

Matter 7 – The Broad Locations for Development – Specific Matters (Policy S6 (i) to (xi))

Main Issue

Whether the detailed policy for each broad location for development is justified, effective and consistent with national policy.

East Hemel Hempstead (Central) S6 (ii)

1. Question 1

Is the site suitable for the development proposed and are there any specific constraints or requirements associated with it, or the need for mitigation measures?

1.1 Yes, the Council considers that the site is indeed suitable for the 55 hectares of employment uses proposed. There are some specific constraints and requirements associated with it and the need for some mitigation measures. It is considered important to also recognise that numerous other significant stakeholders also consider the site is suitable for the development proposed, including DBC, HCC, Herts LEP, Herts EZ, the Crown Estate etc. As set out in more detail in response to other MIQs (and [ED25C](#)) the Green Belt Review Sites and Boundaries Study for St Albans (February 2014) ([GB 001](#)) initially identified the site as being considered for potential release from the Green Belt for employment uses. It concisely set out at page 127 "...c) All developable land would come forward predominantly for residential development, with the exception of Site 2a which is identified exclusively for employment uses." The land forms the largest part of the Government endorsed multi-site Herts Enviro-Tech Enterprise Zone, brought forward jointly by SADC, DBC, HCC, Herts LEP, Herts EZ and landowners including the Crown Estate. The site was included in the former draft SLP and has, subject to the Local Plan process, become a positive and universally supported working assumption across the 5 LPA SW Herts area.

1.2 There are some specific constraints and these have been recognised since the earliest stages in Plan-making. They were an acknowledged consideration as part of the Green Belt Review in 2014 ([GB001](#)) and related subsequent Green Belt and site suitability work, as can be seen at:

11.1.20. Only one site - Land East of Hemel Hempstead Central (S2a) is subject to a primary constraint. The site lies within the Buncefield Oil Storage Depot HSE Consultation Zone. Approximately one third of the site is covered by the Consultation Zone which includes a Development Proximity Zone (DPZ), Inner Zone (IZ), Middle Zone (MZ) and Outer Zone (OZ). The HSE confirms that development is not unacceptable in this area; however, all planning applications in the DPZ must be referred to it, and various types of development, including residential will be heavily constrained by safety and risk considerations. Generally, for reasons given in chapter 4, this site is not considered suitable for residential development.

...

11.2.10. *Site 2a (East of Hemel Hempstead Central) is separated from the settlement edge by the employment area / industrial estate. Most significantly this site is partially covered by the Buncefield HSE Consultation Zone which is a primary constraint to residential (though not employed related) development and some other types of non-residential use).*

1.3 The following specific constraints were also identified as part of the SA;

- Grade 2 Listed Building

1.4 Some of the specific constraints, requirements and mitigations were directly taken into account in draft Policy S6 (ii) requirements 14 and 15, which set out:

- *Appropriate buffer zones and mitigations to address the Buncefield oil depot and pipelines*
- *Design to mitigate adverse impacts from motorway noise and air pollution*

1.5 The specific constraints, requirements and mitigations in relation to the Buncefield oil depot and pipelines is set out in more detail in response to M7iiQ4.

1.6 All of these specific constraints, requirements and mitigations (including the Grade 2 listed building) are also being taken account of and where appropriate mitigated through the Masterplanning process.

Councils Response to Stage 1 Matters, Issues, Questions - Thursday 12 December 2019.

2. Question 2

What evidence is there to demonstrate that the proposed broad location is suitable for enviro-tech employment uses and capable of providing 10,000 jobs?

- 2.1 The Council considers that there is substantial evidence to demonstrate that the proposed broad location is suitable for enviro-tech employment uses and capable of providing in the order of 10,000 jobs. With regard to the circa 10,000 job capacity, this is in part set out in response to Matter 5 Qs 21-22. The evidence includes the B use class mix, plot ratio and employment density assumptions detailed in Appendix 3 of [EMP 003](#). The indicative jobs figure is derived from Local Plan policies for the various employment uses of the land (Local Plan Policy S5 and S6ii) and national standard evidence sources. The estimates have also been sensitivity tested. Several possible land use mix and job growth outcomes are considered. The job capacity outputs are in a range from approximately 4 -14,000. A mid-range assumption of 8,000 jobs is considered (similar to the Herts LEP EZ jobs assumptions for East Hemel Central), but a higher figure of 10,000 is noted in the policy. This provides the best basis to build in a realistic higher assumption to test impacts. It also reflects an economic development aspiration to encourage office / mixed business premises provision, as justified by sectoral labour demand forecasts ([EMP 002](#)). This also addresses PDR losses.
- 2.2 More recently, based on the June 2018 TCE indicative Masterplan - which set out 1.3 million sq ft of primarily B8 space and 1.325 million sq ft of primarily office space - roughly using the HCA floorspace/job calculations (and other rules of thumb) this gives about 10,000 jobs on the primarily office area alone and about 2,000 jobs in the primarily logistics area = a total of 12,000 jobs. The Council accepts that this is likely to be an over-estimation in total and particularly for the primarily office area, but it considers that this does reinforce the approximate 10,000 jobs figure very strongly.
- 2.3 We know that the situation and figures will evolve again numerous times as the wider HGC project moves forward and it is hugely dependent on specific occupier requirements (recent examples discussed in employment evidence workshops have involved two similar sized large logistics warehouses where it is understood one nominally employs 600 FTE and the other 3,000 FTE). It is also considered important in the context of the Garden Communities status, Enterprise Zone status and current and future funding bids that parties don't under-sell the jobs potential.
- 2.4 With regard to the suitability for enviro-tech employment uses, the evidence includes the substantial work undertaken in order to support the SADC/DBC/Herts LEP bid for Enterprise Zone status, which the Government awarded in 2017. As set out in relatively concise terms in [EMP 001](#):

4.14 Hertfordshire's multi-site Enterprise Zone aims to encourage growth in the LEP's priority sectors, with a particular emphasis on environmental technology. The definition of this sector is as follows:

4.15 "“Environmental technologies; companies operating in environmental technology fields broadly related to the built environment, the green environment and agri-tech, digital

technologies which could be applied in these fields, and the supply chains to these companies.”

4.16 In practice this includes a wide range of different sectors including:

- *Agri-tech*
- *Research and development*
- *Construction – with a particular focus on advanced building processes and offsite manufacturing*
- *Advanced materials and manufacturing*
- *Digital technologies*
- *Energy technologies (design and manufacture)*
- *Consultancy and related services*
- *Environmental management (eg waste management, water supply etc)*

...

5.80 The inclusion of parts of Maylands Business Park in the Hertfordshire Enterprise Zone is likely to create future growth opportunities. The development to date has all been at Prologis Park and in the short term will result in the continued growth of distribution, logistics and wholesale sectors. In the longer term the EZ status mean there may be potential to attract investment from a wider range of high value sectors linked to environmental technologies. The commercial feasibility study for the site identified the following opportunities:

- *Offsite construction: this is an existing strength of the area due to the research expertise at the Building Research Establishment. BRE has identified the potential for an offsite manufacturing facility at Maylands, linked to the systems development, testing and R&D that they carry out at the BRE site,*
- *Agritech: although there is currently limited employment in this sector in South West Herts, there are opportunities for future growth centred around Rothamsted. Agri-tech clusters in other parts of the country have been shown to have large space requirements which could make Maylands an attractive site for future investment.*
- *Digital: the feasibility study identifies opportunities for businesses that provide digital services, products, platforms or hardware to deliver technical solutions for other environmental technology sectors eg construction, agritech and engineering. The study refers to these as ‘digital enablers’ and highlights particular opportunities in sensors, ICT software development, big data and AI. Given Maylands existing strengths in digital industries this stands out as a particular growth opportunity for Dacorum.*

2.5 Very recently, the consultation draft [Hertfordshire Local Industrial Strategy](#), published September 2019, directly identifies the importance of the Herts Enviro-tech Enterprise Zone as a core part of the Herts LIS. It also identifies the support for the location and the intent of the Hertfordshire LEP to drive growth in existing and new sectors in the enviro-tech field at this location:

P11 - But the transformation process is also about today’s new developments: the formation of Hertfordshire’s new enterprise zone, Hertfordshire Innovation Quarter, on the edge of Hemel Hempstead, and the emergence of major new communities (Harlow and Gilston Garden Town on the Hertfordshire-Essex border and Hemel Garden Communities in the

south west) are also 'stories' about processes of major economic change – albeit processes which are at a much earlier stage and in our collective gift to shape.

P27 - Hertfordshire is a research-intensive county. Data from the Smart Specialisation Hub suggests that by 2015, Hertfordshire's total R&D expenditure was equivalent to 3.8% of GVA – well above the national target of 2.4% (i.e. one of the headline targets from the Industrial Strategy White Paper). Within Hertfordshire, the majority of R&D spend is accounted for by businesses (rather than higher education institutions, government or non-profit making organisations): business enterprise R&D (BERD) accounted for over 90% of Hertfordshire's R&D spend, a much higher proportion than elsewhere.

P37 - Developing our response... Identify the synergies and complementarities between the two enterprise zones at Hemel Hempstead and in Harlow (with links to major housing growth at Hemel Garden Communities and Gilston), and work collaboratively to promote both, including to inward investors

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3. Question 3

What arrangements have been made for joint working between the Council and Dacorum Borough Council to deliver the proposed broad location?

3.1 The Council has responded to this question in detail at M7iQ7.

4. Question 4

Is the proposed site capacity appropriate taking account of constraints including the provision of infrastructure including the buffer zones and mitigations to address the Buncefield Oil Depot and pipelines? Has the Health and Safety Executive been consulted?

- 4.1 Yes, the capacity is considered appropriate and it has directly considered constraints including the buffer zones and mitigations to address the Buncefield Oil depot and pipelines. The specific HSE Buncefield protection zones (indicatively from the Green Belt Review) are set out in M7iiQ4 appendix 1. The HSE technical guidance with regard to this type of facility and how it must be taken into account in Planning work is set out in M7iiQ4 appendix 2. These documents have been available and have been duly considered by SADC, DBC, Herts LEP, Herts EZ and the Crown Estate since the very genesis of the East Hemel considerations. Direct discussions between the landowner and the HSE have taken place to inform the approach in the Plan.
- 4.2 As can be seen at policy S6(ii), the Plan has directly taken into account the constraints of the Buncefield Oil Depot and pipelines which sets out:

14. Appropriate buffer zones and mitigations to address the Buncefield oil depot and pipelines.

- 4.3 The Council consulted the Health and Safety Executive at Plan regulation 18 and 19 stages. A response was received as part of the regulation 18 consultation from the HSE, including

Future Consultation with HSE on Local Plans

HSE acknowledges that early consultation can be an effective way of alleviating problems due to incompatible development at the later stages of the planning process, and that we may be able to provide advice on development compatibility as your plan progresses. Therefore, we would like to be consulted further on local plan documents where detailed land allocations and use close proposals are made; e.g. site specific allocations of land in development planning documents.

- 4.4 The Health and Safety were again consulted at Regulation 19 stage. No response was received at that time. It should be re-iterated that the HSE have through separate discussions provided the information at Appendix 1 and Appendix 2, which have been fully accorded with in the Plan and the evolving Masterplan. The HSE will continue to be engaged with on an ongoing basis.

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5. Question 5

What are the timescales and funding sources for the necessary improvements to junction 8 of the M1 and the link road? Are these required for other development? Are any other road improvements required and what mechanisms are in place for their delivery?

- 5.1 Hertfordshire County Council is the Transport Authority for this area. The M1 J8 scheme is identified in the Hertfordshire's Local Transport Plan 2018 – 2031 (LTP4) as a Transport Improvement to support new development. A copy of LTP4 can be found in [INFR 001](#) 2018-2019 Infrastructure Delivery Plan reference 74 link on page 168. Please see extract below.

<i>Scheme Table</i>					
<i>Categories</i>		<i>Lead Authority/ Promoter</i>	<i>Status</i>	<i>Time Frame</i>	<i>Information</i>
<i>Transport Improvements to support new development (Specific junctions known to be affected)</i>	...	...	...	...	...
	<i>6) East Hemel Hempstead</i>	<i>Developer</i>	<i>Subject to Planning Consent</i>	<i>Medium</i>	<i>Includes upgraded A414/Green Lanes junction, M1 Junction 8 enhancements and new spine road linking the A414 and B487.</i>

- 5.2 The scheme is also identified in the HCC South West Herts GTP which is a daughter document to LTP4. A copy of the GTP can be found in [INFR 001](#) 2018-2019 Infrastructure Delivery Plan reference 77 link on page 169. Please see extract below.

<i>Reference</i>	<i>Scheme or Project Name</i>	<i>Concept description</i>
...
SM7c	<i>M1 Junction 8 enhancement</i>	<i>Enhancement to M1 Junction 8 and the adjacent junction at Breakspear Way/Green Lane to provide additional vehicle capacity and connectivity to Maylands, and relieve congestion on the A414.</i>

Intervention Qualitative Assessment

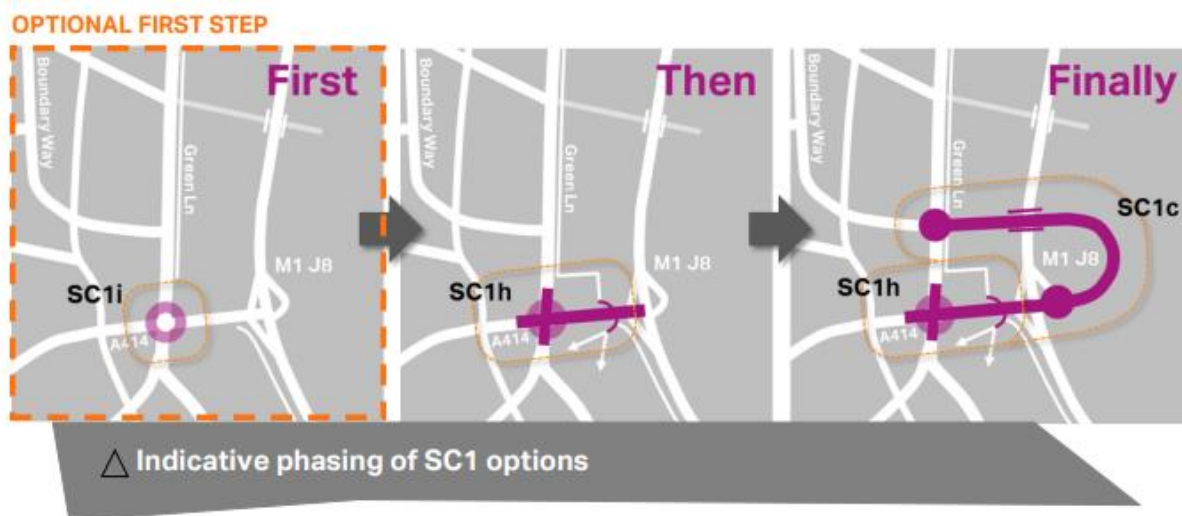
<i>Intervention ID</i>	<i>Scheme Approach ID / Project</i>	<i>Intervention Name</i>	<i>District(s)</i>	<i>Cost Range</i>	<i>Timescale if delivered in</i>	<i>Level of Risk</i>	<i>Likelihood of Funding (internal</i>
...

SM7	...	...	...	...	...	...	...
	C	M1 Junction 8 enhancement	St Albans, Dacorum	£10m-£50m	5-10 years	Medium Risk	High Likelihood

5.3 The Maylands Growth Corridor Study Hemel Hempstead: Investment Prospectus (January 2018) (please see IDP Appendix 3 at [INFR 002b](#)) is the key document which was prepared in a collaborative process which included key stakeholders such as HCC, HE, LEP, SADC, DBC and TCE. It outlines a schedule of interventions, including M1 J8. It explains that M1 J8 forms part of the 'Scheme Concept 1 (SC1) Eastern Gateway Improvements to M1 Junction 8 and A414 Breakspear Way-Green Lane Junction'

5.4 In terms of what is proposed, the document sets out:

What is proposed? A range of highway-focused options have been considered, each varying in terms of scale and impact. It is important not to view each Scheme Concept in isolation, and that as a package the interventions will complement each other. Whilst Scheme Concept 1 will deliver increased highway capacity which will reduce queues and delays to motorists, it will also take pressure off other parts of the transport network so that they can facilitate movements by bike or on foot and free up capacity for buses. A phased approach has been devised. As shown below.



5.5 In terms of timescales and funding sources the Maylands Growth Corridor Study Hemel Hempstead: Investment Prospectus sets out the following on page 16:

When will it happen?

SC1i could come forward within 2 years. Its delivery will be strongly tied to the Maylands Gateway development.

SC1h could come forward within 2-5 years during the early phases of East Hemel Hempstead urban extension development, depending on when or if SC1i is implemented.

SC1c is a more complex intervention which could be delivered within 5-10 years, before the completion of East Hemel Hempstead urban extension development.

Who will be responsible for delivering it?

SC1i can be delivered within the existing highway boundary and will be funded by local developers and delivered by Hertfordshire County Council.

SC1h will require land outside of the existing highway boundary but within the control of The Crown Estate and will be funded entirely by local developers including The Crown Estate. It will be delivered by Hertfordshire County Council or by the developer themselves.

SC1c will require land outside of the existing highway boundary but within the control of The Crown Estate and will require funding from a mixture of sources including local developers and central Government. It will be delivered by Hertfordshire County Council. Or the developer themselves. As it will interact with the strategic road network, Highways England will need to be heavily involved in the development and delivery of SC1c.

How much will it cost?

SC1i - < £250k

SC1h - £2m - £5m (depending on whether dualling of Green Lane is included or not)

SC1c - £15m - £25m (depending on composition of scheme)

- 5.6 As stated above, M1 J8 is part of a package of interventions for the eastern gateway area which complement each other and with phasing planned over a 2-10 year period. Together they are known as SC1 and an outline of the proposals is included at paragraph 8.4 above. The M1 J8 element of SC1 could be delivered within 5-10 years and will require funding from a mixture of sources including local developers and central government. The other SC1 interventions are funded by local developers and are scheduled to be delivered sooner and therefore will provide transport benefits to the eastern gateway at an earlier stage.
- 5.7 In terms of funding sources, the work to secure funding for M1 J8 is ongoing. A key example of progress can be seen in the Herts Enterprise Zone Board Meeting in October 2018 which considered a report regarding EZ Accelerator Funding for Breakspear and J8 Improvement Works. It was proposed that the EZ project and TCE co-fund a package of work to undertake the design and preparatory works for the Breakspear Way and M1 Junction 8 improvements ahead of securing planning permission, in order to accelerate delivery of this critical infrastructure. The estimated costs for preparatory highways and utilities works is £6m, which could be funded £3m by the EZ, forward funded by a LEP repayable grant, and £3m by TCE. It is understood that the funding has been secured and the project for the design and preparatory works has commenced. This is considered to be an important piece of work, and once completed, it will form the foundation which will allow funding to be secured. This investment represents a significant commitment by the LEP and landowner to progress the M1 J8 scheme.
- 5.8 Furthermore, Herts EZ advise:
- The upgrade of M1 Junction 8 is a critical infrastructure improvement needed to support both employment and residential growth in the Hemel Hempstead and St Albans area. This upgrade will support delivery of the Hemel Garden Community programme, the East Hemel Hempstead development and the Hertfordshire IQ Enterprise Zone (EZ), all of which are connected with the wider growth and transformation of Hemel Hempstead, expected to deliver circa 10,000 new jobs and circa 11,000 new homes. The M1 junction 8 upgrade would be delivered on land either within the ownership of the Crown Estate (TCE) or highway land. TCE and Hertfordshire IQ Enterprise Zone (supported by Hertfordshire LEP)*

are currently funding a detailed design project in sufficient detail to enable the construction of the J8 upgrade, along with the design of related highways improvements required for delivery of the TCE owned Herts IQ East Hemel site. This includes the major upgrade of Breakspear Junction which provides a key access point from the A414 to the Maylands Business Park and East Hemel areas. This co-funded £6m design project is being undertaken ahead of planning permission being secured, in order that these essential highways works are ready to be implemented when planning permission is secured by The Crown Estate. It is clearly unusual for both public and private investors to take such an approach, and this gives a strong indication of the local stakeholders commitment to the success of the project and the deliverability of the J8 upgrade scheme.

In terms of funding for the implementation of the main J8 upgrade scheme, this will be secured through a package of funders, and a plan is currently being concluded to target and secure a range of funding sources, including Road Investment Strategy 2, S106, CIL, Housing Infrastructure Fund, LEP Growth Deal funding and landowner contribution of land. However, the Herts IQ Enterprise Zone is able to provide a level of confidence in relation to funding for this scheme, through future business rates income being an already 'secured' source of funding to help deliver a range of Herts IQ priorities, of which the upgrade of the M1 J8 is its major project. Herts IQ EZ should be considered the funder of last resort to underpin delivery as there are a number of competing uses of the business rates funding to support delivery of the wider Herts IQ EZ project. In terms of the timeframe in which funding will be available, Hertfordshire County Council is the accountable body for Hertfordshire LEP and the Herts IQ Enterprise Zone, and has already considered early access to funds via public borrowing, to be repaid as funding sources become available.

- 5.9 The Hemel Hempstead broad locations have been afforded Garden Community status (within a wider proposal) which means MHCLG funding has been allocated to fast-track specialist survey work and planning works necessary for development. The Garden Community status provides extra confidence regarding commitment, resourcing and intent.
- 5.10 In terms of developer contributions, The SADC CIL LP Viability Strategic Site Testing ([INFR Sep 2019](#)) for East Hemel Hempstead North, East Hemel Hempstead South and North Hemel Hempstead, all identify contributions for transport infrastructure. Together the transport contributions indicated in the viability assessments add up to circa £61m as shown in extracts below. All broad locations are assessed as viable, which includes the transport contribution (See SADC response to M6 Q20); therefore viability (or lack thereof) should not be a barrier to securing appropriate transport contributions at this level.
- 5.11 Aside from these sites in SADC, additional developer funding for transport infrastructure is expected to come from the wider Hemel Garden Community's development of up to 11,000 homes (including c 5,000 homes in SADC). If transport contributions were set at a similar level in HGC DBC sites, the indicative transport pot could possibly double to circa £122m.

East Hemel Hempstead (North)

Table 3.2.14: Section 106 contributions

Contribution description	Contribution	Comments on contribution
...
Transport Infrastructure	£18,150,000	Allows for: - Strategic - LTP4 major scheme; - Local highway - on & off site

		<ul style="list-style-type: none"> - Sustainable travel - public transport; - Sustainable travel - walking + cycling on & off site
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East Hemel Hempstead (South)

Table 3.2.15: Section 106 contributions

Contribution description	Contribution	Comments on contribution
...
Transport Infrastructure	£26,400,000	Allows for: <ul style="list-style-type: none"> - Strategic - LTP4 major scheme; - Local highway - on & off site - Sustainable travel - public transport; - Sustainable travel - walking + cycling on & off site

North Hemel Hempstead

Table 3.2.14: Section 106 contributions

Contribution description	Contribution	Comments on contribution
...
Transport Infrastructure	£16,500,000	Allows for: <ul style="list-style-type: none"> - Local highway - on & off site - Sustainable travel - public transport; - Sustainable travel - walking + cycling on & off site

- 5.12 Yes other road improvements are required and these are listed in the Maylands Prospectus (see IDP appendix 3). It shows that the multimodal spine road which is another key scheme. Key extracts are set out below.

Schedule of Interventions

Scheme Concept	Name	ID	Description
...
SC2	Multi-Modal Spine Road	a	Northern Section (B487-Punchbowl Lane)
		b	Central Section (Punchbowl Lane-A414)
		c	Southern Section (A414-A4147)

What is proposed?

For the purposes of the Maylands Growth Corridor Study, the road link is divided into three parts.

SC2a – the northern stretch linking the B487 Redbourn Road and Punchbowl Lane – 30mph single carriageway road with potential for 20mph zones. Where it dissects the Nickey Line, a new traffic signal controlled pedestrian/cyclist crossing will be provided.

SC2b – the central stretch linking Punchbowl Lane and A414 Breakspear Way – 30mph mix of single and dual carriageway road. Existing junctions with Three Cherry

Trees Lane and Boundary Way will be upgraded. It will tie in with SC1h (the staggered crossroads).

SC2c – the southern stretch linking the A414 Breakspear Way and A4147 St Albans Road – 30mph single carriageway road with the potential for 20mph zones.

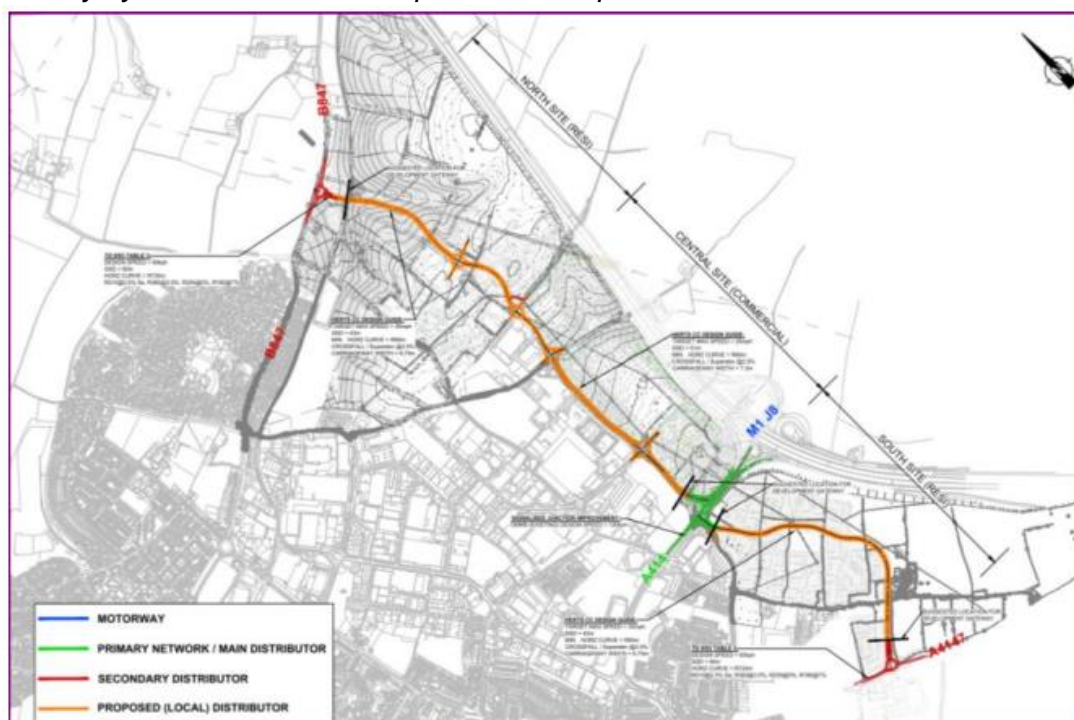
The existing Green Lane (from Leverstock Green) will be diverted to meet the new link road. Where SC2c crosses Westwick Row (part of the SC3 Quietway Green Corridor) a pedestrian/cyclist crossing will be provided.

...

When will it happen? Scheme Concept 2 will be phased in line with planned development at Spencer's Park Phase 2 and East Hemel Hempstead. The northern stretch will be strongly associated with Spencer's Park Phase 2 and East Hemel Hempstead North (residential), as will the central section. The central section will be phased in line with development of the commercial element of the East Hemel Hempstead development and also the northern part of the development. The southern stretch will be strongly associated with East Hemel Hempstead South (residential and employment).

Who will be responsible for delivering it? The developer of East Hemel Hempstead will be exclusively responsible for delivering Scheme Concept 2 as an integral element of the planned development, albeit the road could have wider benefits. Once completed, the new road will eventually be adopted by Hertfordshire County Council formally as part of the wider highway network.

How much will it cost? The cost of SC2 is to be determined. It is expected to be funded entirely by the East Hemel Hempstead developer.



6. Question 6

Have the impacts of the proposal on the wider road network been considered?

6.1 Yes the impacts of proposal on the wider road network has been considered. As set out in SADC response to M2 Q12, the Council works in cooperation with HCC in relation to the annual COMET runs which is a transport model providing future forecasts across the County area. For LP4, the forecast year has been defined by HCC as 2036. This year was chosen as it aligns with the local plan review timescales in south west Hertfordshire, and is the furthest year into the future for which reasonable planning data projections are available. A copy can be found at COMET LP4 Forecasting Report Final (INFR Jun 2019). The COMET model shows the transport impact of all Local Plan proposals in the County including EHH. COMET also takes account of proposed mitigations and schemes.

6.2 A further analysis of COMET LP4 has been carried out for SADC and can be found at [COMET LP4 SADC Analysis V4 Final \(INFR Oct 2019\)](#). The main transport schemes for SADC are listed in this document, for highways and for sustainable travel. Concluding points are at 7.1 which is replicated below:

7.1.1 LP4 shows there are several areas of congestion and delay around SADC, however no obvious “showstoppers” where very long delays or high levels of congestion are recorded. Many of the junctions experiencing delays are currently known as congestion hotspots.

7.1.2 The locations of the new strategic sites appear to be feasible around SADC, however they do generate congestion on the approaches to some of the urban centres such as Hemel Hempstead, St Albans and Hatfield. Journey times increase as expected however the locations of developments away from traditional town centres appears to benefit some movements.

7.1.3 LP4 does not indicate that any of the sustainable measures proposed would conflict with the planned growth, however greater improvements could be considered to improve links to the west of the District, such as between East Hemel and Redbourn. Links between the surrounding key towns such as Hemel Hempstead, Hatfield and Watford should be maximised and any GTP schemes along these corridors to/from St Albans should be considered essential.

7.1.4 LP4 suggests the interaction of SADC with the M1, M25 and A1(M) strategic network is key. As the District is bordered by these routes it is paramount that any rat running onto the District network is discouraged wherever possible.

6.3 An illustration from the document is set out below which shows COMET LP4 congestion and node delay in 2036 in the PM peak.

Figure 15 Map showing congestion and node delay at key junctions in 2036 Local Plan v4 PM Peak



6.4 For East Hemel Hempstead, please see extract below from the document which sets out the key findings:

5.2.1 Trips to and from the East Hemel developments are heavily linked to the M1 which is to be expected given the proximity of the development to the motorway network via junction 8. Figure 23 and Figure 24 illustrate routeing to and from the developments.

5.2.2 There is limited interaction with central Hemel Hempstead as southbound traffic uses either the M1 or A41 to access the M25. Trips travelling towards Watford and the M25 are using Bedmond Lane and the A4251 rather than the A41 (due to delays on the A41 approach to M25 junction 20). There is some interaction with the A4147 towards St Albans and onwards towards the A414 and Hatfield. It is noted there is a lot of development planned around the Maylands area of Hemel Hempstead. Consideration of how these developments interact should be made (possibly using the Hemel Paramics Model).

5.2.3 Examining the GTP schemes in Section 6, these schemes will have limited impact on the East Hemel development as the development links strongly to the motorway network and other strategic routes. There may be interactions with the St Albans Green Ring (PK25). A cycle scheme is planned along the A4147 which would help facilitate these movements, and cycling provision is also planned parallel to the A414 corridor which would help promote travel by bicycle. Further sustainable measures could be considered between Hemel Hempstead and St Albans.

Figure 23: Inbound trips to the East Hemel Hempstead development – 2036 AM

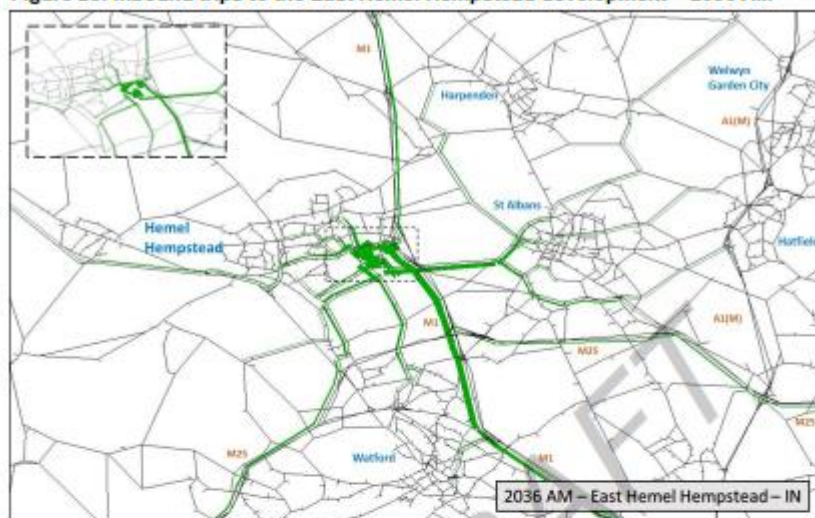
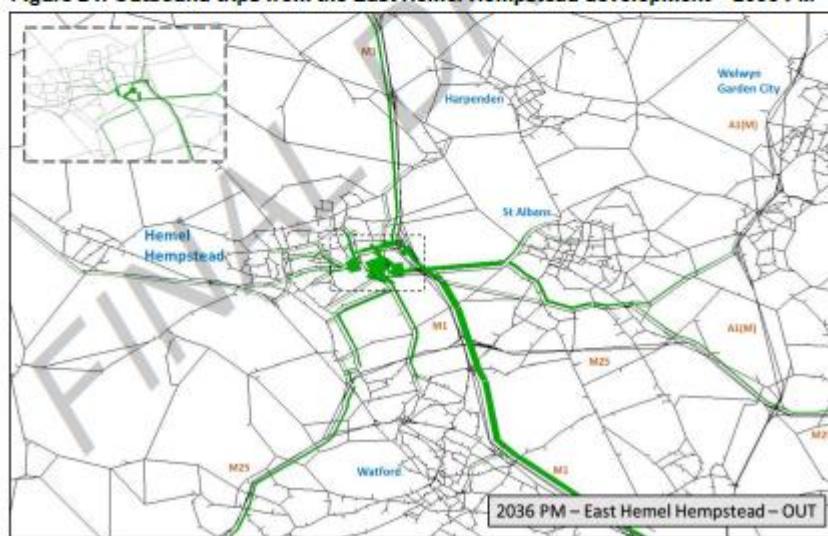


Figure 24: Outbound trips from the East Hemel Hempstead development – 2036 PM



- 6.5 The Maylands Prospectus (IDP appendix 3) is a key document which sets out the main interventions for highways and sustainable travel at EHH. A schedule of interventions is shown below. It should be noted that some schemes relate to land in Dacorum.

Schedule of Interventions

Scheme Concept	Name	ID	Description
SC1	Eastern Gateway	c	M1 J8 east – Boundary Way link road
		h	A414 Breakspear Way/Green Lane staggered signalised crossroads including pedestrian/cycle bridge
		i	A414 Breakspear Way/Green Lane roundabout signalisation upgrade
SC2	Multi-Modal Spine Road	a	Northern Section (B487-Punchbowl Lane)
		b	Central Section (Punchbowl Lane-A414)
		c	Southern Section (A414-A4147)
SC3		a	Cherry Tree Lane Quietway

	Quietway Green Corridor	b	Buncefield Lane (Northern Section) Quietway
		c	Buncefield Lane (Central Section) Quietway
		d	Buncefield Lane (Southern Section) Quietway
SC4	Wood End Lane-Boundary Way Link Road	-	Wood Lane End - Boundary Way Link
SC5	Nickey Line Enhancements	a	Cherry Tree Lane Nickey Line Access
		b	Three Cherry Trees Lane Nickey Line Access
		c	Eastman Way Nickey Line Access
		d	Nickey Line 'branchline' extension alongside SC2
SC6	Foot and Cycle Access Routes	a	A414 Breakspear Way Shared Use Signalised Crossing
		b	B487 Redbourn Rd-Shenley Rd Roundabout Ped Crossings
		c	B487 Redbourn Rd Footway and Signalised Crossing
		d	B487 Redbourn Rd-St Agnells Roundabout Ped Crossings
		e	A4147 Redbourn Rd crossing (Nickey Line)
SC7	Lorry Parking and Routing	a1	Further investigations re. expansion of Furnell's facility
		a2	Expand Watling Street lorry park
		a3	Introduce new lorry parking facility
		b	Subsidy of local HGV parking
		c1	Better signage of Furnell's Lorry Park and A5 Lorry Park
		c2	Promotional campaign to raise awareness of lorry parks
		d1	Introduce Bollards
		d2	Traffic Regulation Orders
		d3	Awareness Campaign
		e1	Formalise HGV laybys on Green Lane
		e2	Introduce lay-bys on Eaton Road
		f	Revise delivery arrangements
SC8	Bus Service Enhancements	a4	Amended ML1 + Extension (2-way working on Maylands Avenue)
		c	Re-route Centrebus '46'
		e	Re-route Arriva '320'
		f	Extension of Greenline 759 commuter coach

6.6 In conclusion, at this stage it is considered that adequate consideration has been given to the impacts of the proposal on the wider road network. Further work on EHH transport is being commissioned as part of the ongoing Masterplanning process and subsequent Planning Application. Key conclusions from COMET LP4 SADC Analysis are set out below:

'The locations of the new strategic sites appear to be feasible around SADC' and there are 'no obvious "showstoppers" where very long delays or high levels of congestion are recorded' Many of the junctions experiencing delays are currently known as congestion hotspots.

7. Question 7

What is the justification for the Multi-Modal Transport Interchange and how will this work in practice? Has it been costed and how will it be delivered?

- 7.1 The justification for the Multi-Modal Transport Interchange originated in the Maylands Growth Corridor technical work undertaken as a partnership between SADC/DBC/HCC/Herts LEP and the Crown Estate, with consultants Aecom, in 2015-18. This technical work identified the potential for a series of inter-connected multi-modal interchanges. This initial work was taken forward and supported by all the parties and the overall justification and emerging intent of how it would work in practice is set out concisely in the HGC Charter document (referenced in more detail in answer to other MIQs) at page 13 and Figure 5:

An Opportunity for New Approaches

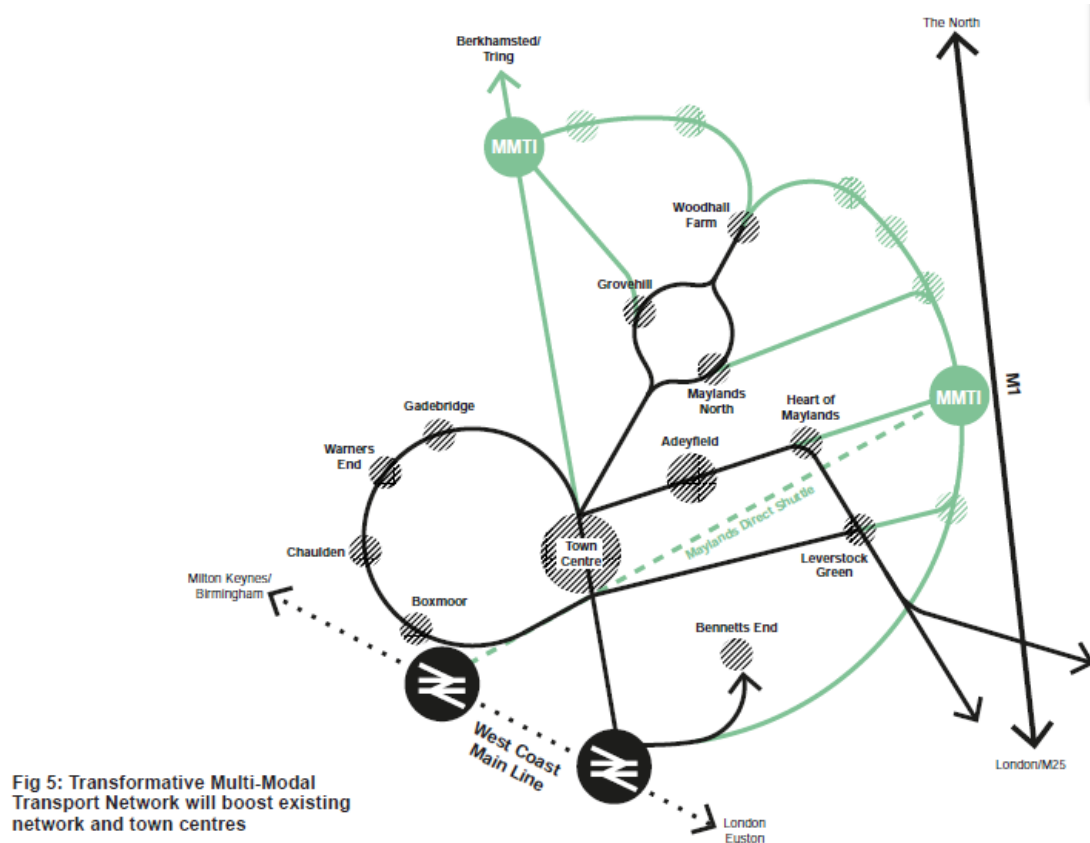
With mobility as a national and regional priority, Hemel Garden Communities and the Enviro-Tech Enterprise Zone will be a leading area for new mobility solutions to be developed, tested, built and commercialised. Moving away from a suburban model reliant on private cars towards shared transport can be assisted through new technologies. Demand responsive transit is particularly suited to the Garden Communities context and will be explored as an opportunity to radically change the pattern and viability of public transport. Masterplans will promote Car Clubs and car sharing through temporary parking zones and pick up/drop off points. The masterplan will be future proofed through ensuring key corridors build in flexibility and demonstrating how parking spaces could be adapted over time.

Key Infrastructure Projects

Convenient access to the railway stations serving the West Coast Main Line will be delivered through creation of a sustainable transport corridor between Maylands, the town centre and Hemel Hempstead station along the A414, including bus priority, cycleways and better crossings. This corridor will also transform sustainable transport options for existing communities in Hemel Hempstead. As well as new and improved access to the M1, a new connection running from the Redbourn Road to the Leighton Buzzard Road will support and complement changes to the A414 such as a priority bus route. These projects are crucial to the success of community integration and connectivity. The requirement for a new Multi Modal Transport Interchange in East Hemel Hempstead set out in SADC's Local Plan will be a critical early step in rebalancing transport in the area away from private car use. It will be a key node in a wider network that provides efficient interchange between coaches, buses, bikes, car club, and other vehicular transport to serve the residents of the Garden Communities and town.

Further guidance to be developed:

- *Multi-Modal Transport Interchange and Public Transport links Feasibility Study*



- 7.2 There has been substantial ongoing work to investigate the potential most appropriate forms and locations of MMIs as part of the ongoing HGC and East Hemel Masterplanning work. In September 2019, the HGC Steering Group discussed a detailed exploration of the issues as set out at M7iiQ7 Appendix 1. The Council acknowledges that there is at this stage a degree of uncertainty about the exact location, nature and cost of the MMI(s). The cost of the options indicatively explored in Appendix 1 are relatively modest when considered against the scale of East Hemel as a whole. The Plan policy wording and Masterplanning process are considered to provide the most appropriate route to take forward this relatively new and evolving approach from concept to deliverable solutions. It is considered important to note that substantial transport-related costs have been identified in the SADC CIL LP Viability Strategic Site Testing ([INFR Sep 2019](#)).
- 7.3 It can also be noted that the East Hertfordshire Local Plan allocation for Harlow/Gilston Garden Community, adopted recently, includes a very similar concept to the MMI. This is described (including at M7iiQ7 appendix 1 page 8) as “Sustainable Community Transport Hubs”. The consultants (Vectos) working on behalf of the Crown Estate at East Hemel are also taking forward the very similar Harlow/Gilston concept.
- 7.4 The MMI(s) will be delivered, as set out in the Plan and the HGC Charter, as part of the Masterplan and then planning applications for East Hemel.

Councils Response to Stage 1 Matters, Issues, Questions - Thursday 12 December 2019.

8. Question 8

How have heritage assets been considered and is a Heritage Impact Assessment required?

8.1 The Council has directly considered heritage assets as part of the Strategic Site Selection process and the Sustainability Appraisal and in considering the draft Plan wording. The one Grade 2 listed building and an appropriate buffer that respects its setting are proposed to be retained within the Broad Location.

8.2 The Strategic Site Selection process set out a three stage process of selecting the Broad Locations, with stage 2 setting out;

Stage 2

2. *Suitability will set out as (Red Amber Green) if there are any issues which are overriding constraints to development – eg Access, Transport, Heritage, Biodiversity, Flood Risk. Any Red rating will rule a site out for further consideration.*

8.3 The Sustainability Appraisal, sets out as part of the SA/SEA Objectives;

10. *To identify, maintain and enhance the historic environment, heritage assets and their setting and cultural assets*

8.4 In consideration of the Broad Location S6 ii) it was set out in the Sustainability Appraisal that;

There is uncertainty in relation to the effects on 'historic environment' as whilst the site is not subject to any significant heritage or archaeological constraint it contains a Grade II listed building and development would impact on the setting of this building.

8.5 Historic England has raised objections to the Plan, highlighting the lack of evidence to demonstrate that appropriate considerations have been given to the conservation and enhancement of the historic environment, together with a lack of policy criteria for the protection and enhancement of the historic environment in relation to these large sites. In the Councils response as set out in Regulation 22C;

“Cross reference Policy L30 This supports conservation of heritage assets appropriate to their significance and seeks that development which may affect such assets is accompanied by a Heritage Statement. Such heritage assets form only a small proportion of the overall Broad Location, are acknowledged and will be treated appropriately as part of the Masterplanning / planning application processes.”

8.6 A specific Heritage Impact Assessment is not considered to be required at this Plan-making stage. A Heritage Statement and a Heritage Impact Assessment will be required as part of the Masterplanning and planning application processes. These Heritage considerations have already and will continue to inform the ongoing Masterplanning being taken forward through the PPA process (see other MIQ responses).

Councils Response to Stage 1 Matters, Issues, Questions - Thursday 12 December 2019.

9. Question 9

Should the plan identify specific allocations/areas for employment uses within the broad location?

- 9.1 Yes, the Council considers that the Plan should indeed identify specific allocations/areas for employment uses within the Broad Location, at a high level. This is in order to provide the required mix of uses to support the need for primarily office uses in a high quality Business Park in the southern part of the Broad Location and to acknowledge the high level of demand for the logistics-lead northern part of the Broad Location. This is what the Plan does at Policy S6ii requirements 4 and 5:

4 A significant new Business Park consisting primarily of B1 office accommodation on the southern approximately 17 Hectares of the site

5 A significant new logistics and mixed industrial area on the northern approximately 38 Hectares of the site

- 9.2 As set out in more detail in response to other MIQs, this geographic split of uses is supported by the evidence base including that in [EMP 001](#), [EMP 002](#), [EMP Sep 2019](#). The split between primarily offices and primarily sheds that directly follows from the general split between the two areas is directly identified as an assumption in [EMP Sep 2019](#), for example as set out at tables 9.1 and 9.2. The approach is also explicitly supported by Dacorum in joint work on HGC; all the SW Herts authorities in work at a SWH level; Herts LEP; Herts EZ, HCC and the Crown Estate. This support has been reflected in all the evidence base documents, included the HGC Charter and in all the iterative work on both the HGC Masterplan and East Hemel Masterplanning.

- 9.3 The Council acknowledges that, in relation to recent market take-up trends alone, there is an element of 'helping to make the market' for a Business Park and the scale of office uses set out for the southern part of the site. Given the array of hugely supporting factors, the Council considers that the approach is very-well founded. These factors briefly include: the Enterprise Zone status including the Business Rate retention advantages; Herts EZ active marketing support; Herts LEP active marketing support; HGC status and Government support; joint SADC/DBC/HCC support; joint SW Herts support; and Crown Estate support.

- 9.4 For the avoidance of doubt, the Council does not consider that further more detailed specific areas/allocations for employment uses are required. This is because these more detailed matters are considered to be more appropriately dealt with through the iterative HGC and East Hemel Masterplanning processes.

10. Question 10

What is the justification for the 15 pitch gypsy and traveller site within this broad location? Should a specific location be identified? Have the implications of the nearby commercial developments in terms of noise and disturbance been taken into account?

- 10.1 The justification for the proposal is explained in detail in the response to M5 Q7-18, especially at M5Q16. It is not considered necessary or appropriate to identify a specific location in the LP (Policies Map). The collaborative Masterplanning process required under Policy S6 is considered the right place to set out the necessary specificity with regard to the site location. This allows the proposal to properly evolve and take account of the detailed public engagement activities required (including through the Strategic Site Masterplanning Toolkit). In the Plan, the BLs establish essential planning and infrastructure requirements and explicitly do not resolve detailed site planning issues, as they are not considered to be required at this stage. The implications of the nearby commercial developments in terms of noise and disturbance have been taken into account. The BL is large enough (55Ha) to accommodate a gypsy and traveller site without problems of noise or disturbance, either to the accommodation site or to the nearby existing and intended commercial uses. There is adequate space for separation, screening and landscaping. It can be noted that this has been suitably addressed and demonstrated in early Masterplanning (as also addressed in response to other MIQs).

Councils Response to Stage 1 Matters, Issues, Questions - Thursday 12 December 2019.

11. Question 11

What further infrastructure work needs to be undertaken, and is this appropriate to be left to the masterplanning stage?

- 11.1 Yes, further infrastructure work is required to be undertaken, and this has been identified in the Infrastructure Delivery Plan 2018/19 ([INFR 001](#)) (and as addressed above in response to other M7ii responses).
- 11.2 As set out in Policy S6 ii), much of this infrastructure is set out as a policy requirement. As set out in the Council's response to M6 Q5, significant progress has been made in respect of Masterplanning for the Broad Locations of East Hemel Hempstead, North St Albans and North West Harpenden. This has included co-operations with parties expected to deliver this infrastructure such as Hertfordshire County Council, NHS and Developers, and the detail is considered to be appropriate and realistic for this stage of the process.

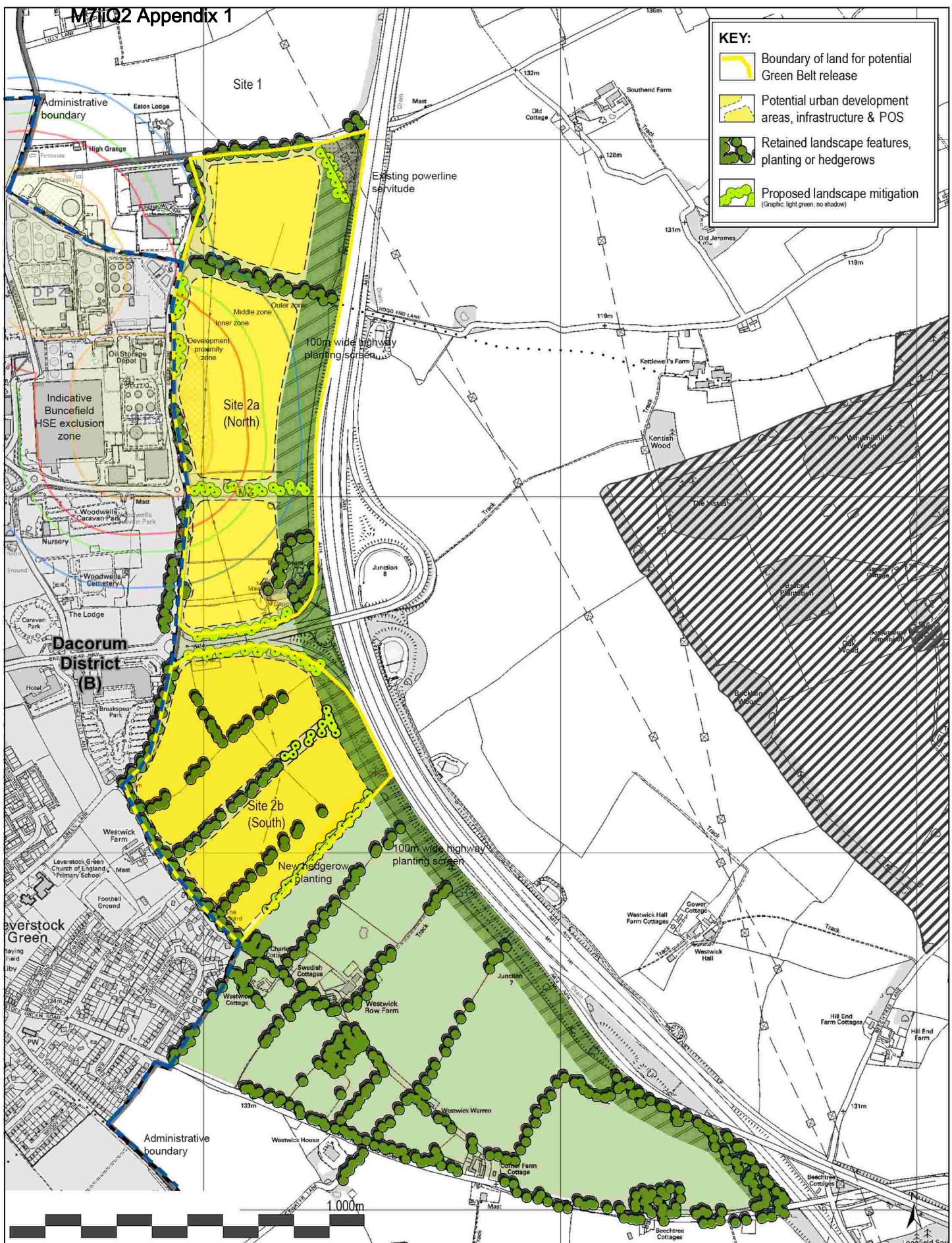
Councils Response to Stage 1 Matters, Issues, Questions Thursday 12th December 2019.

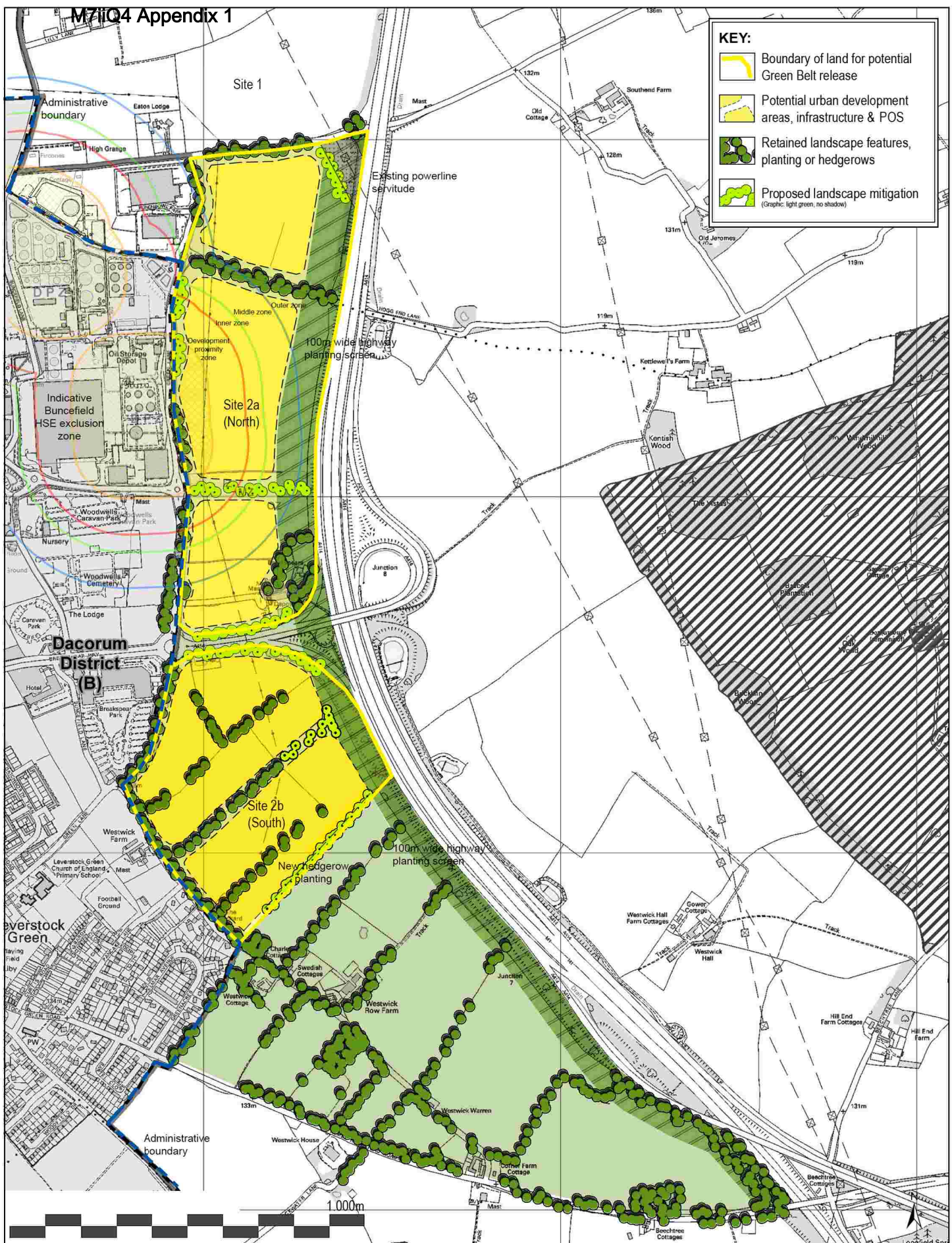
Matter 7 – The Broad Locations for Development – Specific Matters (Policy S6 (i) to (xi))

East Hemel Hempstead (Central) S6 (ii)

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**Sites and boundary study
for St Albans City and
District Council**

PROJECT: JE30761
DATE: Nov 2013
SCALE: Indicative

STAGE 2
Rev. Jan 14/005

**FIGURE 4.3 Indicative layout
Site 2a and 2b East of Hemel Hempstead (south)**

HSE'S LAND USE PLANNING METHODOLOGY

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Management Procedure) (Wales) Order 2012 and the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013

Annex 3 - HSE'S approach to land use planning

Annex 4 - Contact

Introduction

1. The Health and Safety Executive (HSE) is a statutory consultee on certain developments in the vicinity of major hazard sites and major accident hazard pipelines. HSE's land use planning (LUP) advice is based on the methodology set out in this document, and in the majority of cases HSE's advice is provided through HSE's Planning Advice Web App.

Background to HSE's involvement in land use planning

2. Major accidents at sites storing hazardous substances are rare, but when they do happen the effects on people living nearby can be devastating. This became apparent following the Flixborough incident in the UK in 1974, more recently at Buncefield in 2005 and across Europe for example at Enschede in The Netherlands in 2000. HSE first offered advice to Planning Authorities (PA) in 1972 and this was introduced across the EU by the 1996 Seveso II Directive, which was replaced in 2012 by the Seveso III Directive (See Annex 1). The simple aim is to manage population growth close to such sites to mitigate the consequences of a major accident.

3. HSE sets a consultation distance (CD) around major hazard sites and major accident hazard pipelines after assessing the risks and likely effects of major accidents at the major hazard. Major hazards comprise a wide range of chemical process sites, fuel and chemical storage sites, and pipelines. The CDs are based on available scientific knowledge using hazard /risk assessment models updated as new knowledge comes to light. Major accidents are also closely studied. The PA is notified of this CD and has a statutory duty to consult HSE on certain proposed developments within it (see Annex 2), and this should be done through HSE's Planning Advice Web App. HSE's response will be that HSE either 'advises against' or 'does not advise against' the granting of planning permission on safety grounds that arise from the possible consequences of a major accident at the major hazard. The PA must take this advice into account when they make a decision on the planning application.

4. PAs have consulted HSE for many years on planning applications and proposed developments within the CD of major hazards. In 2006/2007, HSE provided PAs with direct on-line access to a software decision support tool known as PADHI+ (Planning Advice for Developments near Hazardous Installations), based on HSE's methodology, for them to use to consult HSE for advice on the majority of planning applications rather than having to contact HSE directly.

5. In 2015, PADHI+ was replaced by the HSE Planning Advice Web App, which PAs should now use to consult HSE for advice. The Web App is also available to developers to use to identify if a proposed development site lies within the CD of a major hazard; if it does, they can also use the Web App to obtain HSE's pre-application advice on their proposal, although there is a charge for that particular service.

6. For more background information see Annex 1 – HSE's land use planning advice provision.

The principles behind HSE's land use planning methodology

7. HSE's land use planning methodology is based on the following principles:

- The risk considered is the residual risk which remains after all reasonably practicable preventative measures have been taken to ensure compliance with the requirements of the Health and Safety at Work etc. Act 1974 and its relevant statutory provisions.
- Where it is beneficial to do so, advice takes account of risk as well as hazard, that is the likelihood of an accident as well as its consequences.
- Account is taken of the size and nature of the proposed development, the inherent vulnerability of the exposed population and the ease of evacuation or other emergency procedures for the type of development proposed. Some categories of development (e.g. schools and hospitals) are regarded as more sensitive than others (e.g. light industrial) and advice is weighted accordingly.
- Consideration of the risk of serious injury, including that of fatality, attaching weight to the risk where a proposed development might result in a large number of casualties in the event of an accident.

HSE's Planning Advice Web App

8. The HSE Planning Advice Web App is the name given to the software used to provide HSE's LUP advice to PAs on proposed developments near major hazard sites and major accident hazard pipelines. It replaced PADHI+ in 2015, and uses the methodology which HSE has used since 2002, which codified the principles used by HSE in providing LUP advice since the 1970s.

9. HSE's Planning Advice Web App can also be used by PAs and developers to obtain HSE's advice on a pre-planning enquiry (PPE) provided sufficient information is available. Developers will be charged for that service. Any decision on a PPE will be conditional on the assessment of the formal planning application which will be made using the information that is appropriate and relevant when HSE is consulted by the PA.

10. Very exceptionally there may be cases of development where the use of HSE's Planning Advice Web App alone is inappropriate and HSE will take account of wider factors so that the usual criteria can be usefully complemented.

11. There are some types of development on which HSE's Planning Advice Web App is currently unable to provide advice. When such cases are identified during a consultation, the PA or developer will be advised to contact HSE directly for advice. These include:

- developments which involve more than 5 separate development types
- mixed-use developments where two or more development types share the same footprint at different levels
- developments which involve a small extension to an existing facility
- developments on a major hazard site which are under the control of the operator of the major hazard site.

What HSE's methodology does not deal with

12. There are a number of aspects of HSE's land use planning and major hazards work that HSE's methodology and HSE's Planning Advice Web App does not deal with.

Incremental development around major hazard sites and major accident hazard pipelines

13. Where HSE has previously advised against a development (particularly where there is a history of incremental development), or where there has already been a Planning Inquiry into a development, the HSE Planning Advice Web App cannot take account of such matters and it is expected that PAs will take this additional information into account when deciding whether or not to grant planning permission.

14. Para 069 of Planning Practice Guidance 'Hazardous Substances – handling development proposals around hazardous installations' advises planning authorities to be alert to encroachment of development in consultation zones, including where larger developments are divided between smaller applications to fall below consultation thresholds. Planning authorities are advised to consult HSE in such cases.

Developments within the Development Proximity Zone (DPZ) of large-scale petrol storage sites

15. Following the Buncefield incident in 2005, HSE reviewed the CDs of all sites which met the criteria for large-scale petrol storage sites, and an additional zone – a Development Proximity Zone (DPZ) was introduced 150 metres from the boundary of the relevant storage tank bunds. HSE's approach to providing land use planning advice on developments in the vicinity of such sites can be found in SPC/Tech/Gen/49 – 'Land use planning advice around large-scale petrol storage sites'. HSE's Planning Advice Web App cannot be used to determine HSE's advice on developments within the DPZ, and PAs must refer any planning applications or pre-planning enquiries which involve such a development to HSE.

Applications for Hazardous Substances Consent

16. These require the specialist skills and knowledge of HSE risk assessors to determine the potential risks and consequences from the hazardous substances in the Consent application. HSE will advise the Hazardous Substances Authority if they should grant consent and will also set a CD, usually comprising three consultation zones (inner, middle and outer – see Annex 3 for LUP purposes for these sites).

Notification of Major Accident Hazard Pipelines by pipeline operators

17. These require the specialist skills and knowledge of HSE Pipelines Inspectors to determine if the potential consequences of the pipelines being approved are acceptable. HSE will then determine the sizes of the 3 zones to be used for LUP purposes basing their assessment on the pipeline details notified to HSE by the pipeline operator.

Applications for Licensed Explosive Sites

18. These require the specialist skills and knowledge of HSE's Explosives Inspectors to determine if the potential consequences of the explosives site being approved are acceptable. They will also determine the safeguarding zones and then advise on any planning consultations within those zones.

Consultations on applications for developments in the vicinity of Licensed Explosives sites or Licensed Nuclear Installations

19. PAs should forward such consultations to HSE's Explosives Inspectorate or the Office for Nuclear Regulation (ONR) as appropriate.

Developments near Major Accident Hazard Pipelines where the pipelines have sections with additional protection measures

20. HSE's Planning Advice Web App uses the 3 consultation zones set by HSE which are based on the details given in the pipeline notification. This covers the whole length of the pipeline and the Web App is unable to accommodate any isolated local variations. If HSE advises against the granting of planning permission due to the proximity of a proposed development to a pipeline, then the option is given to check with the pipeline operator to see if the pipeline has additional protection (e.g. thicker walled pipe) near the proposed development. If so, then HSE's risk assessors are willing to reconsider the case using the details of the pipeline specification relevant to the pipeline near the development. HSE will charge for this service if it is provided as part of the pre-application advice process.

Retrospective advice on developments when a decision has been made by the planning authority

21. HSE does not give retrospective advice on planning applications where a decision has already been made by the planning authority. However, this does not remove the responsibility on the planning authority to take account of public safety in their planning decisions, which in some cases is required by European Directive. Where a decision should have been made with the benefit of HSE's advice, but was not, then it is for the planning authority to consider whether to take any remedial action, which could include revocation of any permission granted.

When to consult HSE

22. HSE should be consulted on any developments which lie within the CD of a major hazard site or a major accident hazard pipeline and which meet the criteria (see Annex 2 for details) set out in:

- the Town and Country Planning (Development Management Procedure) (England) Order 2015,
- the Town and Country Planning (Development Management Procedure) (Wales) Order 2012 and
- the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013.

How HSE's advice is determined

23. HSE's advice is usually determined by a combination of:

- the consultation zone in which the development is located, of the 3 zones that make up the CD set by HSE around the major hazard (see paragraph 26 and Figures 1 and 2); and
- the 'Sensitivity Level' of the proposed development which is derived from HSE's categorisation system of "Development Types" (see paragraphs 34-38).

24. Additionally there are situations where 'rules' may be applied when dealing with the more complex cases in which any of the following apply:

- the development is located in more than one zone
- more than one major hazard is involved
- the proposal involves more than one Development Type (using HSE's categorisation method)
- the development involves a small extension to an existing facility.

25. A decision matrix (see paragraph 39), using the combination of the consultation zone and sensitivity level will determine HSE's response, which will be that HSE either 'Advises Against' or 'Does Not Advise Against' the granting of planning permission for the proposed development.

26. In some cases, a development may involve several different Development Types. In these situations, the combination of consultation zone and Sensitivity Level is considered for each individual Development Type. If any individual Development Type receives an 'Advise Against' response, **then HSE's response for the whole proposal will be 'Advise Against'.**

HSE Consultation distances and consultation zones

27 The consultation zones are normally determined by a detailed assessment of the risks and/or hazards of the installation or pipeline which takes into account the following factors; the quantity of hazardous substances for which the site has hazardous substances consent and details of the storage and/or processing; the hazard ranges and consequences of major accidents involving the toxic and/or flammable and/or other hazardous substances that could be present. The risks and hazards from the major hazard are greatest in the Inner Zone and hence the restrictions on development are strictest within that zone. The CD comprises the land enclosed by all the zones and the installation itself (See Annex 3 for further information).

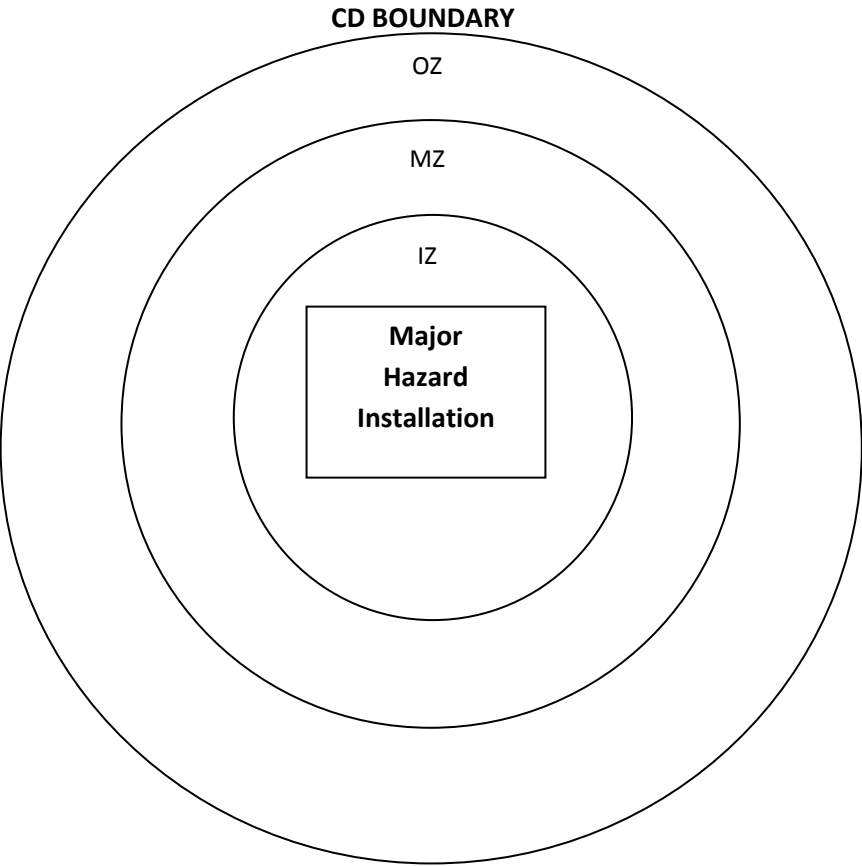


Figure 1 Three zone map

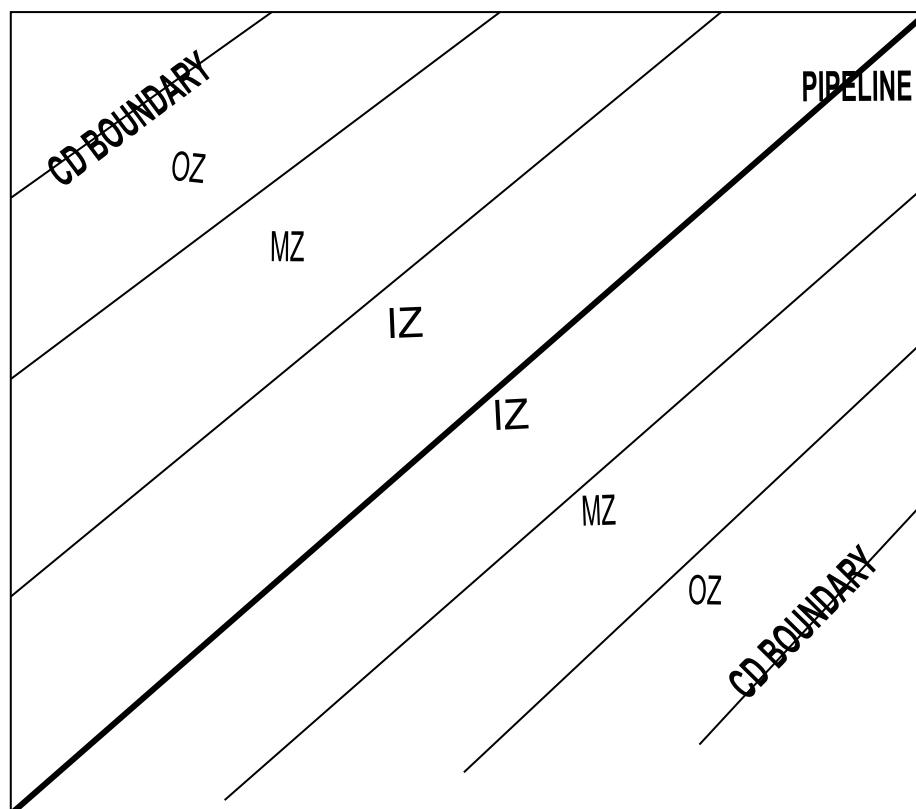


Figure 2 Pipeline zones

Development details

28. The Sensitivity Level of a proposed development will be determined by the Development Type(s) involved and the size and scale of each Development Type (see Tables 1-4).

29. A development proposal may consist of a number of different Development Types and may lie within more than one consultation zone of one or more hazardous installations or pipelines. If a Development Type lies within two or more consultation zones of the CD of a major hazard, including the outer zone and outside the CD, Rule 1 – straddling developments – will be applied to decide the zone in which the whole Development Type is considered to lie when using the decision matrix (see paragraphs 43-45). For a development involving several different Development Types, each combination of consultation zone and Sensitivity Level is considered. If any individual Development Type receives an Advise Against decision **then the overall advice for the whole proposal will be Advise Against.**

30. In certain circumstances where a development is considered to be a small extension to an existing facility, an 'Advise Against' response may be changed to 'Does Not Advise Against'; see Rule 4b (see paragraph 50).

Identifying developments

31. Where a development proposal includes more than one Development Type, all individual Development Types are identified and considered separately. All facilities that involve the same Development Type, but which are physically separated from each other, are aggregated together to determine the Sensitivity Level for that Development Type and subsequently to determine the advice. For example, a development may involve several individual buildings, each of which falls into the category of 'indoor use by the public' such as shops, a cinema and a library; these are all aggregated when determining the sensitivity level of that Development Type. However, any facilities that lie entirely outside the CD are discounted when determining the Sensitivity Level.

32. Developments with a sensitivity level of SL4 (i.e. Institutional accommodation and education and large outdoor use by public developments) are not aggregated with facilities of the same Development Type with a lower sensitivity level.

Assessing developments

33. HSE's advice is assessed for each individual Development Type, taking account of:

- the sensitivity level of the Development Type
- the zone in which the Development Type lies – after applying Rule 1 – 'Straddling developments' and/or Rule 2 - 'Multiple major hazards' if appropriate.

34. This process is repeated for each different Development Type identified. An 'Advise Against' response for any single Development Type will dominate the HSE's advice for the overall consultation and lead to the whole consultation being advised against.

Decision matrix

35. Having determined which consultation zone a Development Type falls into, after applying the straddling rule if necessary, and the Sensitivity Level of the development, the following matrix is used to decide HSE's advice.

Level of Sensitivity	Development in Inner Zone	Development in Middle Zone	Development in Outer Zone
1	DAA	DAA	DAA
2	AA	DAA	DAA
3	AA	AA	DAA
4	AA	AA	AA

DAA = Don't Advise Against development

AA = Advise Against development

36. If all Development Types in a consultation result in a DAA response, then DAA is the final HSE advice.

37. If any individual Development Type gives an AA response, then the result for the consultation is AA. If a development which HSE has advised against involves an extension to an existing facility, HSE will reconsider this advice and may revise the advice if it involves a small extension – see paragraph 50

Introduction to Sensitivity Levels

38. The Sensitivity Levels are based on a clear rationale in order to allow progressively more severe restrictions to be imposed as the sensitivity of the proposed development increases. There are 4 sensitivity levels:

- Level 1 – Based on normal working population
- Level 2 – Based on the general public – at home and involved in normal activities
- Level 3 – Based on vulnerable members of the public (children, those with mobility difficulties or those unable to recognise physical danger) and
- Level 4 – Large examples of Level 3 and very large outdoor developments.

39. Development Types are used as a direct indicator of the Sensitivity Level of the population at the proposed development. Exceptions are made for some very large or very small developments by assigning them a higher or lower Sensitivity Level than normal for that Development Type.

40. The tables below expand on the four basic Development Types:

- 1 – People at work, Parking
- 2 – Developments for use by the general public
- 3 – Developments for use by vulnerable people
- 4 – Very large and sensitive developments

41. The tables show the Development Types (first column) with examples of each type of development given in column 2 (these are only a guide – they are not exhaustive). Fuller details that are needed to determine the Sensitivity Level of any particular development proposal are given in column 3. As a general principle, the Sensitivity Level is decreased by one for small examples of a particular Development Type and increased for large and very large examples, or where particular features of the development increase the risk to the population. These exceptions are identified in the tables under the EXCLUSIONS for each type of development (and identified as x1, x 2 etc.). The Justification column shows the rationale for the allocation of the Sensitivity Level to each Development Type.

42. All facilities of the same Development Type which are completely and/or partly inside the CD are aggregated in determining the Sensitivity Level. Any facilities that are entirely outside the CD are discounted when determining the Sensitivity Level. For example all housing areas within the CD are aggregated to determine the overall Sensitivity Level of a housing development, but any housing area which lies completely outside the CD is not included. The only exception to the aggregation is Sensitivity Level 4 developments involving outdoor use by the public or institutional accommodation and education – see paragraph 47.

Development Type Tables

Table 1 Development type: People at work, Parking

DT1.1 – Workplaces

DT1.2 – Parking Areas

DEVELOPMENT TYPE	EXAMPLES	DEVELOPMENT DETAIL AND SIZE	JUSTIFICATION
DT1.1 – WORKPLACES	Offices, factories, warehouses, haulage depots, farm buildings, non-retail markets, builder's yards	Workplaces (predominantly non-retail), providing for less than 100 occupants in each building and less than 3 occupied storeys – Level 1	Places where the occupants will be fit and healthy, and could be organised easily for emergency action. Members of the public will not be present or will be present in very small numbers and for a short time
	EXCLUSIONS		
		DT1.1 x1 Workplaces (predominantly non-retail) providing for 100 or more occupants in any building or 3 or more occupied storeys in height – Level 2 (except where the development is at the major hazard site itself, where it remains Level 1)	Substantial increase in numbers at risk with no direct benefit from exposure to the risk

	Sheltered workshops, Remploy	DT1.1 x2 Workplaces (predominantly non-retail) specifically for people with disabilities – Level 3	Those at risk may be especially vulnerable to injury from hazardous events and / or they may not be able to be organised easily for emergency action
DT1.2 – PARKING AREAS	Car parks, truck parks, lock-up garages	Parking areas with no other associated facilities (other than toilets) – Level 1	
	EXCLUSIONS		
	Car parks with picnic areas, or at a retail or leisure development, or serving a park and ride interchange	DT1.2 x1 Where parking areas are associated with other facilities and developments the sensitivity level and the decision will be based on the facility or development	

Table 2 Development type: Developments for use by the general public**DT2.1 – Housing****DT2.2 – Hotel / Hostel / Holiday Accommodation****DT2.3 – Transport Links****DT2.4 – Indoor Use by Public****DT2.5 – Outdoor Use by Public**

DEVELOPMENT TYPE	EXAMPLES	DEVELOPMENT DETAIL AND SIZE	JUSTIFICATION
DT2.1 – HOUSING	Houses, flats, retirement flats / bungalows, residential caravans, mobile homes	Developments up to and including 30 dwelling units and at a density of no more than 40 per hectare – Level 2	Development where people live or are temporarily resident. It may be difficult to organise people in the event of an emergency
	Exclusions		
	Very small developments including infill and backland developments	DT2.1 x1 Developments of 1 or 2 dwelling units – Level 1	Minimal increase in numbers at risk
	Larger housing developments	DT2.1 x2 Larger developments for more than 30 dwelling units – Level 3	Substantial increase in numbers at risk
		DT2.1 x3 Any developments (for more than 2 dwelling units) at a density of more than 40 dwelling units per hectare – Level 3	High-density developments
DT2.2 – HOTEL / HOSTEL / HOLIDAY ACCOMMODATION	Hotels, motels, guest houses, hostels, youth hostels, holiday camps, holiday homes, halls of residence, dormitories, accommodation centres, holiday caravan sites, camping sites	Accommodation up to 100 beds or 33 caravan / tent pitches – Level 2	Development where people are temporarily resident. It may be difficult to organise people in the event of an emergency
	Exclusions		
	Smaller – guest houses, hostels, youth	DT2.2 x1 Accommodation of less	Minimal increase in numbers at risk

	hostels, holiday homes, halls of residence, dormitories, holiday caravan sites, camping sites	than 10 beds or 3 caravan / tent pitches – Level 1	
	Larger – hotels, motels, hostels youth hostels, holiday camps, holiday homes, halls of residence, dormitories, holiday caravan sites, camping sites	DT2.2 x2 Accommodation of more than 100 beds or 33 caravan / tent pitches – Level 3	Substantial increase in numbers at risk
DT2.3 – TRANSPORT LINKS	Motorway, dual carriageway	Major transport links in their own right i.e. not as an integral part of other developments – Level 2	Prime purpose is as a transport link. Potentially large numbers exposed to risk, but exposure of an individual is only for a short period
	Exclusions		
	Estate roads, access roads	DT2.3 x1 Single carriageway roads – Level 1	Minimal numbers present and mostly a small period of time exposed to risk. Associated with other development
	Any railway or tram track	DT2.3 x2 Railways – Level 1	Transient population, small period of time exposed to risk. Periods of time with no population present
DT2.4 – INDOOR USE BY PUBLIC	<p>Food & drink:</p> <p>Restaurants, cafes, drive-through fast food, pubs</p> <p>Retail:</p> <p>Shops, petrol filling station (total floor space based on shop area not forecourt), vehicle dealers (total floor space based on showroom/sales building not outside</p>	Developments for use by the general public where total floor space (of all floors) is from 250 m ² up to 5000 m ² – Level 2	Developments where members of the public will be present (but not resident). Emergency action may be difficult to co-ordinate

	display areas), retail warehouses, super-stores, small shopping centres, markets, financial and professional services to the public		
	<p>Community & adult education:</p> <p>Libraries, art galleries, museums, exhibition halls, day surgeries, health centres, religious buildings, community centres. Adult education, 6th-form college, college of FE</p> <p>Assembly & leisure:</p> <p>Coach/bus/railway stations, ferry terminals, airports. Cinemas, concert/ bingo/dance halls. Conference centres Sports/leisure centres, sports halls. Facilities associated with golf courses, flying clubs (eg changing rooms, club house), indoor go-kart tracks</p>		
	Exclusions		
		DT2.4 x1 Development with less than 250 m ² total floor space (of all floors) – Level 1	Minimal increase in numbers at risk

		DT2.4 x2 Development with more than 5000 m ² total floor space (of all floors)– Level 3	Substantial increase in numbers at risk
DT2.5 – OUTDOOR USE BY PUBLIC	Food & Drink: Food festivals, picnic areas Retail: Outdoor markets, car boot sales, funfairs Community & adult education: Open-air theatres and exhibitions Assembly & leisure: Coach/bus/railway stations, park & ride interchange, ferry terminals. Sports stadia, sports fields/pitches, funfairs, theme parks, viewing stands. Marinas, playing fields, children's play areas, BMX/go-kart tracks. Country parks, nature reserves, picnic sites, marquees	Principally an outdoor development for use by the general public i.e. developments where people will predominantly be outdoors and not more than 100 people will gather at the facility at any one time – Level 2	Developments where members of the public will be present (but not resident) either indoors or outdoors. Emergency action may be difficult to co-ordinate
	Exclusions		
	Outdoor markets, car boot sales, funfairs. Picnic area, park & ride interchange, viewing stands, marquees	DT2.5 x1 Predominantly open-air developments likely to attract the general public in numbers greater than 100 people but up to 1000 at any one time – Level 3	Substantial increase in numbers at risk and more vulnerable due to being outside
	Theme parks, funfairs, large sports stadia and events, open-air markets, outdoor concerts, pop festivals	DT2.5 x2 Predominantly open-air developments likely to attract the general public in numbers greater than 1000 people at any one time – Level 4	Very substantial increase in numbers at risk, more vulnerable due to being outside and emergency action may be difficult to co-ordinate

Table 3 Development type: Developments for use by vulnerable people**DT3.1 – Institutional Accommodation and Education****DT3.2 - Prisons**

DEVELOPMENT TYPE	EXAMPLES	DEVELOPMENT DETAIL AND SIZE	JUSTIFICATION
DT3.1 – INSTITUTIONAL ACCOMMODATION AND EDUCATION	Hospitals, convalescent homes, nursing homes. Old people's homes with warden on site or 'on call', sheltered housing. Nurseries, crèches. Schools and academies for children up to school leaving age	Institutional, educational and special accommodation for vulnerable people, or that provides a protective environment – Level 3	Places providing an element of care or protection. Because of age, infirmity or state of health the occupants may be especially vulnerable to injury from hazardous events. Emergency action and evacuation may be very difficult
	EXCLUSIONS		
	Hospitals, convalescent homes, nursing homes, old people's homes, sheltered housing	DT3.1 x1 24-hour care where the total site area on the planning application being developed is larger than 0.25 hectare – Level 4	Substantial increase in numbers of vulnerable people at risk
	Schools, nurseries, crèches	DT3.1 x2 Day care where the total site area on the planning application being developed is larger than 1.4 hectare – Level 4	Substantial increase in numbers of vulnerable people at risk
DT3.2 – PRISONS	Prisons, remand centres	Secure accommodation for those sentenced by court, or awaiting trial etc. – Level 3	Places providing detention. Emergency action and evacuation may be very difficult

Table 4 Development type: Very large and sensitive developments**DT4.1** – Institutional Accommodation**DT4.2** – Very large Outdoor Use by Public

DEVELOPMENT TYPE	EXAMPLES	DEVELOPMENT DETAIL AND SIZE	JUSTIFICATION
[Note: All Level 4 developments are by exception from Level 2 or 3. They are reproduced in this table for convenient reference]			
DT4.1 – INSTITUTIONAL ACCOMMODATION	Hospitals, convalescent homes, nursing homes, old people's homes, sheltered housing, boarding schools	Large developments of institutional and special accommodation for vulnerable people (or that provide a protective environment) where 24-hour care is provided and where the total site area on the planning application being developed is larger than 0.25 hectare – Level 4	Places providing an element of care or protection. Because of age or state of health the occupants may be especially vulnerable to injury from hazardous events. Emergency action and evacuation may be very difficult. The risk to an individual may be small but there is a larger societal concern
	Nurseries, crèches. Schools for children up to school leaving age	Large developments of institutional and special accommodation for vulnerable people (or that provide a protective environment) where day care (not 24-hour care) is provided and where the total site area on the planning application being developed is larger than 1.4 hectare – Level 4	Places providing an element of care or protection. Because of age the occupants may be especially vulnerable to injury from hazardous events. Emergency action and evacuation may be very difficult. The risk to an individual may be small but there is a larger

			societal concern
DT4.2 – VERY LARGE OUTDOOR USE BY PUBLIC	Theme parks, large sports stadia and events, open air markets, outdoor concerts, and pop festivals	Predominantly open air developments where there could be more than 1000 people present at any one time– Level 4	People in the open air may be more exposed to toxic fumes and thermal radiation than if they were in buildings. Large numbers make emergency action and evacuation difficult. The risk to an individual may be small but there is a larger societal concern

Additional rules and how they are applied

43. The following rules have been developed to allow consideration of the more complex planning consultations.

Rule 1 – Straddling developments

44. This rule is applied (Rule 1a, then Rule 1b if applicable) when the site area of a proposed Development Type lies across a zone boundary (e.g. when a development site lies within the inner and middle zones), to decide the zone which will be used in the decision matrix. The CD is considered a zone boundary in this context.

45. **Rule 1a:** Development Types that ‘straddle’ zone boundaries will normally be considered as being in the innermost zone to the major hazard unless either of the two following conditions applies. The Development Type will be considered to be in the OUTERMOST of the zones if:

- less than 10% of the area marked on the application for that particular development type is inside that boundary, OR
- it is only car parking, landscaping (including gardens of housing), parks and open spaces, golf greens and fairways or access roads etc. associated with the development; that are in the inner of the zones.

46. **Rule 1b:** For the special case where a Development Type straddles the CD boundary (i.e. part of the site lies within the CD and part lies outside) Rule 1a is followed, then:

- If, after using the Rule 1a, the Development Type is considered to be outside the CD, then there is no need to categorise further; a 'DAA' response is appropriate.
- If, after using Rule 1a, the Development Type is considered to be within the CD then all of the facilities that make up the proposed Development Type are considered. Any that are **entirely outside** the CD are discounted when determining the Sensitivity Level. All the facilities that are **completely and/or partly inside** the CD are then considered together for the purpose of determining the Sensitivity Level. (If appropriate, the 'Multiple-use developments' rule – Rule 3 should be applied).

(Note: Rules 1a and 1b do not apply where the development type is a Sensitivity Level 2 Transport Link. Even though this type of development is likely to 'straddle' zone boundaries, it will always be considered as being in the innermost of the zones).

Rule 2 – Multiple major hazards

47. Where a proposed development lies within the CD of more than one major hazard site and/or major accident hazard pipeline, the zone within which the development lies is determined for each major hazard (after applying the straddling rule (Rule 1) if necessary). The overall advice is decided on the basis of the most onerous of any of the zones the development is in (i.e. the Inner Zone is more onerous than Middle Zone, the Middle Zone is more onerous than Outer Zone).

Rule 3 – Multiple-use developments

48. This rule is applied when a proposed development involves more than one Development Type (e.g. a mix of housing, indoor use by the public and a workplace).

- All individual Development Types are identified, as in column 1 of Tables 1-4. All facilities involving the same Development Type are aggregated to determine the Sensitivity Level of that Development Type (being aware that any facilities which are completely outside the CD boundary are not considered). **The only exception to this is an SL4 development (outdoor use by public and Institutional accommodation and education) which is not aggregated with facilities of the same development type with a lower sensitivity level.**
- The zone within which each Development Type lies is identified, using the straddling rule (Rule 1) if appropriate.
- The appropriate 'Advise Against' or 'Does Not Advise Against' response is determined for each Development Type using the decision matrix. If each individual Development Type receives a 'Does Not Advise Against' response, then that will be HSE's overall advice. If any individual Development Type receives an 'Advise Against' decision **then HSE's overall advice will be 'Advise Against'.**

- If any individual Development Type receives an 'Advise Against' response, then if appropriate, Rule 4b– 'Developments which involve a small extension to an existing facility' is applied, to decide if HSE's 'Advise Against' response should be revised.

Rule 4 – Developments which involve a small extension to an existing facility.

49. This rule is concerned with an 'Advise Against' response where the proposed development involves a small extension to an existing facility. If the proposed development is a **small** extension to the existing development, then in certain circumstances the 'Advise Against' response may be revised to 'Does Not Advise Against'. This Rule applies only to small extensions to existing facilities, and not to new developments, or to change of use on sites which may have an existing use.

50. **Rule 4a:** First **the proposed development is considered on its own merit** according to the normal procedure and rules. There are two outcome options:

- a 'Does Not Advise Against' response, in which case there is no need to apply Rule 4b. (For 'Multiple-use developments', if the application of Rule 3 results in **all** outcomes from the matrix being 'Does Not Advise Against', then that is the final advice, in which case there is no need to apply Rule 4b) or;
- an 'Advise Against' response, in which case Rule 4b is applied if appropriate. (For 'Multiple-use developments', if the application of Rule 3 results in one or more 'Advise Against' responses from the matrix, then Rule 4b is applied individually to each Development Type which received an 'Advise Against' response.)

NB: only the details supplied with the planning application or pre-planning enquiry are used to determine if, and how, Rule 4b applies.

51. **Rule 4b: Extensions (including minor modifications, alterations, or additions)**

If...	Then...
the proposal is for an extension to an existing development, and the proposed extension is of the same Development Type as the existing development that is going to be extended. And the population at the development will not increase by more than 10% (or, if the population data is not readily available, the total floor area will not increase by more than 10%),	the consultation should be treated as though the proposed extension had a Sensitivity Level one less than the Sensitivity Level of the existing (i.e. not that of the proposed) development. If this results in a reduced Sensitivity Level, which combined with the zone that the extension is in, produces a DAA response, then this will replace the initial AA response.
For 'Multiple-use developments', if the application of Rule 4b changes ALL of the AA	then this will replace the initial AA response.

outcomes to DAA	If at least one outcome remains AA, then an AA response is the final advice. Any remaining AA responses after applying Rule 4b dominates for 'Multiple-use developments' and an AA response is the final advice for the overall development.
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Rule 5 – Temporary / time limited planning permissions

52. HSE treats proposals for these the same way as any other planning permission consultations; no allowance is given for the time restriction. Existing temporary / time limited permissions are not taken into account when applying Rule 4.

Glossary

Beds – the number of residents/visitors for which sleeping accommodation is provided.

Consultation – an enquiry from a PA or a developer, usually made through the HSE Planning Advice Web App, seeking HSE’s comments on a proposed development within a CD, either on a formal planning application or a pre-planning enquiry. A consultation will involve at least one ‘Development type’.

Development – the proposed use of an area of land (e.g. housing, a school, etc.) for which planning permission is sought, or to which a pre-planning enquiry relates. A proportion of planning proposals will consist of more than one Development Type.

Development type – term used to describe proposed uses (and/or facilities) that are considered to involve a similar type of population (see the first column in the Development Type Tables 1-4).

Dwelling units – the smallest individual unit of accommodation e.g. house, apartment, caravan.

Extension – a development which involves an addition to, or the expansion of, an existing facility. This must be

- of the same Development Type as the existing facility.
- an integral part of the existing facility that is being extended. This will commonly be through physical attachment to an existing structure but, in certain cases, it might qualify by being within the control boundaries of the existing facility of which it will be an extension (e.g. a proposed physically isolated classroom within an existing school confines can be considered an ‘extension’).
- usually under the control of the same owner and have the same operator/tenant as the existing facility that is being extended (the owner and the operator/tenant of the existing facility might be different people/companies).
- unable to function independently of the existing facility that is being extended.

Most developments are expected to be developments in their own right – not extensions to existing facilities. For example, a proposed housing development would not be treated as though it is an extension to an existing area of housing. Similarly, an application for additional residential caravan plots would not be considered an application for an extension to an existing area for such use, because the residential caravan plots are able to function independently.

Major redevelopment which involves demolishing a large existing structure(s)/facility and then replacing it by building a slightly bigger version is not considered to be an extension, because the demolition is seen as providing an opportunity to review the situation. For example, if the existing facility is an ‘incompatible’ one then the proposed replacement could be rebuilt further away from

the hazardous installation. A building/facility such as a school for several hundreds of pupils would be considered a 'large' structure/facility.

Facilities – buildings and other provisions (e.g. picnic area, children's play area, park and ride bus stop) where people may congregate.

Hectare – unit of area equal to 10,000 square metres (m²) in any shape (e.g. rectangles 10m x 1,000m or 25m x 400m; square 100m x 100m; or other regular and irregular shapes)

LUP – land use planning

Multiple use development – see 'development'.

PA – planning authority

Pre-Planning Enquiry (PPE) – an informal, non-statutory LUP consultation made by a developer or a PA to determine what HSE's advice is likely to be before submitting a formal planning permission application to the PA.

Protective environment – there is provision of some element of supervision or care e.g. by a warden being available on-site or on call.

School leaving age – the minimum age at which a young person can leave school – currently 16.

Sensitivity Level – the scale used to define the vulnerability of a development population to major accident hazards. It is based on pragmatic criteria; the type of development, likely numbers present and whether any vulnerable people will be present. The scale ascends from Level 1 to Level 4: the more vulnerable the population, the higher the sensitivity level.

Total floor space – the area of buildings enclosed by the exterior walls multiplied by the number of floors (units are m²).

Vulnerable people – people who by virtue of age (children and elderly) and/or ill health may be particularly susceptible to the effects of a major accident.

Annex 1

HSE's land use planning advice provision

1. HSE's land use planning (LUP) advice is based on the recommendations of the Advisory Committee on Major Hazards (ACMH). The principles behind the recommendations are followed in guidance; see for example 'Planning Practice Guidance: Hazardous Substances – handling development proposals around hazardous installations', which is available through the Planning Portal. The principles and objectives HSE uses in giving its advice received strong support in a public consultation in 2007 (CD211 – Proposals for revised policies for HSE advice on development control around large-scale petrol storage sites). Failure to follow the principles will lead to non-compliance with Article 13 of the Seveso III Directive.

2. HSE's advice is currently delivered through HSE's Planning Advice Web App. This is a codification of the methodology used by HSE over the last 30 years or more and replaced PADHI+ which PAs used between 2006 and 2015.

3. Under Article 18 of the Town and Country Planning (Development Management Procedure) (England) Order 2015, Article 14 of the Town and Country Planning (Development Management Procedure) (Wales) Order 2012 and Regulation 25 of the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013, decision-makers are required to consult HSE on certain planning proposals around major hazard establishments and to take into account the Executive's representations when determining associated applications. This is to ensure that the UK complies with Article 13 of the Seveso III Directive which has the specific objective of controlling specified new development to maintain adequate separation; including residential areas, buildings and areas of public use; around major hazard establishments when the development is such as to increase the risk or consequences of a major accident. In essence decision-makers should ensure that new development does not significantly worsen the situation should a major accident occur.

4. In some instances there may already be existing development which is closer to a potentially hazardous installation. In these cases HSE has recognised the views of the Advisory Committee on Major Hazards as expressed in paragraphs 108 and 109 of their Second Report which reads as follows:

'108.....The HSE is also frequently asked to comment on proposals to develop or to redevelop land in the neighbourhood of an existing hazardous undertaking where there may already be other land users which are closer and possibly incompatible. In these cases, HSE tells us that it takes the view, which we fully endorse, that the existence of intervening developments should not in any way affect the advice that it gives about the possible effects of that activity on proposed developments which may appear to be less at risk than the existing ones'.

'109.....The overall objective should always be to reduce the number of people at risk, and in the case of people who unavoidably remain at risk, to reduce the likelihood and the extent of harm if loss of containment occurs.....

5. HSE's approach balances the principle of stabilising and not increasing the numbers at risk with a pragmatic awareness of the limited land available for development in the UK. An HSE discussion document in 1989 ("Risk criteria for land-use planning in the vicinity of major industrial hazards") sets out the basis of HSE's approach at that time.

6. The Government committee of experts, the Advisory Committee on Major Hazards (ACMH), which originally proposed HSE's role in the LUP system did recognise *"the remote possibility that in some instances a local planning authority may not feel inclined, for a variety of reasons, to follow the advice of the Executive on particular applications for potentially hazardous developments or other developments in their vicinity."* As a consequence, arrangements were set up so that in this rare circumstance, a planning authority is required by 'Planning Practice Guidance: Hazardous Substances – handling development proposals around hazardous installations', Circular 20/01 (Wales), or Circular 4/1997 (Scotland) to formally notify HSE of its intention to grant against the Executive's advice. This is so that, in England and Wales, HSE can decide whether or not to request the Secretary of State to call-in the application for their own determination. In Scotland, if the planning authority is minded to grant permission they have to notify the Scottish Ministers who can decide to call-in the application.

7. HSE's consideration of call-in should not be confused with its LUP advice delivered through HSE's Planning Advice Web App; it is the latter which is provided to enable LUP decision-makers to comply with the objectives of Seveso III, Article 13. In line with Government policy, HSE normally requests call-in only in cases of exceptional concern. However if HSE decides not to make such a request this does not mean that it has withdrawn its advice against permission, which remains on file and in the future is likely to be published on our website. A decision not to request call-in does not negate HSE's LUP advice.

8. HSE's role in the LUP process is to provide independent advice on the residual risks from major accidents to people at specified proposed new developments. This is delivered through HSE's Planning Advice Web App and hence that is what planning authorities must 'seriously consider' in accordance with 'Planning Practice Guidance: Hazardous Substances – handling development proposals around hazardous installations', which advises decision-makers that:

*"In view of its acknowledged expertise in assessing the off-site risks presented by the use of hazardous substances, any advice from Health and Safety Executive that planning permission should be refused for development for, at or near a hazardous installation or pipeline **should not be overridden without the most careful consideration.**"*

9. Furthermore the Courts (Regina v Tandridge District Council, Ex parte Al Fayed, Times Law Report 28 January 1999) have decided that on technical issues, local authorities, while not bound to follow the advice of statutory bodies such as the HSE, *"should nevertheless give great weight to their advice"* when determining planning applications.

10 A published external review "Analysis of Planning Appeal Decision Reports" (HSE contract research number 262/2000) concluded *"It is clear the HSE's risk policies are largely upheld on appeal.*

It is viewed as a competent and expert body, and its advice provides considerable support to PA decisions."

Annex 2

Types of development to consult on under the Town and Country Planning (Development Management Procedure) (England) Order 2015, the Town and Country Planning (Development Management Procedure) (Wales) Order 2012 and the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013

The following guidance and circulars provide further guidance on when HSE is a statutory consultee:

- 'Planning Practice Guidance: Hazardous Substances – handling development proposals around hazardous installations',
- SOEnD Circular 5/1993 (This document is not available on the internet)
- National Assembly for Wales Circular 20/01

They identify the following developments:

1. Within the Consultation Distance (CD) of major hazard installations / complexes and pipelines, HSE should only be consulted for developments involving:

- residential accommodation
- more than 250 square metres of retail floor space
- more than 500 square metres of office floor space
- more than 750 square metres of floor space to be used for an industrial process
- transport links (railways, major roads, etc.)
- a material increase in the number of persons working within, or visiting, a CD

and then only if the development is within the CD.

2. HSE should also be consulted on

- proposed development involving the siting of new establishments where hazardous substances may be present; or
- modifications to existing establishments which could have significant repercussions on major accident hazards; or
- proposed development that is in the vicinity of existing hazardous installations and pipelines where the siting is such as to increase the risk or consequences of a major accident

3. For licensed explosive sites the criteria are the same as above, but only if within the explosive site's Safeguarding Zone.

4. HSE will also advise Hazardous Substances Authorities prior to them determining a consent application. The HSE Planning Advice Web App cannot be used to provide HSE's advice on applications for hazardous substances consent – HSE must be consulted directly on such applications...
5. HSE does not give retrospective advice on planning applications where the decision has already been made by the planning authority.

Annex 3

HSE'S approach to land use planning

Policy & Practice

1. The aim of health and safety advice relating to land use planning is to mitigate the effects of a major accident on the population in the vicinity of hazardous installations, by following a consistent and systematic approach to provide advice on applications for planning permission around such sites.
2. Since the early 1970s, arrangements have existed for local planning authorities (PAs) to obtain advice from HSE about risks from major hazard sites and the potential effect on populations nearby. The Advisory Committee on Major Hazards (ACMH), set up in the aftermath of the Flixborough disaster in 1974, laid down a framework of controls which included a strategy of mitigating the consequences of major accidents by controlling land use developments around major hazard installations
3. Historically, HSE has based its land-use planning advice on the presumption that site operators are in full compliance with the Health & Safety at Work etc. Act 1974 (HSW Act). Section 2 of the Act places a duty on an employer to ensure, so far as is reasonably practicable, the health and safety of his employees. There is a corresponding duty in section 3 to ensure, so far as is reasonably practicable, that others (which includes the public) are not exposed to risks to their health & safety. It was presumed that the safety precautions taken by the employer to comply with Section 2 (risks to his workers) would also ensure compliance with Section 3 of the HSW Act.
4. The main legal driver now is the EU Seveso III Directive, the principal land use planning aspects of which are given effect in the UK by the Planning (Hazardous Substances) Regulations (the PHS Regulations) and associated legislation.

HSE's role

5. HSE's specific role in LUP is **twofold**:
 - i. Under the PHS Regulations, the presence of hazardous chemicals above specified threshold quantities requires consent from the Hazardous Substances Authority (HSA), which is usually also the local planning authority (PA). HSE is a statutory consultee on all hazardous substances consent applications. **Its role is to consider the hazards and risks which would be presented by the hazardous substance(s) to people in the vicinity, and on the basis of this to advise the HSA whether or not consent should be granted.** In advising on consent, HSE may specify conditions that should be imposed by the HSA, over and above compliance with statutory health and safety requirements, to limit risks to the public (e.g. limiting which substances can be stored on site, or requiring tanker delivery rather than on-site storage). HSAs should notify HSE of the outcome of all applications for consent and where consent has been granted should supply copies of the site plans and conditions.

ii. HSE uses the information contained in consent applications to establish a consultation distance (CD) around the installation. This usually comprises three zones or risk contour areas – see paragraph 8. The CD is based on the maximum quantity of hazardous substance(s) that the site is entitled to have under its consent. HSE notifies the PAs of all CDs in their areas. The Development Management Procedure Orders require the PA to consult HSE about certain proposed developments (essentially those that would result in an increase in population) within any CD. **HSE advises the PA on the nature and severity of the risks presented by the installation to people in the surrounding area so that those risks are given due weight by the PA when making its decision. Taking account of the risks, HSE will advise against the proposed development or simply note that it does not advise against it.** This advice balances the ACMH principle of stabilising and not increasing the numbers at risk, with a pragmatic awareness of the limited land available for development in the UK.

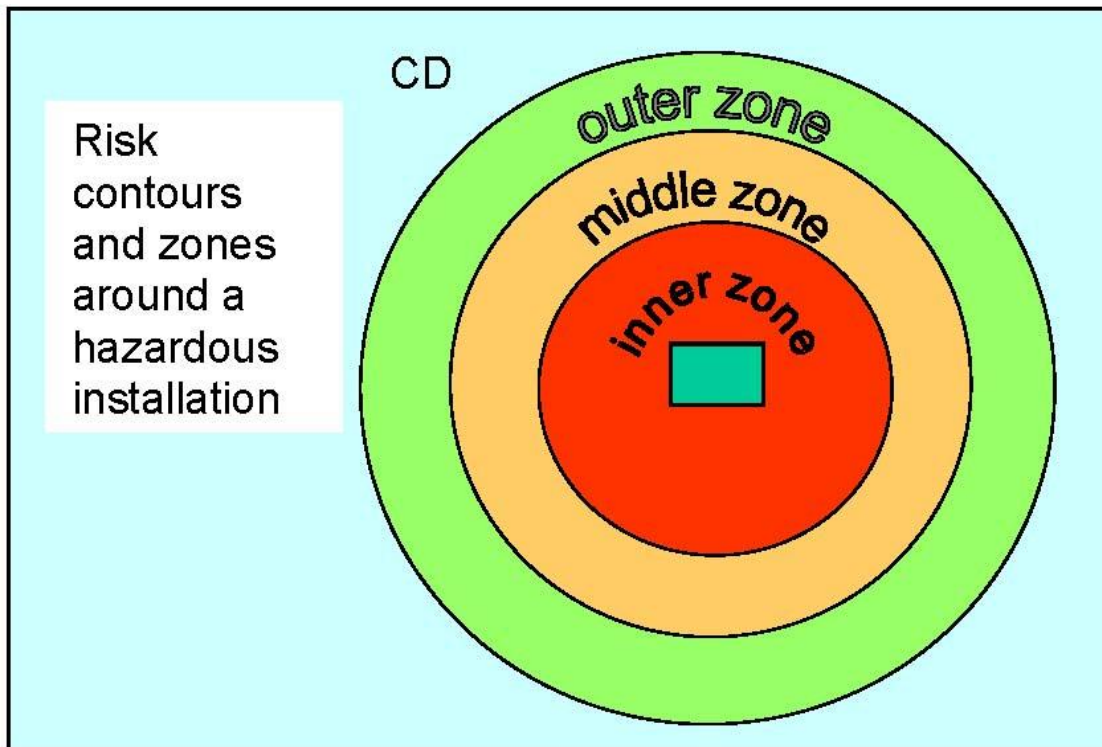
6. Like other statutory consultees, HSE's role in the land use planning system is advisory. It has no power to refuse consent or a planning application. It is the responsibility of the HSA or PA to make the decision, weighing local needs and benefits and other planning considerations alongside HSE advice, in which case they should give HSE advance notice of that intention. PAs may be minded to grant permission against HSE's advice. In such cases HSE will not pursue the matter further as long as the PA understands and has considered the reasons for our advice. However HSE has the option, if it believes for example that the risks are sufficiently high, to request the decision is 'called in' for consideration by the Secretary of State, in England and Wales (a very rare situation). In Scotland, if the planning authority is minded to grant permission they have to notify the Scottish Ministers who can decide to call-in the application.

Consultation distances and risk contours

7. Using hazardous substances consent information, HSE undertakes a detailed assessment of the hazards and risks from the installation and produces a map with three risk contours representing defined levels of risk or harm which any individual at that contour would be subject to. The risk of harm to an individual is greater the closer to the installation. In each case the risk relates to an individual sustaining the so-called 'dangerous dose' or specified level of harm. A 'dangerous dose' is one which would lead to:

- severe distress to all;
- a substantial number requiring medical attention;
- some requiring hospital treatment; and,
- some (about 1%) fatalities.

8. The three contours represent levels of individual risk of 10 chances per million (cpm), 1 cpm and 0.3cpm per year respectively of receiving a dangerous dose or defined level of harm. The contours form three zones (see below), with the outer contour defining the CD around major hazard sites.



The PA consults HSE on relevant proposed developments within this CD through the HSE Planning Advice Web App.

How HSE gives advice

9. When consulted, HSE firstly identifies which of the three defined zones the proposed development is in. Secondly, the proposed development is classified into one of four “Sensitivity Levels”. The main factors that determine these levels are the numbers of persons at the development, their sensitivity (vulnerable populations such as children, old people) and the intensity of the development. With these two factors known, a simple decision matrix is used to give a clear ‘Advise Against’ (AA) or ‘Don’t Advise Against’ (DAA) response to the PA, as shown below:

Level of Sensitivity	Development in Inner Zone	Development in Middle Zone	Development in Outer Zone
1	DAA	DAA	DAA
2	AA	DAA	DAA
3	AA	AA	DAA
4	AA	AA	AA

Sensitivity Level 1 - Example: Factories

Sensitivity Level 2 - Example: Houses

Sensitivity Level 3 - Example: Vulnerable members of society e.g. primary schools, old people's homes

Sensitivity Level 4 - Example: Football ground/Large hospital

DAA means Do not Advise Against the Development

AA means Advise Against the Development

Technical assumptions underpinning HSE methodology for land use planning

10. The installation: The quantities and properties of hazardous substances, and the descriptions of storage and process vessels, are assumed to be in accordance with the 'hazardous substances consent' entitlement for the site since this represents an operator's declaration of their entitlement to store such substances which could be introduced at any time. For each type of development HSE's advice to PAs will take account of the maximum quantity of a hazardous substance permitted by a hazardous substances consent and any conditions attached to it. Best cautious, but not pessimistic, assumptions concerning substances, locations, operating conditions and surroundings are used. For operations not described in the consent (e.g. numbers and sizes of road tanker operations, pipework diameters, pumps and other fittings) site-specific values are obtained as necessary.

11. Hazardous events: All foreseeable major accidents are considered and a representative set of events which describe a set of circumstances which, for that installation, could lead to an accidental release of hazardous substances.

12. Consequences: The previously described 'dangerous dose' concept is generally used to describe the extent of the impact of any hazardous event on the surrounding population. Protection provided to persons by being sheltered within buildings is generally taken into account by the approach, as is the likelihood of persons being outdoors at the time of the incident.

13. Ambient conditions: Local weather data is used to provide wind and stability information around the installation. Further, the surroundings are generally assumed to be flat although ground roughness can be taken into account where circumstances require it.

14. Risk assessment: The calculations produce contours of the frequency that a typical house resident would be exposed to a dangerous dose or worse. This is generally expressed in terms of 'chances per million per annum' or cpm for short, i.e. 10cpm, 3CPM cpm, 0.3cpm.

Annex 4

Contact

Any queries regarding HSE's land use planning methodology, or on how to use or access HSE's Planning Advice Web App to consult HSE in order to obtain advice on planning applications or pre-application enquiries, should be referred to lupenquiries@hsl.gsi.gov.uk or tel: 0203 028 3708.

Any queries relating to hazardous substances consent should be sent to hazsubcon.CEMHD5@hse.gsi.gov.uk



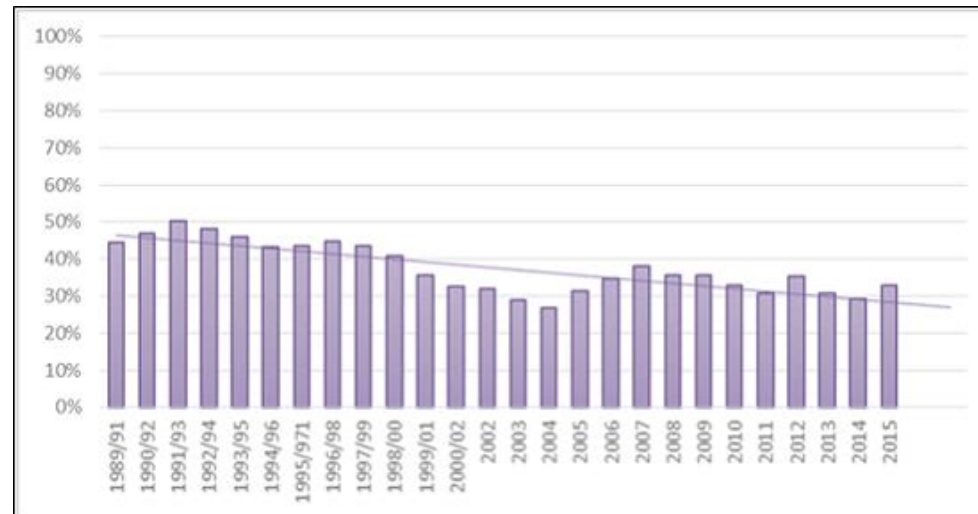
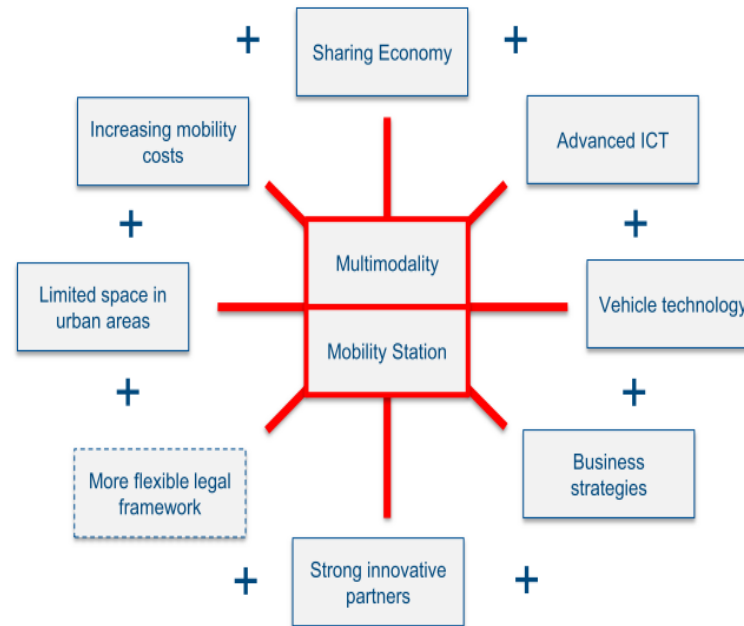
MULTI MODAL TRANSPORT INTERCHANGES - MMTIs
BRIEFING FOR EAST HEMEL HEMPSTEAD - 4 SEPTEMBER 2019

MARCUS DELLA CROCE - ASSOCIATE DIRECTOR – VECTOS

PAUL CURTIS - ASSOCIATE DIRECTOR – VECTOS

Multi Modal Transport Interchanges Rationale

MMTIs can act as feeders to PT network



1993: 50%
2014: 30%

CAR CLUBS, CARPOOLING, CYCLE SHARING

Core MMTI components

On-demand and shared mobility services

Becoming more convenient,
cost effective,
environmentally friendly
and even income generating

drivy by
getaround

“Rent out your own vehicle
earn up to £500 per month”



For every vehicle used in a **car-sharing club**, 10 privately-owned vehicles are taken off the road.

Ref: Carplus's [Annual Survey of Car Club Members](#)

23%

chose a bike share bike instead
of a car for their most frequent trip



Cycle share scheme enables modal shift & multimodality: 25% of respondents used bike share in conjunction with bus, and 40% with the train.

Ref: CoMo UK's [Public Bike Share Users Survey Results 2017](#)



App-assisted carpooling.
Realtime matches increases
convenience. Payment made
through digital wallet.

ENABLING DEMAND RESPONSIVE

MMTI provides pick up/ drop off bays

Real time ride sharing through mobile phone app

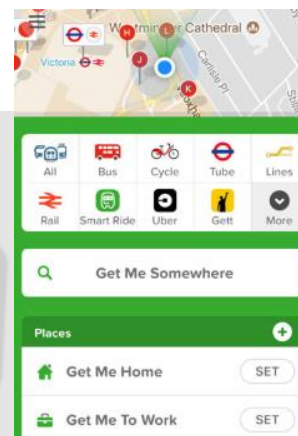
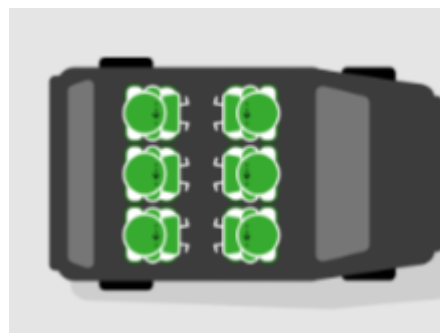
Connects multiple passengers on similar route

Directed to convenient pick up whilst reducing detours

Potential for greater efficiency than bus routes

Operating fleets:

- Via Van: London and Milton Keynes
- Smartride: London
- ArrivaClick: Sittingbourne, Leicester, Liverpool





Public and private sector collaboration offers multiple funding streams

Plugs gaps in public transport network

Can help provide vibrant social communities and enhance local economy: cafés, parcel pickup, EV charging points

Can reduce need to travel
/ change time of travel
(e.g. co-working spaces)



Basic components

- Minimum 2 car club bays
- Bicycle sharing and/or parking
- Public transport
- Accessible, safe and secure
- Branding

MMTI ADVICE

Vectos is already working with Harlow and Gilston Garden Town developing MMTI Guidance

This has included developing a methodology for a hierarchy of MMTIs (primary, secondary, tertiary)

Also advising on potential national guidance and other specific residential and town centre sites



HARLOW & GILSTON GARDEN TOWN

Guidance Note: 02/20190426

A Harlow & Gilston Garden Town 'How To' Guide for ...

Sustainable Community Transport Hubs

Sites are identified which already offer basic services such as a car club bay, bicycle parking or a site next to a bus stop. These are then scaled up to include the essential components. As soon as all criteria are met, the Mobihub receives the necessary branding and connected to the network.



The image above shows a representation of a large scale Hub which has been significantly scaled up from the essential components and principles to include multiple mobility services and amenities for a busy catchment area. The additional components are listed in the table below and can be flexibly applied according to the site in question:-

Multi Modal Transport Interchanges Primary, Secondary and Tertiary Levels

TERTIARY MMTI SERVICES

Small neighbourhood hub

Serves local community

- Car club
 - Bicycle sharing and parking
 - Bus / tram stop
 - Branding
 - Accessible by foot and bike
-
- 80% car club users access the car by foot



The mobil.punkt for car-sharing in Bremen
on Georg-Groening-Straße

Examples from Germany and Belgium



SECONDARY MMTI SERVICES

Large neighbourhood hub

Serves local community and wider catchment

- Located at interchange of transport routes
- Additional features & mobility services to Tertiary
- Allow for joined up journeys (e.g. cycle, car club, on demand for first/last mile)
- Feeder for local residents to use bus services
- Enhance community space through café, co-working, bike repair, parcel pick up



Additional Components - Scaled up

Bike share	Electric charging points for private cars
eBike share	Secure parcel lockers
Cargo bike share	Workspace
Electric Vehicle car club	Free Wifi
Real time travel information	Café
Wayfinding signage for onward journey by foot / bike	DRT pick up and drop off bays

PRIMARY MMTI SERVICES

Main town centre interchange

- Principle rail / bus interchange and terminus with connections to local mobility services
- Significant footfall
- Likely to be town centre location
- Composed of Secondary MMTI features plus greater number/ selection mobility services



Hamburg
town centre

Source: <http://www.qixxit.de/blog/die-mobilitaetsstation-mobilitaet-vor-ort/>

Visualised
representation of
MMTI with bus +
metro interchange



MMTI hierarchy



PRIMARY	SECONDARY	TERTIARY	MOBILITY SERVICE	SUPPORTING FEATURES
x	x	x	Car club bays (min 2)	Step-free access
x	x	x	Cycle share scheme	Branding
x	x	x	Cycle parking	Street lighting
x	x	x	Bus stop	Free Wi-Fi
x	x		EV car club bays	Realtime PT information
x	x		EV Charging Points	Toilets
x	x		eBike share scheme	Benches
x	x		Multiple bus interchanges	Café with co-working space
x	x		DRT pick up / drop off bays	Bike repair shop
x	x		Secure cycle parking	Concierge, travel advice, parcel collection
x	x		Carpool scheme (lift-sharing)	Wayfinding totem for walk and cycle trips
x			Cargo bike / Brompton cycle hire	Lockers
x			Rail / metro interchange, national links and terminus	

Multi Modal Transport Interchanges International Examples

INTERNATIONAL EXAMPLES



eMobility Station, residential neighbourhood, Munich

EV Car Club, eBikes, EV charging points

TERTIARY



Park and Ride Station, Umea, Sweden

TERTIARY

eBike and eCargo bike, 500m outside town centre



INTERNATIONAL EXAMPLES

50 hubs rolled out in
northern Holland

Emphasis on first / last
mile connectivity of
smaller towns around the
cities of Groningen and
Assen

Joined up network of
primary, secondary and
tertiary, similar distances

Facilities on each site
clearly marked on website

Mobility Hubs, Netherlands

TERTIARY, SECONDARY, PRIMARY

Pick up/ drop off, car club, bike hire, café etc.



<https://reisviahub.nl>

MOBILITY STATION USER RESEARCH, MUNICH

Impacts of the first
Mobility Station 2016
Technical University of
Munich, City of Munich

Convenience and prime
location major drivers in
uptake

Reasons for renting:

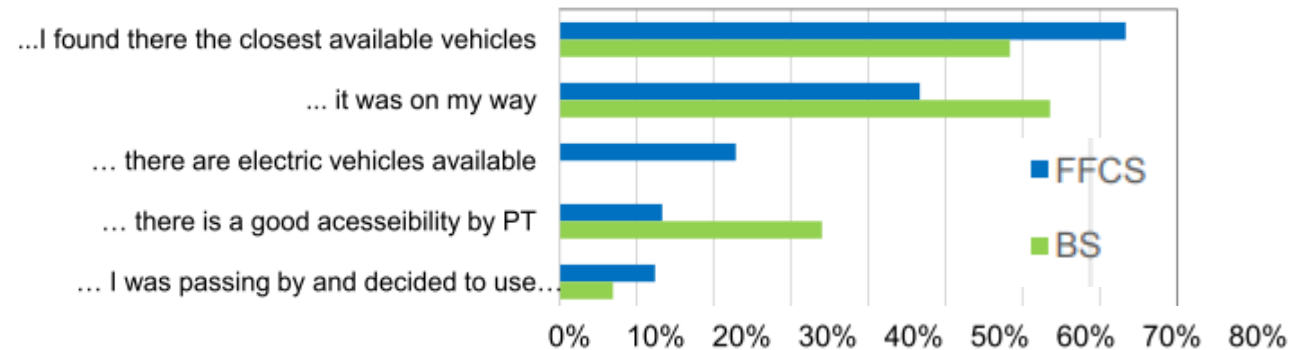
- FFCS = free floating car share users
- BS = Bike Share users



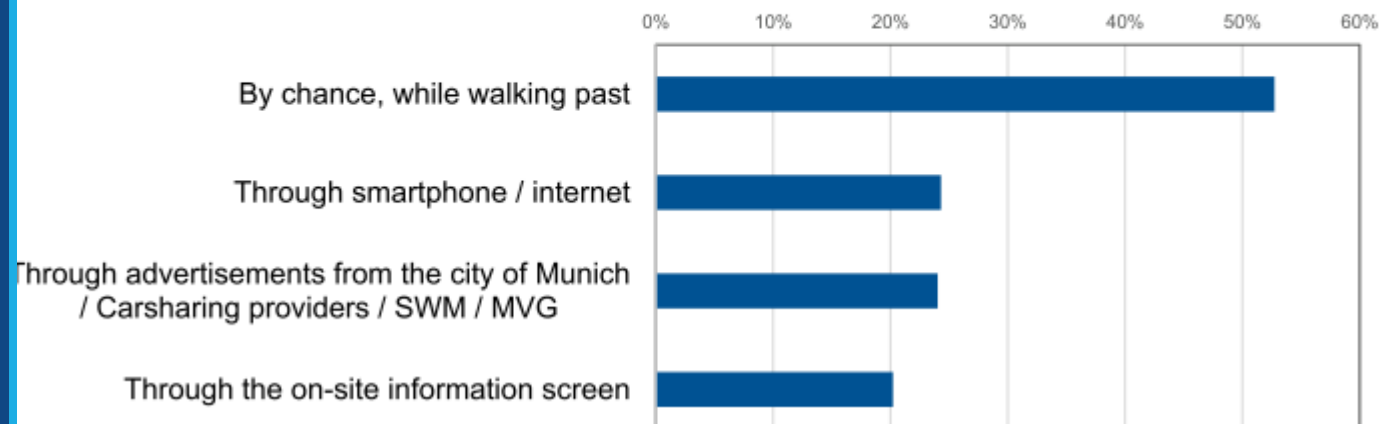
Why did you rent a vehicle specifically at the Mobility Station?

T

Reasons for renting at the Mobility Station - Because...



How did you find out about the Mobility Station at Münchner Freiheit? (n=366)



Multi Modal Transport Interchange For East Hemel Hempstead

APPLYING SECONDARY MMTI TO EAST HEMEL

WHY THESE LOCATIONS?

Prominent location, highly visible to increase understanding and take up of modes

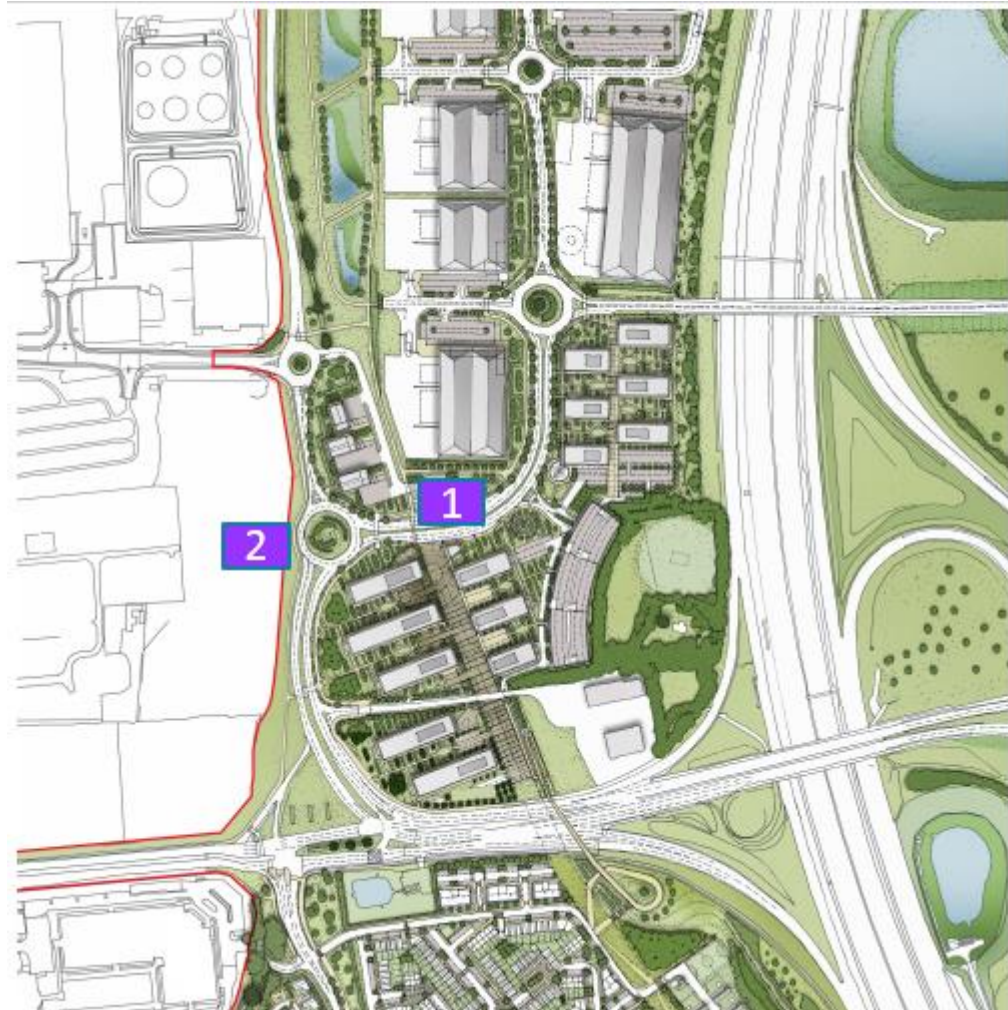
Multiple bus route interchange

Conveniently serves the community, accessible by foot or by bike

Scope for parcel pick up / last mile delivery

Scope to link up with additional tertiary MMTIs

MMTI location map Options 1 & 2



SECONDARY MMTI INDICATIVE LAYOUT

East Hemel requirements
met by Secondary MMTI

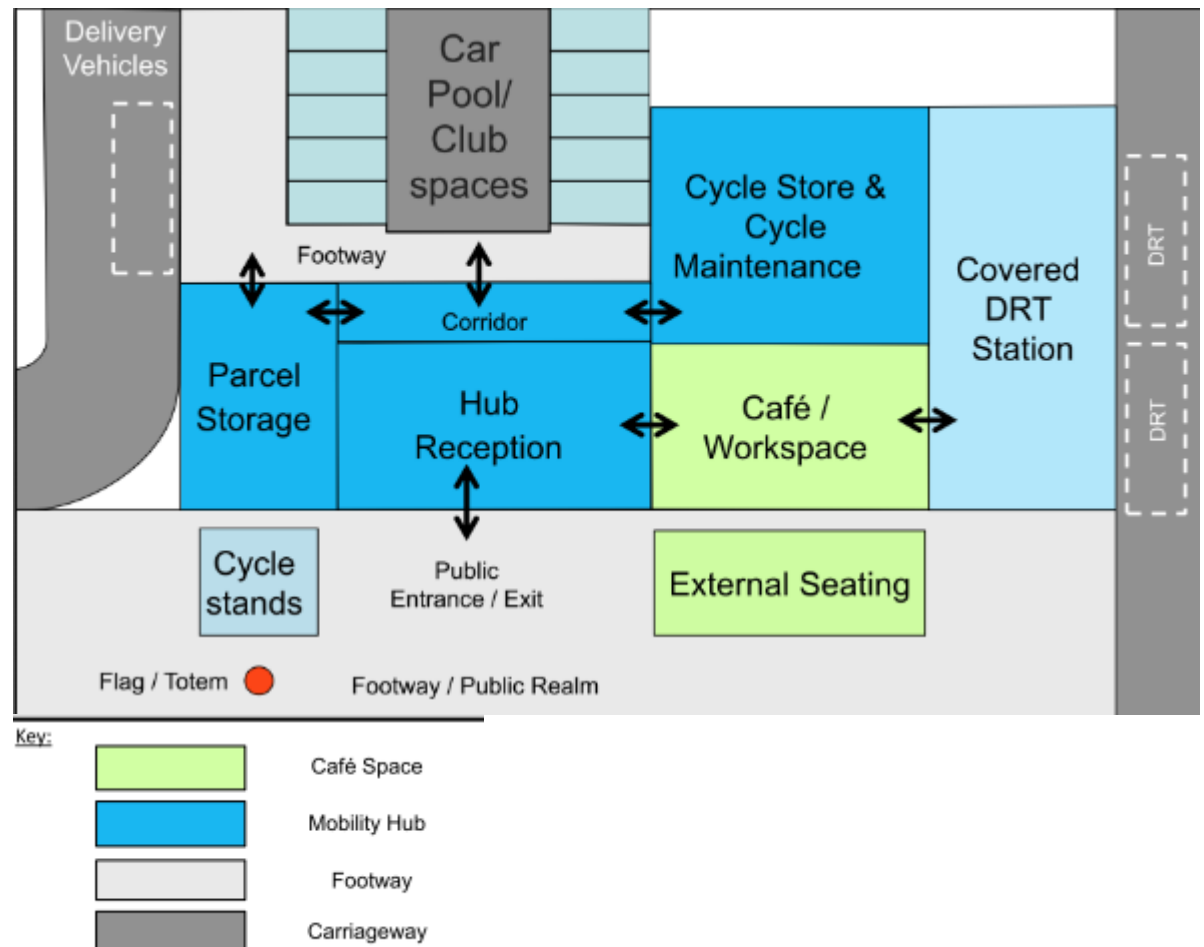
CONSIDERATIONS

Location must be
accessible by foot or bike,
prominently positioned

Bus interchange

Café, workspace, bike
repair offer revenue
model

Launch with series of
incentives to maximise
take up



APPLYING MMTIs TO EAST HEMEL

Option 1 – East of Green Lane

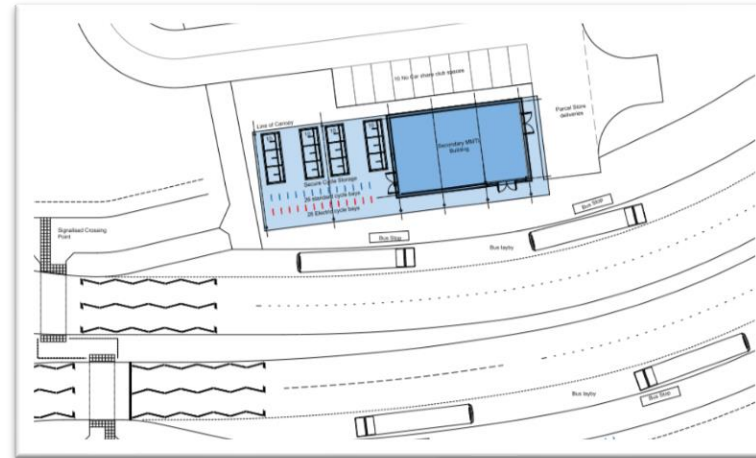
Mobility Services

- MULTIPLE BUS INTERCHANGE
- 10 CAR CLUB BAYS
- 40 SECURE CYCLE STANDS
- 26 EBIKE HIRE
- 26 CYCLE HIRE

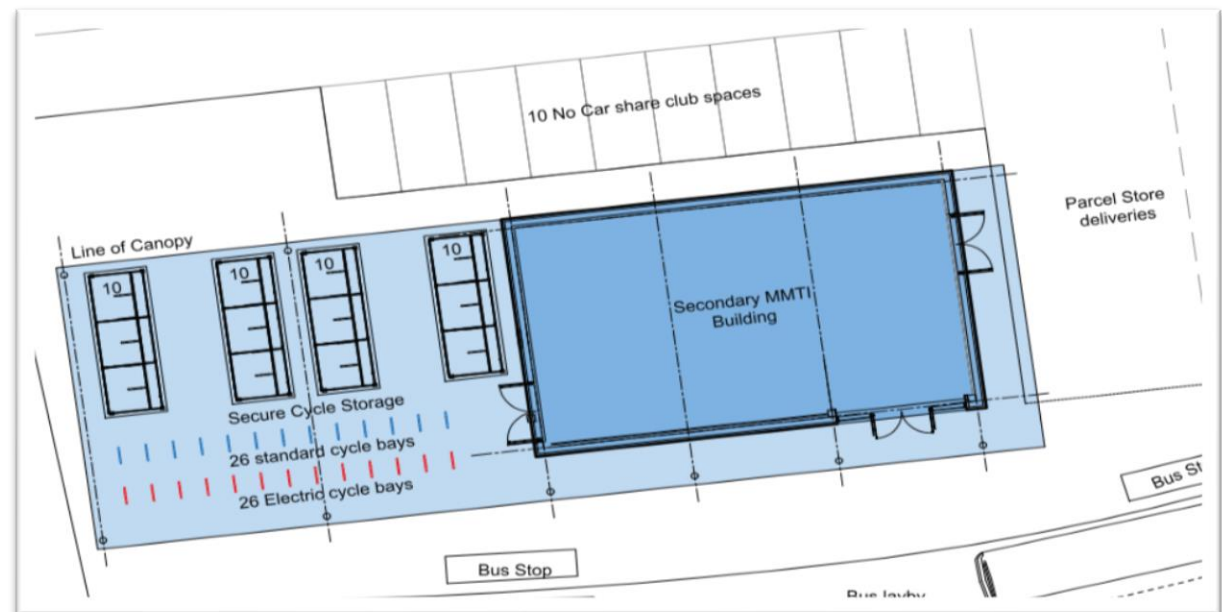
Supporting Features

- CONCIERGE, CAFÉ, CO-WORKING SPACE, BIKE REPAIR
- SHOWER, TOILETS, LOCKERS
- WI-FI, TRAVEL ADVICE, REAL-TIME PT INFO
- BRANDING, LIGHTING, STEP-FREE ACCESS

MMTI Site Layout – Option 1



Site Mobility Services



APPLYING MMTIs TO EAST HEMEL

Option 2 – West of Green Lane

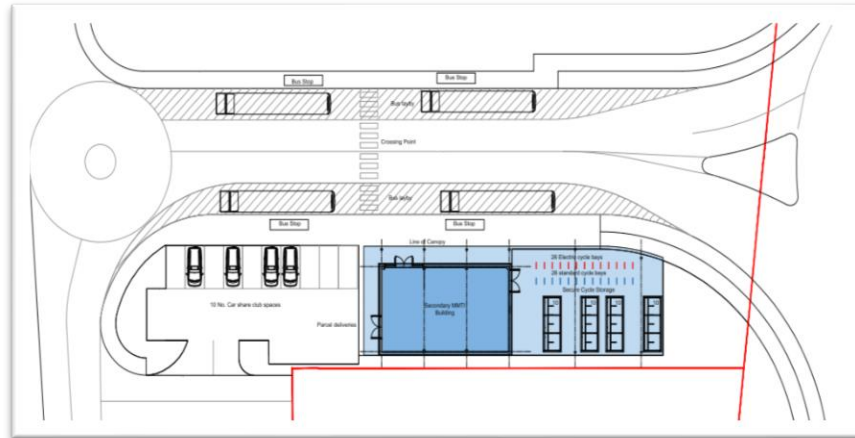
Mobility Services

- MULTIPLE BUS INTERCHANGE
- 10 CAR CLUB BAYS
- 40 SECURE CYCLE STANDS
- 26 EBIKE HIRE
- 26 CYCLE HIRE

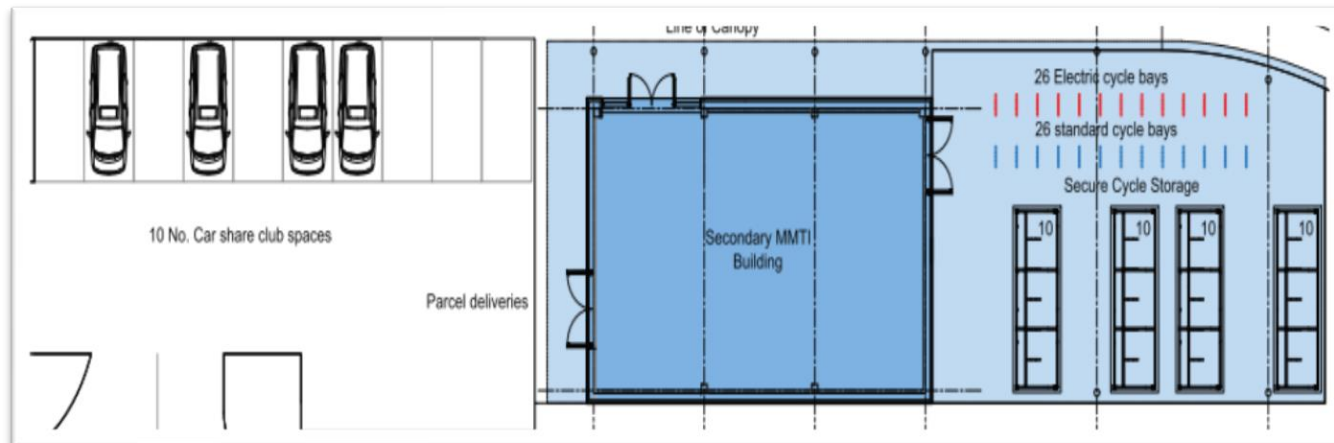
Supporting Features

- CONCIERGE, CAFÉ, CO-WORKING SPACE, BIKE REPAIR
- SHOWER, TOILETS, LOCKERS
- WI-FI, TRAVEL ADVICE, REAL-TIME PT INFO
- BRANDING, LIGHTING, STEP-FREE ACCESS

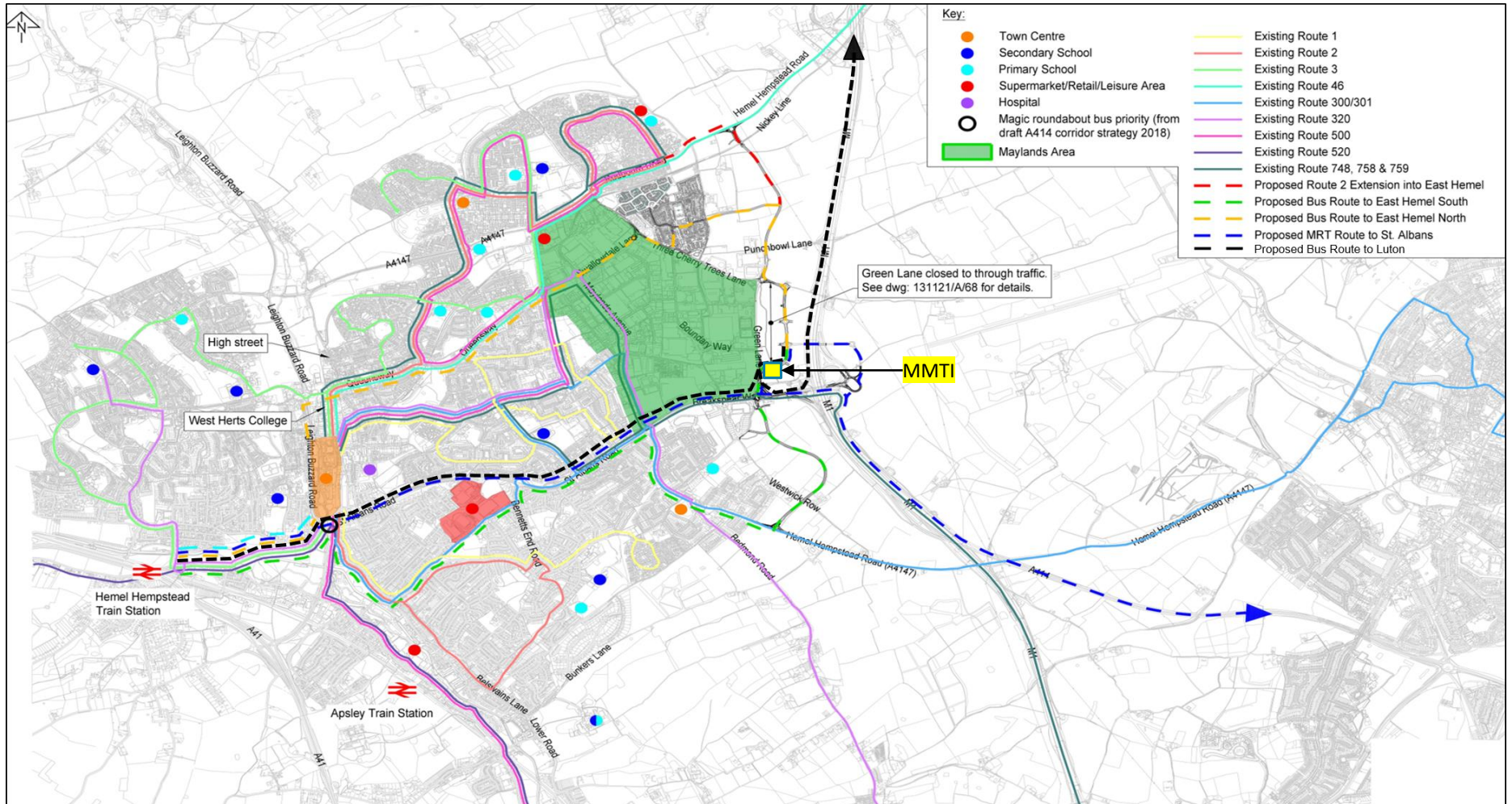
MMTI Site Layout – Option 2



Site Mobility Services



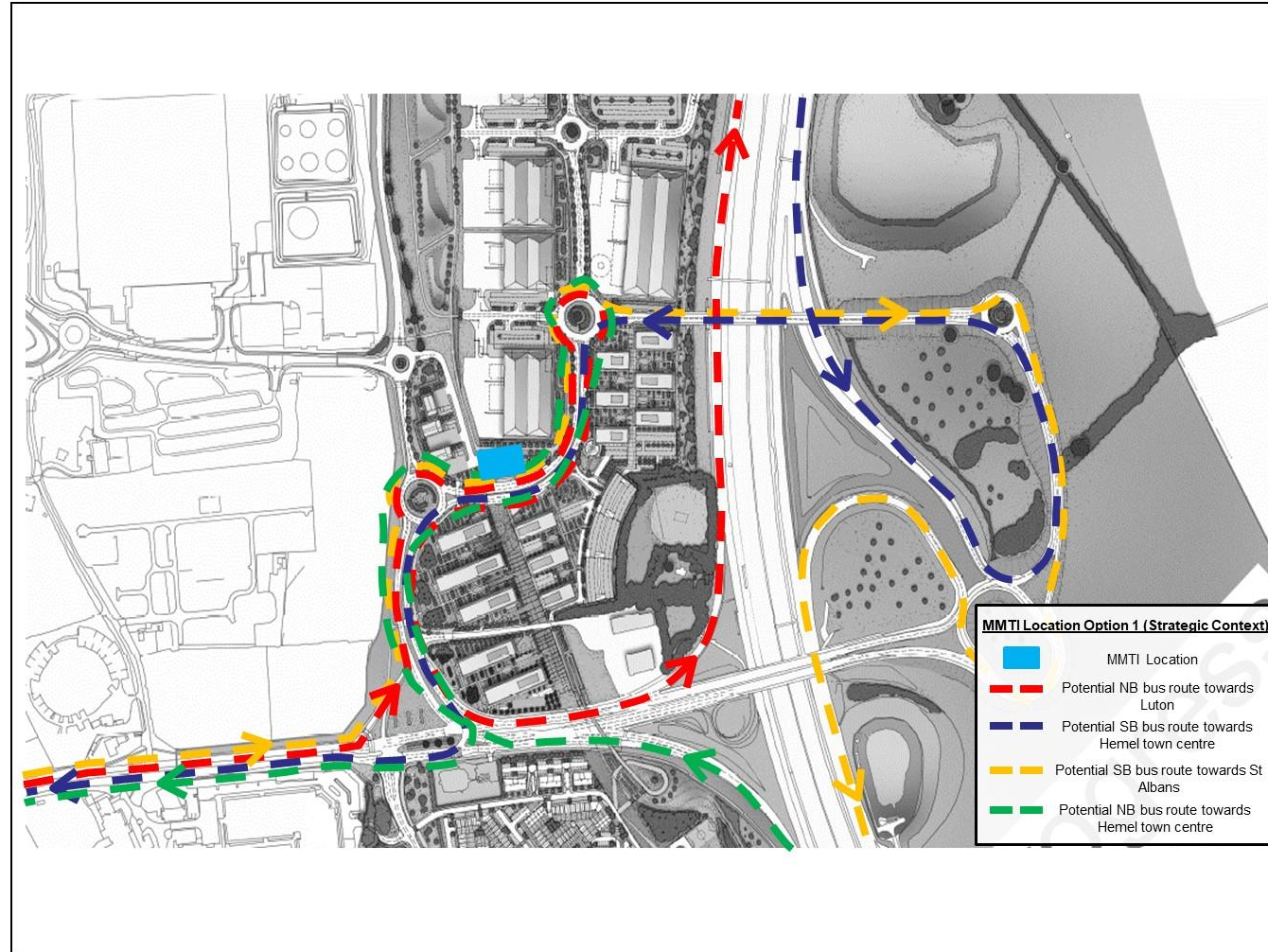
Wider Public Transport Connectivity



BUS ROUTES CONNECTING TO MMTI – OPTION 1

Strategic Context

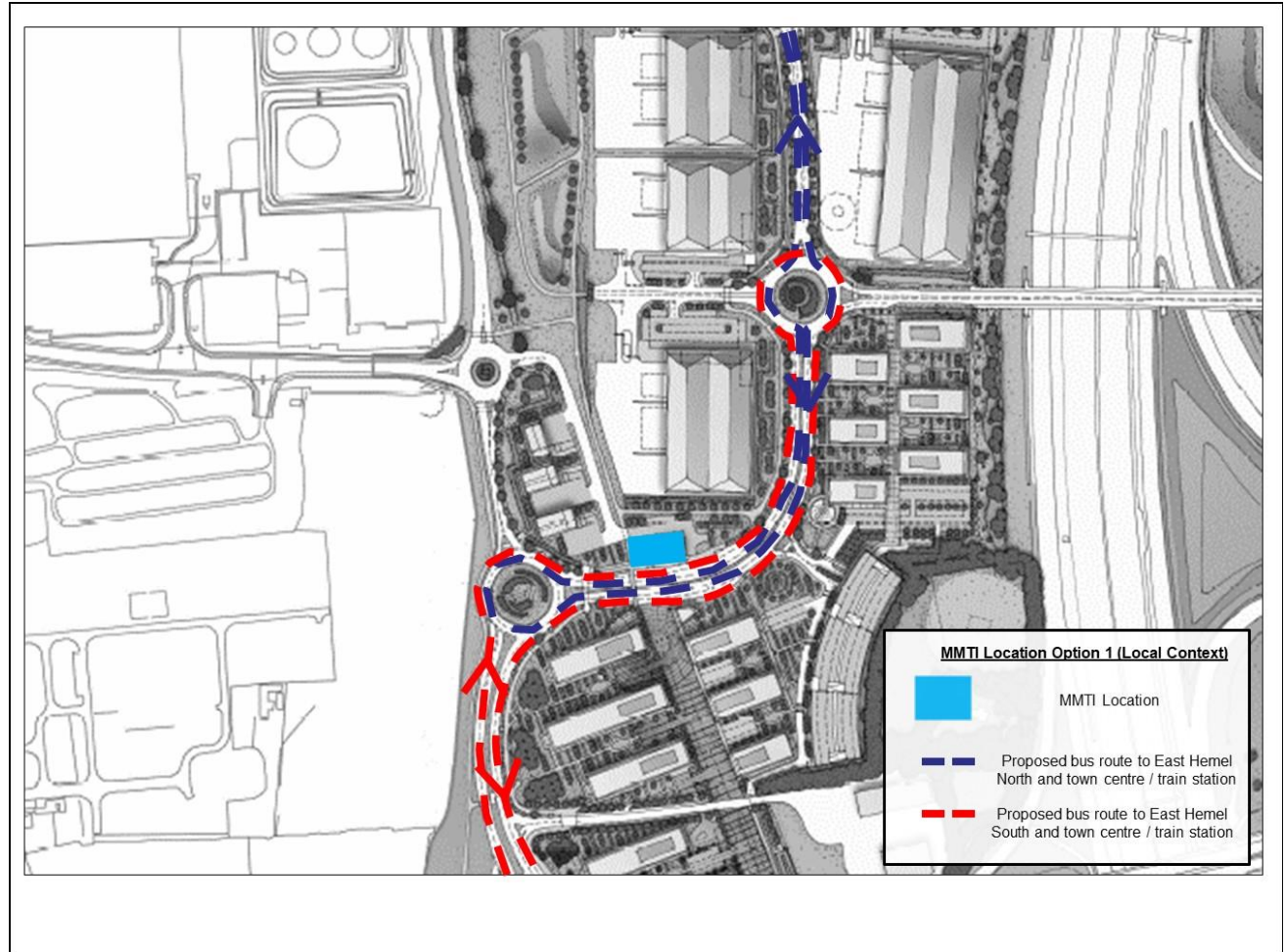
Proposed bus routes
towards Luton, St Albans
and Hemel town centre
and railway station
(Primary MMTI)



BUS ROUTES CONNECTING TO MMTI – OPTION 1

Local Context

Potential terminating bus routes to East Hemel North and East Hemel South



BUS ROUTES CONNECTING TO MMTI – OPTION 2

Strategic Context

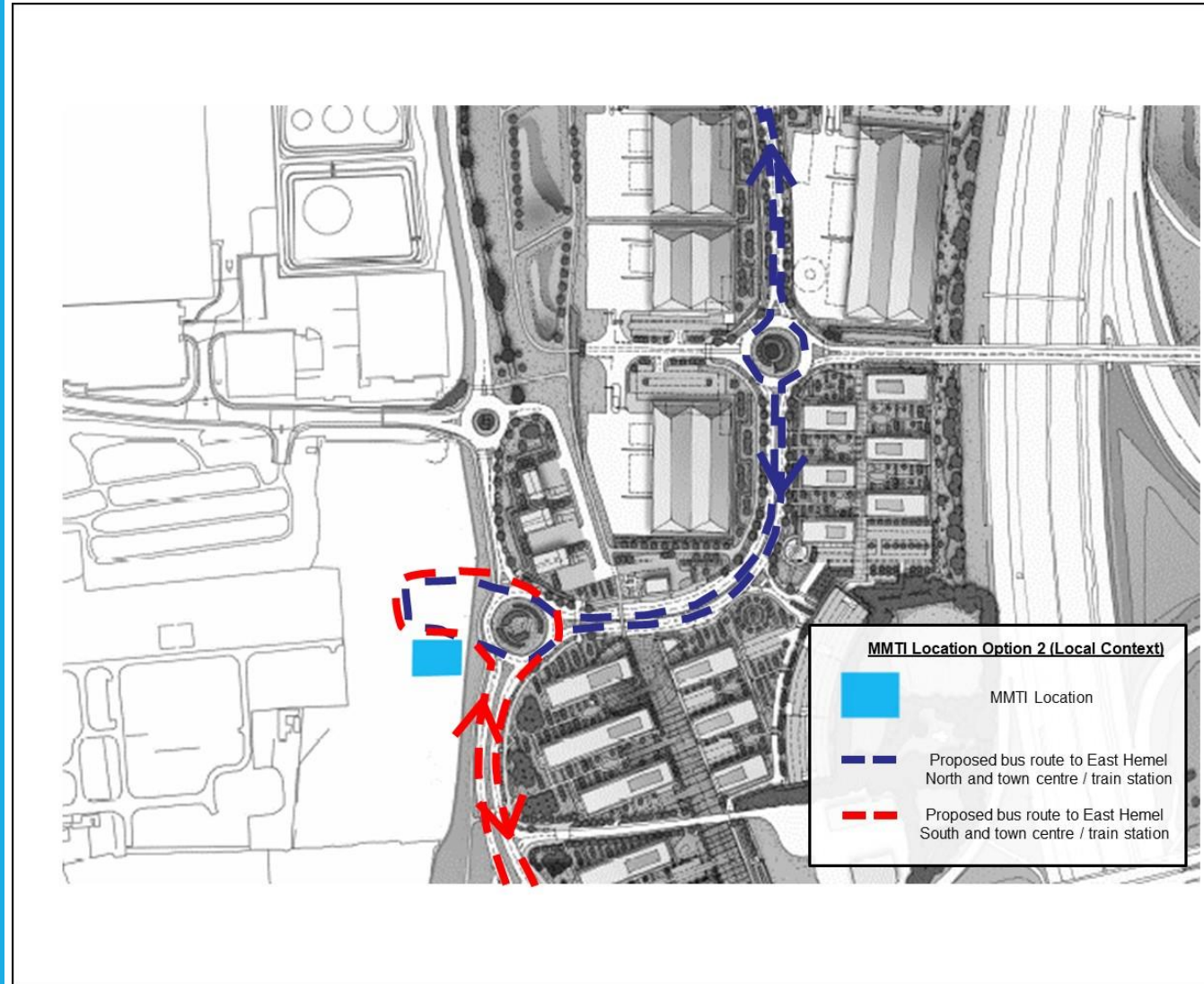
Proposed bus routes
towards Luton, St Albans
and Hemel town centre
and railway station
(Primary MMTI)

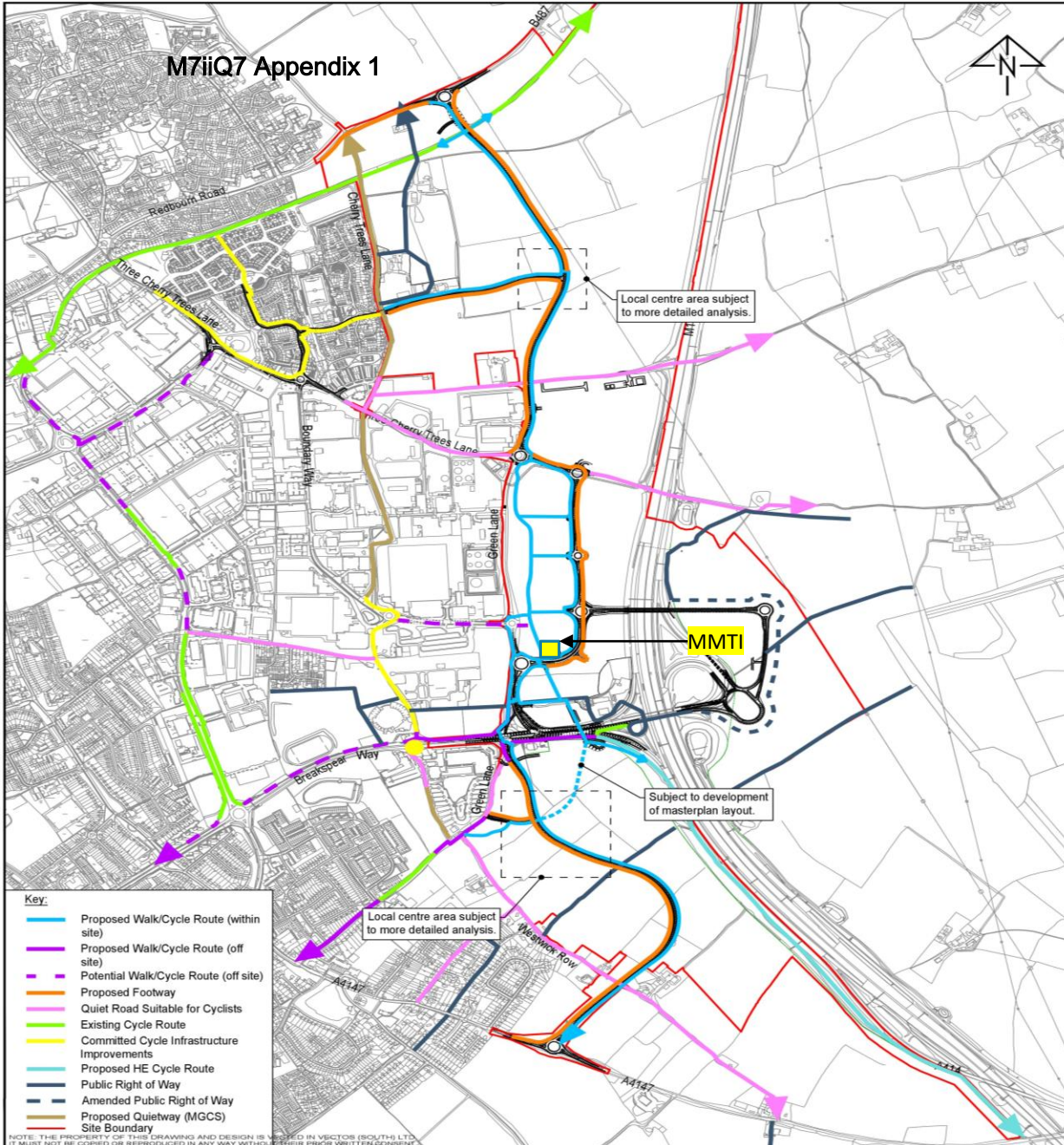


BUS ROUTES CONNECTING TO MMTI – OPTION 2

Local Context

Potential terminating bus routes to East Hemel North and East Hemel South



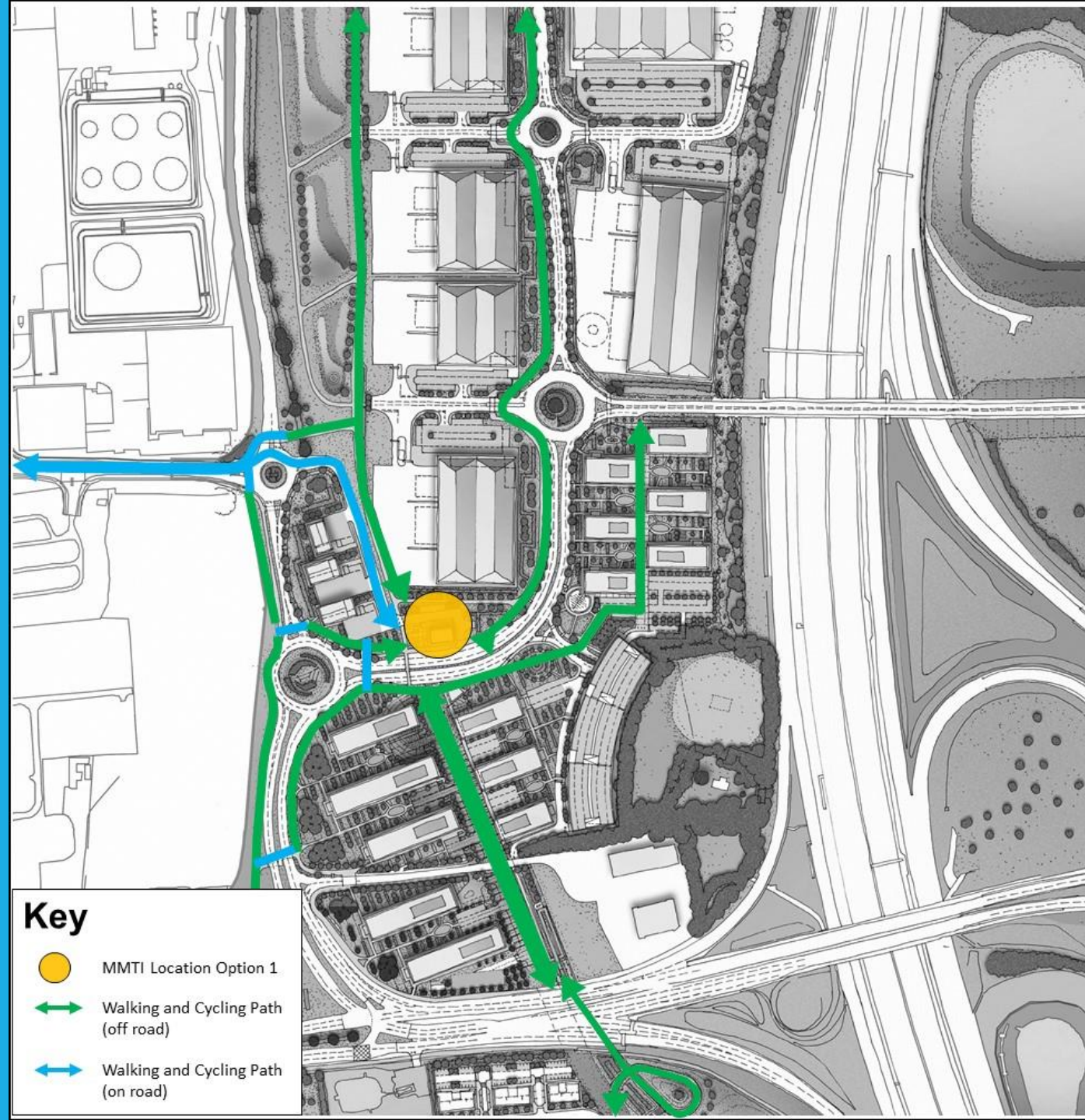


East Hemel Strategic Walking & Cycling Routes

INDICATIVE WALKING AND CYCLING ROUTES TO MMTI - OPTION 1

Desire lines for walking
and cycling

Accessible for residential
and commercial



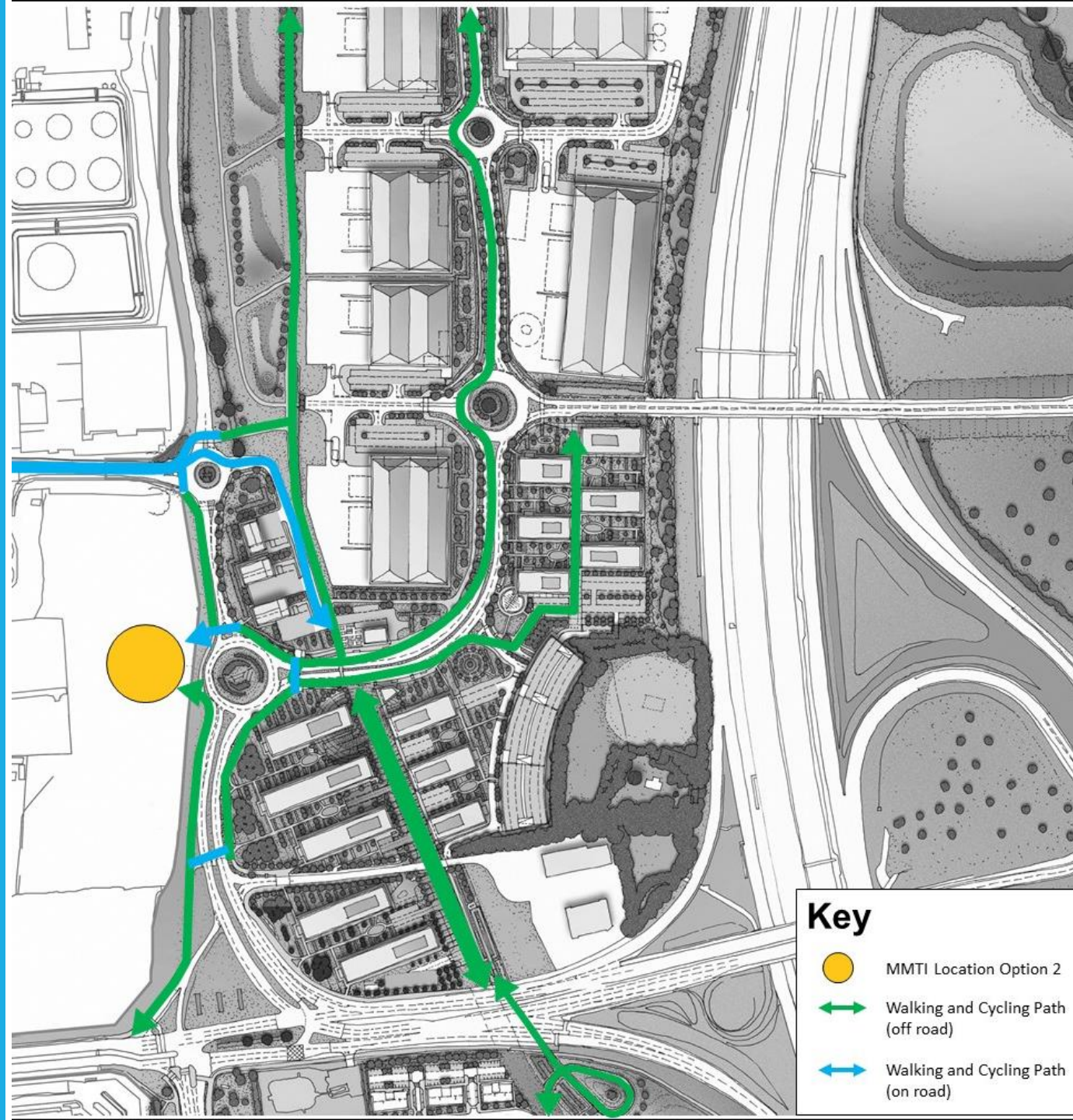
Key

-  MMTI Location Option 1
-  Walking and Cycling Path (off road)
-  Walking and Cycling Path (on road)

INDICATIVE WALKING AND CYCLING ROUTES TO MMTI - OPTION 2

Desire lines for walking
and cycling

Accessible for residential
and commercial



Key

-  MMTI Location Option 2
-  Walking and Cycling Path (off road)
-  Walking and Cycling Path (on road)



Next Steps

NEXT STEPS

Undertake comparative analysis of 2 options following consultation with bus operator and outcome of DBC land deal



Developing an MMTI guide:

- for the site and wider communities to enhance connectivity
- checklist for tertiary, secondary and primary level MMTIs

PRIMARY	SECONDARY	TERTIARY	MOBILITY SERVICE	SUPPORTING FEATURES
x	x	x	Car club bays (min 2)	Step-free access
x	x	x	Cycle share scheme	Branding
x	x	x	Cycle parking	Street lighting
x	x	x	Bus stop	Free Wi-Fi
x	x		EV car club bays	Realtime PT information
x	x		EV Charging Points	Toilets
x	x		eBike share scheme	Benches
x	x		Multiple bus interchanges	Café with co-working space
x	x		DRT pick up / drop off bays	Bike repair shop
x	x		Secure cycle parking	Concierge, travel advice, parcel collection
x	x		Carpool scheme (lift-sharing)	Wayfinding totem for walk and cycle trips
x			Cargo bike / Brompton cycle hire	Lockers
x			Rail / metro interchange, national links and terminus	

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