	✗	✓	✓	✓	✓	✗	Test the performance of Maylands Concepts, and impact of East HH development	REQUIRED	2 variants	2	2
2b	2031-N3-D2	✓	✓	✓	✓	✓	✓	✓	✓	✗	Demonstrate the impact of potential development infrastructure, and impact of East HH development	REQUIRED	6 variants	6	6
1b	2031-N1-D2+	✓	✓	✗	✗	✓	✓	✓	✓	✓	Demonstrate the impact of further East HH development. Let's assume further development won't happen unless all the proposed infrastructure is in place	NOT REQUIRED	N/A	0	0
2b	2031-N2-D2+	✓	✓	✓	✗	✓	✓	✓	✓	✓	Demonstrate the impact of further East HH development. Let's assume further development won't happen unless all the proposed infrastructure is in place	NOT REQUIRED	N/A	0	0
2b	2031-N3-D2+	✓	✓	✓	✓	✓	✓	✓	✓	✓	Demonstrate the impact of further East HH development.	REQUIRED	3 variants	3	3

Next Stages

Timescale

- Stage 1b forecast year reference case modelling – November/December
- Stage 2b forecast year scheme scenario modelling – November-January
 - Initial testing of options in 2015 or 2021 to determine scheme potential
- Stage 2b scheme design of finalised options – November-January



Thank You

November 3, 2015

Maylands Growth Corridor Study Progress Meeting 5



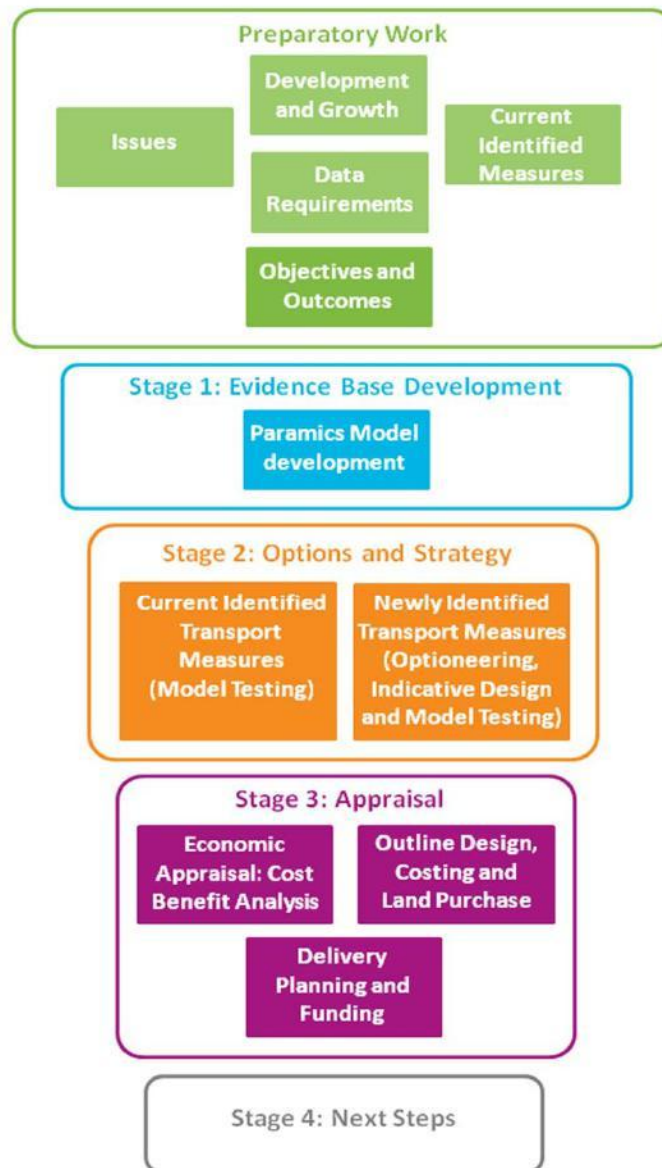
January 29, 2016

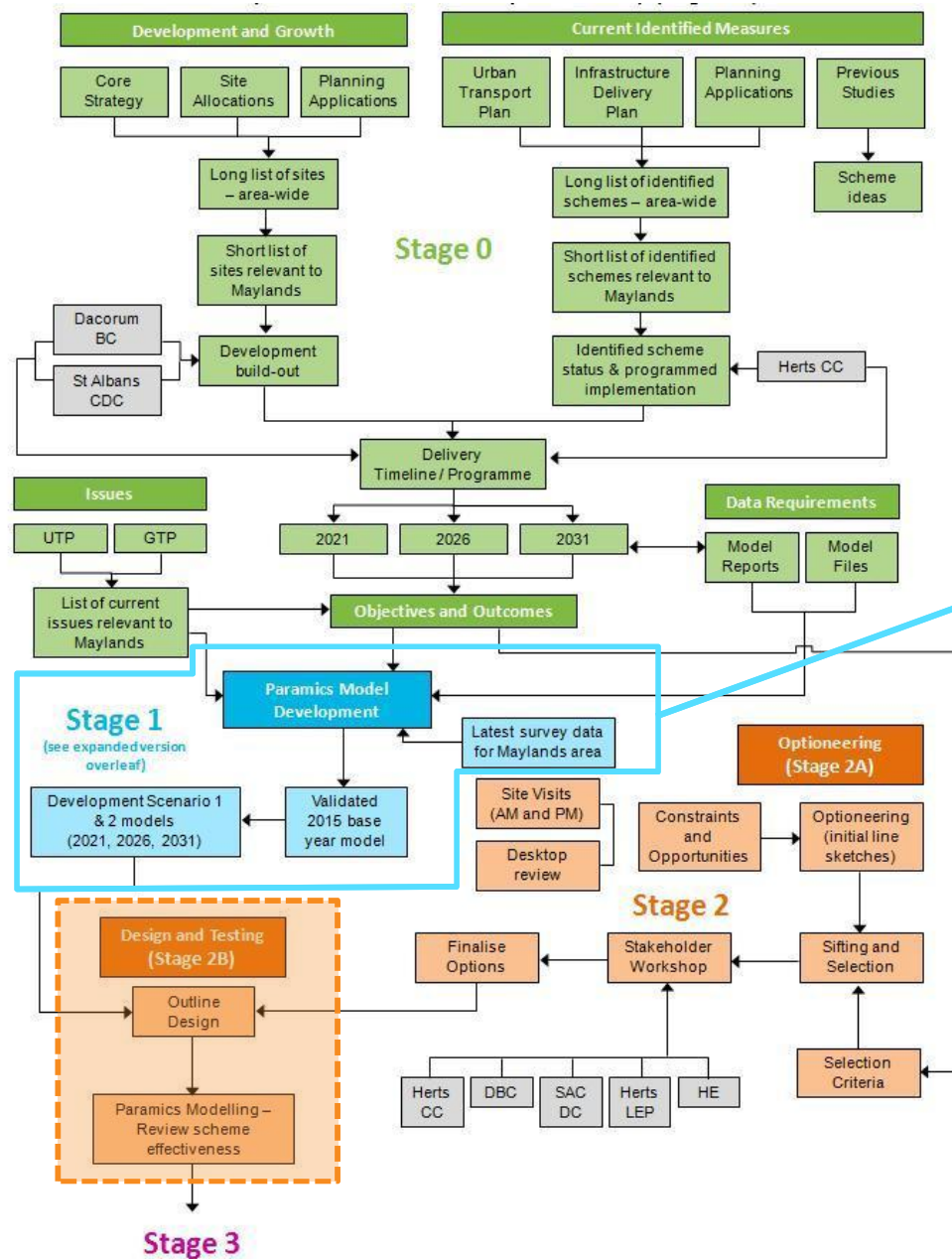
AECOM

Presentation Agenda

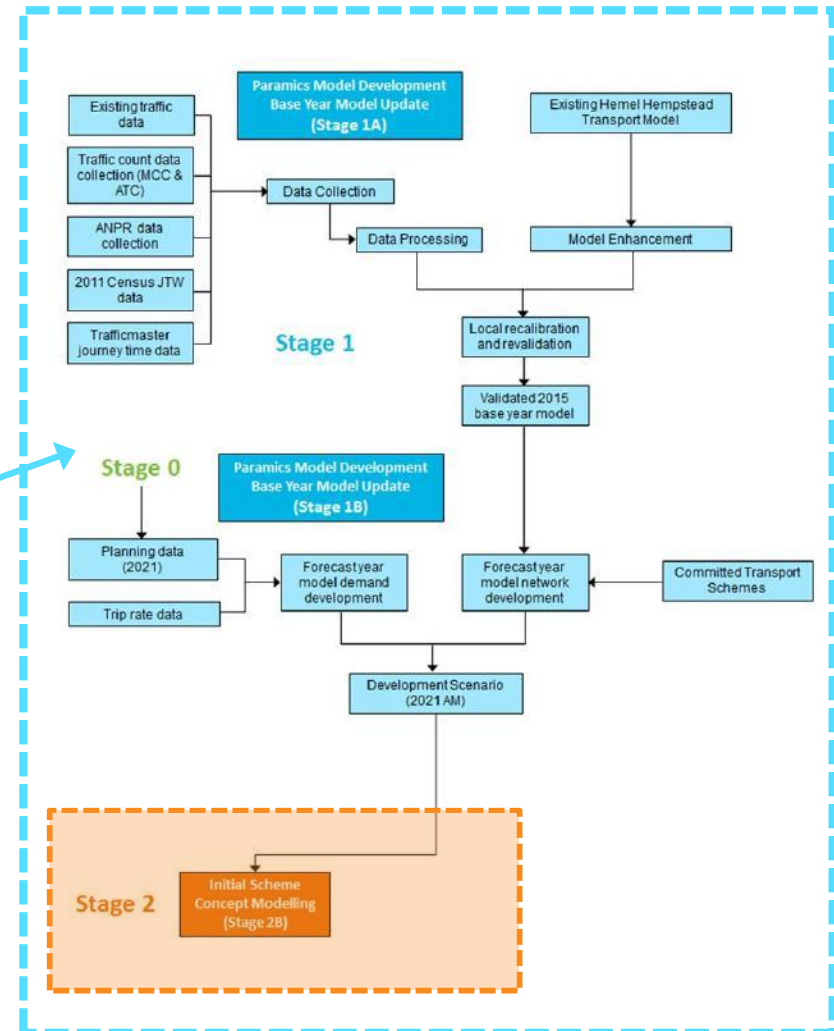
1. Introductions
2. Enterprise Zone status
3. Overview of the study commission
4. Paramics Modelling evidence – sensitivity testing of large-scale interventions
5. Next steps

Key stages





Process Map

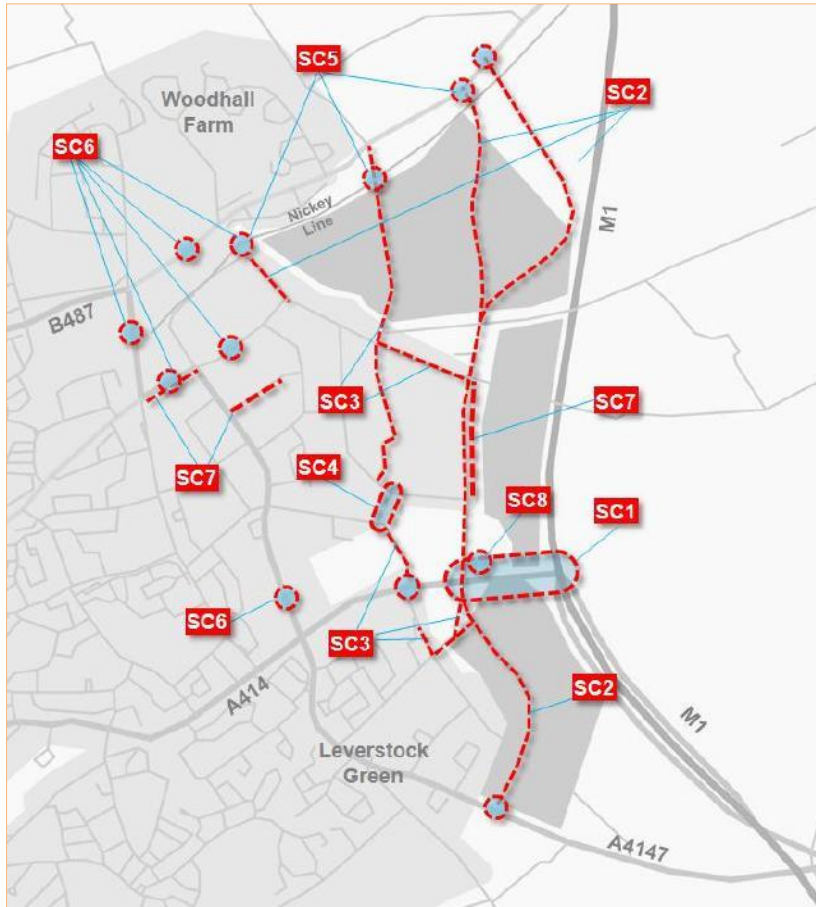


Timeline of work

		Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16
Stage 0	Preparation																					
Stage 1a	Base year modelling																					
Stage 1b	Forecast year 'Do Minimum' modelling																					
Stage 2a	A - strategy																					
Stage 2b	B - option development and 'Do Something' Sensitivity Testing																					
Non-Study	Model enhancement to support Vectos planning applications																					
Stage 2c	C - 'Do Something' Option Modelling using enhanced model																					
Stage 3	Scheme Appraisal and Business Case																					
Stage 4	Final Reporting / Consultation																					

Schemes

Stage 2b – Scheme Concept Options



SC1 - A414 Breakspear Way/Green Lane Junction Improvement

SC1a: Enlarged signalised roundabout with a 'hamburger' roundabout.

SC1b: Compact grade-separated junction

SC1c: Reconfigured M1 J8 with new Maylands eastern gateway access to the north

SC1d: Reconfigured M1 J8 with new Maylands western gateway access to the north

SC1e: Full signalisation of the existing roundabout plus widening on Green Lane (north & south), Breakspear Way eastern arm and the circulatory.

SC2 - East Hemel Hempstead North-South Spine Road

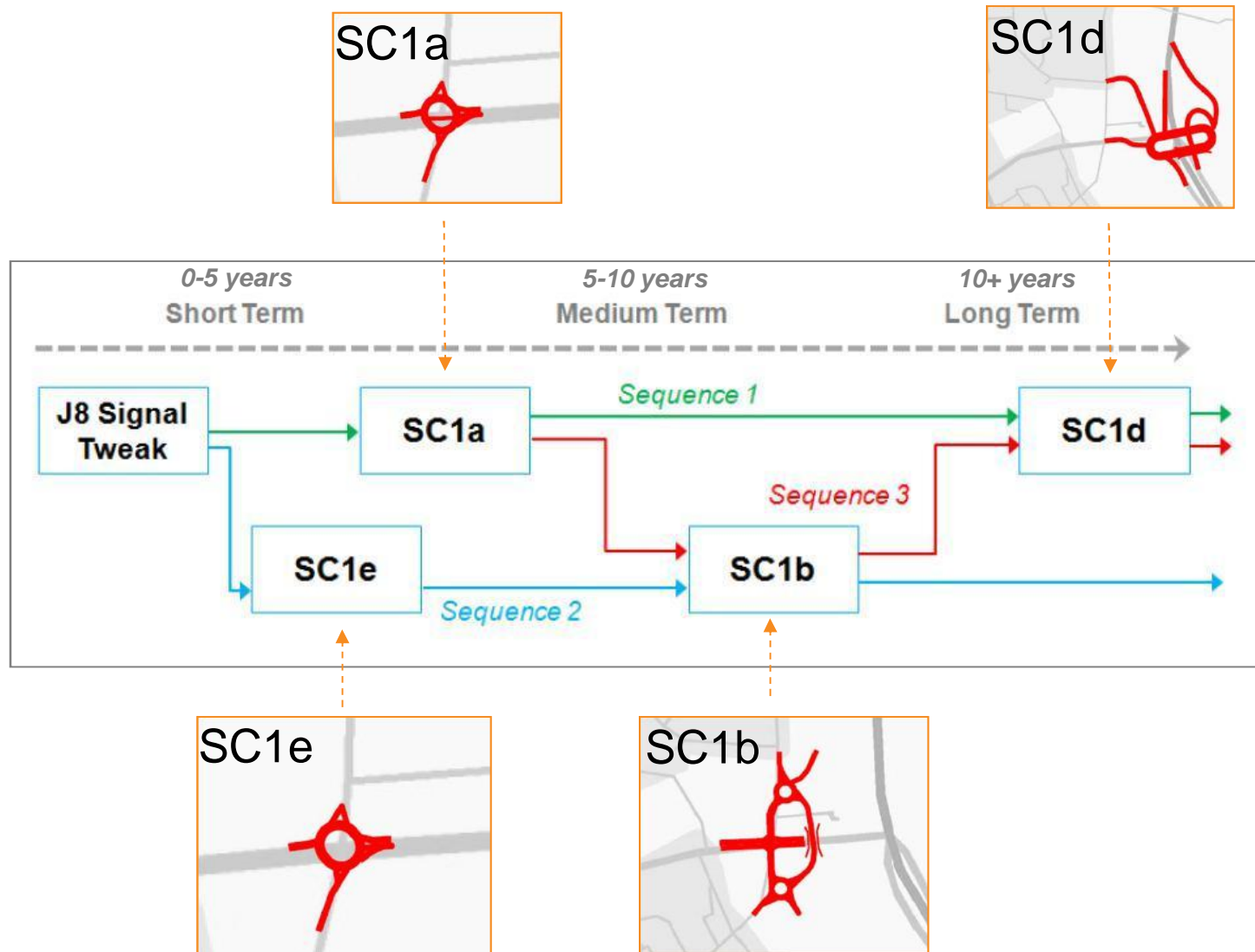
SC2a: Spine road connecting all parts of the proposed development, with links onto the A4147 Leverstock Green Road, A414 Breakspear Way and B487 Hemel Hempstead Road.

SC2b: Alignment runs closer to the M1.

SC2c: Follows upgraded Three Cherry Trees Lane.

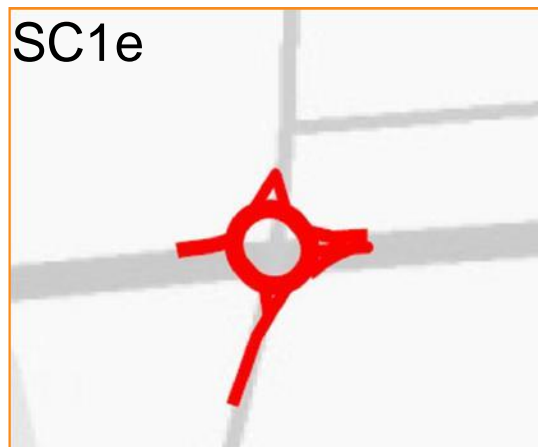
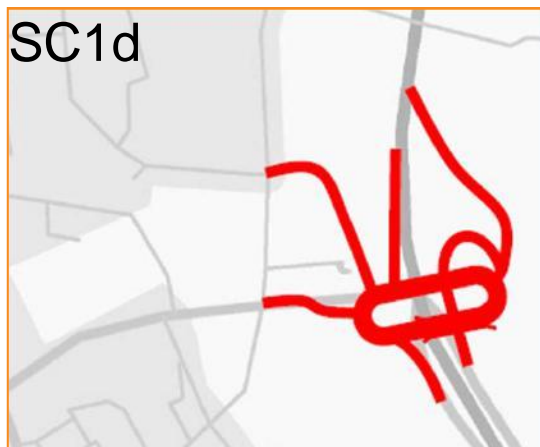
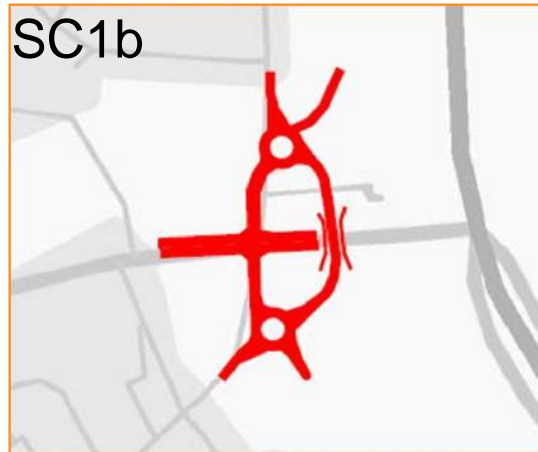
...plus 'small-scale' schemes – SC3-SC8

Large-scale interventions – potential sequence of delivery



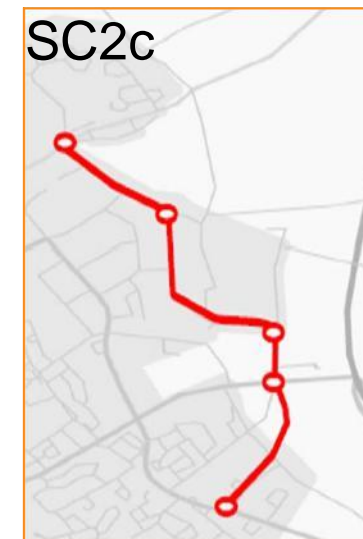
Model Scenarios

Stage 2b – 2021 Network Scenarios



Network Scenarios

- SC1a + SC2c
- SC1b + SC2c
- SC1d + SC2c
- SC1e + SC2c



Model Scenarios

Stage 2b – 2015 to 2021 Development and Growth

Hemel Hempstead

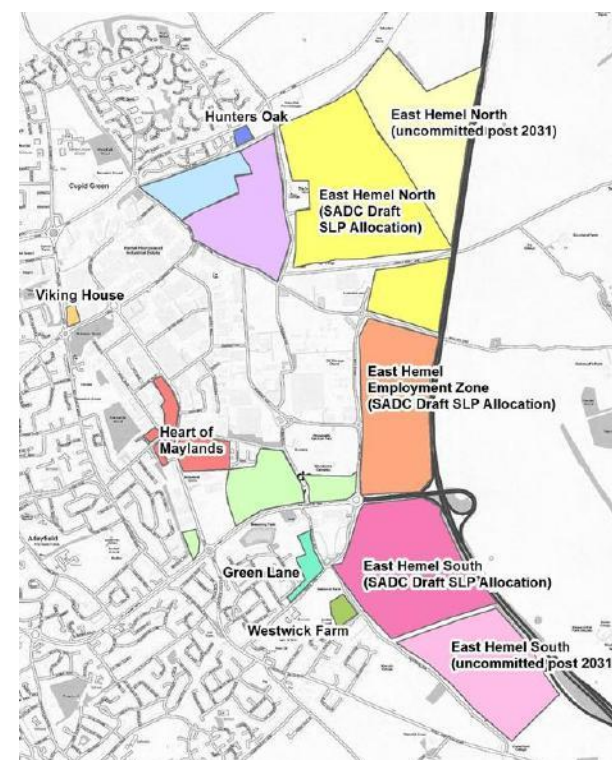
No. of dwellings	2015 to 2021
Paramics Modelling	3,130
NTEM v6.2	1,380

Key developments within Maylands

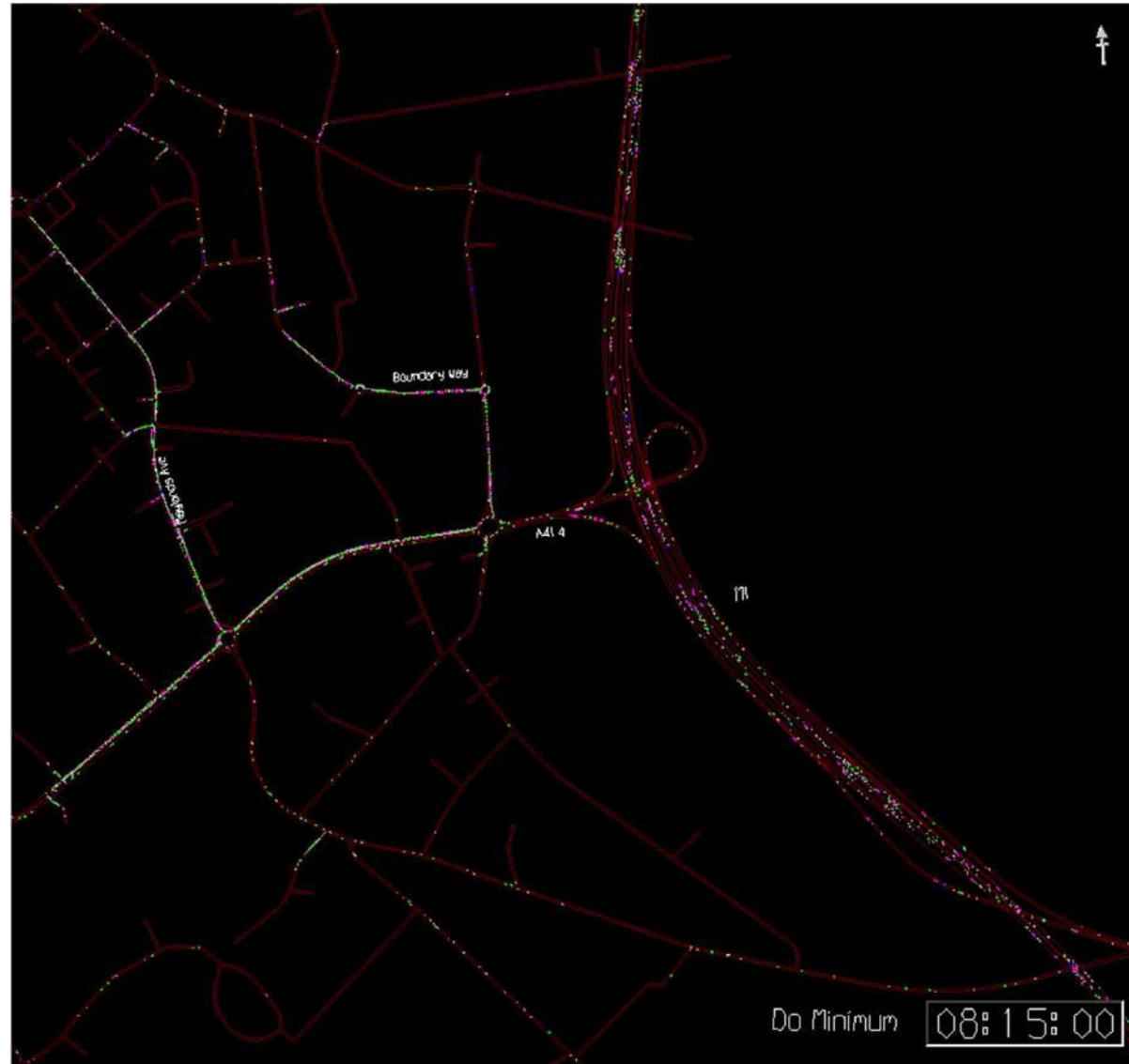
No. of dwellings	2015 to 2021
Spencers Park Phase 1	357
Spencers Park Phase 2	121
Within Heart of Maylands	375
East Hemel	227

Model Demand Matrix Totals (AM)

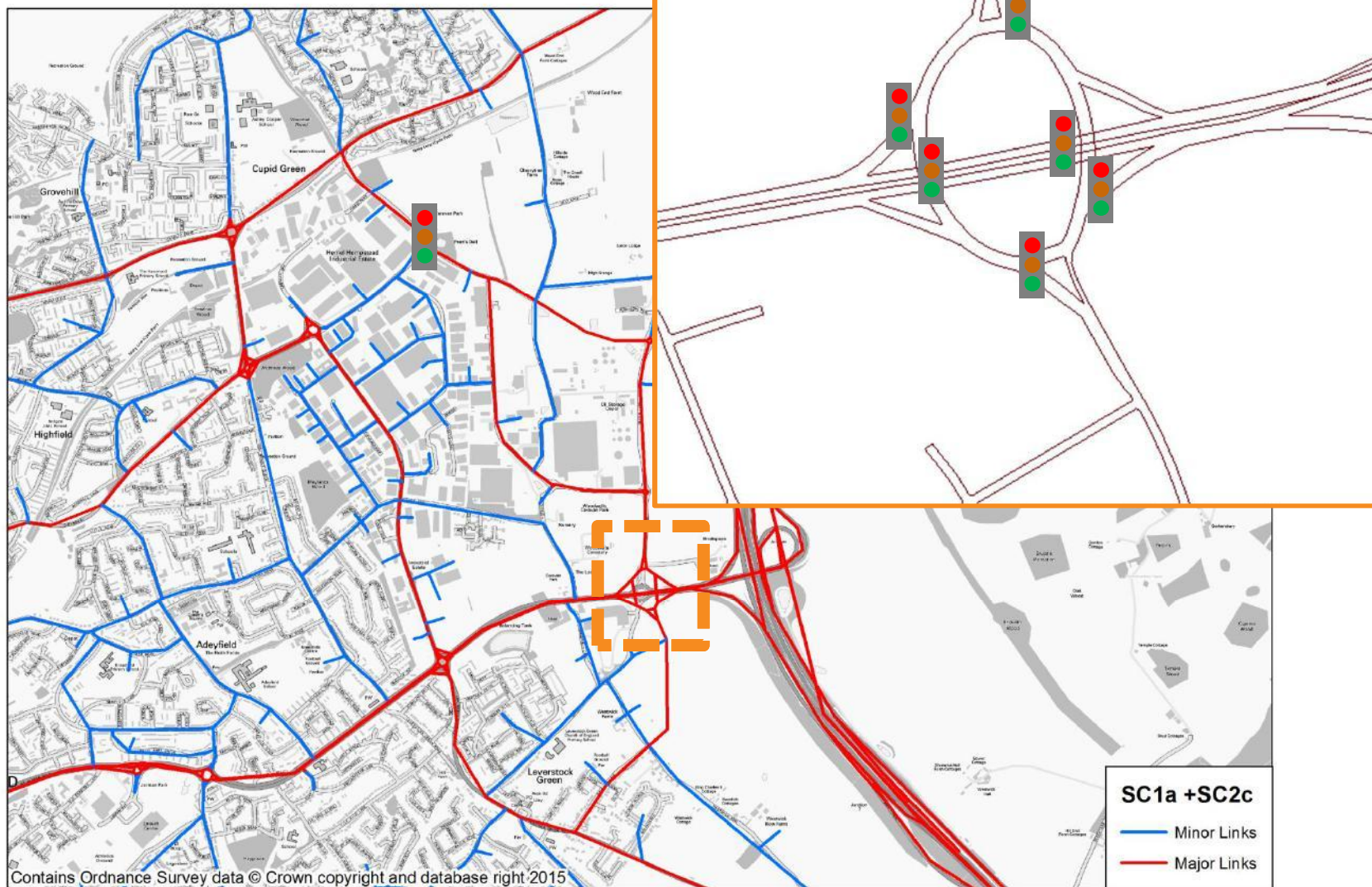
2015	95,840
2021	105,580
2015 to 2021 Growth	+10.2% (+1.63% p.a.)



2021 Do Minimum Morning Peak



2021 SC1a + SC2c Network

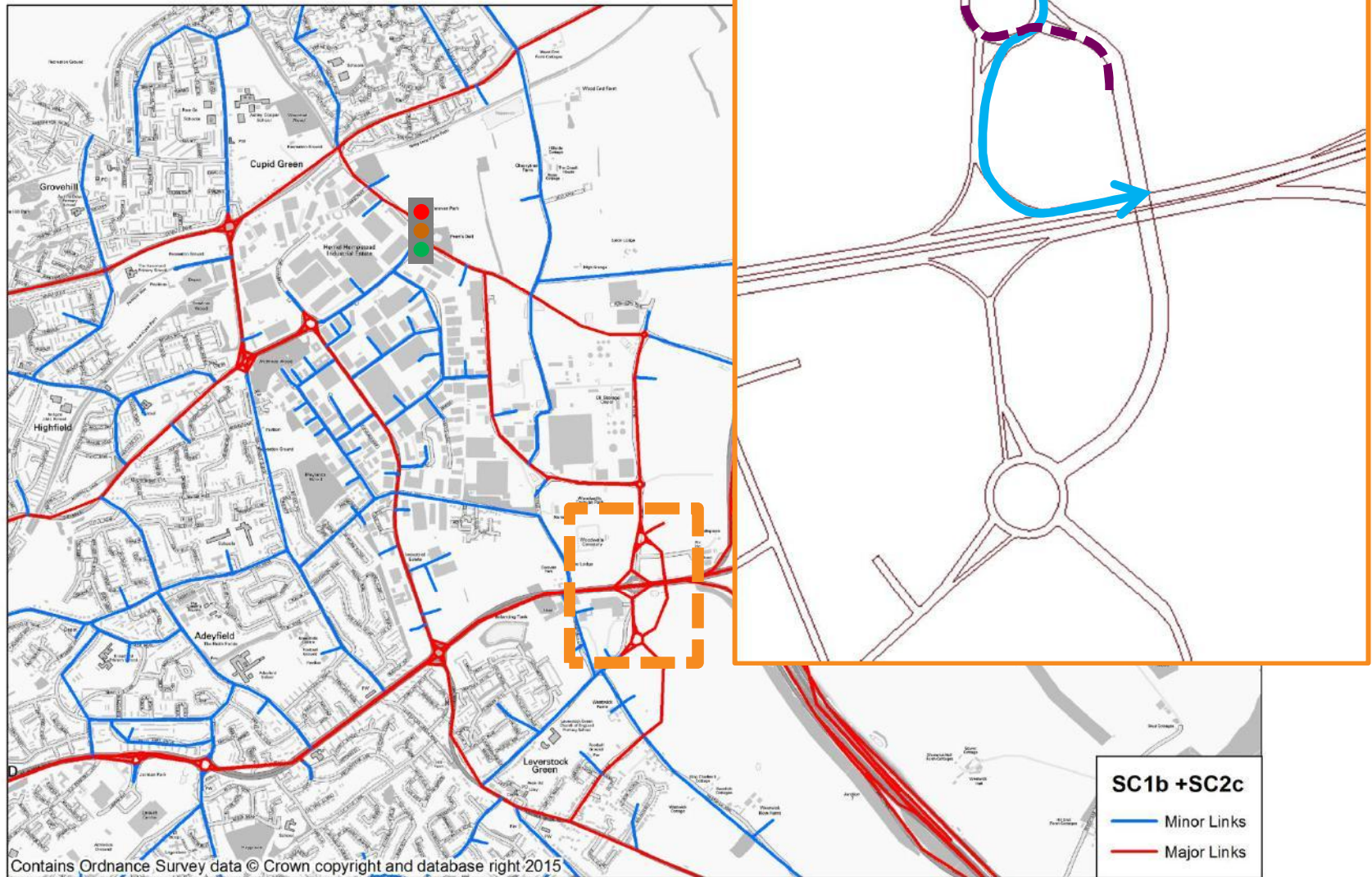


2021 SC1a + SC2c

Morning Peak



2021 SC1b + SC2c Network



2021 SC1b + SC2c

Morning Peak



2021 SC1b + SC2c

Network - Variation

- Southbound traffic
 - Very little opposing traffic in 2021 based on current network and demand assumptions
- Northbound traffic
 - Has difficulties finding gaps to join roundabout circulatory due to continuous stream of southbound traffic
- Network Variation
 - Southbound approach arm – pre-signal to increase gaps for northbound traffic

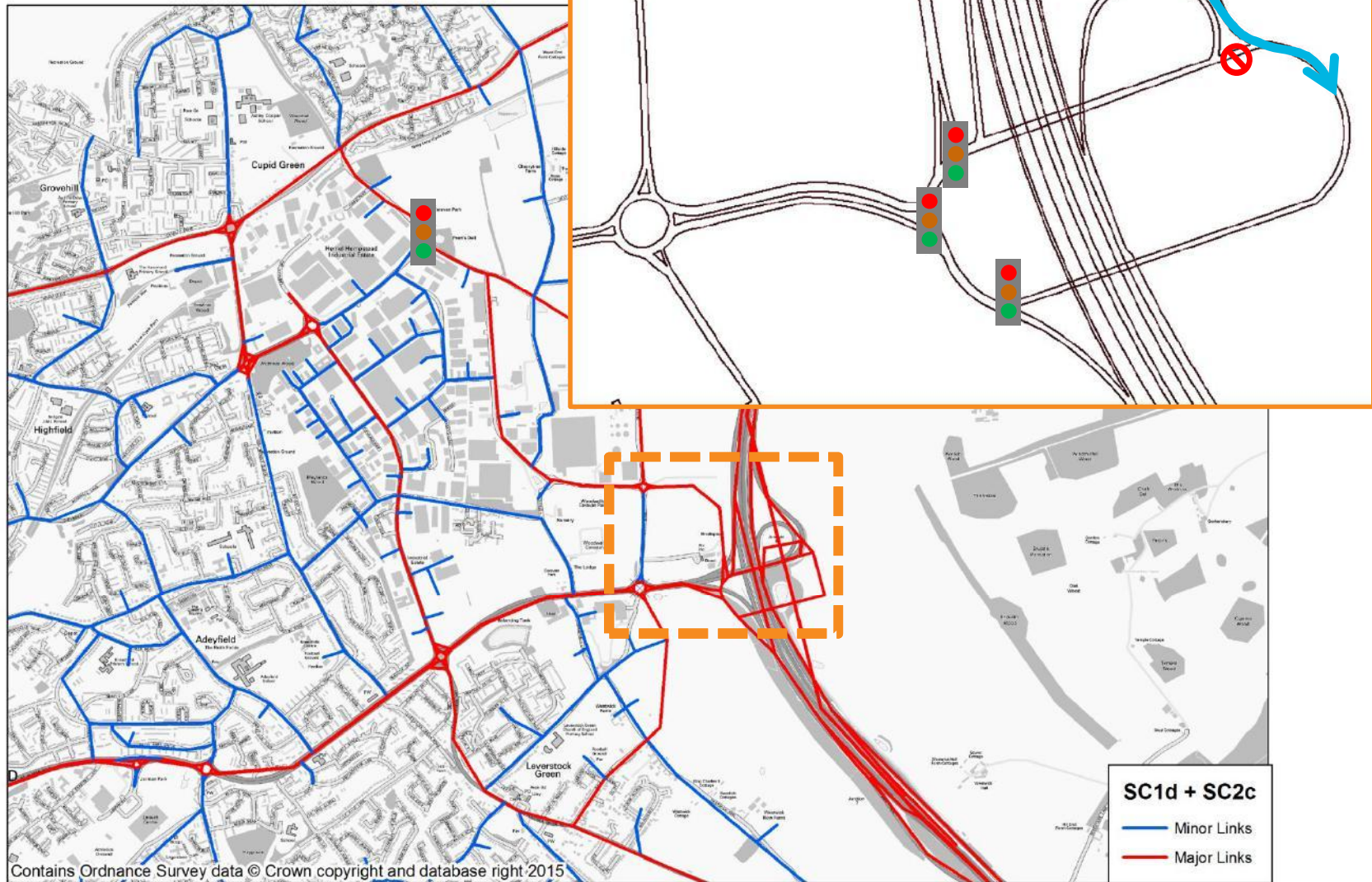


2021 SC1b + SC2c

Morning Peak



2021 SC1d + SC2c Network

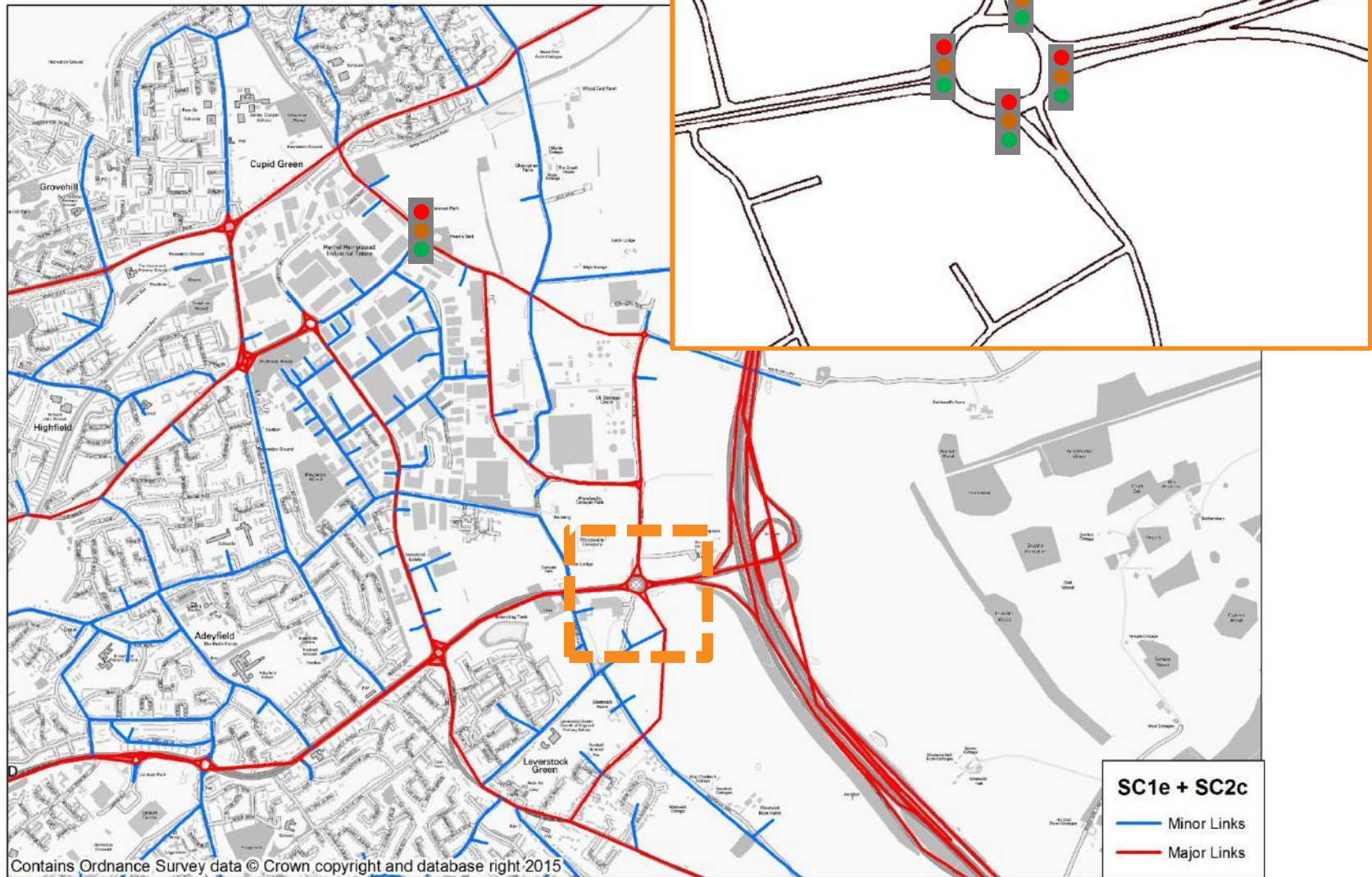


2021 SC1d + SC2c

Morning Peak



2021 SC1e + SC2c Network



2021 SC1e + SC2c

Morning Peak

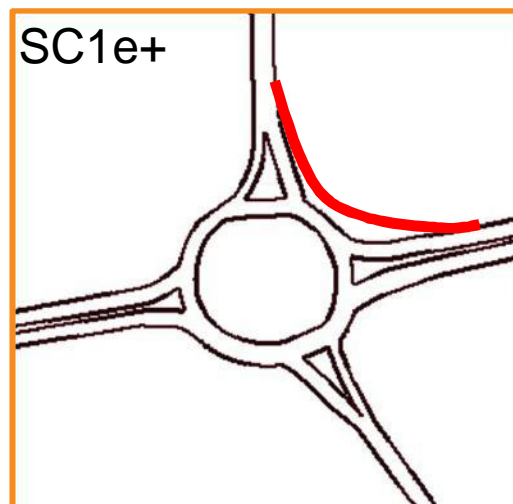
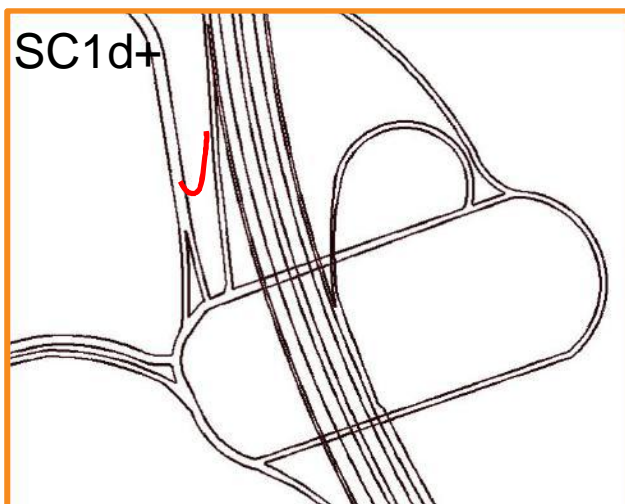


Next Steps

– Paramics Modelling

- Analysis on changes in traffic flow volume within Maylands (e.g. Boundary Way)
- Sensitivity Tests – test variations of scheme concepts and potential new concepts

For example...



- Hemel Hempstead model enhancement

Next Steps

- Scheme Design – completion of small-scale scheme design including lorry parking and bus service proposals (March 2016)
- Consideration of alternative modes to provide additional capacity (including links to Vision schemes)
- Modelling to support development planning applications (April-July 2016)
- Model testing in enhanced model (July 2016>)

Thank You

January 29, 2016

AECOM

Maylands Growth Corridor Study Progress Meeting 6



February 25, 2016

AECOM

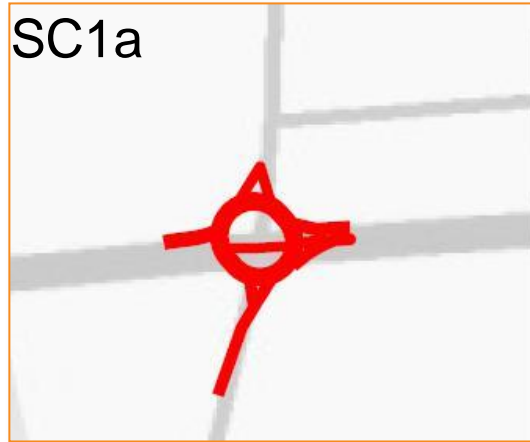
Presentation Agenda

1. Introductions
2. Proposed Paramics Model Enhancement
3. Paramics Modelling evidence – small-scale interventions
4. Paramics Modelling evidence – sensitivity testing of large-scale interventions
5. Stage 2b progress update
6. Next steps

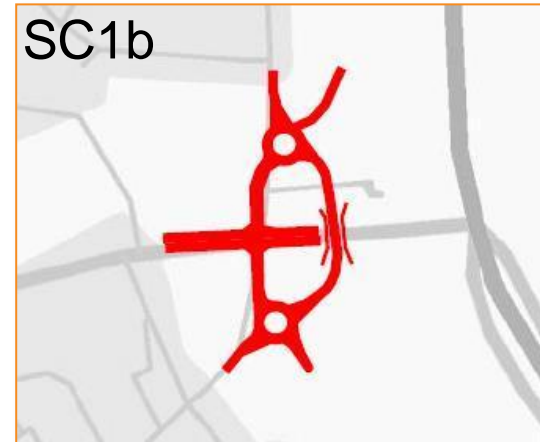
Proposed Paramics Model Enhancement

- Scope
- Timescales
- Implications on the Study

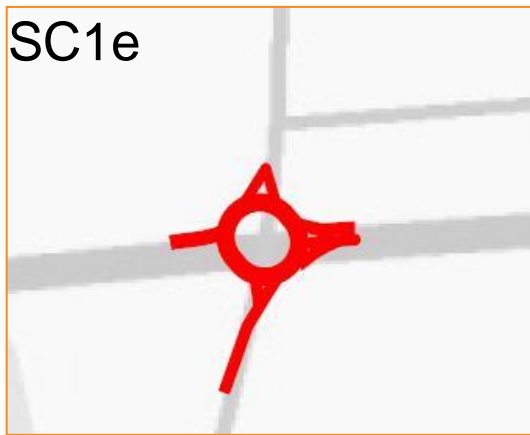
Large-scale interventions – potential sequence of delivery



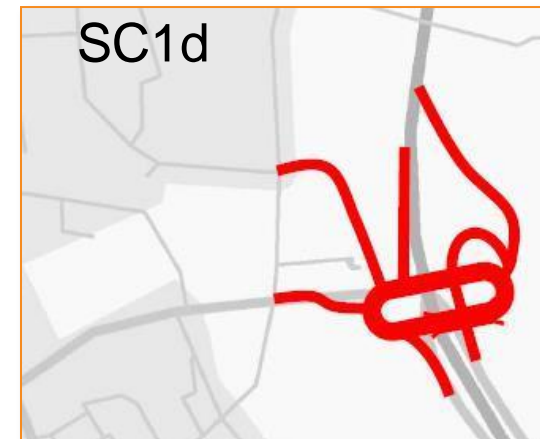
Enlarged signalised
'Hamburger' roundabout



Compact grade-separated
interchange



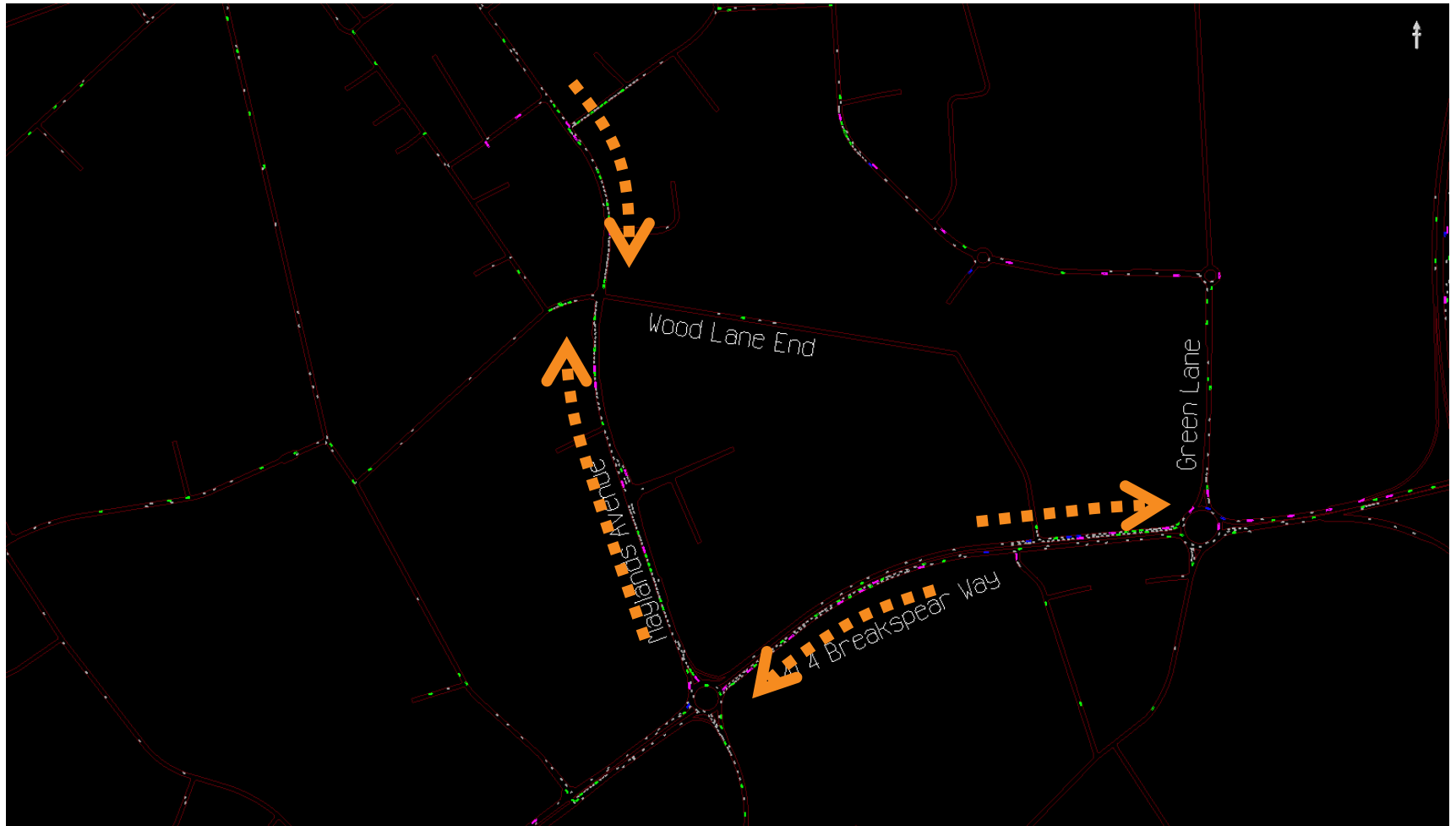
Enlarged signalised
roundabout



Enlarged J8 + dedicated
Maylands access

2015 Base Year Model

Morning Peak Hour



2015 (with M1 J8 signal adjustments)

Morning Peak Hour



2015 Base Year Model

Evening Peak Hour

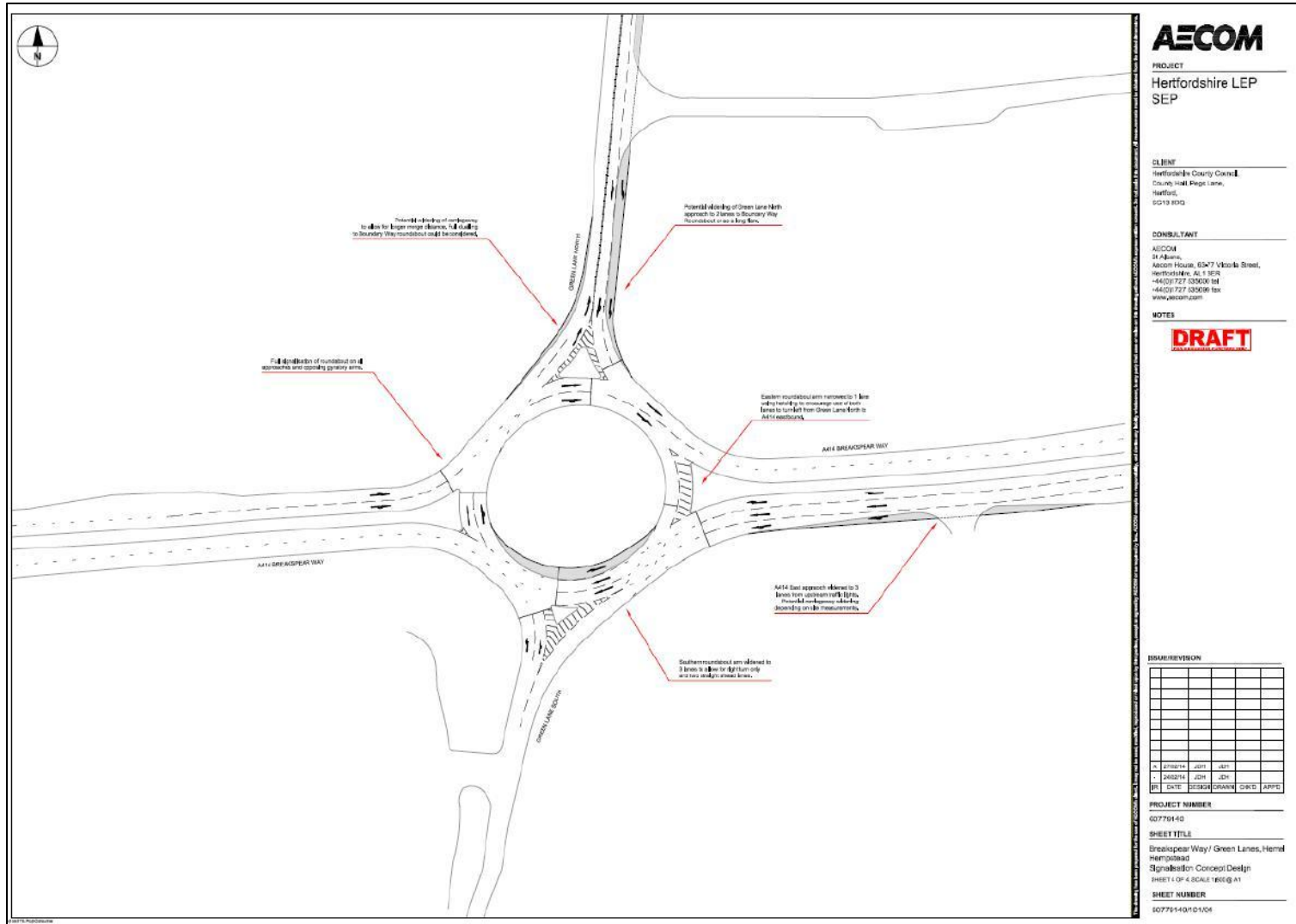


2015 (with M1 J8 signal adjustments) Evening Peak



Short Term Scheme Concept

A414 Breakspear Way roundabout



2021 (with short term scheme concept)

Morning Peak



2021 (with short term scheme concept)

Evening Peak

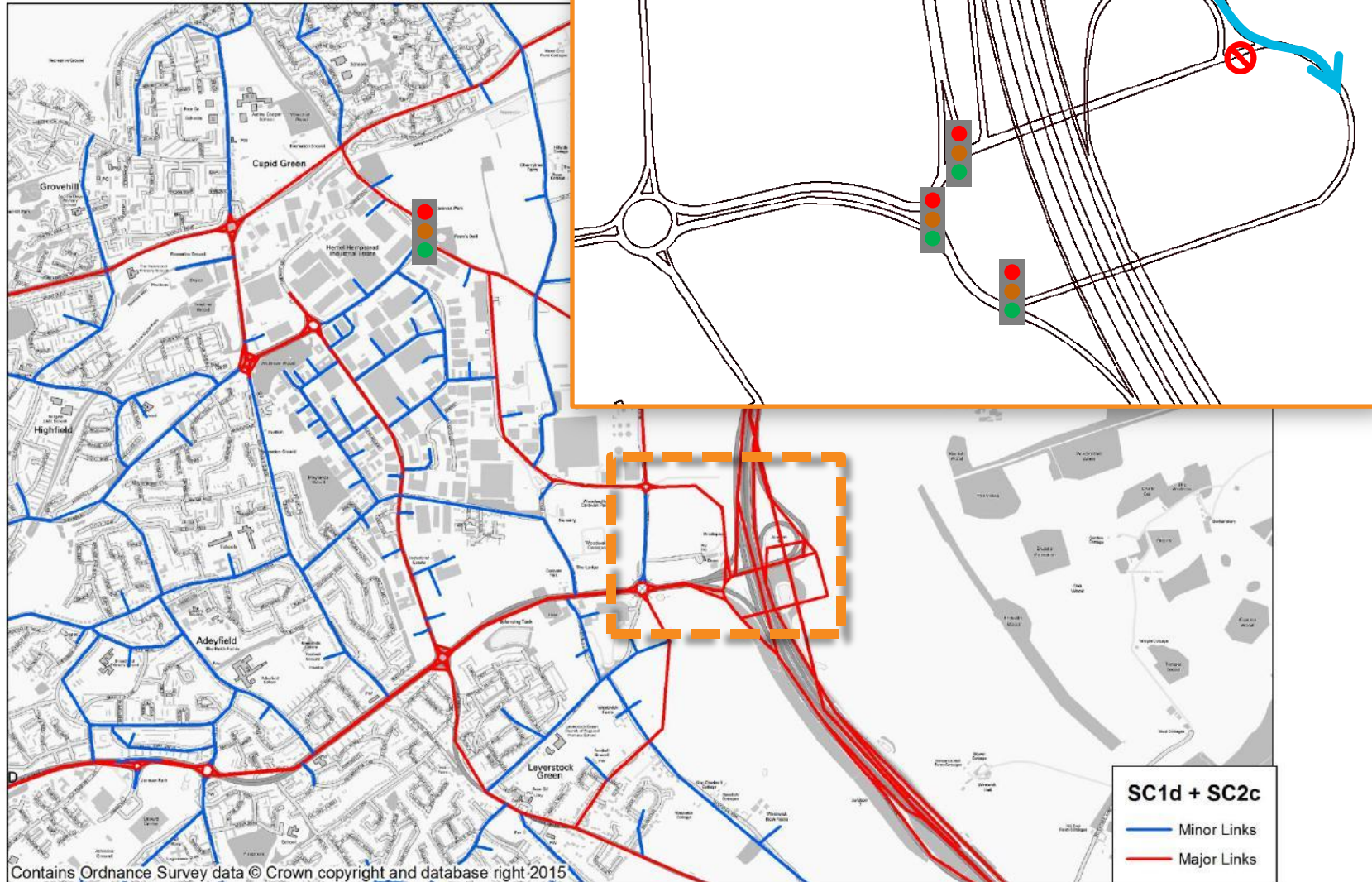


Model Scenarios

Stage 2b – Demand Growth Overview

Hemel Hempstead			
	No. of dwellings	Traffic demand growth	
		Morning Peak Hour	Evening Peak Hour
2015 to 2021	3,130	+10% (+1.6% p.a.)	+11% (+1.8% p.a.)
2015 to 2031	12,410	+29% (+1.6% p.a.)	+33% (+1.8% p.a.)

2021 SC1d + SC2c Network



2021 SC1d + SC2c

Morning Peak Hour



2021 SC1d + SC2c

Evening Peak Hour



2031 SC1d + SC2c

Morning Peak



2031 SC1d + SC2c

Evening Peak



Other potential options

Compact grade-separated junction with skewed overbridge



- Would remove the conflicting flows
- Would require land to NW
- Skewed bridge expensive

Large lozenge signalised junction with access links north and south



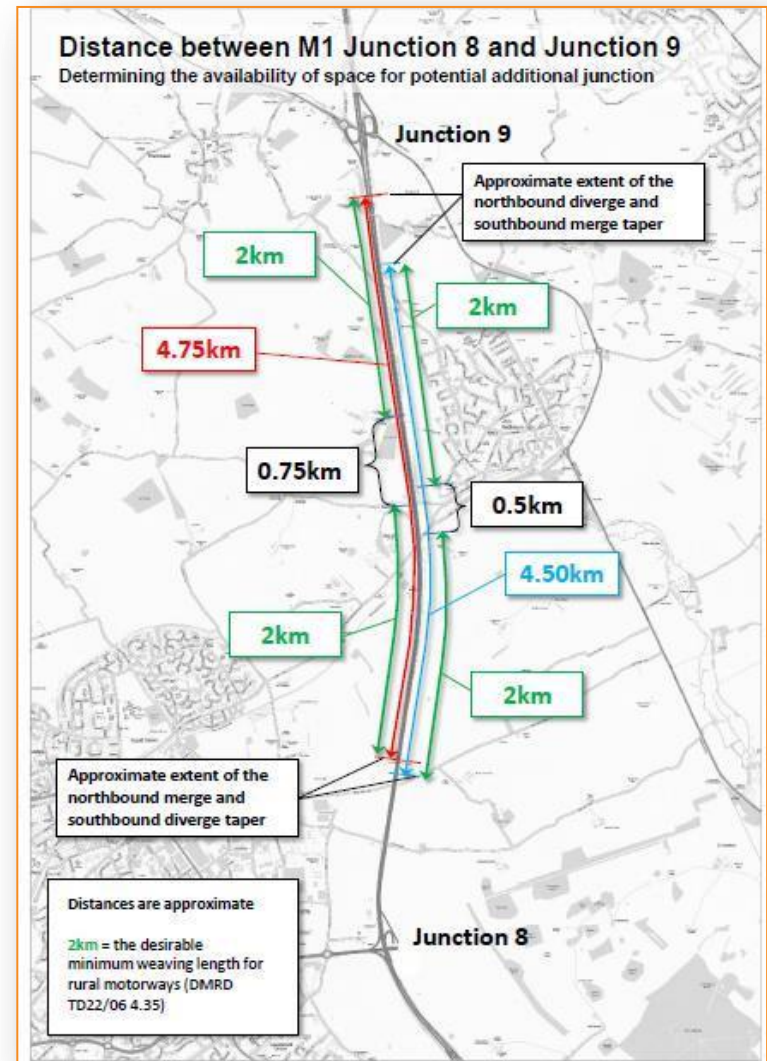
- Wouldn't remove the conflicting flows but accommodate them at a higher capacity junction
- Land take from existing depot

Other potential options

Large roundabout and Green Lane flyover



- Removes existing conflicting flows
- Could create new conflicting flows
- Would require land to NW
- Land take from depot



‘J8a’ with north-facing slips only may be feasible. However, very expensive and may not derive sufficient benefits at J8. Could generate junction-hopping between J9 and J8a

Stage 2b progress update – development of small-scale scheme options

SC3-SC6

- Site visits undertaken;
- Locations for new pedestrian crossings identified
- Design work to continue. Completion expected in late **March**.

SC7: Lorry Parking and Access:

- Undertaken a site visit;
- Developed a policy context for HGV parking in the area;
- Identified issues associated with truck parking at Maylands;
- Considered the potential factors driving truck parking;
- Drawn up recommendations aimed at addressing the issues described;
- Technical Report to be circulated during **March**

SC8: Bus Movements and Interchange

- TRACC data analysis compiled for Growth and Transport Plan Evidence Pack to be used to identify potential bus service reconfiguration.
- Technical Report to be circulated during **April**.

Next Steps

- Scheme Design – completion of small-scale scheme design including lorry parking and bus service proposals (April 2016)
- Consideration of alternative modes to provide additional capacity (including links to Vision schemes)
- Modelling to support development planning applications (April-Aug 2016)
- Model testing of Study scheme options in enhanced model (August 2016>)
- Input to indicative business cases (September 2016)
- Completion of Study (September/October 2016)

Thank You

February 25, 2016

AECOM

Maylands Growth Corridor Study

Progress Meeting 7: 5th May 2016

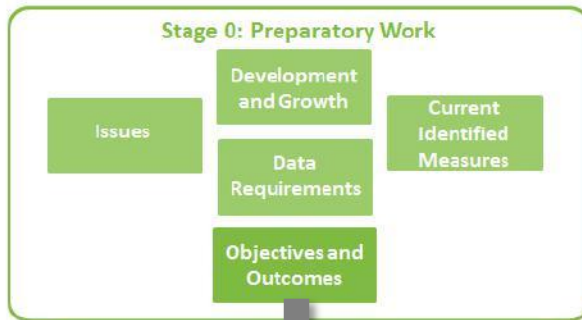
Agenda

- 1/ Introductions & progress meeting #6 actions
- 2/ Commission Overview – timescales and progress
- 3/ East Hemel Hempstead masterplanning & model enhancement – update
- 4/ Enterprise Zone – update
- 5/ SC1&2 Model sensitivity testing
- 6/ SC3-6 option development
- 7/ A4147-A414 cycle link – update
- 8/ Next Steps

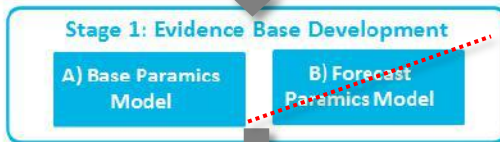
2/ Commission Overview

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Commission Overview

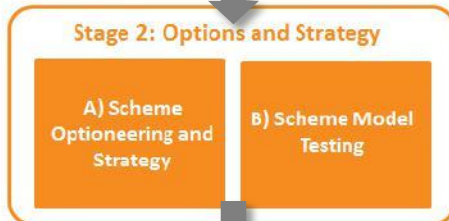


April '15-July '15



a) Aug '15 – Nov '15

b) Dec '15 – Jan '16*



a) Sept '15-Nov '15

b) Jan '16 - Sept '16

S-Paramics Model
Enhancement
(TCE / LEP commission)

April '16 – Aug '16



Autumn 2016

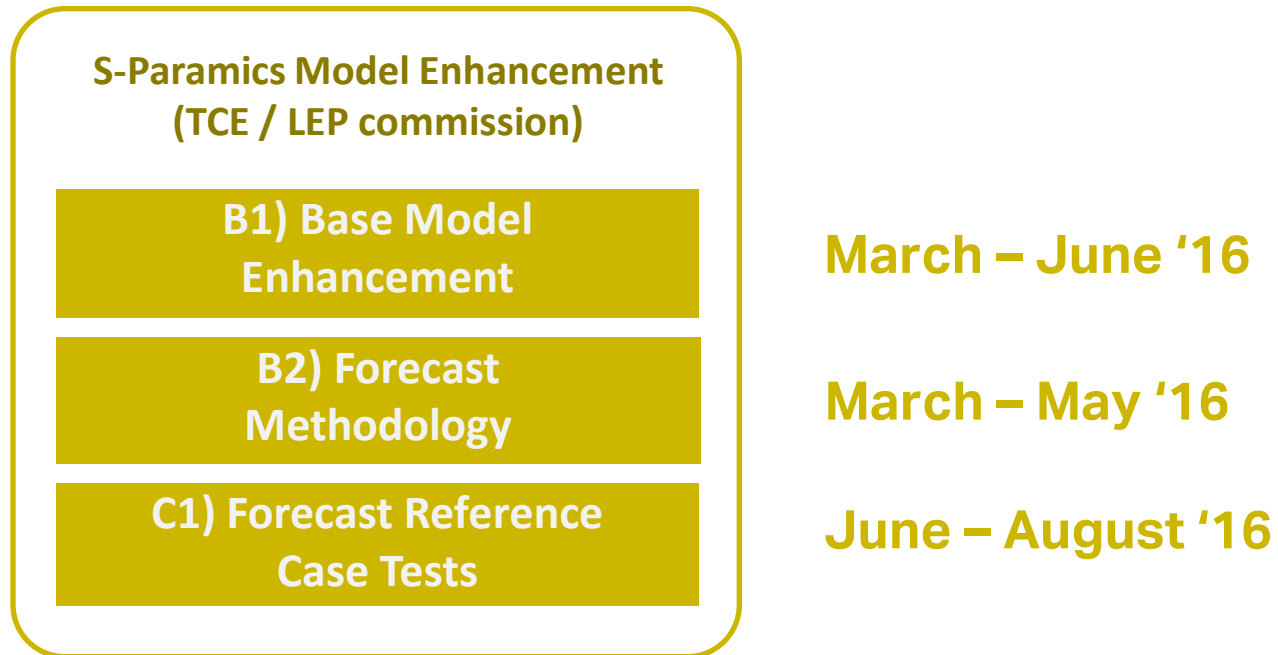


tbc

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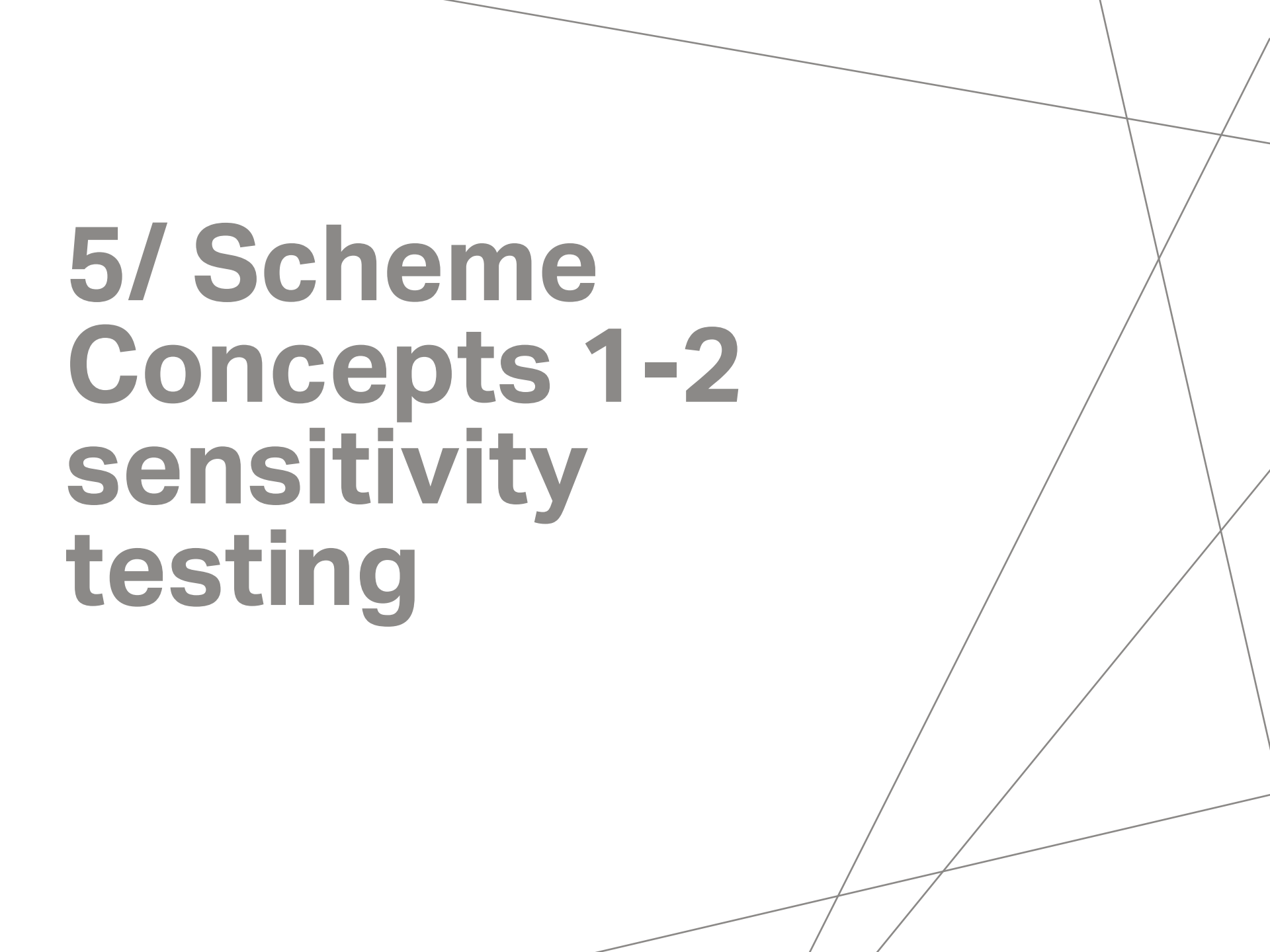
3/ East Hemel masterplanning & model enhancement

Hemel Hempstead Model Enhancement



4/ Enterprise Zone

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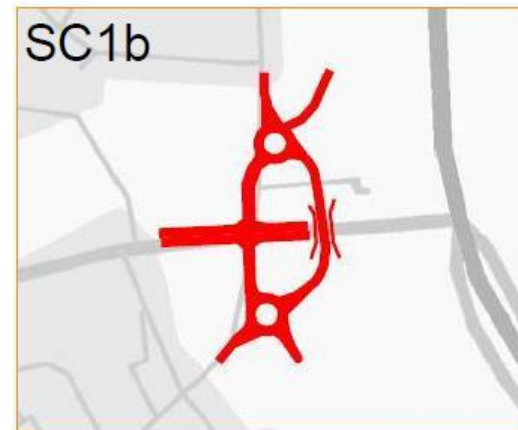
The background of the slide features several thin, dark gray lines that intersect to form various geometric shapes, including triangles and quadrilaterals. These lines are positioned primarily on the right side of the slide, creating a modern, architectural feel.

5/ Scheme Concepts 1-2 sensitivity testing

Scheme Concept 1 & 2 Options



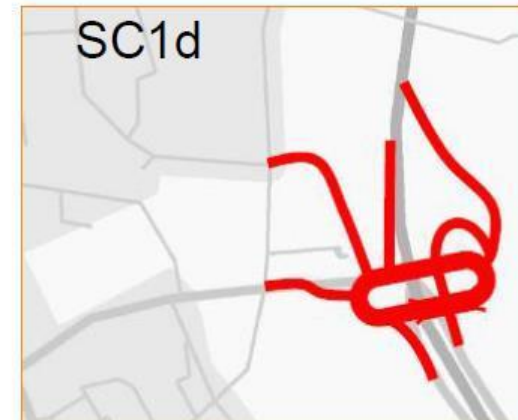
Enlarged signalised
'Hamburger' roundabout



Compact grade-separated
interchange



Enlarged signalised
roundabout



Enlarged J8 + dedicated
Maylands access

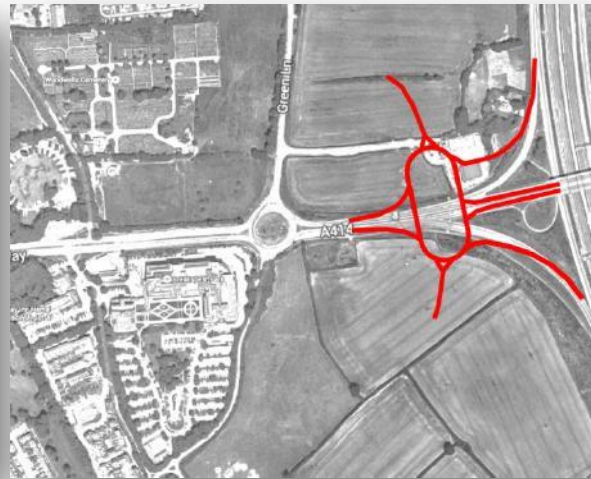
Other Potential Options

Compact grade-separated junction with skewed overbridge



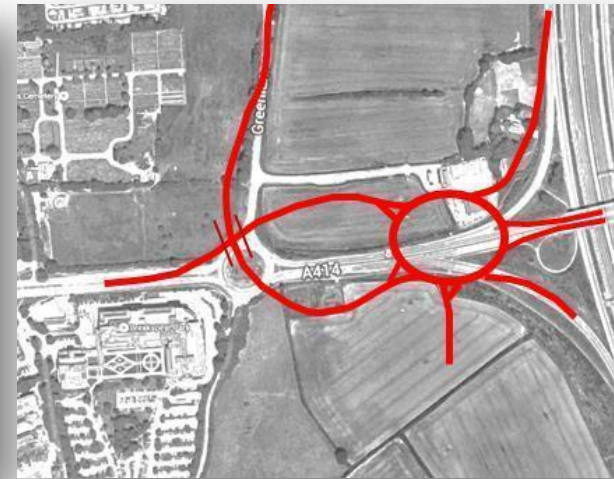
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Large lozenge signalised junction with access links north and south



- Wouldn't remove the conflicting flows but accommodate them at a higher capacity junction
- Land take from existing depot

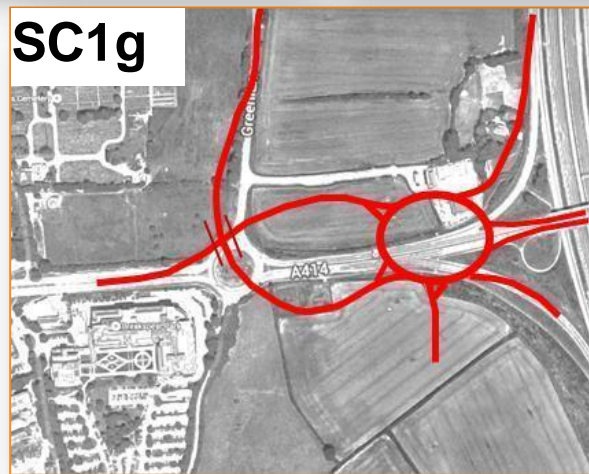
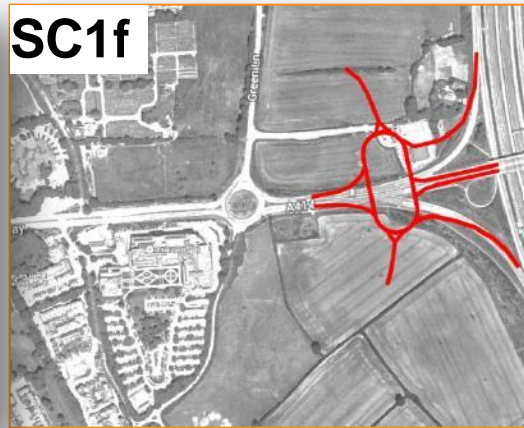
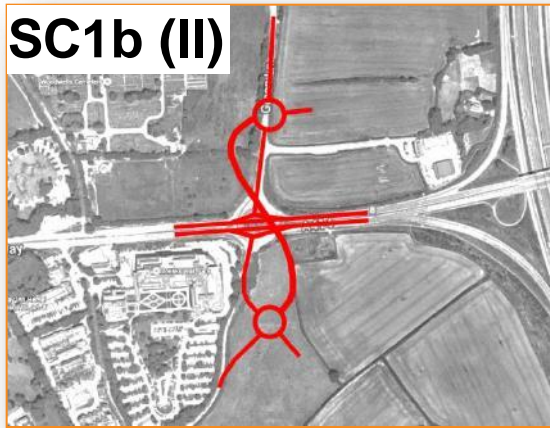
Large roundabout and Green Lane flyover



- Removes existing conflicting flows
- Could create new conflicting flows
- Would require land to NW
- Land take from depot

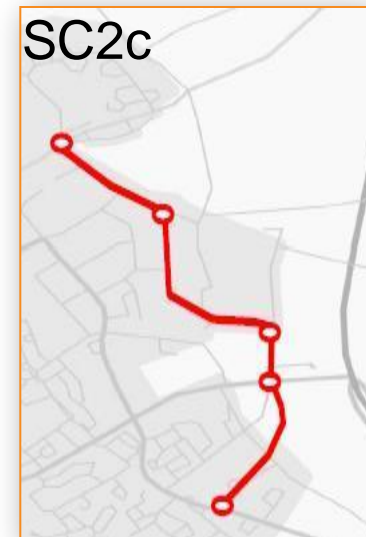
Model Scenarios

Other Potential Options



Network Scenarios

- SC1b (II) + SC2c
- SC1f + SC2c
- SC1g + SC2c



Model Scenarios

Stage 2b – 2015 to 2021/2031 Demand Growth Overview

Hemel Hempstead			
	No. of dwellings	Traffic demand growth	
		Morning Peak Hour	Evening Peak Hour
2015 to 2021	3,130	+10% (+1.6% p.a.)	+11% (+1.8% p.a.)
2015 to 2031	12,410	+29% (+1.6% p.a.)	+33% (+1.8% p.a.)

2021 Demand

May 5, 2016

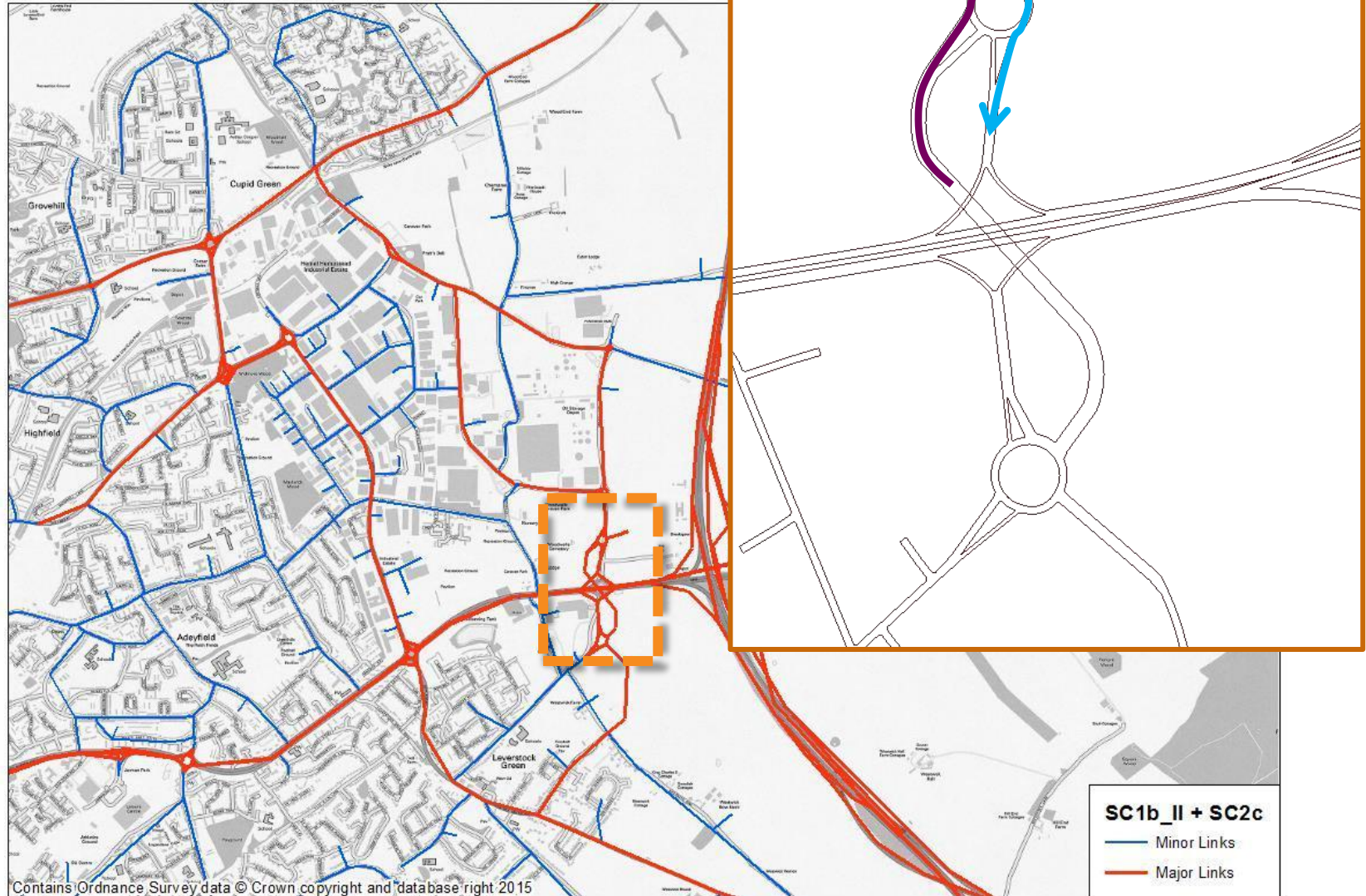
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2021 Do Minimum

Morning Peak Hour



SC1b (II) + SC2c Network



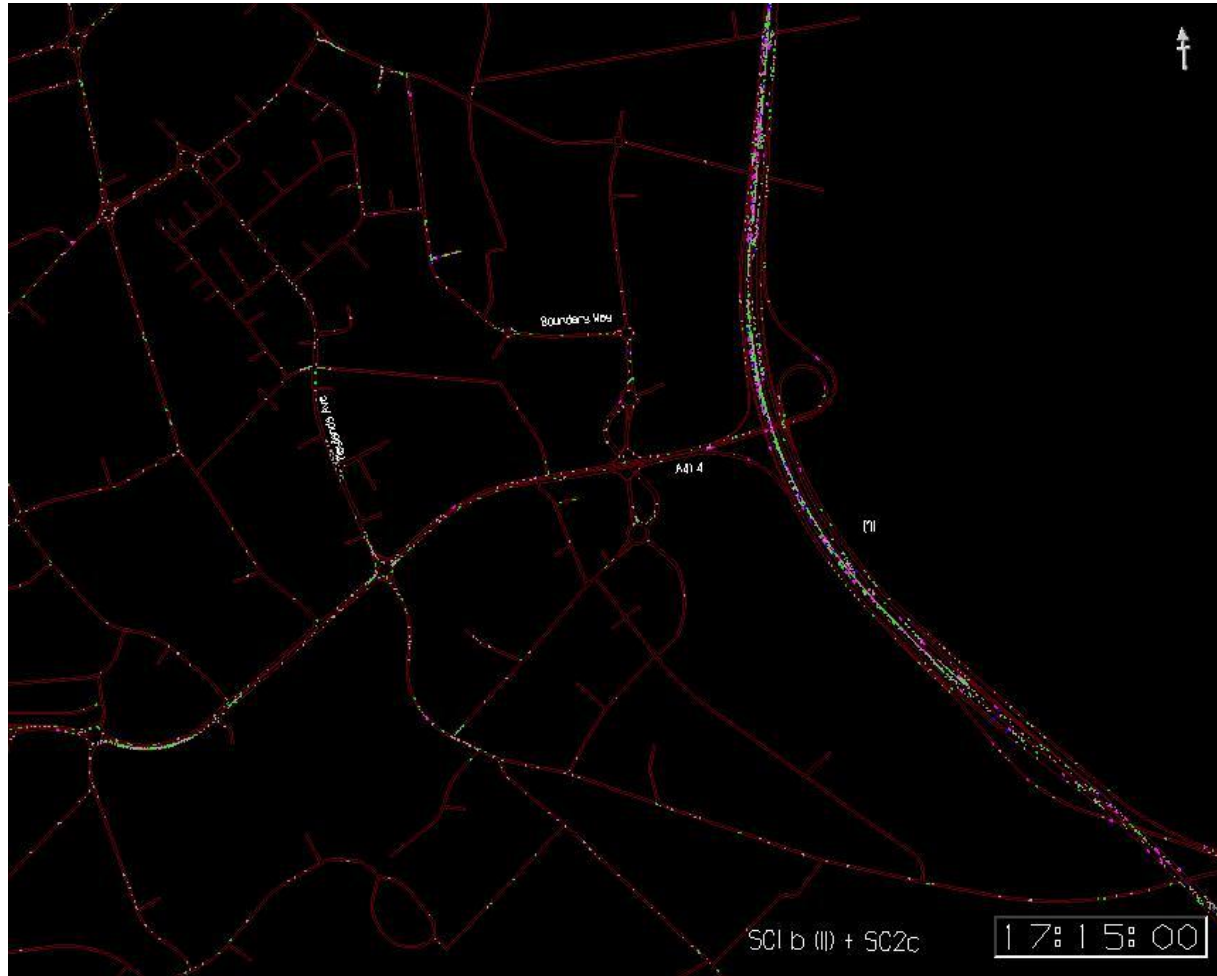
2021 SC1b (II) + SC2c

Morning Peak Hour

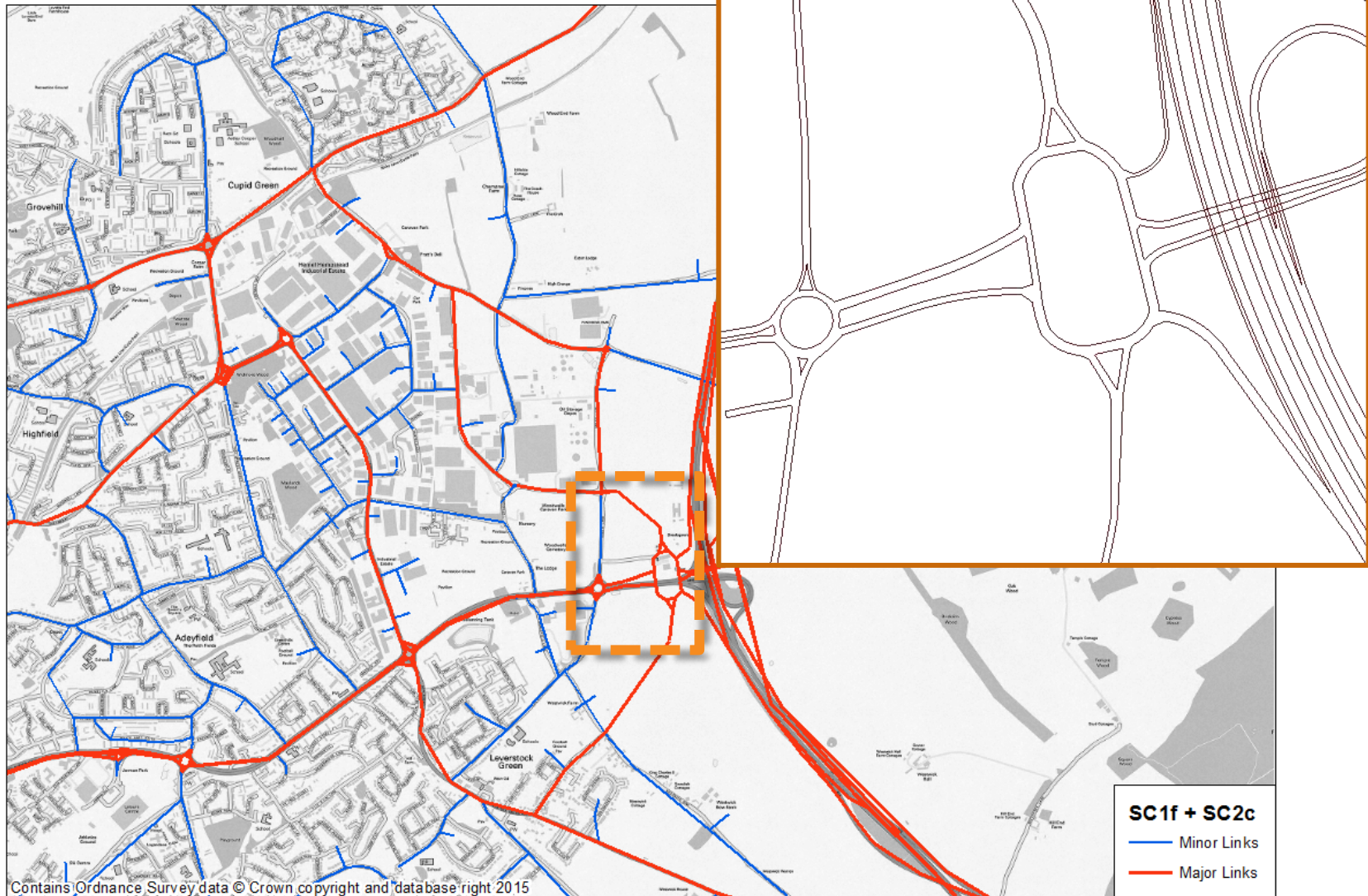


2021 SC1b (II) + SC2c

Evening Peak Hour



SC1f + SC2c Network



2021 SC1f + SC2c

Morning Peak Hour

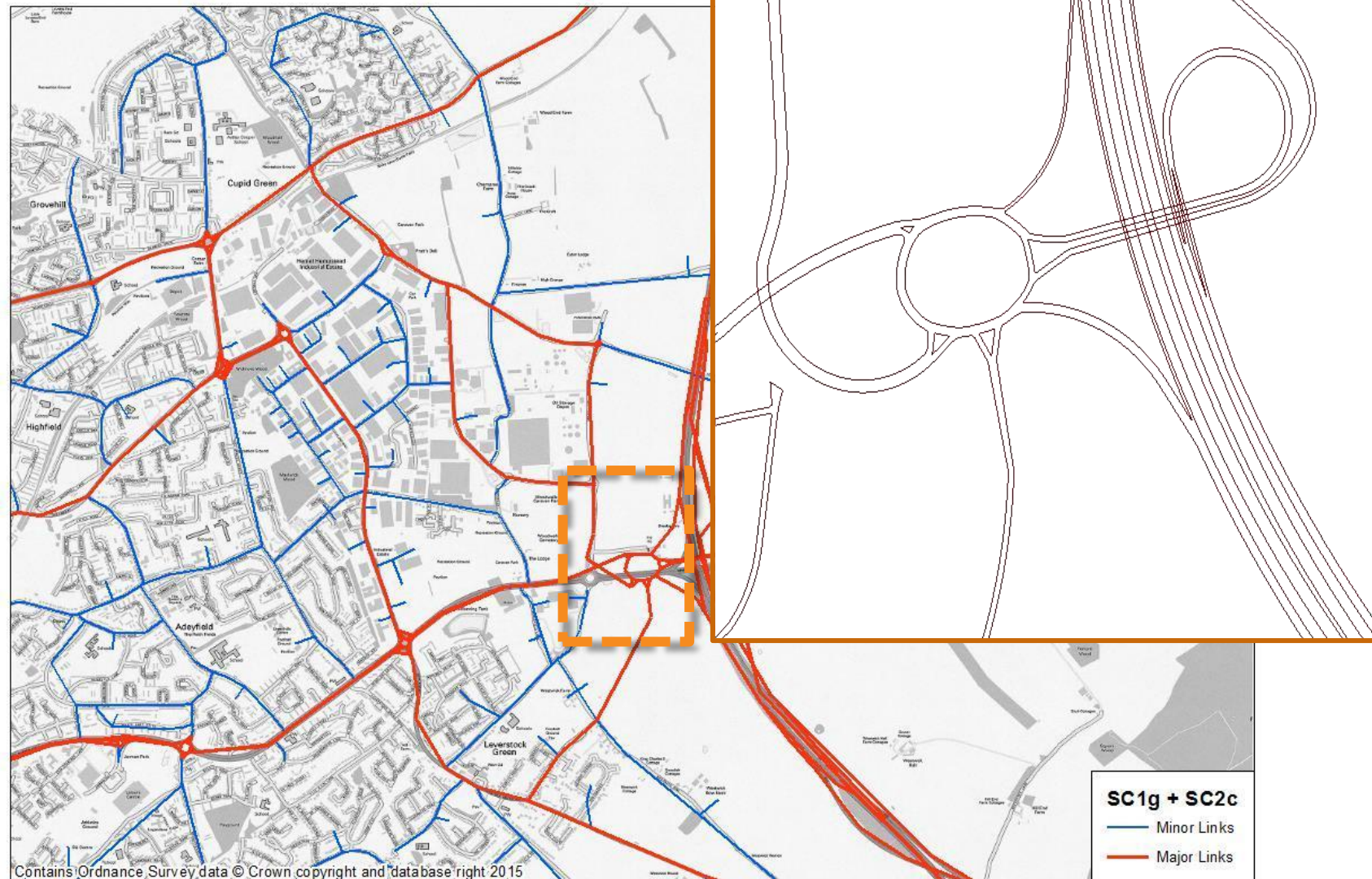


2021 SC1f + SC2c

Evening Peak Hour



SC1g + SC2c Network



2021 SC1g + SC2c

Morning Peak Hour



2021 SC1g + SC2c

Evening Peak Hour



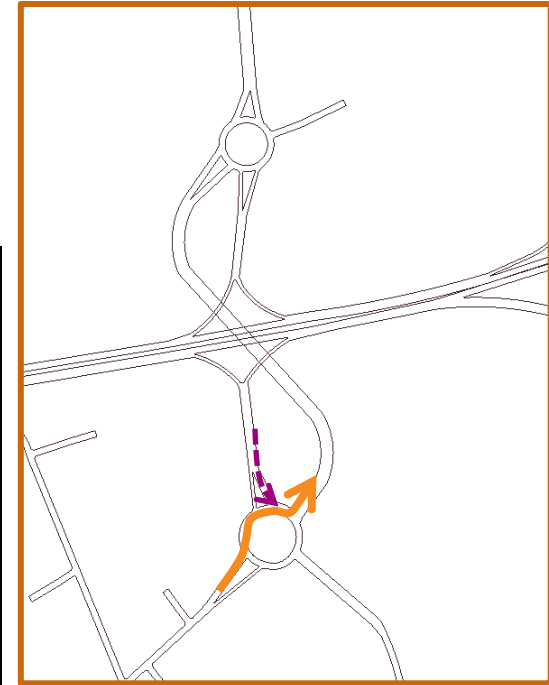
2031 Demand

May 5, 2016

AECOM

2031 SC1b (II) + SC2c

Morning Peak Hour



2031 SC1b (II) + SC2c

Evening Peak Hour



2031 SC1f + SC2c

Morning Peak Hour



2031 SC1f + SC2c

Evening Peak Hour



Summary of Model Sensitivity Testing

May 5, 2016

AECOM

Summary of Model Sensitivity Testing

	Solves problem & accommodates future traffic growth		Comment	Recommendation
	2021	2031		
SC1a	Yes	No	Option could provide short-medium term relief but unlikely to provide sufficient long term capacity. Performance is dependent upon junction size.	Should be assessed further (as interim scheme only)
SC1b	Yes	No	May be more feasible than SC1b(ii) (fewer uncertainties) but design is compromised in terms of long term capacity.	Should not be assessed further
SC1b(ii)	Yes	Yes	Subject to engineering feasibility and land-take, this option shows potential to address future traffic growth.	Should be assessed further
SC1d	Yes	Yes	Subject to engineering feasibility and land-take, this option shows potential to address future traffic growth.	Should be assessed further
SC1e	No	No	Option does not address the problem or provide sufficient capacity in 2021.	Should not be assessed further
SC1f	Yes	Yes	Subject to engineering feasibility and land-take, this option shows potential to address future traffic growth.	Should be assessed further
SC1g	No	No	Option does not address the problem or provide sufficient capacity even in 2021.	Should not be assessed further

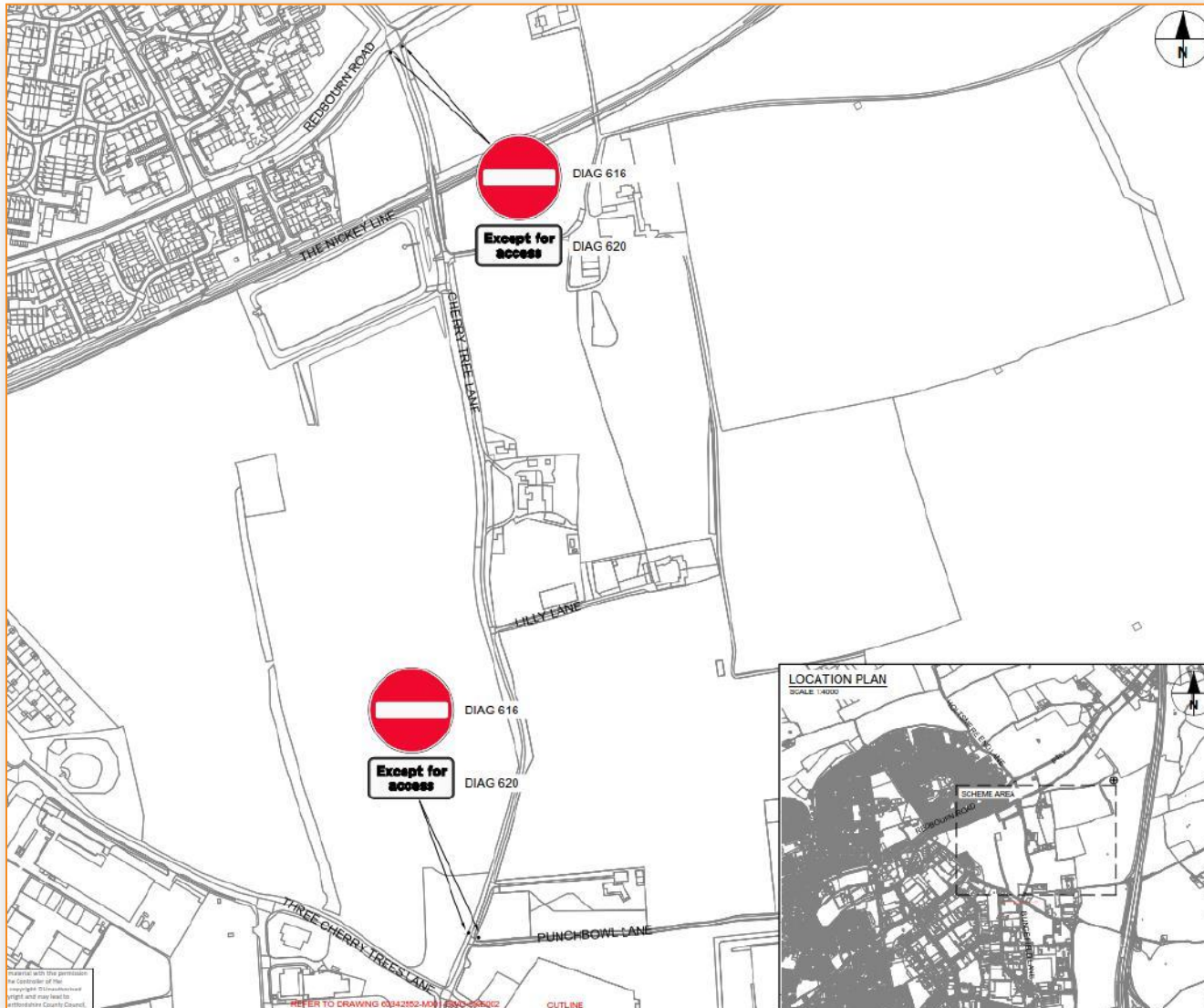
6/ Scheme Concepts 3-6

Scheme Concepts 3-6

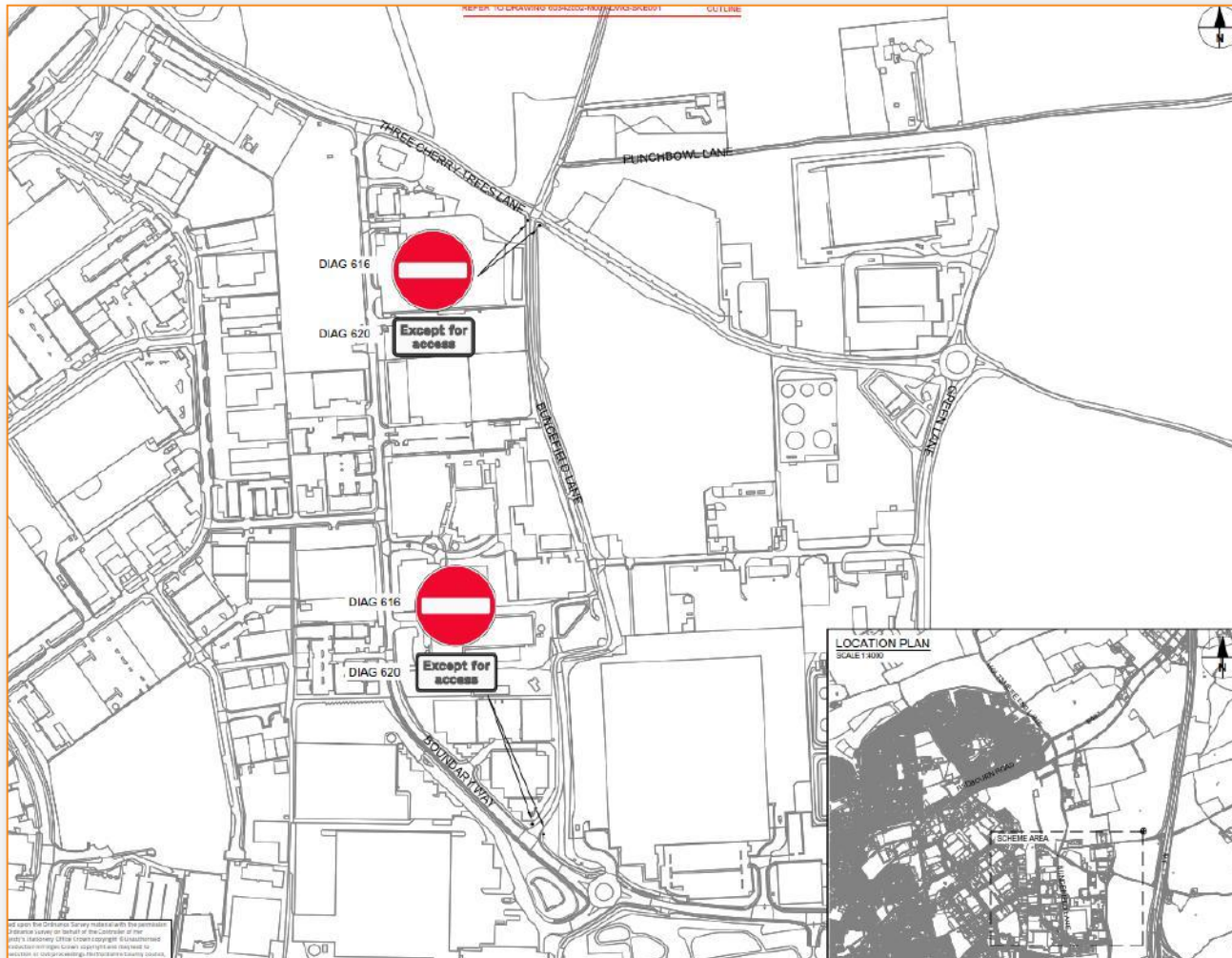


Scheme Concept 3

Cherry Tree Lane
'quietway'

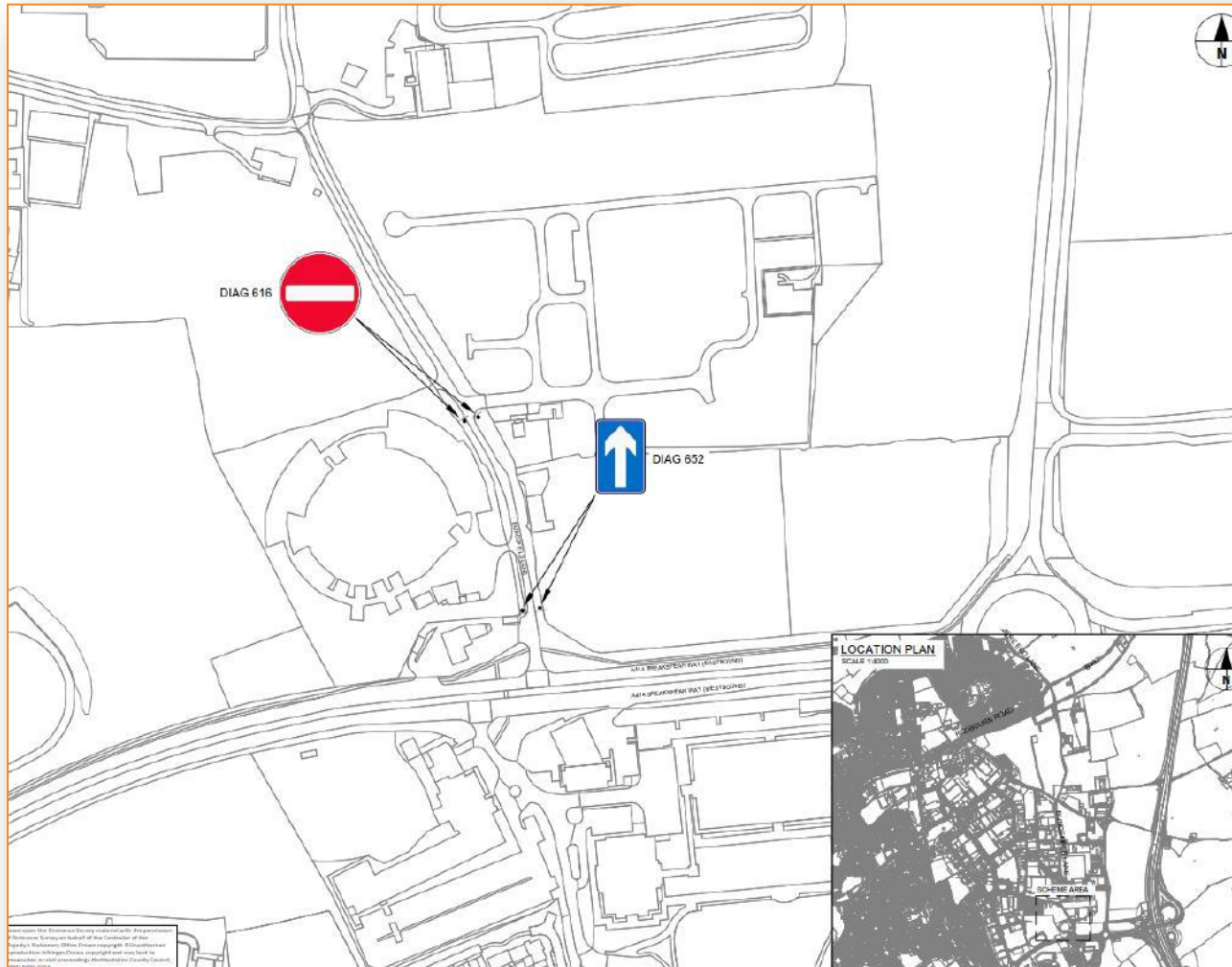


Scheme Concept 3



Buncefield Lane
(northern section)
'quietway'

Scheme Concept 3



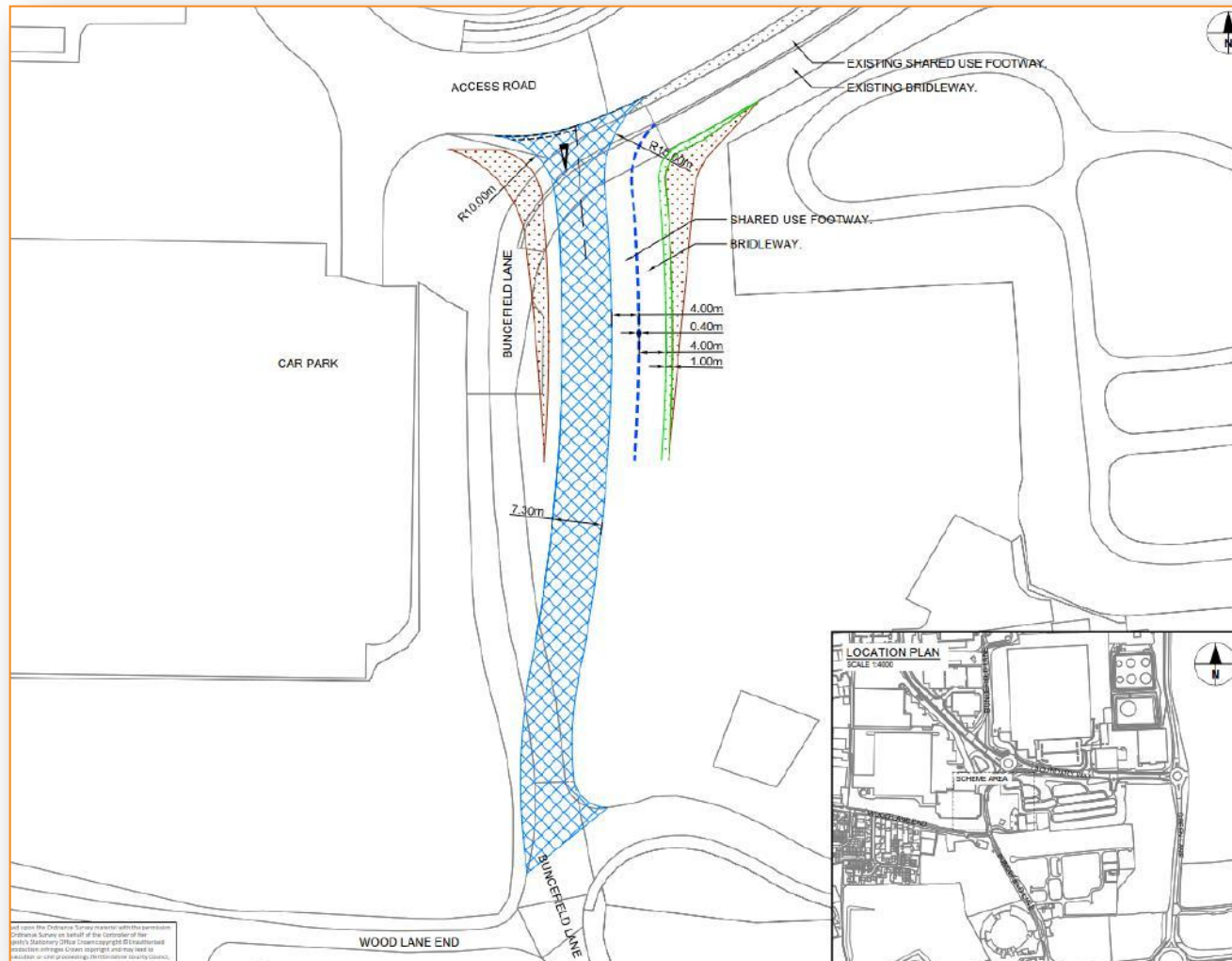
Buncefield Lane
(central section)
'quietway'

Scheme Concept 3



Buncefield Lane
(southern section)
'quietway'

Scheme Concept 4



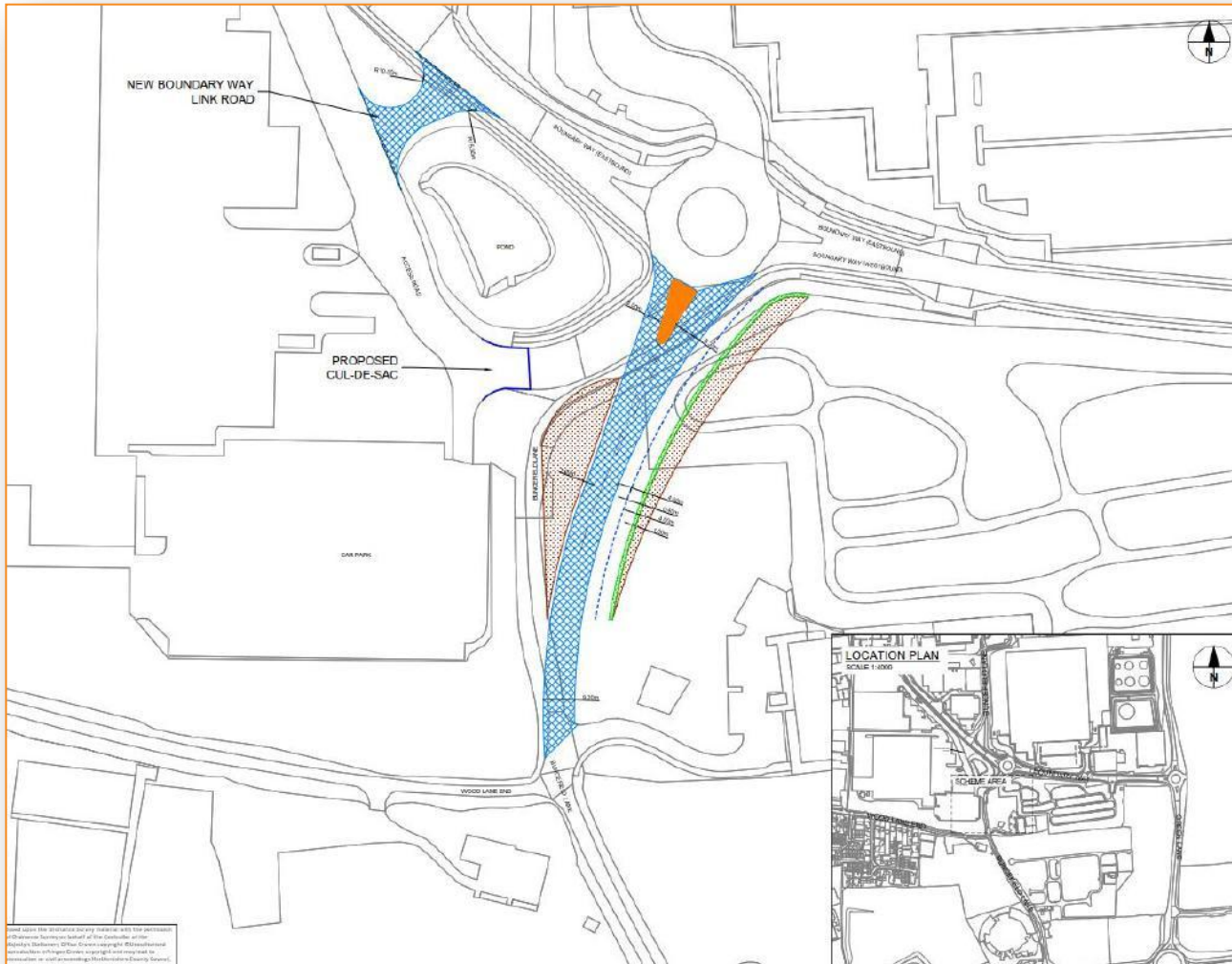
Wood End Lane-
Buncefield Lane-
Boundary Way
Link – option A

Scheme Concept 4



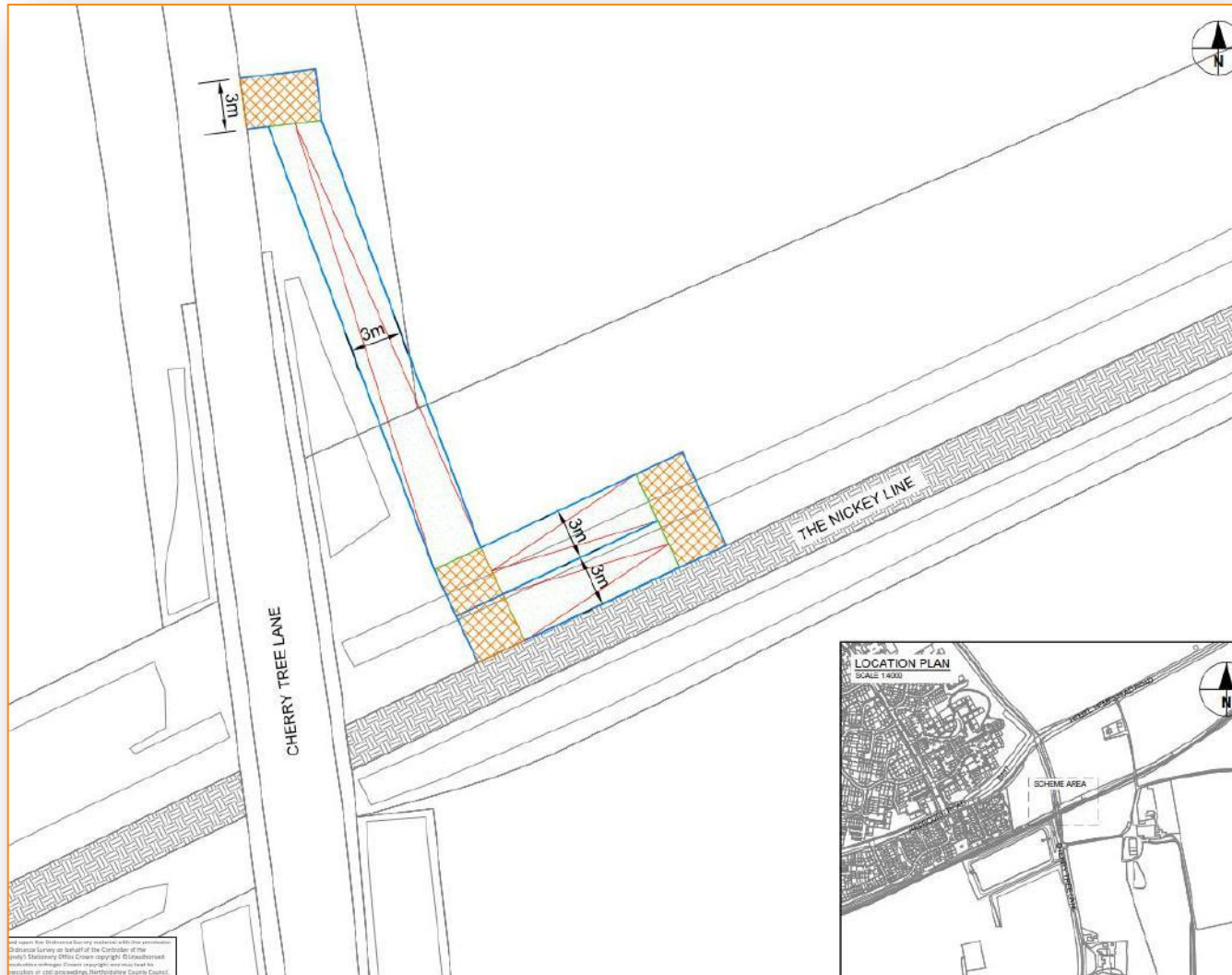
Wood End Lane-
Buncefield Lane-
Boundary Way
Link – option B

Scheme Concept 4



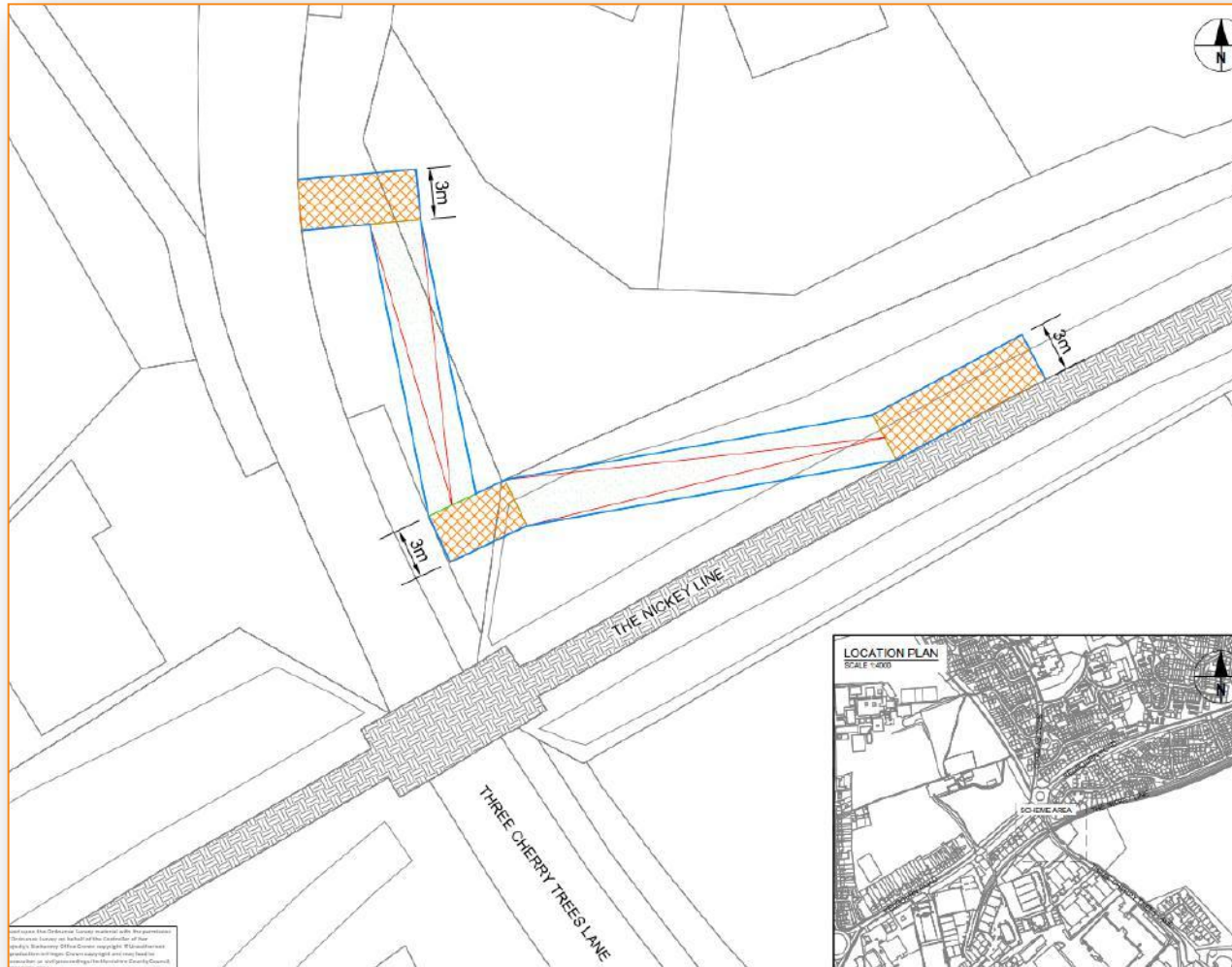
Wood End Lane-
Buncefield Lane-
Boundary Way
Link – option C

Scheme Concept 5



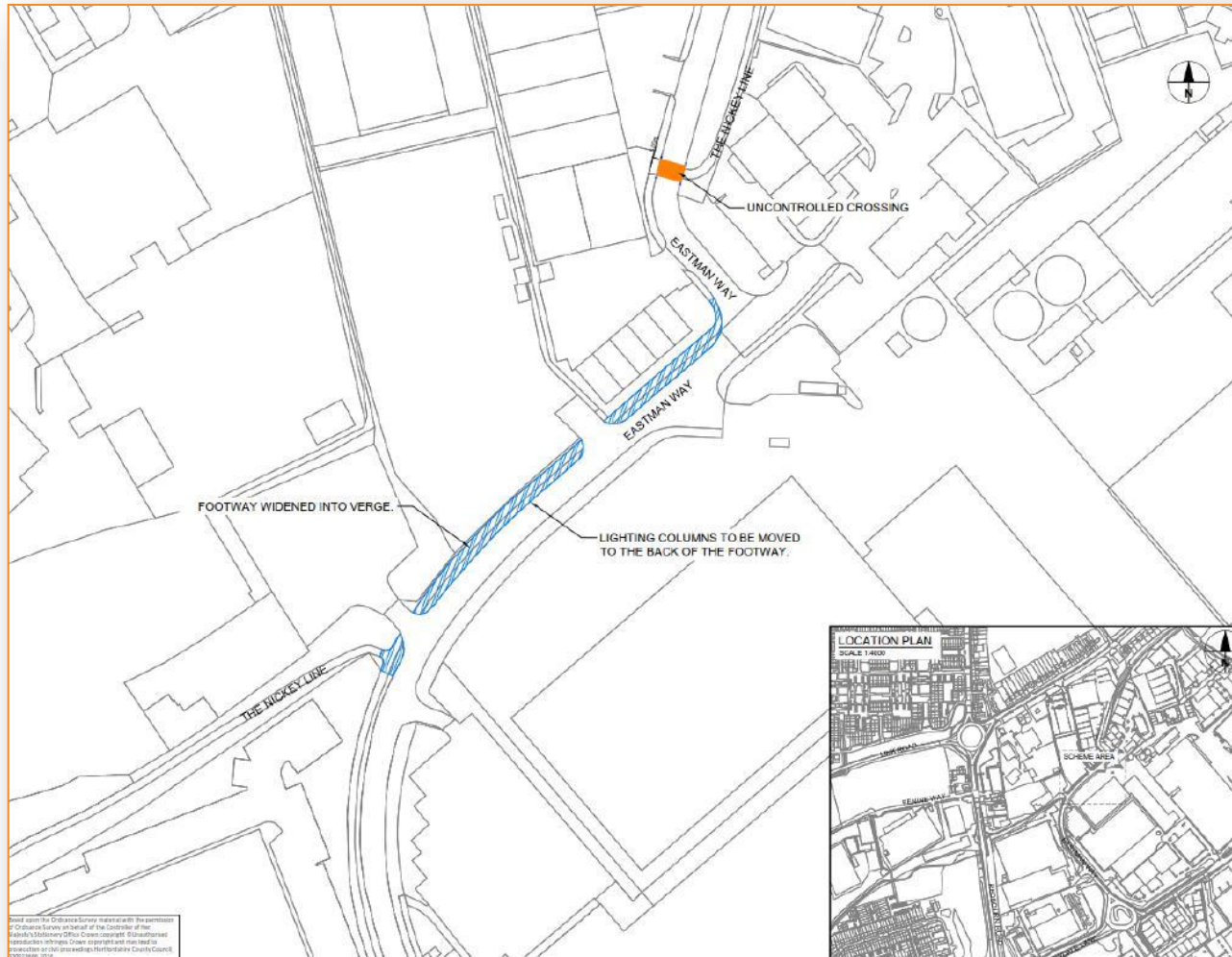
Nickey Line-
Cherry Tree Lane
ramp access

Scheme Concept 5



Nickey Line-Three
Cherry Trees Lane
ramp access

Scheme Concept 5

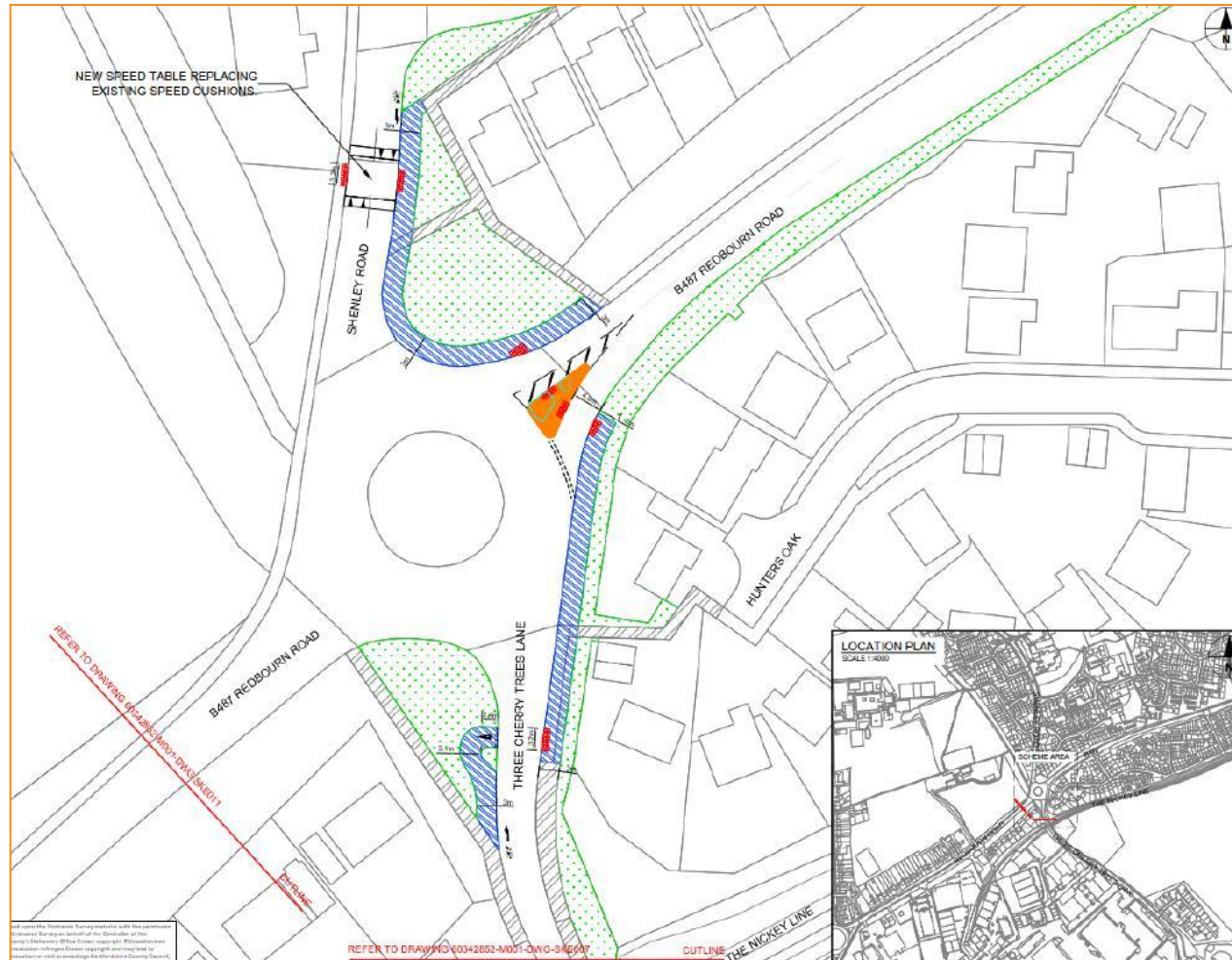


Nickey Line –
Eastman Way
linkage

[illegible]

A414 Breakspear Way at-grade crossing

Scheme Concept 6



Redbourn Road-
Shenley Road-
Three Cherry
Trees Lane
Roundabout
footway crossing
improvements

Scheme Concept 6



B487 Redbourn
Road crossing and
bus stop access

Scheme Concept 6



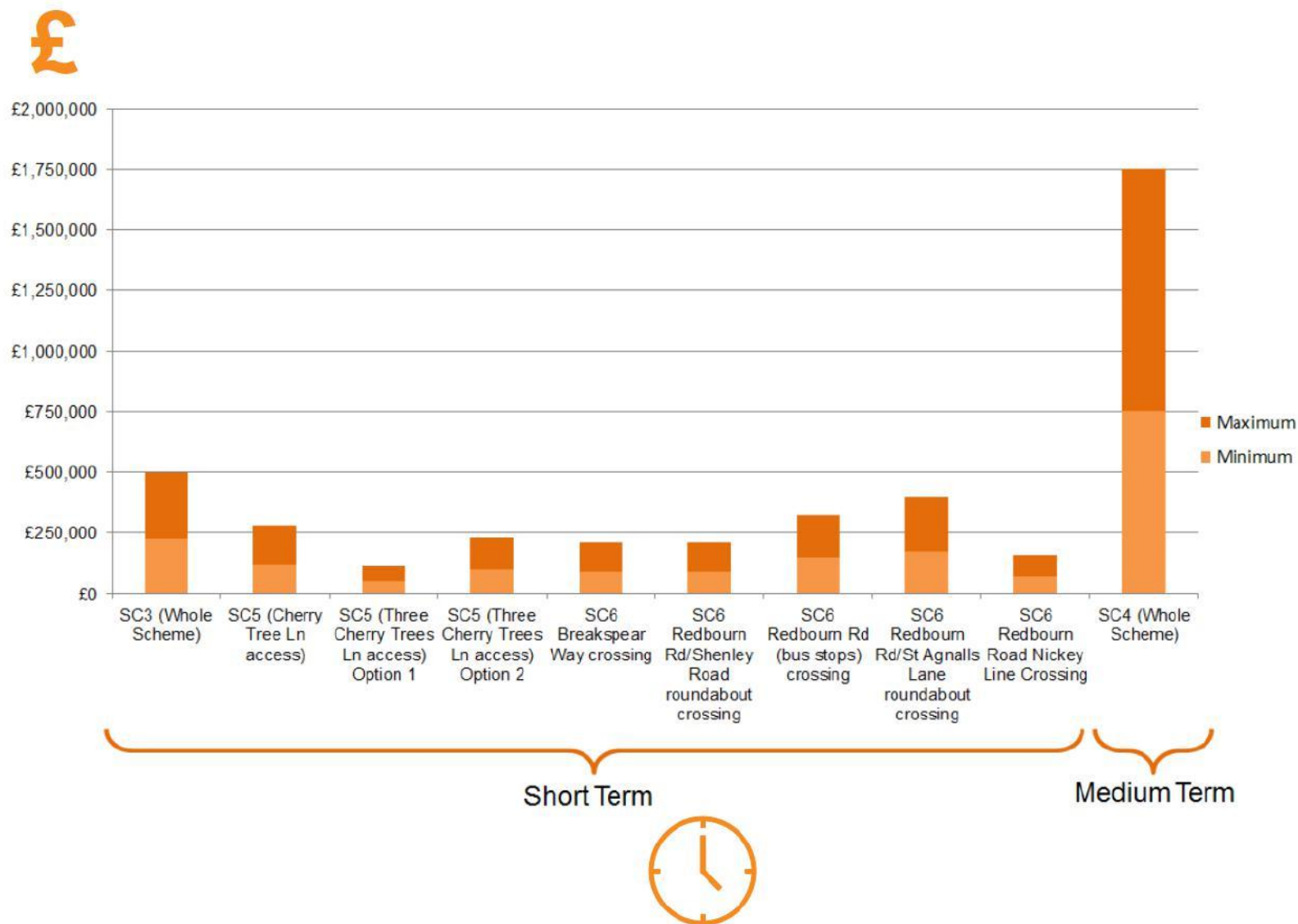
B487 Redbourn
Road-A4147 Link
Road-St Agnells
Lane roundabout
footway crossing
improvements

Scheme Concept 6



B4147 Redbourn
Road – Nickey Line
signalised crossing

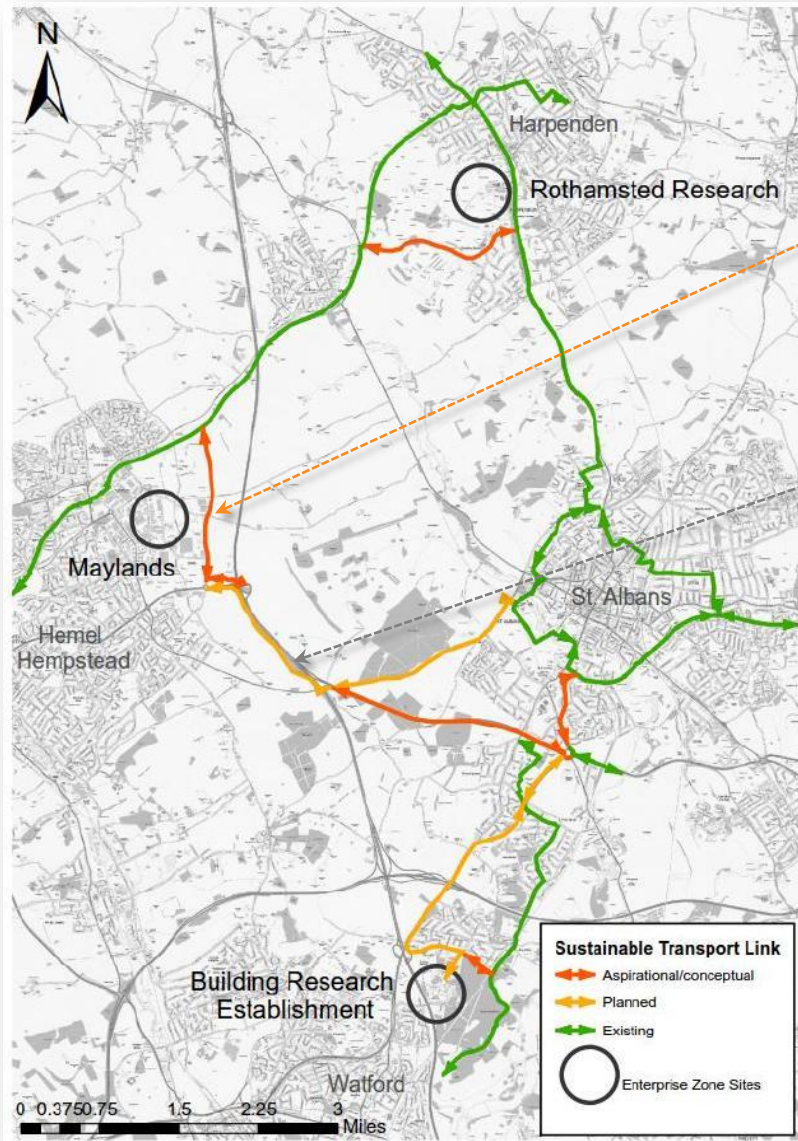
Scheme Concepts 3-6 summary



7/ A4147-A414

Cycle Link

A4147-A414 Cycle Linkage



**SC5 Nickey Line
'branchline'**
(alongside SC2
N-S spine road)

HCC-led project
A4147-A414T(M1)-A414
Breakspear Way cycle
link



8/ Next Steps

Next Steps

- Model Enhancement on-going
 - Scheme testing resulted in initial sifting and suggested short list of SC1 options
 - Test short list in enhanced model
 - Undertake design & costing of SC1 short list
 - SC8 bus proposals
-
- Next progress meeting w/c 6th June

Maylands Growth Corridor Study

Progress Meeting 8: 20th June 2016

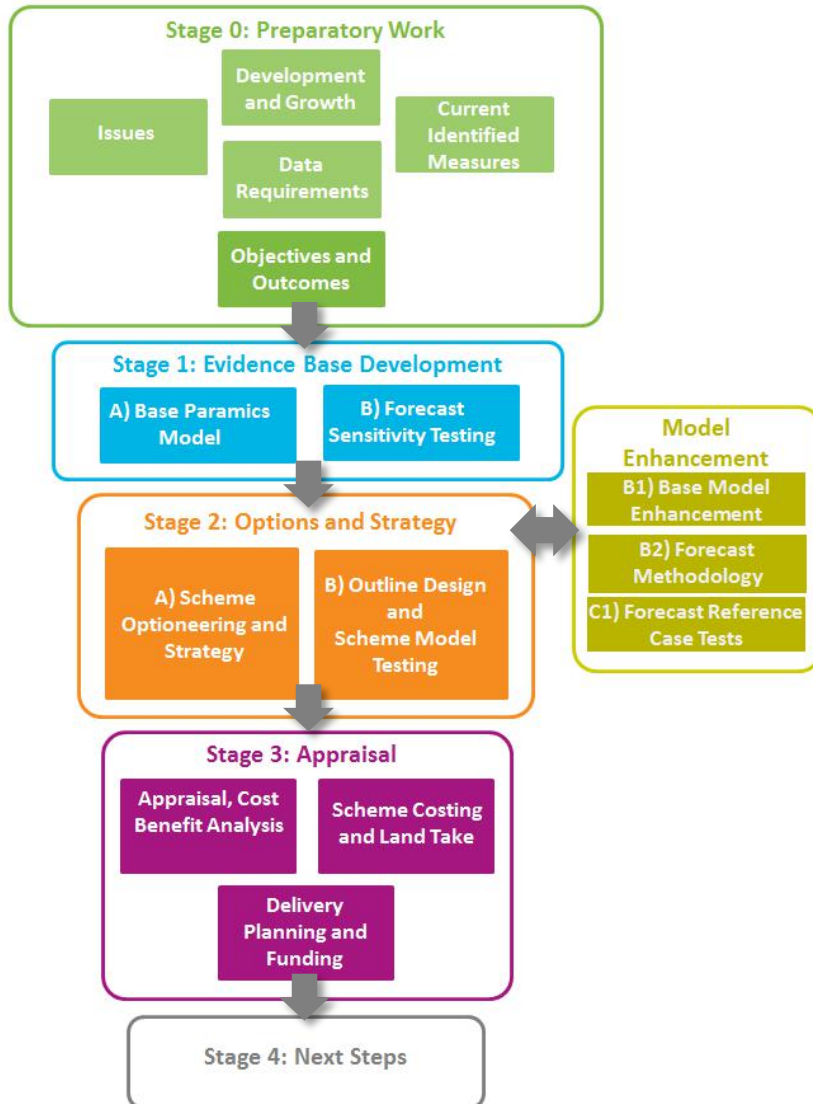
Agenda

- 1/ Introductions & progress meeting #7 actions
- 2/ Commission Overview – timescales and progress
- 3/ East Hemel Hempstead masterplanning & model enhancement – update
- 4/ SC7 Lorry Parking and Routing
- 5/ SC8 Bus Service Provision
- 6/ Next Steps
- 7/ AOB

2/ Commission Overview

The background of the slide features several thin, dark gray lines that intersect to form various geometric shapes, including triangles and quadrilaterals. These lines are positioned primarily on the right side of the slide, creating a modern, architectural feel.

Commission Overview



April '15-July '15

a) Aug '15 – Nov '15

b) Dec '15 – Jan 16

B1) 'March-June '16

B2) July-Aug '16

B3) Aug-Sept '16

a) Sept '15-Nov '15

b) Jan - Sept '16

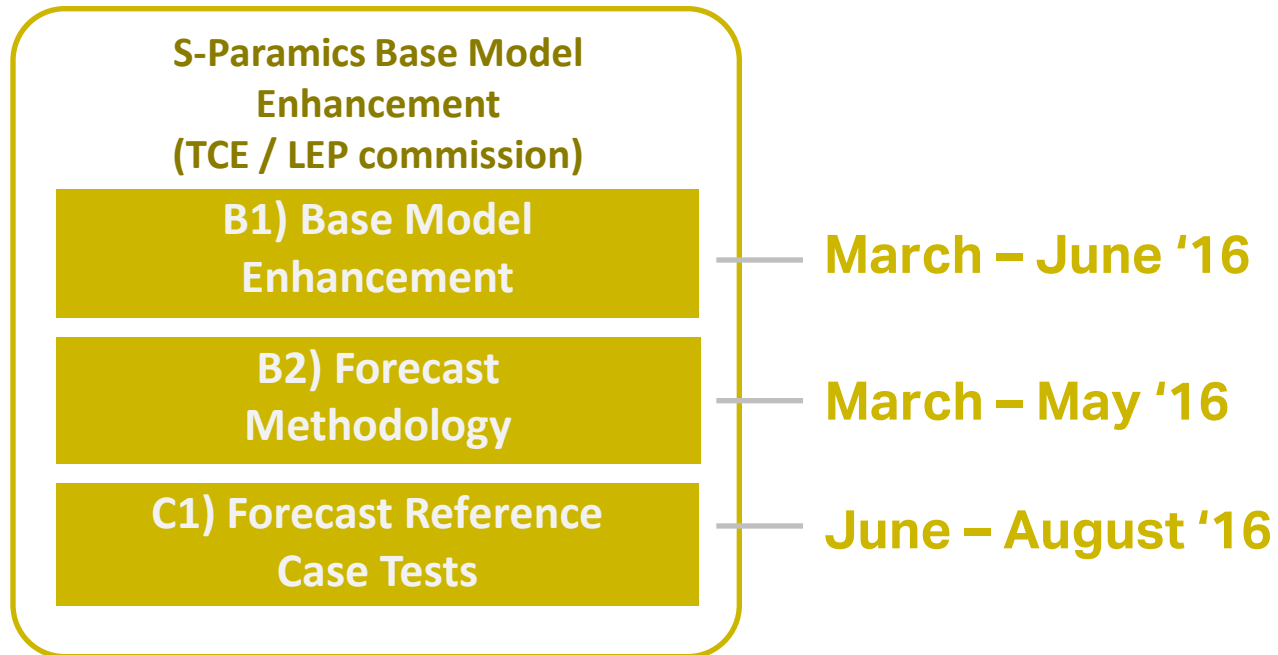
Sept-Oct '16

tbc

The background features several thin, dark gray lines that intersect to form various geometric shapes, including triangles and polygons, creating a modern, architectural feel.

3/ East Hemel masterplanning & model enhancement

Hemel Hempstead Model Enhancement

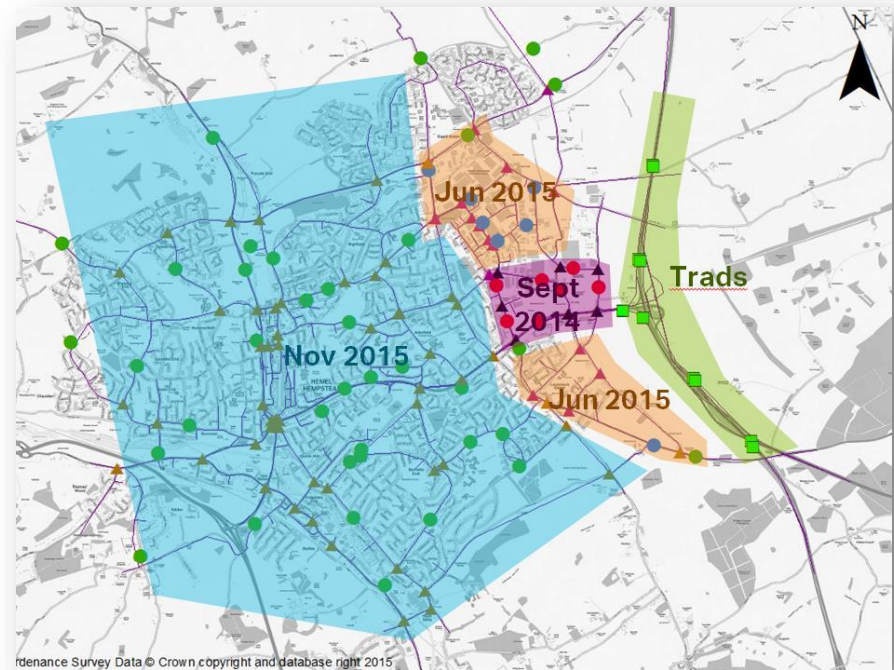


Model Enhancement Update



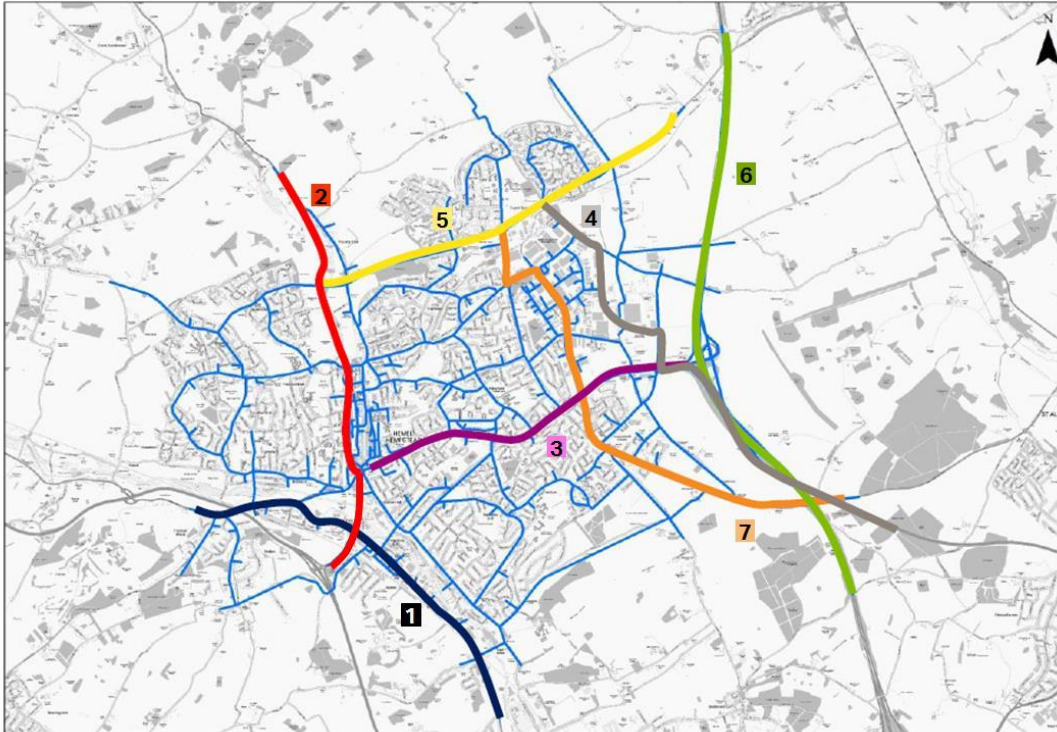
Signal timings updated at some key junctions

Updated count data



Model Enhancement Update

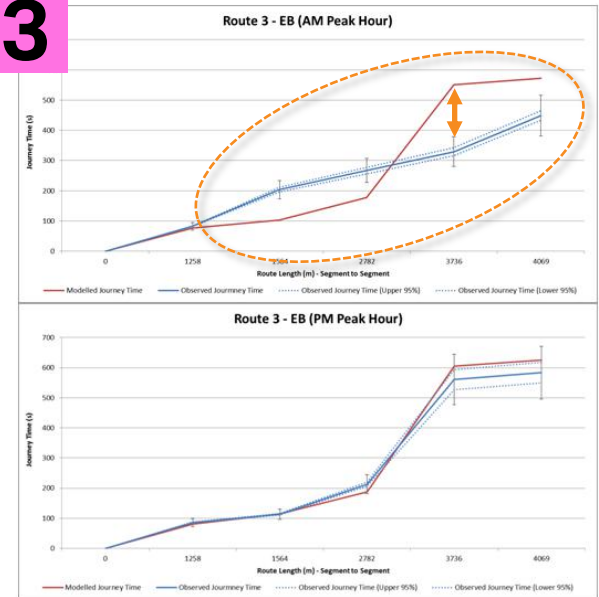
Journey Times



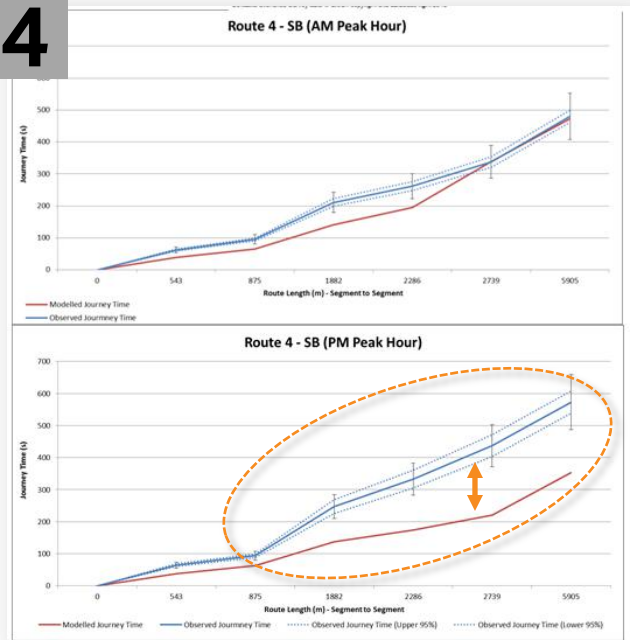
Contains Ordnance Survey data © Crown copyright and database right 2015

Generally the modelled and observed journey times align well. Some exceptions are currently being investigated.

3



4



4/ Scheme Concept 7

Lorry Parking & Routing

SC7 – Lorry Parking and Routing

Existing Demand:

- Large logistics firms including Gist, Martin Brower and Furnells, Royal Mail and retailers incl. Next
- Amazon fulfilment and logistic centres – HGVs and LGVs



SC7 – Lorry Parking and Routing

Existing Parking Provision and Routing:

- Furnells Lorry Park - 85 spaces (secured entry) ((approx £15.00))
- Main routes in/out of Maylands are Green Lane, Maylands Ave (via A414 Breakspear Way) and Swallowdale Lane (via Redbourn Road)
- Area wide weight restriction in place north-east of Maylands covering part of Redbourn Road (extends up to M1 J9)
- Width restriction on Three Cherry Trees Lane
- Watling St Truck Stop – 60-80 spaces plus café, toilets, showers, petrol filling station and 24hr marshal patrol ((£23.00 to park))



SC7 – Lorry Parking and Routing

Existing (Perceived) Problems:

- (A) Lack of capacity at lorry parks
- (B) Unwillingness to pay for lorry parks
- (C) Lack of awareness of lorry parks
- (D) Maylands area being used by passing HGVs to rest in
- (E) Lack of appropriate lay-bys
- (F) Drivers waiting for delivery slots

Lorry Parking on Green Lane – on/off verges



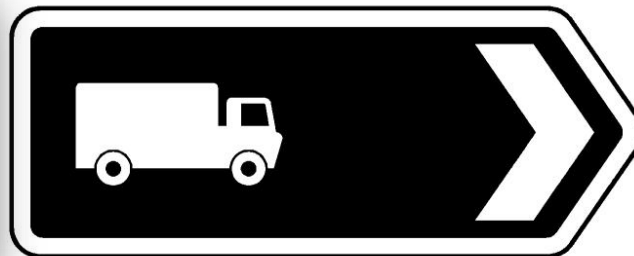
SC7 – Lorry Parking and Routing

Potential Measures:

- A1** – Discuss lorry parking issues with Furnells to determine if extra capacity can be provided (short term)
- A2** – Expand Watling Street Truck Stop (medium term)
- A3** – Introduce new lorry parking facility (long term)

- B1** – Subsidy of local HGV parking areas (short term)

- C1** – Improved signage of Furnells' Lorry Park and A5 Lorry Park (short term)
- C2** – Promotional campaign to raise awareness of lorry parks (short term)



SC7 – Lorry Parking and Routing

Potential Measures (D-F):

D1 – Introduce Bollards (short term)

D2 – Traffic Regulation Orders (short term)

D3 – Awareness Campaign (short term)

E1 – Formalise HGV laybys on Green Lane (short-medium term)

E2 – Introduce laybys on Eaton Road (short-medium term)

F1 – Revise delivery arrangements (short term)

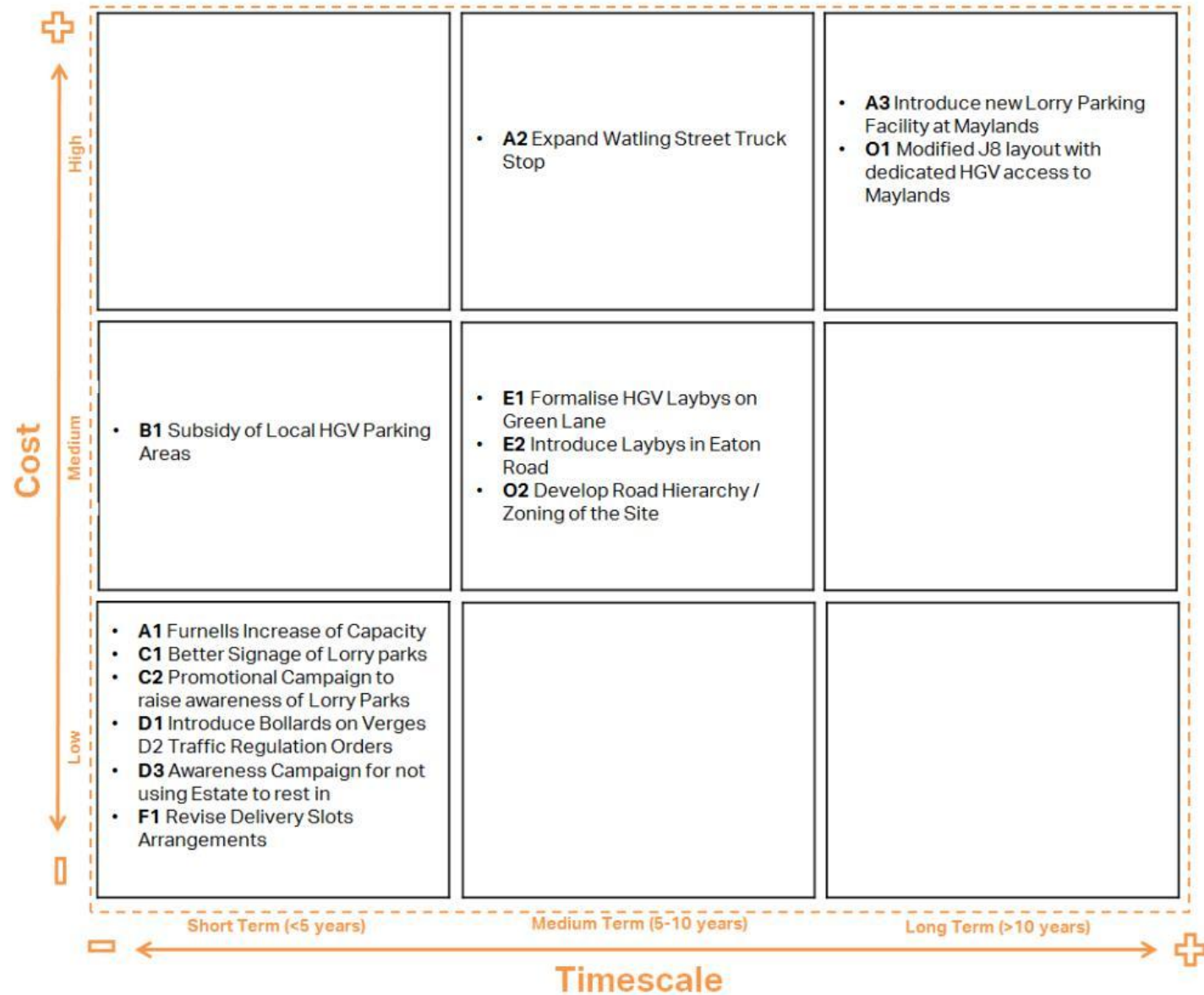
Other recommendations:

O1 – Dedicated access for HGVs to reduce interaction with A414

O2 – Develop a stronger road hierarchy



SC7 – Lorry Parking and Routing



SC7 – Lorry Parking and Routing

Possible next steps:

- Carry out qualitative driver surveys to determine origin, journey purpose and reason for parking (requiring consultation with parked drivers)
- Traffic surveys to collect data on how vehicles enter Maylands and how long they are staying. Collected manually or through ANPR survey
- Consultation with businesses in Maylands to determine nature of deliveries
- Involvement of RHA and FTA in development of options

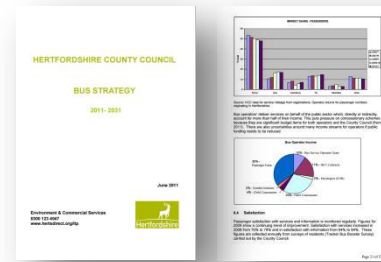
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5/ Scheme Concept 8

Bus Service Provision

SC8 – Bus Service Provision

Policy – HCC Bus Strategy 2011-2031



Strategic Policies include:

- [A] Support, promote, improve a network of **efficient and attractive bus services** responsive to existing and potential passenger needs...
 - Assess the **passenger transport implications of new development**; recommend what is required to make those developments capable of being **effectively served by bus** improvements
- [C] Develop buses as a **viable alternative to the use of the private car** ... contribute to reduction of greenhouse gas emissions.
 - Take account of the **contribution that bus services make to reducing car use and emissions...**
- [I] Seek to **give greater priority to buses** on the road network to improve punctuality and minimise disruption...
 - Identify **measures to give greater priority to buses** and consider the effects on buses of other highway or traffic management schemes...
- [J] **Develop partnerships** to achieve improvements in service provision and other facilities for specific corridors or geographical areas.
 - Ensure that **operators of long distance coach services consider local needs** in the planning of services...
 - Consider new **partnerships in service improvement delivery...**

SC8 – Bus Service Provision

Bus Services Bill

Enhanced Partnerships

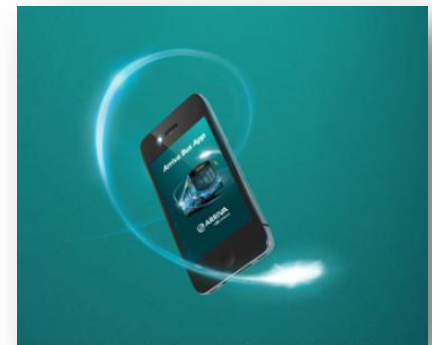
- Enabling bus operators & authorities to work jointly to respond quickly to passenger demand
- Requiring certain info is provided to passengers
- Identifying optimal bus services needed
- Setting vehicle standards for emissions & accessibility
- Enable common ticket rules and fare zones across operators

Franchising

- Give LAs powers to decide what services run where and when – able to take a more strategic view
- Create more competition between operators

Open Data and Ticketing

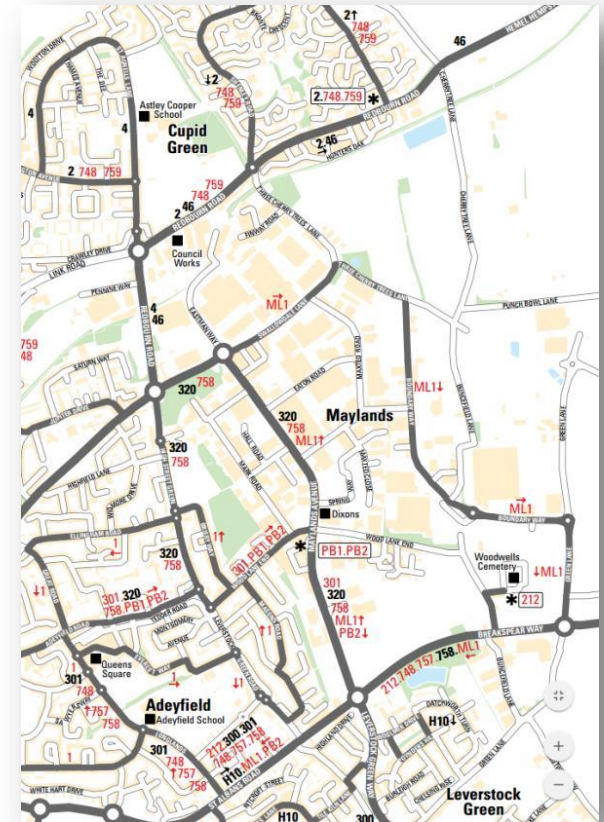
- Better info about services



SC8 – Bus Service Provision

Existing service provision and usage:

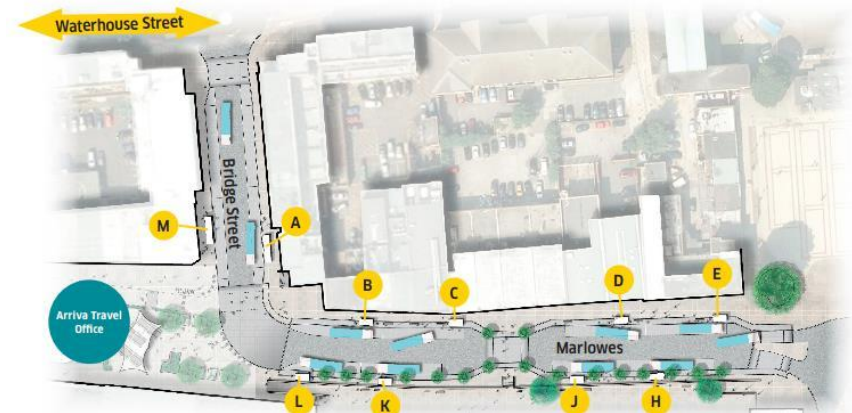
- Several services route through Maylands, specifically ML1, plus services through the Heart of Maylands including PB1 & 2, 320 and 758
- Mix of urban (within Hemel), local inter-urban (e.g. to/from Watford) and long-distance limited stop coach services
- Mix of operators

**AECOM**

SC8 – Bus Service Provision

Recent Improvements:

- **New Bus Interchange (Dec 15)**
 - £2m investment
 - Part of wider regen programme
 - Modern shelters & RTPI displays
 - Modern streetscape
 - Improved Town Centre connectivity
 - New travel information centre
 - Public toilets
- **ML1 continuation (Mar 16)**
 - Originally LSTF supported (up to 2015)
 - £260k rev, £90k capital
 - Reduction in services
 - Promotional activity to boost patronage
 - S106 support (15-16)
 - Commercially operated by Arriva since April 16



SC8 – Bus Service Provision

Current bus usage:

- Approx. 2.85% bus mode share to Maylands (journeys to work by bus – Census)

Possible reasons for low usage:

- Relative convenience and flexibility of driving to work (parking provision, ability to make linked trips e.g. via school run in the morning, gym or supermarket in the evening)
- Infrequent bus services coinciding with shift times
- Majority of bus services on western side of Maylands – perceived long distance walk from bus stop to work
- Perceived lack of certainty about bus arrivals – perceptions about bus reliability
- Overall journey time compared to car – services not direct
- Trips within Hemel cheaper/more convenient on foot or by bike?
- Buses susceptible to congestion



... not unique to Maylands

SC8 – Bus Service Provision

‘Scenario Builder’

Objectives:

- Estimate future demand on the network
- Understand capacity and network constraints
- Test development ‘scenarios’ against potential bus demand growth

Key Metrics

- New dwellings/population
- New jobs
- Proportion of rail to bus interchange users
- Total internal- and external-origin bus trips
- Proportion of internal- to external-origin trips
- Proportion of new workers making each trip type
- Average bus max capacity
- Average bus occupancy (how full are buses already)

Variables

- Proportion of proposed development (jobs) realised
- Proportion of new residents working locally

Scenario Guide	
1 Set the total number of jobs, population expected in 2031	
Maylands jobs (2031)	27166.40
Maylands pop (2031)	17431.47
2 Set the rate of change/year (2011-2014) of Dacorum trips	
Rate of change (car) (%/year)	0.50%
Rate of change (PT) (%/year)	1.50%
3 Set the upper limit of estimated 2011 "rail" bus trips to maylands	
"Rail" trips to Maylands taken by bus (%)	75%
4 Set the upper limit of trips/job in 2014 to Mayland	
Maylands trips/job (2014) (%)	95%
5 Set the increase in the proportion of new residents (2031) that work in Maylands	
Increase in proportion of internal workers	5%
6 Set the 2031 bus modeshare target	
Internal trips bus modeshare target (2031) (%)	0%
External trips bus modeshare target (2031) (%)	0%
7 Set the average bus capacity in Maylands	
Average bus capacity	50.00
Average bus occupancy (non-Maylands trips)	33%
8 Turn on/off the modal shift for pre-existing (2014) trips	
Modal shift for pre-existing (2014) trips (1=full, 0=off)	0.10
9 Adjust the future bus route frequencies	
Is BAU = FUTURE	FALSE

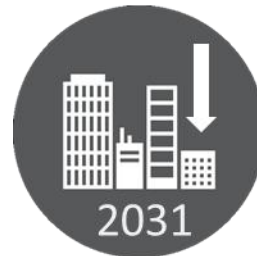
2014.00 JOBS			DWELL			POP	
	%	#		%	#		
A	2.00	100%	2.00	1991.00	100%	1991.00	4937.68
B	13.00	100%	13.00	1044.00	100%	1044.00	2589.12
C	3054.00	100%	3054.00	430.00	100%	430.00	1066.40
D	658.00	100%	658.00	2.00	100%	2.00	4.96
E	-16.00	100%	-16.00	17.00	100%	17.00	42.16
F	9428.00	80%	7542.40	1233.00	80%	986.40	2446.27
G	238.00	0%	0.00	2.00	0%	0.00	0.00
OTHER	5.00	100%	5.00	6.00	100%	6.00	14.88
EXISTING	15908.00			6330.00			

SC8 – Bus Service Provision

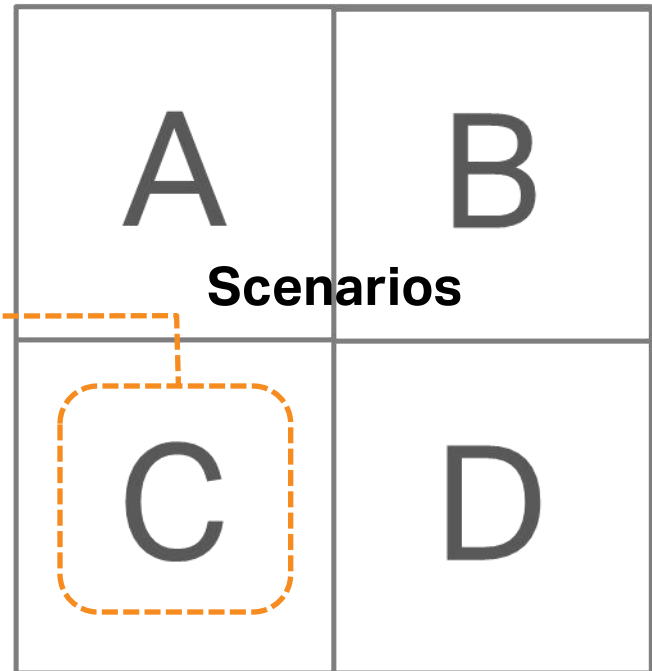
Outputs

- Growth (or decline) in bus demand
- Capacity for network to facilitate potential new demand

New residents working locally



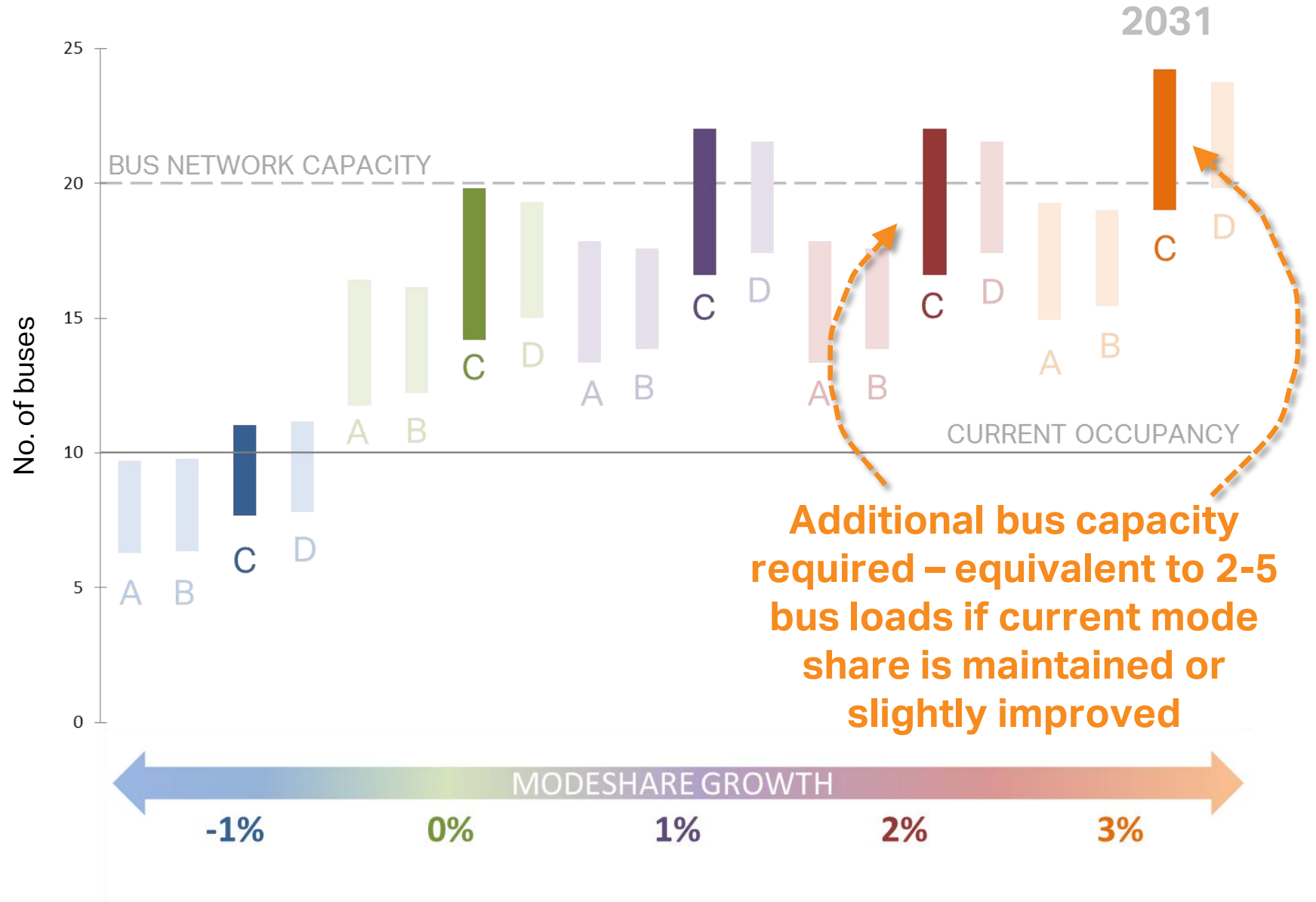
Amount of
employment
development
realised



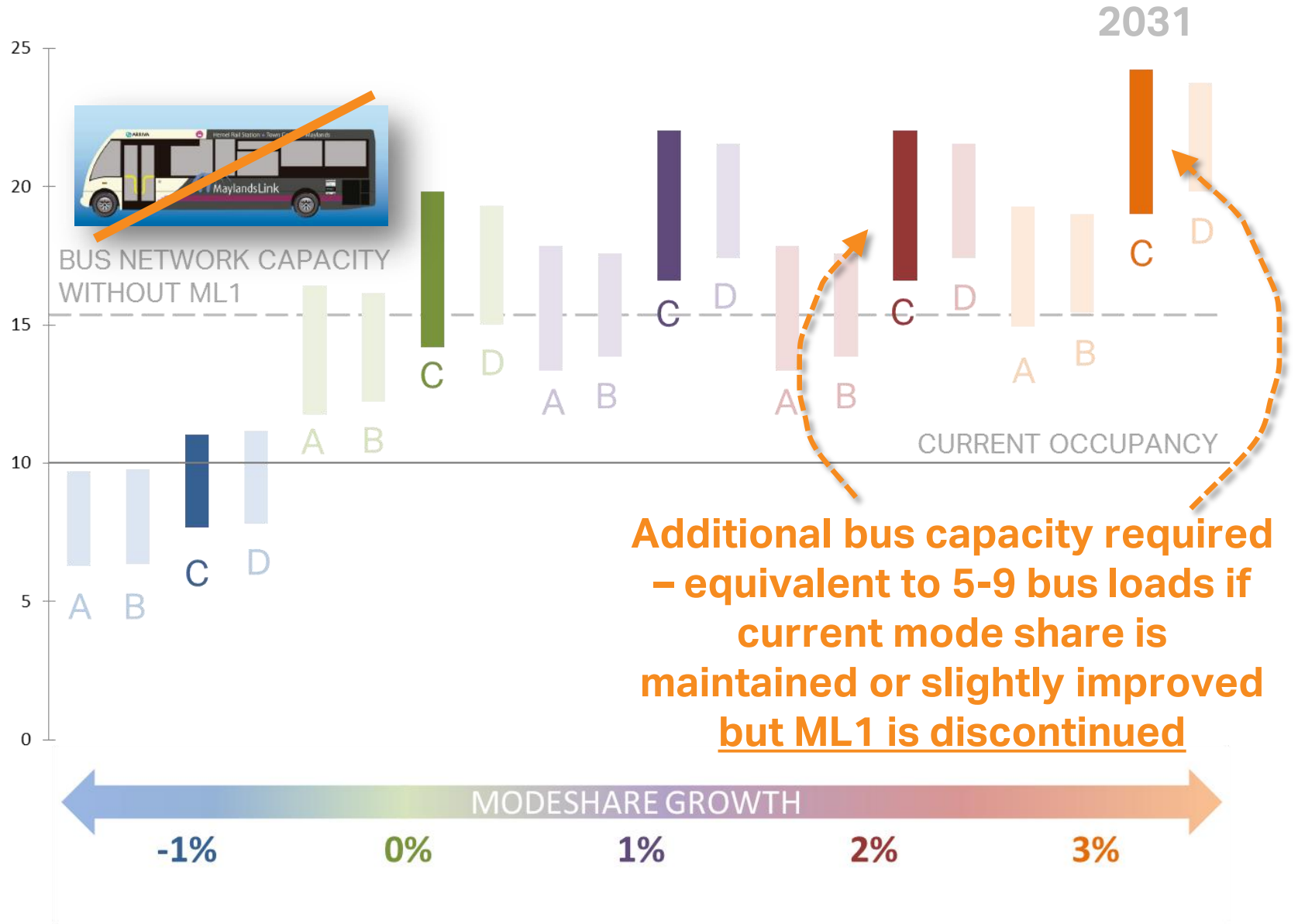
Approx. 9,000 new jobs fully realised

Only 5% of new residents work within expanded Maylands

SC8 – Bus Service Provision



SC8 – Bus Service Provision

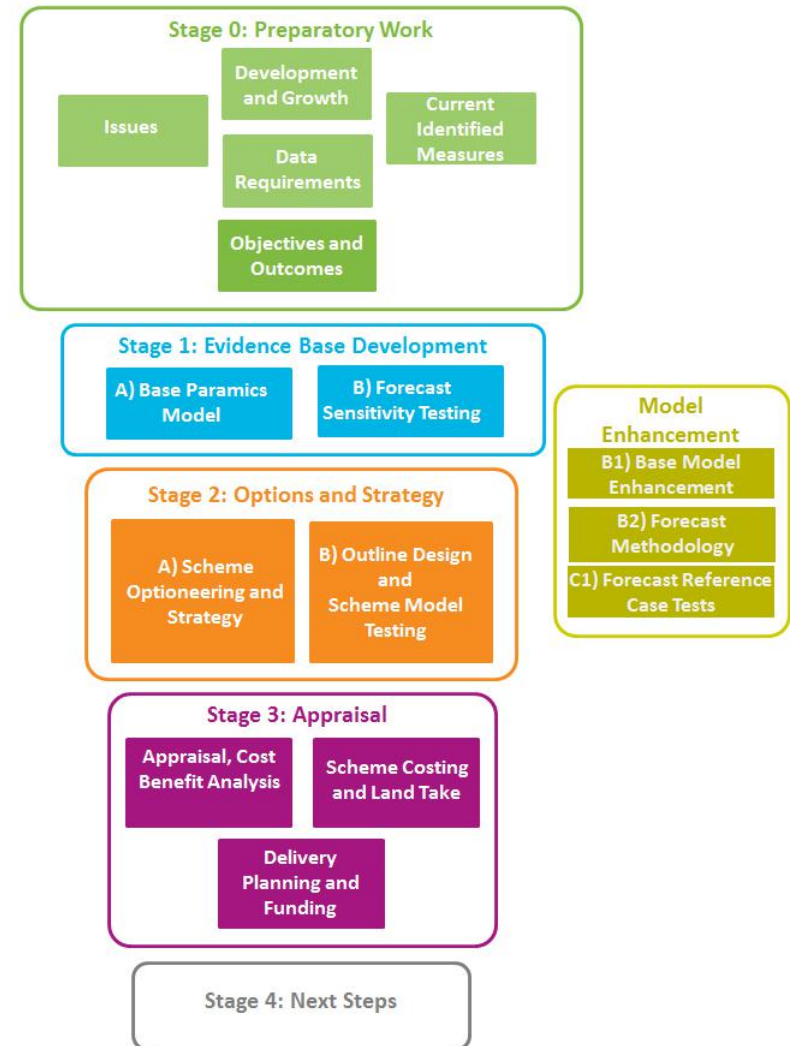


6/ Next Steps

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Next Steps

- Finalise SC8 Bus Service Provision analysis and circulated report (**early July**)
- Continue Model Enhancement – LMVR (June) Forecast Model (**July-Aug**)
- SC1 option development (**est. July-Aug**)
- SC package testing in enhanced model (**est. Aug-Sept**)
- Potential SC refinement - **TBC**
- Scheme appraisal and study finalisation (**est. Sept-Oct**)
- **Next progress meeting date...**



7/ AOB



