



## UNIVERSAL DESTINATIONS & EXPERIENCES UK PROJECT

Former Kempston Hardwick Brickworks  
and adjoining land, Bedford

### Environmental Statement Volume 3

### Appendix 2.3 - Outline Construction Environmental Management Plan

Report reference: 4.2.3.0

Revision number: 00

Date: June 2025





# CONTENTS

---

<b>1</b>	<b>BACKGROUND, CONTEXT AND DESCRIPTION OF SITE</b>	<b>1</b>
1.1	INTRODUCTION	1
1.2	LEGAL COMPLIANCE	2
1.3	DESCRIPTION OF SITE	2
1.4	CONSTRUCTION PROPOSALS	3
<b>2</b>	<b>GENERAL ENVIRONMENTAL REQUIREMENTS</b>	<b>8</b>
2.1	AUDITS AND INSPECTIONS	8
2.2	ROLES AND RESPONSIBILITIES	8
2.3	COMPETENCE, TRAINING AND AWARENESS	11
2.4	WORKER CODE OF CONDUCT	11
2.5	INTERNAL COMMUNICATION	12
2.6	EXTERNAL COMMUNICATION	13
2.7	INCIDENT RESPONSE	13
<b>3</b>	<b>ENVIRONMENTAL MITIGATION MEASURES</b>	<b>14</b>
3.1	INTRODUCTION	14
3.2	ECOLOGY AND NATURE CONSERVATION	14
3.3	OUTLINE CONSTRUCTION TRAFFIC MANAGEMENT PLAN	28
3.4	HEALTH AND SAFETY	39
3.5	LANDSCAPE AND VISUAL	39
3.6	AIR QUALITY	41
3.7	NOISE AND VIBRATION	43
3.8	CULTURAL HERITAGE AND ARCHAEOLOGY	45
3.9	GROUND CONDITIONS, SOILS AND AGRICULTURAL LAND	47
3.10	WATER ENVIRONMENT	50
3.11	SOCIO-ECONOMICS	53

---

<b>3.12 GREENHOUSE GAS</b>	<b>54</b>
<b>3.13 MAJOR ACCIDENTS AND DISASTERS</b>	<b>56</b>
<b>3.14 POPULATION AND HUMAN HEALTH</b>	<b>57</b>
<b>3.15 WASTE</b>	<b>58</b>
<b>3.16 MONITORING AND REPORTING</b>	<b>62</b>

---

## ***TABLES***

Table 1-1 - Machinery and Equipment Identified for Construction Phase	5
Table 2-1 - Personnel with Defined Environmental Responsibilities	8
Table 3-1 – Monitoring of Ecological Mitigation Measures during the Construction Phase	28

---

## ***FIGURES***

Figure 3.1: HDV and AIL Routes	32
Figure 3.2: National Highways Heavy and High Routes	33
Figure 3.3: Waste Hierarchy	60

---

## ***ANNEXES***

ANNEX 1
RELEVANT LEGISLATION
ANNEX 2
CONSTRUCTION WORKER TRAVEL PLAN
ANNEX 3
CONSTRUCTION ACCESS AND PHASING PLAN



# 1 BACKGROUND, CONTEXT AND DESCRIPTION OF SITE

---

## 1.1 INTRODUCTION

- 1.1.1 This Outline Construction Environmental Management Plan (OCEMP) is prepared on behalf of Universal Destinations & Experiences (UDX) to support a planning proposal for the construction and operation of an entertainment resort complex and associated development as described in **Chapter 2: Description of the Proposed Development (Volume 1)**.
- 1.1.2 This OCEMP identifies the main environmental mitigation measures associated with the Construction Phase of the Proposed Development and reflects those mitigation measures presented in relevant environmental topics in the Environmental Statement (ES). In addition, this document provides an overview of the construction programme, hours of working etc known at this time, to be adopted during the construction of the Proposed Development, in line with the information presented in **Chapter 2: Description of the Proposed Development (Volume 1)**.
- 1.1.3 At the time of writing this OCEMP, the Principal Contractor(s) are yet to be appointed by the relevant Undertakers (as defined in **Appendix 0.1: Glossary and Acronyms (Volume 3)** and explained in **Chapter 2: Description of the Proposed Development (Volume 1)**). Upon appointment, it is anticipated that the Principal Contractor(s) will prepare detailed Construction Environmental Management Plans (CEMPs) (referred to in this document as the CEMPs) which will take account of the measures outlined within this OCEMP. Each CEMP will include a detailed location plan showing the specific part of the development that the CEMP applies to. It is anticipated that the CEMPs will be reviewed and updated on a regular basis throughout the Construction Phase as new environmental mitigation measures are potentially required and new environmental legislation comes into force.
- 1.1.4 All detail relating to construction traffic management, including construction routing, logistics, road and footpath closures is presented in the Outline Construction Traffic Management Plan (OCTMP), provided in **Section 3.3** of this OCEMP, while **Annex 2: Construction Worker Travel Plan** provides the Heads of Terms for the Construction Worker Travel Plan (CWTP).
- 1.1.5 The OCTMP sets out the phasing and strategy, the management measures, the monitoring approach and the compliance structure aimed at regulating and spreading construction trips across the day during the construction of the Proposed Development.
- 1.1.6 All reference to Health and Safety measures and processes that are likely to be adopted during the Construction Phase will be prepared by the Principal Contractor(s), in a standalone Construction Health and Safety Plan with other supporting Health and Safety related documentation, in accordance with current UK legislation and UDX's internal Environmental Health and Safety protocols.
- 1.1.7 For the purposes of this report, it is assumed that Construction Phase mitigation measures also include those mitigation measures required to be implemented during the Demolition Phase.

## 1.2 LEGAL COMPLIANCE

- 1.2.1 Considerable environmental legislation applies to the works to be undertaken. It is anticipated that all relevant legislation, including requirements for licences, permits and/or consents shall be presented in the CEMPs and that the Principal Contractor(s) will be required to provide details of how compliance is to be achieved, as part of the construction process.

A review of potential environmental legislation and regulations is presented in **Annex 1 Relevant Legislation** of this document. The Principal Contractor(s) will use this list of legal requirements and update it where relevant prior to construction commencing to inform the preparation of the CEMPs. It will be the Principal Contractor's responsibility to ensure strict compliance with all legal requirements.

## 1.3 DESCRIPTION OF SITE

- 1.3.1 The Site is located in an area broadly defined on all four sides by existing road and rail infrastructure. The A421 passes from northeast to southwest along the western side of the Site, with local access provided by Woburn Road running in parallel on the A421's eastern edge. Ampthill Road runs from north to south to the eastern edge of the Site. Broadmead Road connects from Woburn Road, running west to east along the southern edge of the Site.
- 1.3.2 The Marston Vale Railway Line bounds the western edge of the Lake Zone and Core Zone and bisects the Site (north to south) between the Core Zone and West Gateway Zone. The Midland Mainline Railway runs from north to south to the east of the Site, parallel to and west of Ampthill Road.
- 1.3.3 Elstow Brook, a tributary of the Great River Ouse, follows the line of Marston Vale Railway Line along the western boundary of the Lake Zone, then diverges slightly to cross through the West Gateway Zone. Existing waterbodies bound the Site to the north, east and southeast, while warehouse units bound the Site to the northwest. The Site is primarily surrounded by agricultural land and open fields to the west and south.
- 1.3.4 The Site is situated in a semi-rural location, split by Manor Road which connects the village of Kempston Hardwick to Woburn Road on the west and Ampthill Road to the east. There are a small number of residential properties with direct frontage along Manor Road, in addition to the CEMEX Bedford Concrete Plant and BCA Bedford car auction site. The Lake Zone is located to the north of Manor Road, part of which is a brownfield site whose former uses include brickworks, clay pits and an electrical substation. The Lake Zone also comprises an area of unused hard standing, associated with the former Kempston Hardwick Brickworks along with stockpiles of former demolition waste. The previous clay extraction pits are now either in-filled or flooded semi-permanent waterbodies. The Lake Zone also includes areas of grass scrub and arable farmland used to grow crops. The Core Zone, located to the south of Manor Road comprises primarily arable fields, hedgerows and drainage ditches.

- 1.3.5 Four public rights of way (PRoW) cross the Site as shown on **Parameter Plan – Active Travel Routes (Document Reference 1.12.0)**. One links the eastern end of Manor Road to Woburn Road, crossing the Core Zone and the Marston Vale Railway Line at a footpath level crossing near the centre of the Core Zone. A second PRoW runs from north to south through the Core Zone (and across the other PRoW) from Manor Road to Broadmead Road. The third and fourth PRoWs skirt the northeastern boundary of the Lake Zone following along field edges from Ampthill Road, meeting the field's edge to cross under the A421 adjacent to the Marston Vale Railway Line.

## 1.4 CONSTRUCTION PROPOSALS

### CONSTRUCTION PHASING STRATEGY

- 1.4.1 The Proposed Development will be built out in phases as explained in ES **Chapter 2: Description of the Proposed Development (Volume 1)**, with the proposed phasing of the Primary Phase set out in **Annex 3: Construction Access and Phasing**.
- 1.4.2 The Primary Phase (2026 to 2031) require the demolition of Vine Cottages 1 and 2 and their respective outbuildings, as well as the derelict building currently located within the Lake Zone. There may also be requirement for demolition of some or all of the other dwellings within the Site.

### CONSTRUCTION MANAGEMENT

- 1.4.3 Areas of construction will be secured (for security and public safety) via suitable fencing for construction of temporary works during the Primary Phase. Details will be specified by the Principal Contractor(s) in a detailed CEMP that will be submitted for approval prior to works starting on-Site.
- 1.4.4 The following working hours will be adhered to during the construction of the Proposed Development:
- 07:00 – 19:00 (Monday to Friday);
  - 07:00 – 13:00 (Saturday); and
  - No Sunday, Bank Holiday or Public Holiday working unless by prior approval for specific works.
- 1.4.5 The first hour of any working day (07:00 – 08:00) is to consist of mobilisation works to include, but not be limited to, deliveries, movement to place of work, unloading, maintenance and general preparation works.
- 1.4.6 Certain construction activities may require extended working hours for reasons of engineering practicability, weather and safety such as major concrete pours and piling, surveys, lifting/fitting of infrastructure and equipment, and abnormal deliveries.
- 1.4.7 The nature and timing of these works and the associated extended working hours will be provided in the detailed CEMP(s), and the agreed schedule shared with Bedford Borough Council (Bedford BC) and notified to relevant stakeholders.
- 1.4.8 UDX will compel the Principal Contractor(s) to issue “look-ahead” bulletins detailing the location, nature, timing and expected duration of any works scheduled outside standard hours, together with the noise-control measures to be employed. Information will be distributed at least five working days in advance through real-time updates via a project website and/or SMS alert system.

- 1.4.9 Works that may be undertaken during extended construction hours:
- i. Concrete placement where the expected length of time to complete the placement cannot be accommodated within the normal day-time working hours and/or that would be unduly disruptive of other construction activities, including normal traffic operations;
  - ii. Installation of complicated structural systems or critical equipment that do not become stable until all the pieces are in place and require longer than one working day to install;
  - iii. Day-time closures for bridge demolition and installation or other works requiring the full or partial closure of, or otherwise adversely affecting the operation of existing carriageways or railway lines;
  - iv. Any oversize deliveries or other deliveries where day-time working would be excessively disruptive to normal traffic operation;
  - v. The provision of services at compounds, including CCTV and vehicle recovery;
  - vi. Works associated with the diversion of and tie-ins to existing utilities;
  - vii. Junction tie-in works;
  - viii. Works associated with traffic management and signal changes;
  - ix. Testing and/or cycling of rides/shows;
  - x. As otherwise agreed with the local authorities in advance.
- 1.4.10 Some activities may require 24-hour working and where this is the case, the detailed CEMP(s) schedule will make this clear, and include an obligation to notify Bedford BC, local residents and relevant stakeholders in advance, including details of any applicable noise control measures.
- 1.4.11 Amendments to the programme of extended construction hours of an approved detailed CEMP(s) will be agreed with Ministry of Housing, Communities and Local Government (MHCLG) and notified to relevant stakeholders.
- 1.4.12 In the case of work required in an emergency, or which if not completed would be unsafe or harmful to workers, the public or local environment, Bedford BC will be informed as soon as reasonably practicable of the reasons and likely duration. Examples may include concrete pouring taking longer than anticipated due to unfavourable conditions or equipment failure.
- 1.4.13 In addition to the other specified works to be undertaken during extended construction hours listed above, during the final 18 months of the Primary Phase construction programme there will be a requirement for out of hours working within the Core Zone for Theme Park ride and show fit-out activities, which will be carried out after heavy construction activities cease. Up to approximately 300 staff would be on-Site during this time.
- 1.4.14 As noted above, there will be ongoing maintenance and alteration work to support the operation of the Proposed Development. Such works will be managed in accordance with the approach set out in this OCEMP and will be mindful of the effects of the environment at the time such works are undertaken. This will be informed by UDX's experience of delivering such maintenance and alteration work within operational theme parks and doing so in a manner that enables the smooth operation of parks whilst works are undertaken.

## PLANT AND EQUIPMENT

- 1.4.15 At this stage, the precise equipment which may be used in the construction of the Proposed Development cannot be fully determined. For the purposes of the ES and this OCEMP, it has been assumed that the machinery and equipment identified in **Table 1-1** would be used as per the phases set out in **Annex 3: Construction Access and Phasing**.
- 1.4.16 For the construction of the elements within the Core Zone, East Gateway Zone and West Gateway Zone, piling may be required for bridges, roadway and rail components, select buildings and theme park ride foundations. It has been assumed that a combination of concrete cast pile, sheet piles or other similar appropriate piling system would be used.

**Table 1-1 - Machinery and Equipment Identified for Construction Phase**

Construction Phase	Estimated Time Period	Plant Type	Maximum Amount
1a) Advanced Works, 1b) Enabling Works and Grading, and 1c) Primary Infrastructure Works	Q4 2025 – Q4 2027	Cranes	Fewer than 10
		Excavators, Backhoes and Front Loaders	Fewer than 100
		Dozers	Fewer than 100
		Graders and Compactors	Fewer than 100
		Misc. Small Equipment	Fewer than 500
		Off Road Dump Trucks	Fewer than 100
		Concrete Batch Plant	Setup and use for less than 25% of duration
		HGV Deliveries	Fewer than 500 per day
1d) Property Infrastructure	Q3 2027 – Q2 2030	Cranes	Fewer than 10
		Excavators, Backhoes and Front Loaders	Fewer than 100
		Dozers	Fewer than 100
		Graders and Compactors	Fewer than 100
		Misc. Small Equipment	Fewer than 500
		Off Road Dump Trucks	Fewer than 100
		Concrete Batch Plant	Setup and use for less than 25% of duration
		HGV Deliveries	Fewer than 100 deliveries per day
	Q3 2026 – Q4 2030	Cranes	Fewer than 20

Construction Phase	Estimated Time Period	Plant Type	Maximum Amount
1e) Roadway Works		Excavators, Backhoes and Front Loaders	Fewer than 100
		Dozers	Fewer than 100
		Graders and Compactors	Fewer than 100
		Misc. Small Equipment	Fewer than 500
		Off Road Dump Trucks	Fewer than 100
		Concrete Batch Plant	Setup and use for less than 25% of duration
		HGV Deliveries	Fewer than 500 deliveries per day
1f) Railway Works	TBC	Cranes	Fewer than 5
		Excavators, Backhoes and Front Loaders	Fewer than 100
		Dozers	Fewer than 100
		Graders and Compactors	Fewer than 100
		Misc. Small Equipment	Fewer than 500
		Off Road Dump Trucks	Fewer than 100
		Concrete Batch Plant	Setup and use for less than 25% of duration
		HGV Deliveries	Fewer than 100 deliveries per day
1g) Theme Park Construction	Q4 2027 – Q4 2030	<b>Vertical Construction (Q3 2024 – Q3 2029)</b>	
		Cranes	Fewer than 50
		Excavators, Backhoes and Front Loaders	Fewer than 250
		Dozers	Fewer than 100
		Graders and Compactors	Fewer than 100
		Misc. Small Equipment	Fewer than 2500
		Off Road Dump Trucks	Fewer than 100
		Concrete Batch Plant	Use for entire duration

Construction Phase	Estimated Time Period	Plant Type	Maximum Amount
		HGV Deliveries	Fewer than 500 deliveries per day
1g) Theme Park Construction	Q4 2027 – Q4 2030	<b>Fit Out and Installation (Q3 2029 – Q3 2030)</b>	
		Mobile elevated work platforms	Fewer than 50
		Excavators, Backhoes and Front Loaders	Fewer than 50
		Dozers	Fewer than 10
		Graders and Compactors	Fewer than 10
		Misc. Small Equipment	Fewer than 2500
		Off Road Dump Trucks	Fewer than 100
		Concrete Batch Plant	Use for entire duration
		HGV Deliveries	Fewer than 100 deliveries per day
1g) Theme Park Construction	Q4 2027 – Q4 2030	<b>Ride Installation and Show Installation</b>	
		Cranes	Fewer than 50
		Excavators, Backhoes and Front Loaders	Fewer than 250
		Dozers	Fewer than 10
		Graders and Compactors	Fewer than 10
		Misc. Small Equipment	Fewer than 2500
		Dump Trucks	Fewer than 100
		Concrete Batch Plant	Use and dismantle for less than 50% of duration
		Heavy Goods Vehicle Deliveries	Fewer than 100 deliveries per day



## 2 GENERAL ENVIRONMENTAL REQUIREMENTS

### 2.1 AUDITS AND INSPECTIONS

- 2.1.1 Internal environmental inspections and audits will be undertaken regularly during the Construction Phase. Audits will be carried out in accordance with the Principal Contractor's detailed CEMP and contractual obligations (including any UDX's Contractor Environmental Health and Safety Rules and Responsibilities document) to assess the environmental performance of the Construction Phase and to check compliance with legal and contractual requirements. Audit timeframes shall be discussed and agreed between the Principal Contractor(s) and the relevant Undertaker(s) prior to construction commencing.

#### CONSENTS

- 2.1.2 A register of consents covering environmental requirements will be prepared and maintained by the Principal Contractor(s). The process of preparation, submission of consent applications to relevant statutory bodies and approval of the consents required will be applied for, obtained and tracked by the Principal Contractor(s) throughout the Construction Phase.

### 2.2 ROLES AND RESPONSIBILITIES

- 2.2.1 It is anticipated that personnel with defined environmental responsibilities during the Construction Phase will be in line with those presented in **Table 2-1**. These roles may be performed by a combination of personnel from the Principal Contractor(s) and/or the relevant Undertaker. It will be the responsibility of the Principal Contractor(s) to update and confirm their team structure in the CEMPs and show how this structure dovetails with the relevant Undertaker(s), prior to construction of the relevant works commencing on-Site.

**Table 2-1 - Personnel with Defined Environmental Responsibilities**

Individual	Role
Principal Contractor	<ul style="list-style-type: none"> <li>Responsible for: <ul style="list-style-type: none"> <li>Overall execution of the Construction Phase for the Proposed Development and its compliance with the OCEMP and CEMPs and other management documents;</li> <li>Updating and managing the CEMPs as the Construction Phase progresses; and</li> <li>Appointing a Waste Manager if activities involve handling waste.</li> </ul> </li> </ul>
Project Manager/Director	<ul style="list-style-type: none"> <li>Responsible for: <ul style="list-style-type: none"> <li>Monitoring the performance of the CEMPs against statutory requirements and the agreed objectives and targets; and</li> <li>Reviewing and approving the CEMPs, prepared by the Principal Contractor(s) and identify any areas for improvement, checking that the Principal Contractor(s) has allocated sufficient resources to ensure delivery of the CEMPs, participating in communication with stakeholders as required and arranging for the periodic review and update of the CEMPs.</li> </ul> </li> </ul>



Individual	Role
Environmental Manager	<ul style="list-style-type: none"> <li>Responsible for: <ul style="list-style-type: none"> <li>Updating all environmental plans and registers including ensuring that the environmental measures and mitigations set out in the ES and the OCEMP are implemented on-Site and recorded within the CEMPs;</li> <li>Ensuring construction work is carried out in accordance with legislation, required consents and Construction Phase mitigation measures; and</li> <li>Developing good working relationships with key stakeholders.</li> </ul> </li> </ul>
Environmental Clerk of Works	<ul style="list-style-type: none"> <li>Responsible for: <ul style="list-style-type: none"> <li>Monitoring and ensuring that the Proposed Development proceeds in accordance with all relevant environmental construction mitigation measures; including water quality and sediment monitoring;</li> <li>Reviewing and inputting into risk assessments and environmental processes and management systems; and</li> <li>Acting as a Waste Champion who will enforce the requirements set out in the Construction Site Waste Management Plan(s) (to be produced as part of a CEMP), set waste targets and monitor all waste movements on-Site.</li> </ul> </li> </ul>
Archaeological Clerk or Works (AcoW)	<ul style="list-style-type: none"> <li>Responsible for monitoring and ensuring construction works are undertaken in accordance with the archaeological mitigation strategy (<b>Appendix 10.3: Archaeological Mitigation Strategy (Volume 3)</b>) and OCEMP.</li> </ul>
Ecological Clerk of Works (ECoW)	<ul style="list-style-type: none"> <li>Responsible for overseeing and monitoring of relevant ecological mitigation measures as set out in Outline Habitat Creation and Enhancement Plan (OHCEP) (<b>Appendix 6.4: Outline Habitat Creation and Enhancement Plan (OHCEP) (Volume 3)</b>) and Outline Landscape and Ecology Management Plan (OLEMP) (<b>Appendix 6.5: Outline Landscape and Ecology Management Plan (OLEMP) (Volume 3)</b>), and notification to Principal Contractor that construction works are undertaken in accordance with agreed ecological protocols or the relevant controlling documents.</li> </ul>
Site Waste Manager	<ul style="list-style-type: none"> <li>Responsible for: <ul style="list-style-type: none"> <li>Day-to-day waste management and maintaining Site waste registers/documentation; and</li> <li>Monitoring and managing the final disposal of regulated waste off Site.</li> </ul> </li> </ul>
Construction Manager	<ul style="list-style-type: none"> <li>Responsible for: <ul style="list-style-type: none"> <li>Organising and implementing the provision and maintenance of a working environment and systems of work that are, as far as is reasonably practicable, safe and without risk to human health or the environment; and</li> <li>Ensuring that adequate monitoring and supervision arrangements are maintained and clearly defined areas of responsibility for Contractor(s) are established and implemented.</li> </ul> </li> </ul>
Senior Health, Safety, Security and Environment Lead	<ul style="list-style-type: none"> <li>Responsible for:</li> </ul>

Individual	Role
	<ul style="list-style-type: none"> <li>• All Health and Safety processes and procedures associated with the Construction Phase, all of which will be the responsibility of the Principal Contractor(s); and</li> <li>• Ensuring that Environmental Health and Safety Rules and Responsibilities are adequately reflected for in all day-to-day operations.</li> </ul>
Site Health and Safety Advisor	<ul style="list-style-type: none"> <li>• Responsible for the development and implementation of the Health and Safety Management System.</li> </ul>
Community Liaison Officer (CLO)	<ul style="list-style-type: none"> <li>• Responsible for:</li> <li>• Acting as the first point of contact for members of the public and ensuring all local residents and stakeholders are kept informed of progress and key issues;</li> <li>• Establishing and maintaining relationships with key stakeholders, the dissemination of the construction programme to all interested parties, and dealing with queries, responding to complaints and concerns.</li> <li>• Maintaining the notification systems outside standard working hours (Paragraph 1.4.8);</li> <li>• Logging, investigating and responding to all noise-related enquiries;</li> <li>• Reporting monthly to the Principal Contractor(s) and Bedford BC on enquiries received and actions taken; and</li> <li>• Attending meetings with socio-economic taskforce.</li> </ul>
Transport Coordinator (TC)	<ul style="list-style-type: none"> <li>■ Responsible for<sup>1</sup>:</li> <li>• Delivering and monitoring the CTMP;</li> <li>• Producing and maintaining a key information pack to be distributed to all contractors, suppliers, hauliers and HDV drivers involved in the Construction Stage;</li> <li>• Monitoring the Delivery Management System (DMS) on a daily basis against the actual HDV deliveries. Any breaches of the HDV upper limits, will be reported to the Transport Steering Group (TSG) as part of the TC's reporting procedure; and</li> <li>• Every three months the TC will prepare a monitoring report and submit it to the TSG for review.</li> </ul>
Transport Steering Group (TSG)	<ul style="list-style-type: none"> <li>■ The management of the CWTP will be informed by the TSG.</li> <li>■ Responsible for:</li> <li>• Review and approve the results of the annual travel survey;</li> <li>• Review and approve any changes to car parking provision/allocation;</li> <li>• Review and consider any changes to transport services and infrastructure that may impact the uptake of sustainable modes of transport;</li> </ul>

<sup>1</sup> See **Annex 2: Construction Worker Travel Plan** for more detail on the TCs responsibilities.

Individual	Role
	<ul style="list-style-type: none"> <li>Review and approve any changes to the measures to promote and maximise the uptake of sustainable travel modes of transport;</li> <li>Issuing warning letter to the Principal Contractor(s) if requirements are not being met; and</li> <li>Liaising with stakeholders where appropriate.</li> </ul>

## 2.3 COMPETENCE, TRAINING AND AWARENESS

- 2.3.1 The Principal Contractor(s) shall identify the training needs of all employees so that they can implement the requirements of this OCEMP and CEMPs into briefings and construction method statements. The Principal Contractor(s) shall be responsible for ensuring that a competence and training tracker is in place for all Site operatives and employees. The Principal Contractor(s) training requirements and training given is recorded and monitored throughout the Construction Phase. Any training provided will be logged and any certification documents will be produced by the relevant members of staff as evidence that they hold the required competencies.
- 2.3.2 Environmental awareness will be reinforced through information, such as poster campaigns, environmental/sustainability performance indicator reports and environmental alerts available on on-Site notice boards. This will be developed further in the CEMPs.

### CONSIDERATE CONSTRUCTOR'S SCHEME

- 2.3.3 To adhere to best construction practices, once appointed, the Principal Contractor(s) will, where applicable, register the project to the Considerate Constructor's Scheme, designed to encourage best practice beyond statutory requirements. All related documentation should be appended to the CEMPs.

## 2.4 WORKER CODE OF CONDUCT

- 2.4.1 UDX will implement a Worker Code of Conduct designed to set clear expectations for the behaviour of all workers, whether on-Site or in the local community. It will be the responsibility of the Principal Contractor(s) to make sure its workers adhere to the code of conduct.
- 2.4.2 The Worker Code of Conduct, (the "Code" (Paragraphs 2.4.3 to 2.4.6)), aims to achieve the following:
- Explain the required behaviour of workers and outline the means by which the Code will be communicated. This requirement will also inform the local community of the standard of behaviour they should expect from the workers and their employers;
  - Inform workers about the consequences if the Code is not upheld; and
  - Recommend actions for workers when behaviours contrary to this Code have been observed.
- 2.4.3 The conduct of the entire Project workforce in the community is of the highest importance. The Code contains enforcement provisions designed to ensure that the entire workforce have no impact on the local community in terms of antisocial behaviour, vandalism, property destruction or other types of social crime.
- 2.4.4 It is for this reason that everyone involved with the Project is expected to:

- a) Have due respect to their own safety and the safety of others by complying with all applicable laws, rules, and regulations including UDX processes and procedures;
- b) Be ambassadors for UDX through behaviours and actions both on and off Site by not engaging in any conduct or activity that may affect UDX's reputation or otherwise cause embarrassment to the Project;
- c) Understand that anti-social behaviour, discriminatory behaviour or harassment will not be tolerated on or off Site. Workers must respect colleagues and endeavour to maintain harmonious workplace relations at all times. It is never acceptable to use abusive or derogatory language towards others or inappropriately use emails and social media;
- d) Come to work fit for work. Workers must ensure that they are not intoxicated by alcohol or under the influence of illegal drugs. Workers should not work under the influence of prescription drugs if they could reasonably expect that there may be effects on their work performance or on the safety of themselves or others. Alcohol and illegal drugs are not to be brought onto the Site;
- e) Ensure no damage of any kind is caused to property on and off Site;
- f) Ensure that any workers accommodation that may be provided is maintained in a tidy state with the proper disposal of rubbish;
- g) Ensure that personal noise levels are appropriate to the time of day and location; and
- h) Respect speed limits, be aware of other road users, agricultural vehicles and livestock.

2.4.5 From time to time the Code will be re-enforced through communication mechanisms such as toolbox talks, the worker incentive and general communication networks highlighting positive engagement by workers in the community.

- 2.4.6 It is of the highest importance that the Code is respected by workers at all levels. If someone acts in ways that are contrary to this Code, at least one of the following should be actioned:
- In the first instance discuss the person's behaviour with your immediate supervisor or line manager; and
  - Raise the matter with the relevant employer's human resources team who will investigate the complaint and, if appropriate, will follow their company disciplinary procedure which could lead to removal from the Project and potentially dismissal.

## 2.5 INTERNAL COMMUNICATION

- 2.5.1 Communication on environmental issues will take place through face-to-face conversations, email, telephone and regular construction meetings chaired by the Site Manager and attended by all relevant environmental team members.

- 2.5.2 The relevant Undertaker(s) will be made aware of all environmental issues at the earliest possible opportunity. Environmental issues identified will be entered into an environmental tracker, communicated to the relevant personnel to ensure any required actions are carried out, and closed out within an appropriate timeframe. Dissemination of information will take place in several forms as appropriate, including meetings to discuss particular project issues, method statements, task/activity briefings, toolbox talks, inductions, environmental notices and environmental alerts. Records that these have been carried out should be recorded on briefing registers. The Environmental Manager(s) will provide updates to the Principal Contractor(s) to ensure policies and procedures on display are up to date. Supervisors will also be notified of any legislation changes which may affect working practices on-Site.

## **2.6 EXTERNAL COMMUNICATION**

### **COMMUNICATION WITH THE UNDERTAKERS**

- 2.6.1 The Principal Contractor(s) will liaise regularly with the relevant Undertaker(s) and their representatives regarding the programme of works, nature of the construction operations and the methods to be employed to minimise adverse environmental impacts.

### **COMPLAINTS PROCEDURES**

- 2.6.2 The relevant Undertaker(s) will appoint an identified contact who will be responsible for fulfilling the role of Community Liaison Officer for the Proposed Development. As part of the Site set-up process, Site notice boards will be erected and thereafter maintained and clearly visible to third parties. A telephone number for environmental complaints will be published local to the Site. The Community Liaison Officer will be responsible for dealing with any complaints and will have the appropriate authority to resolve any issues that may occur. Both the Community Liaison Officer and the Site Manager's 'out of hours' telephone numbers will be available.
- 2.6.3 The CLO will maintain a close liaison with the Bedford BC Environmental Health Officer (EHO) and Central Bedfordshire Council (CBC), where relevant, at all times and should any complaints regarding environmental nuisance (e.g. dust or noise) be received by the CLO, the details will be passed to the EHO for verification purposes.
- 2.6.4 Should any unforeseen events occur within the construction Site that has the potential to cause off-Site pollution then the CLO will immediately notify the EHO by phone and e-mail. As far as possible, notice will be issued to the EHO for dealing with an unforeseen activity which may give rise to a particular environmental problem.

## **2.7 INCIDENT RESPONSE**

- 2.7.1 An Incident Response Plan will be prepared by the Principal Contractor to highlight actions to be undertaken in response to an environmental incident occurring on-Site and will be reviewed and agreed by the Environmental Clerk of Works and/or Site Health and Safety Advisor. This will likely include reference to the scope of the incident and procedure for responding to such environmental incidents, including approach to investigation and reporting. These procedures will be set out by the Principal Contractor(s), detailed in the CEMPs and updated throughout the Construction Phase. They shall be reviewed and agreed by the ECoW and any Safety Advisor(s).

## 3 ENVIRONMENTAL MITIGATION MEASURES

---

### 3.1 INTRODUCTION

- 3.1.1 An outline of environmental mitigation measures to be implemented during the Construction Phase is set out below. These reflect the mitigation measures presented in ES **Volume 1**.

### 3.2 ECOLOGY AND NATURE CONSERVATION

- 3.2.1 These Construction Phase mitigation measures are consistent with those which are committed to within **Chapter 6: Ecology and Nature Conservation (Volume 1)**.

#### GENERAL CONSTRUCTION MEASURES

- 3.2.2 The following general measures will be followed during the Construction Phase and will help to avoid and reduce risks to protected and/or notable species as well as the protection of retained habitats and designated sites.

#### GENERAL SITE MANAGEMENT

- 3.2.3 General environmental protection measures must be implemented during the Construction Phase of the Proposed Development. Such measures include best environmental practice guidance outlined in the Government's Pollution prevention for businesses (DEFRA, 2019) and those outlined by the Construction Industry Research and Information Association guidance (CIRIA, 2015). The following minimum standards must be adhered to, to minimise negative ecological effects beyond the Proposed Development boundary:

- Appointment of an ECoW to provide an advisory role throughout the Construction Phase of the Proposed Development. The ECoW should be of a sufficient competency (as defined by guidance from Chartered Institute of Ecology and Environmental Management) to fulfil their duties. A competency standard for the ECoW will be outlined in the CEMPs;
- Measures must be taken to protect retained and created habitats within the Ecological Enhancement Areas (EEAs)<sup>2</sup>, including measures to avoid dust and pollution prevention during construction;
- Hedgerows, where retained, must be protected by measures including incorporation of an appropriate buffer (a minimum of 3m to the base of the hedgerow) between the retained hedgerow and works activities, demarcated with appropriate protection fencing e.g. Heras fencing or similar;
- Chemicals and fuels must be stored in secure containers located away from watercourses or water bodies. Spill kits must be available;
- Appropriate drainage arrangements must be implemented to intercept, capture and attenuate surface water runoff;

---

<sup>2</sup> Areas where measures have been put in place to improve their ecological condition, for example, the installation of bird nesting boxes.

- Retained trees must be protected in accordance with the Arboricultural Method Statement (as required by Planning Condition 22 and described in **Section 4.5** of the **Arboricultural Impact Assessment Report (Document Reference 6.11.0)**);
- Excavations will be covered overnight or otherwise protected to prevent animals falling in. Open pits, open pipes and other excavations will be covered at the end to prevent mammals being trapped. Excavations should be checked first thing each morning, prior to the start of works that day. Any animals found within excavations should be allowed to escape and move off, or carefully removed and placed within suitable habitat cover before Site works recommence;
- Noise and vibration will be controlled via the implementation of best practicable means (BPM), as defined in Section 72 of the *Control of Pollution Act 1974*. Further details are provided in **Section 3.7** of this document;
- Where practicable, construction compounds and on-Site working areas should be sited away from sensitive features such as known bat roosts, watercourses and running water habitats to avoid/minimise the risk of disturbance and polluted run-off/wastewater entering these habitats from the compounds; and
- Appropriate protective fencing and signage will be installed around retained habitats during construction works. This may include the use of solid hoardings, to reduce visual and noise effects from construction activities.

3.2.4 All safeguards outlined above will be implemented prior to the start of construction work and will remain in place until the end of the construction period.

## PRE-COMMENCEMENT SURVEYS

3.2.5 Pre-commencement surveys to confirm the continued absence of protected or otherwise notable species and/or to inform detailed mitigation and/or licensing will be required where relevant to the part of the Site being affected. In some cases, it may be possible to rely on EIA survey data (presented in the ES) to inform the Construction Phases, depending on the validity of the data (in accordance with Chartered Institute of Ecology and Environmental Management guidance), relating to the following species:

- Badger;
- Birds;
- Bats; and
- Otter.

3.2.6 A pre-construction survey for Invasive non-native plant species would be completed in the active growing season (approximately April to August inclusive) prior to vegetation and Site clearance commencing within any part of the Site.

## CONSTRUCTION LIGHTING MANAGEMENT PLAN

3.2.7 Night works should be avoided where practicable to reduce the lighting of sensitive habitats and potential disturbance to species. Lighting levels will be kept to the minimum necessary for security and safety.



3.2.8 Where use of artificial lighting cannot be avoided, any temporary lighting during construction will follow guidance produced by the Institution of Lighting Professionals (ILP) in conjunction with the Bat Conservation Trust (BCT). This may include the following recommended measures:

- Temporary lighting used for construction will be switched-off when not in use;
- Avoid light spill onto known bat roosts, trees, woodland edge, hedgerows and watercourses;
- Light spill to be minimised through good design, with physical shields installed where necessary;
- Creation of a 'buffer zone' of very low illuminance (if any) adjacent to established or proposed key habitats, such as treelines;
- Landscaping measures in the form of scrub and tree planting to further act as secondary mitigation to screen and soften the effects of installed artificial construction light sources;
- Use the minimum light levels necessary for the relevant task/function, this may equate to reducing light intensity, and/or using the minimum number of light sources or minimum column height that can be achieved;
- Use narrow spectrum light sources where practicable to lower the range of species affected by lighting. Specifically, this should avoid shorter wavelength blue light, using instead warm/neutral colour temperature lighting; and
- Use light sources that emit minimal ultra-violet light to avoid attracting night-flying invertebrate species.

## DESIGNATED SITES

3.2.9 See 'General Construction Measures' above, 'Aquatic Ecology' and 'Invasive non-native species' below.

3.2.10 Mitigation measures to address the potential effects of increased flood risk upon designated sites are secured by **Appendix 12.1: Flood Risk Assessment (Volume 3)** and are not repeated here.

## BATS

3.2.11 Measures to be undertaken for the protection of bats during the Construction Phase are set out below:

- Pre-construction surveys of previously confirmed or potential bat roosts will be required, depending on the results of ongoing surveys and on the timing of demolition and vegetation clearance works;
- A European Protected Species Mitigation Licence (EPSML) will be required from Natural England to enable some works to commence. This licence would be required prior to the start of vegetation clearance or demolition works. Where necessary, confirmed roosts, and moderate and high suitability trees and buildings, will be felled or demolished under licence, pursuant to a method statement approved as part of an EPSML;
- A toolbox talk will be provided by the Ecologist named on the Natural England bat licence (defined as the Named Ecologist) or appointed accredited agent to the Principal Contractor(s) (and sub-contractors as required) where there is a risk of Site staff encountering bats, to outline the proposed works, actions to take if a bat is encountered and their legal responsibility regarding bats and their roosts;



- The EPSML will include details of the provision of bat boxes to be installed, and veteran features to be created, to provide replacement roosting features. Surveys have confirmed the presence of bat roosts in at least one existing structure and several trees within the Site. Therefore, as part of the EPSML, replacement roost structures would be provided appropriate to the nature of the roost(s) lost. Replacement roost features will be installed in suitable locations in advance of the tree being pruned or felled or structure demolished under the discretion of the Named Ecologist for the EPSML;
- Measures to mitigate potential risk of harm and disturbance of bats during the Construction Phase of the Proposed Development will also be included within the method statement which is embedded within the EPSML. Where works are not defined as being subject to licensing but require a precautionary working approach these will be included in a non-licensed Precautionary Works Method Statement (PWMS) which should be included within the Toolbox Talk;
- The EPSML will also include timings for which works can occur on trees which have been identified to have potential bat roost suitability (PRF or PRF-M as identified within **Appendix 6.10: Bat Roost Appraisal Report (Volume 3)**), to avoid sensitive periods for roosts (i.e. hibernation or maternity);
- The tree felling protocol, within the EPSML, will also include additional mitigation measures for temporary retained roosts, during the construction period. Where a roost will be lost but is required to be temporarily retained to avoid sensitive periods (i.e. hibernation or maternity) retention of vegetative buffers and temporary flightlines (hedgerows) will be required;
- Where structures and trees identified as confirmed roosts are to be retained, suitable buffer zones to those structures and trees will be defined within the EPSML. These buffers will also include areas of connective vegetation to be retained leading to/from the roost. Any works within the buffers of these trees must be agreed in advance with the Named Ecologist or their accredited agent and in line with the granted EPSML;
- Felling methodologies for all negligible or low roost suitability trees (defined as PRF-I and identified within **Appendix 6.10: Bat Roost Appraisal Report (Volume 3)**) will be covered by a PWMS for the Proposed Development and completed under direction of the ECoW.
- Ecological watching briefs for buildings/structures/trees/features with bat roost suitability or confirmed as bat roosts will be carried out by the ECoW. Works to remove features of bat roost potential will be carried out by hand/using hand tools by contractors with support from a suitably experienced and licensed bat Ecologist (or their Accredited Agents/Assistants) acting as an Ecological Clerk of Works (ECoW). Once all potential/confirmed bat roost features have been removed, buildings can be demolished. Prior to commencement of works, all contractors will be briefed and provided necessary site briefings and methods statements
- Measures to avoid and/or reduce effects of noise on bats, from activities such as piling will be embedded within the CEMPs at each phase of the Proposed Development. This will include timing of works to either set a level of disturbance before sensitive periods for roosts (i.e. hibernation or maternity) or to avoid works during these periods. The Named Ecologist will work with the Environmental Manager to develop this plan in line with the requirements within the EPSML and to ensure consistency with the CEMPs submitted for approval;
- Temporary lighting during construction will be adopted in accordance with the Construction Lighting Management Plan (see Paragraphs 3.2.7 and 3.2.8 above) which will adopt measures

to avoid bat sensitive habitats and features. This will be referred to in the EPSML application if an EPSML is required;

- Where compounds cannot be located away from sensitive habitat features, buffer stockpiles will be installed at the edge of compounds between retained hedgerows or blocks of woodlands. They will be designed to create a barrier to reduce light spill and attenuate noise to minimise disturbance; and
- Consideration of the potential effects of noise upon retained habitats and features of interest to bats will be made by planning high noise activities such as piling or rock crushing activities at least 50m away from existing or replacement roost locations (at the time of that stage of construction). These measures will be subject to engagement between the Principal Contractor(s) and the Named Ecologist and captured during the Construction Phase and embedded within the associated CEMPs.

## **BADGER**

- 3.2.12 A mitigation licence will be required from Natural England prior to the commencement of any construction activities which are located within proximity to (typically a 30m radius) of a badger sett. Works should be undertaken in accordance with the measures outlined in the licence method statement agreed by Natural England and embedded within the mitigation licence. A summary of the mitigation measures to be included in any such licence is provided below.
- 3.2.13 The badger licence application would list the setts that would require closure (permanent or temporary) under the Natural England licence. Setts that fall within 30m of construction activities such as piling or rock crushing or significant ground excavations, but which can be retained, may need to be closed under licence prior to the commencement of these activities within this exclusion zone.
- 3.2.14 Artificial sett(s) are usually required prior to the planned closure or destruction of a main sett. Any required artificial setts would be constructed prior to the closure of setts, in accordance with the methodology to be included in the licence. The exclusion and closure of badger setts can only be undertaken between 1 July – 30 November (inclusive; although these periods are subject to potential extension until end of December at the discretion of Natural England as the licensing body). Artificial setts would be protected throughout construction and remain protected in-situ in the operational phase.
- 3.2.15 The Badger Licence would also include measures to minimise the risk of damage or disturbance to retained setts, methods to close setts not currently in use, and best practice protocols.
- 3.2.16 As outlined above, to address the risk of badgers creating new setts over time, a pre-construction badger survey, focus on reaffirming the status of setts previously identified and confirming no additional badger setts have been created, will be carried out a maximum of three months in advance of initial commencement of construction or Site establishment activities in areas of potential badger habitat to reaffirm the status of badger setts within the Site.
- 3.2.17 The following measures will be undertaken to mitigate any potential impacts on badger populations arising from the Proposed Development, where deemed licensable (e.g. closure of active setts or within proximity to setts where temporary closures are required) and will be included in the badger licence method statement:

- A sett inspection would be completed within one week in advance of Site clearance/badger mitigation commencing as defined by the licence. These surveys would reconfirm levels of badger activity immediately in advance of Site clearance/badger mitigation commencing. This would allow identification of any additional mitigation required, in the unlikely event levels of activity had increased or locations had changed in the three months prior to Site work commencing;
- Where badger setts are to be retained and construction works are required nearby, a buffer zone will be established by use of fencing and signage around setts. No activities which involve ground work/excavations or vehicle movements will be possible within this buffer zone; and
- All vegetation clearance works within 20m of known badger setts will be completed with support of a suitably qualified ecologist (SQE). Prior to the start of vegetation clearance, the area within 10m of any badger sett entrance that displays signs of current use by a badger must be clearly marked using coloured tape, string, paint or other markers. Any further setts which are discovered during vegetation clearance must be similarly marked as soon as their presence becomes known.

3.2.18 Badgers use the wider area for foraging and commuting purposes and therefore measures need to be put in place during the Construction Phase to minimise effects upon badger movement and foraging activity. Measures stated in Section 3.7 of this document will also mitigate disturbance impacts to badger. Additional measures to be set out in the CEMPs will include the following:

- Fencing off or covering dangerous areas of the construction Site (e.g., deep excavations) with badger proof fencing; or providing a means of egress from shallow excavations, such as animal ladders;
- Avoidance of storage of plant and materials on areas of potential foraging habitat (e.g., retained grassland);
- Enforcements of appropriate speed limits for on-Site traffic to minimise the risk of collisions with badgers;
- Avoidance of night works where practicable, unless specifically required, to avoid disturbance by artificial lighting; and
- Where required use of lighting hoods, cowls or shields to avoid light spill onto setts or badger paths.

3.2.19 If any potential or confirmed additional badger setts are identified during works, these should be checked by the SQE or Named Ecologist prior to any clearance works to confirm their status. The Named Ecologist should be engaged with should an active sett be identified to determine whether an amendment to the licence is required.

## **OTTER**

3.2.20 In addition to the 'General Construction Measures' above the following measures would be completed specifically in relation to otter and set out in the CEMPs:

- Pre-construction surveys will be carried out to re-assess and determine status of otter on watercourses and water bodies within 250m from construction areas. Survey will be completed prior to construction works commencing;

- Avoidance of any obstructions to established otter paths and access to open water;
- The marking of, and adherence to, 30m exclusion zones around any holts and shelters identified prior to Site clearance and construction activities commencing. If otters are known or suspected to be breeding, the exclusion zone could be extended to a 200m radius. However, it could be reduced to 100m depending on the nature of the works, topography, and natural screening. This would require judgement from the ECoW; and
- Where works are within the vicinity of a watercourse or water body known or assumed to support otter but will not be directly impacted by the Proposed Development (e.g. sections of Elstow Brook in the Lake Zone, and the water bodies in the Lake Zone) a 10m Riparian Zone will be maintained along the watercourse/to the edge of the water body and the working area wherever practicable. The area will be demarcated to prevent encroachment onto otter habitat.

3.2.21 If breeding was confirmed and exclusion zones of the size set out above were not possible, works would likely need to be undertaken in accordance with an EPSML to derogate the legislation protecting otter (it should be noted that a licence would not normally be granted to affect a holt whilst in use for breeding). As part of any licence, appropriate alternative habitat would be provided in advance of the impact occurring. Works within 30m of a holt, or 100-200m of an active natal den, might need to be delayed until a Natural England otter licence has been obtained, or the holt is no longer in use.

## **WINTERING BIRDS**

- 3.2.22 General construction measures will be employed to minimise the effects of noise pollution, dust and air pollution and visual intrusion during the Construction Phase. To minimise disturbance to wintering birds, particularly within wetland habitats located east of the Lake Zone (Kempston Hardwick Pits) and Core Zone (Coronation Pits), the duration of vegetation clearance would be limited to the shortest time possible.
- 3.2.23 Strict adherence to construction working zones and fencing around zones will restrict access into Ecological Enhancement Areas and will reduce potential effects during the Construction Phase.

## **BREEDING BIRDS**

- 3.2.24 Vegetation clearance within areas of highly suitable habitat will be undertaken outside of the bird nesting period (generally considered to be from 1 March to end August inclusive) wherever practicable.
- 3.2.25 If carried out during the breeding season (considered to be from March to August inclusive), vegetation and Site clearance could cause the destruction or damage of active nests and any eggs or live young present. The following measures will therefore be implemented:
- Should it be deemed necessary to remove habitats suitable for breeding birds during the breeding season, these habitats would be subject to a pre-clearance watching brief by a ECoW. The watching brief will be undertaken a maximum of 48 hours prior to the vegetation removal taking place (unless otherwise stated by the ECoW);
  - In the event any active nests are found or suspected, clearance works would be halted within a minimum distance of 5m from the nest. This buffer distance would be varied on the advice of the ornithologist experienced ECoW, dependent on the nature of affected habitats and the species

of bird involved. Clearance works would not recommence until any young had fledged and left the nest, with a re-inspection by the ECoW to confirm the absence of active nests;

- Activities such as piling or rock crushing will be timed to avoid the dawn chorus during the nesting season (dawn chorus is the period before dawn, when most species of songbirds call most frequently and at their loudest; specific timings will vary based upon sunrise time, but this will generally extend to a period between 05:00 – 08:00) in accordance with guidance provided by the SQE. Mitigation detailed in the **Section 3.7** of this document will be adhered to; and
- Ground nesting species may be dissuaded from nesting in construction/Site access routes by removing the surface vegetation from the desired area and maintaining it as bare ground before the breeding season commences. Where this is not possible appropriate deterrent measures such as potential use of noise devices will be deployed to deter birds from nesting, followed by the completion of a pre works survey to check for presence of nests.

## **SCHEDULE 1 BIRDS**

- 3.2.26 Prior to any construction works commencing, a pre-works check for nesting Schedule 1 bird species will also be carried out on Potential Nest Sites (PNS) or areas identified by the previous breeding bird surveys within the Proposed Development by a ECoW. The ECoW will determine areas where additional survey is required at that time.
- 3.2.27 If a Schedule 1 bird species is identified during the pre-clearance checks, then works shall cease. The ECoW would then determine an appropriate course of action. Monitoring of any nest of a Schedule 1 species may require an ECoW to hold a specific Natural England Schedule 1 survey licence defined as a A27 licence). If any active nests are recorded, to avoid the risk of intentional or reckless disturbance the ECoW (who should be an appropriately experienced ornithologist) will determine an appropriately sized buffer around the active nest.
- 3.2.28 All PNS identified within the Site will be removed (when not in use) to further minimise the risk of disturbing Schedule 1 birds during construction. The radius will be determined by the ECoW prior to construction activities commencing on-Site. To prevent Schedule 1 birds from accessing the PNS and support compliance with legislation, an ECoW who holds a Schedule 1 licence or suitably experienced ornithologist will undertake nest exclusion measures to prevent Schedule 1 species commencing nesting at the PNS. This may involve removing and relocating the nesting site to an appropriate location away from construction works, or capping the PNS, outside the breeding season and in advance of works. This work should take place September to February inclusive (outside of the typical nesting season). Compensatory nest sites should be in place at least 30 days in advance of the commencement of works, where practicable. Temporary mitigation measures such as capping should remain in place for the duration of the construction period and be removed in the winter prior to commencement of the Operational Phase of the Proposed Development.

### **Barn Owl**

- 3.2.29 Should evidence of a PNS for barn owl be identified within 150m of the Proposed Development either during the pre-commencement surveys or during clearance works outside of the bird breeding season, then an ECoW should be contacted to undertake nest exclusion measures, and an alternative nesting site should be provided. If a barn owl PNS needs to be removed, compensatory nest sites would be provided as soon as practicable, and prior to the removal of the existing PNS.

3.2.30 If a PNS is identified during clearance works within the bird breeding season, or if any identified PNS are unable to be removed or excluded prior to the commencement of works, then the following guidelines will be followed:

- An ECoW should be engaged prior to the commencement of works to survey the PNS for evidence of Schedule 1 breeding activity;
- Should the PNS be identified as an occupied breeding site then a protection zone should be defined based on the potential for disturbance, to be determined by the ECoW; and
- Should it not be possible to implement the required protection zone distance, monitoring of the status of the nest site will be made.

## REPTILES

- 3.2.31 Habitats such as tussocky grassland, woodland, scrub, wetland, field margins and boundary features such as ditches and hedgerows identified within the Site have potential to support reptiles.
- 3.2.32 Habitat removal or alteration has potential to result in an increased risk of harm to individual reptiles. Mitigation measures to minimise the risk of harm to individual animals and avoid detrimental effects upon the local populations will be detailed in a Reptile Method Statement, as part of the CEMPs.
- 3.2.33 The Reptile Method Statement will comprise the following main elements:
- The identification and establishment of one or more translocation receptor area(s);
  - The trapping and translocation of reptiles from areas to be affected by the Proposed Development;
  - Destructive search methods; and
  - The creation and enhancement of additional areas of habitat for the benefit of reptiles.
- 3.2.34 The reptile receptor site would be established in the Northern Ecology Area, as shown in **Figure 1: Indicative Habitat Creation and Enhancement Plan of Appendix 6.4: OHCEP (Volume 3)**. Artificial refugia such as log piles would be created within the receptor site to provide shelter for translocated reptiles and suitable habitat for hibernation. Habitat creation measures are set out in **Appendix 6.5: OLEMP (Volume 3)**.

## Translocation

- 3.2.35 In some areas of the Site particularly within the Lake Zone, surveys have confirmed that reptile populations are large enough to warrant a dedicated trapping and translocation operation to sufficient mitigate the risk of harm, combined with sensitive habitat removal in advance of construction. These measures would be completed in advance of works and during the season in which reptiles are active (i.e. broadly speaking March to October, subject to weather conditions). The perimeter of any trapping area should be fenced with reptile exclusion fencing and all suitable reptile habitat where reptiles have been recorded 'trapped out'.
- 3.2.36 The trapping would include the deployment of a high density of artificial refugia (i.e. 100 or more per hectare) which are then checked regularly by a surveyor, under suitable weather conditions. It is possible that habitat alteration methods could be used in combination with trapping and translocation to enable reptiles to be excluded from the works area earlier within the trapping period. Such methods could involve the removal of vegetation using 'Destructive search methods' as



described below. The extent and scope of these measures will depend on the locations where works are required in any given year.

- 3.2.37 Once five suitable days have passed in which no reptiles have been captured, sensitive vegetation clearance and a destructive search should be completed to confirm the absence of reptiles. Both throughout the trapping period and following completion the exclusion fencing would be maintained to minimise the risk of any reptiles from habitat adjacent to the works area re-entering the exclusion area. Reptile exclusion fencing would be checked on a regular basis during the main reptile active season and repaired as necessary.

### **Destructive Search Methods**

- 3.2.38 The following destructive search methods should only be used during the reptile active season when it is considered there is low potential for reptiles to be encountered (i.e. following trapping and translocation of reptiles, where very minimal areas of suitable habitat are due to be affected, or if survey work conducted has confirmed population sizes are very low such that a trapping operation is not warranted).
- 3.2.39 The ecologist will give a toolbox talk to the vegetation clearance contractors; this will include:
- A brief introduction to the widespread reptile species which potentially may be discovered on the Site; and
  - Precautionary working methods, including those which may form a PWMS to be employed and permitted equipment types.
- 3.2.40 Vegetation clearance would generally be completed using hand tools (these can include mechanical hand tools such as brush cutters or chainsaws) but may also be carried out by low ground pressure tracked/wheeled cutting equipment across larger (>0.1ha) extents of similar habitat e.g. areas of continuous grassland. Clearance would move towards retained habitat on or adjacent to the Site (where not all habitat is due to be removed and connecting habitat is available). The steps listed below must be completed:
- Targeted hand search by ecologist for reptiles within vegetation to be cleared;
  - Clearance of vegetation to 200mm above ground level;
  - Re-inspection of vegetation by ECoW; and
  - Clearance to ground level (or as close as is practicable).
- 3.2.41 Any active reptiles found must be captured by an ECoW or those persons appointed as appropriate experienced by the ECoW and placed into a soft cloth bag before being moved to the receptor site or adjacent suitable habitat lying outside the working area. To reduce the chances of predation, any captured animals would be placed under suitable natural or artificial refugia.
- 3.2.42 Once the vegetation has been reduced to ground level (or as close as is practicable), any remaining features with suitability for sheltering reptiles should be dismantled/soil-stripped under a targeted ecological watching brief. This would typically involve use of a 360 degree tracked excavator (7 tonne or similar). The topsoil and any debris would be spread on to the ground to allow the ecologist to search for any remaining reptiles, in the unlikely event that animals are present.
- 3.2.43 Should the removal of any rubble, brash, log piles or other materials suitable for reptile hibernation be required as part of the Proposed Development this will only be undertaken outside of the reptile

hibernation period (considered to be November to February inclusive) and under with oversight from the ECoW.

- 3.2.44 Works should cease, within the immediate vicinity, and the advice of the ECoW be sought if any reptiles are discovered during works when an ecologist is not present.

### **AMPHIBIANS (INCLUDING GREAT CRESTED NEWT)**

- 3.2.45 Due to the presence of great crested newt (GCN) within the Site and surrounding area, a mitigation licence will be required. Habitat removal or alteration has potential to cause a risk of harm to individual GCN.

- 3.2.46 Works must proceed in adherence to the requirements of the District Licensing Scheme (DL) for Bedfordshire. Construction works must only commence once approval for the Site to be covered under the DL has been given by Bedford Borough Council.

- 3.2.47 The following requirements relating to the great crested newt DL has been set out by NatureSpace Partnership Ltd and will apply upon entry to the District Licence scheme. It concerns works that will be undertaken during the Construction Phase and will be enforceable by Bedford Borough Council for the Site to be authorised under the District Licence.

- No part of the development hereby permitted shall take place except in accordance with the terms and conditions of the Council's Organisational Licence (WML-OR152, or a 'Further Licence') and with the proposals detailed on an impact plan and associated District Licensing scheme documents, as required, to be agreed with NatureSpace Partnership Limited during the detailed design stage for such part.
- No part of the development hereby permitted shall take place unless and until a certificate from the Delivery Partner (as set out in the District Licence WML-OR152, or a 'Further Licence'), confirming that all necessary measures regarding great crested newt compensation have been appropriately dealt with for such part, and a copy of such certificate has been submitted to the planning authority and authorisation under Bedford Borough Council's District Licence has been given.
- No development hereby permitted shall take place except in accordance with Part 1 of the Great Crested Newt Mitigation Principles, as set out in the District Licence (WML-OR152, or a 'Further Licence') and in addition in compliance with the following:
  - *Works to existing ponds onsite may only be undertaken during autumn/winter, unless otherwise in accordance with the Great Crested Newt Mitigation Principles;*
  - *Works which will affect likely newt hibernacula may only be undertaken during the active period for amphibians;*
  - *Prior to the commencement of any part of the development, capture methods must be used at suitable habitat features in such part (i.e., hand/destructive/night searches), which may include the use of temporary amphibian fencing, to prevent newts moving onto a development site from adjacent suitable habitat, installed for the period of the development (and removed upon completion of the development); and*
  - *Prior to the commencement of any part of the development, Amphibian fencing and pitfall trapping must be undertaken at suitable habitats and features in such part.*



- 3.2.48 The reason for this is to ensure that adverse impacts on great crested newts are adequately mitigated and to ensure that site works are delivered in full compliance with the Organisational Licence (WML-OR152, or a 'Further Licence'), section 15 of the National Planning Policy Framework, Circular 06/2005 and the Natural Environment and Rural Communities Act 2006.

## AQUATIC ECOLOGY

- 3.2.49 All Site staff should be made aware of the need to protect watercourses from contamination, including through implementation of EA and CIRIA guidance. This will be communicated via Toolbox Talks presented by an SQE.
- 3.2.50 Appropriate measures to protect the water environment should be implemented during construction, to eliminate or minimise risk to aquatic habitats, flora, and fauna (see **Section 3.10** for further details).
- 3.2.51 The following would be implemented during the Construction Phase and set out in the CEMPs:
- Sediment management and water quality monitoring would be implemented during any construction works with the potential to affect watercourses;
  - Preparation of a plan for appropriate remediation measures to address any adverse effects should they occur;
  - When construction activities, including stock-piling and plant and vehicle washing, occur near a watercourse they should be separated from the watercourse with barriers (e.g. sediment fences) to prevent surface runoff from these Sites entering the watercourse. Construction activities should be as far from the bank top of a watercourse and/or connected hydrological pathways as practicable. Works within 8m of watercourses require an environmental permit from the Environment Agency (or relevant authority), which will be obtained prior to commencement of works;
  - The extent of vegetation clearance should be limited as far as practicable near to watercourses. Where possible, any vegetation removed should be managed carefully to limit the extent of bare soil on-Site at any given time, to limit the potential for sediment run-off during wet weather;
  - Impacts to vegetation within the riparian zone during the enabling works and Construction Phase should be monitored for recovery and suitably reinstated;
  - Works should avoid being carried out on soft riverbanks wherever practicable to avoid compaction, erosion, and sediment release. Where temporary crossings or permanent structures are being constructed on watercourses, these works should remain localised within proximity to the structure;
  - Activities such as concrete pouring will be carried out in line with industry best practice, such as use of concrete washout points to avoid lorries and pumps runoff contamination and temporary works procedures to avoid spillages;
  - Sensitivity (to noise and vibration) of those fish species present should be considered to implement appropriate construction methods to minimise and avoid disturbance. Construction will comply with measures set out in the **Section 3.7** of this document. Should sheet piling be required in close proximity to a watercourse then a soft-start piling method should be implemented. Timing of construction activities near watercourses should allow for fish dispersion;

- A construction exclusion zone from the water's edge of at least 10m on Elstow Brook, will be enforced to reduce potential impacts to watercourses/water bodies;
- Should any part of a watercourse need to be impounded during the works, then a fish translocation exercise may need to be carried out. Fish translocation operations will require a permit from the EA. A fish translocation method statement to accompany the permit application will be prepared. Any such operation will need careful co-ordination with the Principal Contractor(s) to set-up and drain any coffer dam or impounded areas;
- Where culverts are required, they would be constructed with due regard to the Environment Agency fish pass manual (Armstrong et al., 2010), and be placed so that the invert level is below the existing bed level, to prevent impedance of fish movement; and
- Any floodplain areas modified or created should be designed to allow fish passage back into watercourses following flood events, avoiding fish entrapment.

3.2.52 The Construction Lighting Management Plan will provide that lighting used for construction must be switched-off when not in use and, where possible, positioned so as not to spill onto watercourses. A dark corridor should always be maintained overnight within watercourses to allow fish passage.

### **TERRESTRIAL INVERTEBRATES**

- 3.2.53 Should the removal of any rubble, brash or log piles be required as part of the Proposed Development then a PWMS similar to that proposed for reptiles should be employed. Prior to removal, a Toolbox Talk will be presented by an SQE.
- 3.2.54 Mitigation will entail the careful clearance of suitable terrestrial invertebrate habitats, particularly those in the Lake Zone. Where any deadwood habitat is removed, this will be retained and incorporated within the areas of proposed landscaping for the Proposed Development.

### **ADDITIONAL SPECIES OF PRINCIPAL IMPORTANCE AND ANIMAL WELFARE CONSIDERATIONS**

- 3.2.55 The Site is anticipated to support Species of Principal Importance (SPI) including brown hare, hedgehog and common toad. SPI are considered crucial for biodiversity conservation in the UK and listed under Section 41 (England) of the *Natural Environment and Rural Communities (NERC) Act 2006*. Public bodies, including local authorities, have a legal duty to consider the conservation of these species when carrying out their functions. This includes taking actions to protect and enhance their habitats.
- 3.2.56 In addition to the 'General Construction Measures' above, mitigation for SPI would comprise of the following measures which would be outlined in a method statement prepared and overseen by the ECoW:
- Clearance works will avoid the hibernation period in areas of suitable habitat for hibernation (indicatively November-February inclusive, but weather dependent);
  - Ecological Site support will be required during animal burrow excavations and vegetation/Site clearance activities; and
  - Animal burrows on-Site will be inspected by the ECoW to confirm the likely absence of protected species or habitat, and then carefully excavated in a manner that allows animals to safely escape before works commence.

- 3.2.57 Any potential existing refugia on-Site (e.g. log piles) will be dismantled by hand and relocated to retained areas.
- 3.2.58 Works will be temporarily halted if individual animals are encountered to allow the animal to disperse from the work Site. If toads do not disperse from the work Site, they can be carefully moved by hand by either the ECoW or an appointed Contractor representative, taking care to avoid any injury, and relocated to a suitable area in proximity.
- 3.2.59 This activity will be supervised by an ECoW to minimise the risk of harm to Species of Principal Importance, who will hand search vegetation for these species prior to clearance each day.

### **INVASIVE NON-NATIVE SPECIES**

- 3.2.60 Construction activities within the Proposed Development could potentially result in the spread of invasive non-native species into areas they do not currently occupy.
- 3.2.61 To address the risk of spreading invasive non-native plant and animal species a detailed invasive species strategy which would include a method statement would be produced by the Principal Contractor(s) alongside the CEMPs. This strategy would include and develop the following measures:
- A pre-construction survey for Invasive non-native plant species would be completed in the active growing season (approximately April to August inclusive) prior to vegetation and Site clearance commencing in any part of the Site;
  - Measures to prevent the spread of any invasive species across and beyond the Site will include exclusions zones around identified areas of invasive species where no works are to take place with. Invasive species removal carried out by a specialist contractor;
  - Briefing and training of workers on good biosecurity practices appropriate to their role;
  - Equipping workers with the necessary equipment, PPE and substances to implement biosecurity control measures, including effective hygiene and sanitation practices. This will most frequently comprise disinfectant tablets, sprayers and brushes to clean and disinfect equipment and PPE prior to leaving Site;
  - Ensure that Defra's "*Check, Clean, Dry*" principles are followed and aim that all PPE and survey equipment is clean and dry (and if necessary, disinfected) prior to going to and from Site; and
  - Survey for mink presence to assess the risk of Water Vole predation, and measures to avoid incidental movement of other non-native species such as signal crayfish (*Pacifastacus leniusculus*) prior to any translocation activities, if required.

3.2.62

- 3.2.63 **Table 3-1** summarises the recommended monitoring of ecological mitigation measures during the construction of the Proposed Development. These recommendations will be further refined as part of the production of the CEMPs for the Proposed Development. Monitoring beyond the Construction Phase will be detailed in the Landscape and Ecological Management Plan (LEMP) for the Proposed Development. See **Appendix 6.5: OLEMP (Volume 3)** for more information.

**Table 3-1 – Monitoring of Ecological Mitigation Measures during the Construction Phase**

Feature	Construction Monitoring
Aquatic Habitats	Impacts to vegetation within the riparian zone should be monitored for recovery and suitably reinstated. Sediment management and water quality monitoring.
Bats	Measures to align with the monitoring strategy as part of any EPSML. Monitoring of alternative roosting opportunities. Regular checks of tree protection fences by the Named Ecologist, accredited agent or an appropriate person, appointed by the Named Ecologist.
Badger	Monitoring as stated in any Badger licence subsequently secured. Monitoring will be required to confirm badgers have relocated to any artificial setts prior to construction. Checking for new burrows for badgers or other burrowing animals within or adjacent to the Proposed Development extent. Regular checks of implemented mitigation measures by an SQE.
Breeding birds	Regular checks for breeding birds and of tree and habitat protection measures during the breeding season by an SQE.
Reptiles	Regular checks for reptiles and of implemented mitigation measures by an SQE.
Amphibians	Regular checks of implemented mitigation measures by an SQE.
Terrestrial Invertebrates	Regular checks of implemented mitigation measures by an SQE.
Additional Species of Principal Importance and animal welfare considerations	Checking for new burrows for burrowing animals within or adjacent to the Proposed Development site boundary. Regular checks of tree and habitat protection fences by an SQE. Regular checks of implemented mitigation measures by an SQE.

### 3.3 OUTLINE CONSTRUCTION TRAFFIC MANAGEMENT PLAN

- 3.3.1 The OCTMP sets out the phasing and strategy, the management measures, the monitoring approach and the compliance structure aimed at regulating and spreading construction trips across the day.
- 3.3.2 A Construction Worker Travel Plan (CWTP) also forms part of this OCEMP and is appended as **Annex 2: Construction Worker Travel Plan**. The CWTP sets out management measures for how workers will get to and from Site during construction.
- 3.3.3 This section therefore outlines the proposed arrangements for the management of construction traffic. It sets out the key principles of how construction traffic during the Construction Phase will be managed, including measures that would be implemented within the wider context of this OCEMP. Where detailed information is included, it relates to the Primary Phase of the Proposed Development.
- 3.3.4 This OCTMP and its implementation will involve a number of participants, including:

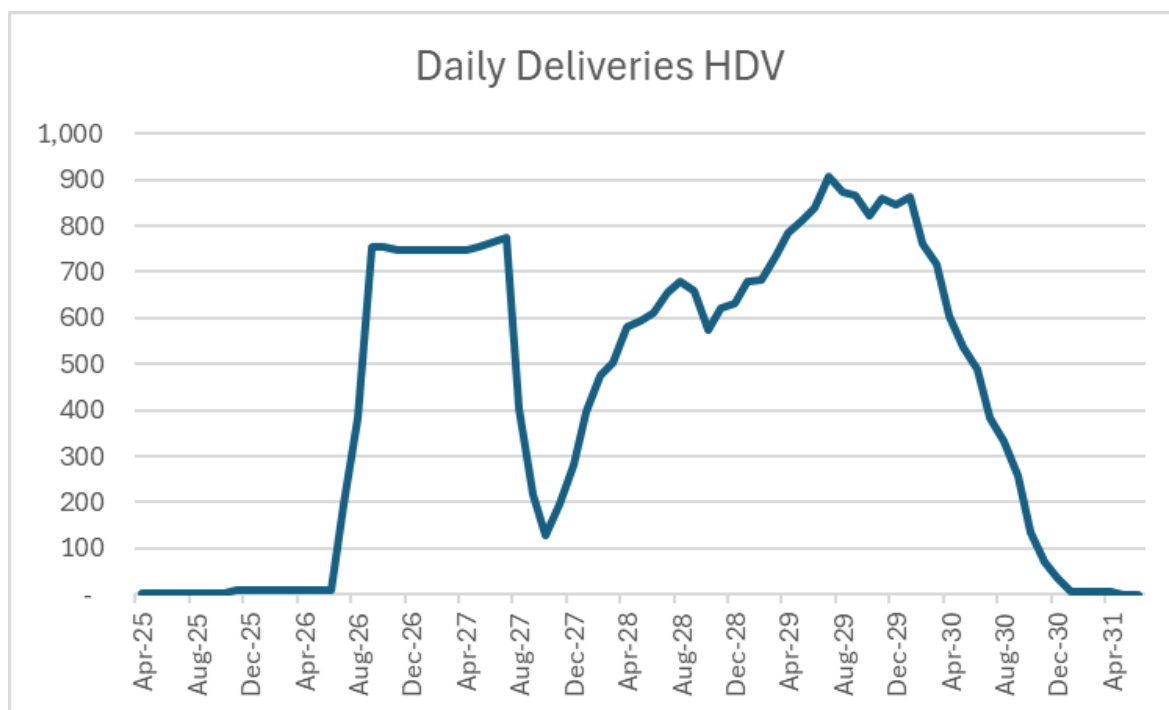
- The relevant Undertaker(s) – The persons (corporate or otherwise) who are permitted to carry out the Proposed Development (including their contractors and other persons appointed by them in connection with the carrying out of the Proposed Development);
- The ‘Principal Contractor(s)’ – The organisation delivering the construction works on behalf of/employed by the relevant Undertaker(s);
- The Sub-contractors – The organisation featuring within the ‘Principal Contractor(s)’ supply chain;
- The Transport Steering Group – This group will form a forum where relevant Undertakers and Stakeholders will be able to address matters pertaining to the OCTMP and compliance with it;
- The Stakeholders – These will include parties with an interest in the construction of the Proposed Development, including local community representatives. Stakeholders will be agreed 3 months prior to the first TSG meeting; and
- The management of the CTMP will be the responsibility of the relevant Undertaker(s), which will ensure that their ‘Principal Contractor(s)’ and, through them, the Sub-contractor(s) will adhere to the CTMP’s principles. The relevant Undertaker(s) will in particular employ TC’s (directly or indirectly) whose role will be to deliver and monitor the CTMP.

3.3.5 Within the Site the construction routes will be designed to ensure that pedestrians are adequately protected through the provision of separate pedestrian gates and footpaths during the Construction Phase.

#### **Freight Movements during construction of Primary Phase**

3.3.6 This Section summarises the freight movements that are predicted to occur during construction. The freight movements vary by day, week and month across the construction of the Primary Phase on the Site. These are summarised below in **Graph 3-1**.

3.3.7 This section principally addresses the construction of the Primary Phase as it is better understood at this stage with further stages subject to a degree of change through to full build out.



**Graph 3-1 - Overview of HDV Deliveries per Day – construction of Primary Phase**

- 3.3.8 Heavy Duty Vehicle (HDV) deliveries will occur during the permitted construction working hours as set out in **Section 1.4** of this OCEMP. At all other times no HDVs will be permitted to arrive or be dispatched from the Site, with the exception of the exclusions set out in this OCEMP (see Paragraph 1.4.3 – 1.4.13 and section on Abnormal Indivisible Loads Paragraph 3.3.10 – 3.3.12) , or when the relevant Undertaker(s) can demonstrate that there are exceptional circumstances.
- 3.3.9 The Principal Contractor(s) and their Sub-contractor(s) will be encouraged to minimise HDV movements to the Site by means of consolidating payloads and aggregate supplies, through the following measures:
- Optimising the specification for the imported material; and
  - Maximising HDV payloads.

## ABNORMAL INDIVISIBLE LOADS (AILs)

- 3.3.10 The Site works to construct the Proposed Development will require the movement of AILs to bring certain oversized construction materials to the Site.
- 3.3.11 AILs will be one-off deliveries and removals and will generally occur at times when construction activity is low. They will arrive on the Site and be removed from the Site at times which are set in engagement with stakeholders and primarily timed to coincide with the start or end of the phase of works in which they are required when other construction movements are likely to be at their lowest. These AIL movements may occur outside the permitted delivery times subject to engagement with stakeholders. The *Road Vehicles (Authorisation of Special Types) (General) Order 2003* sets out the categories of AILs with regard to weight, width and length.

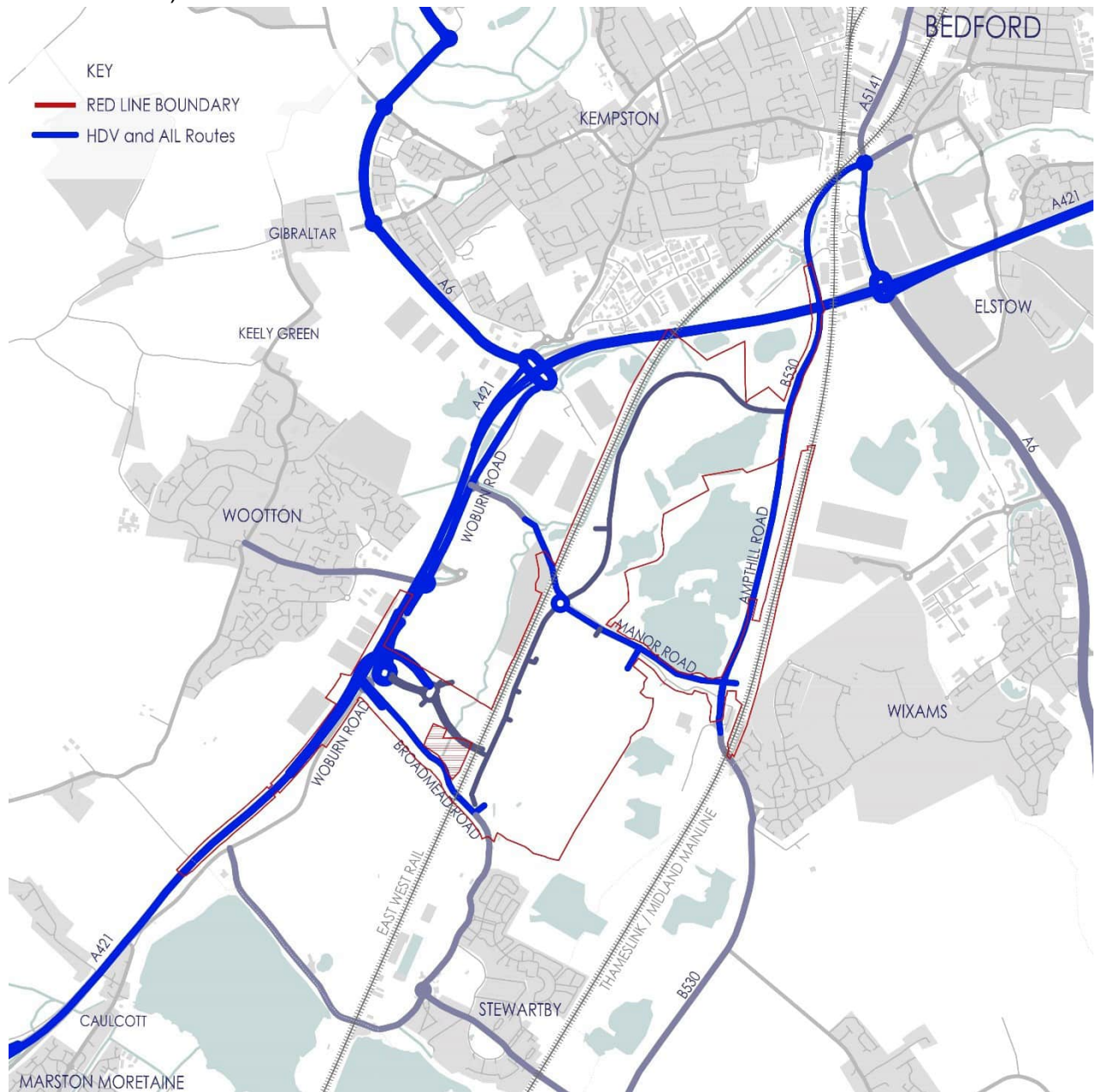
- 3.3.12 It is anticipated that heavy plant will be delivered to the Site on low loader combinations, unescorted as the maximum width, length and weight are less than the requirements prescribed by *The Road Vehicles (Authorisation of Special Types) Order 2003* for police escort HDV and AIL Routes.

## HDV Routes

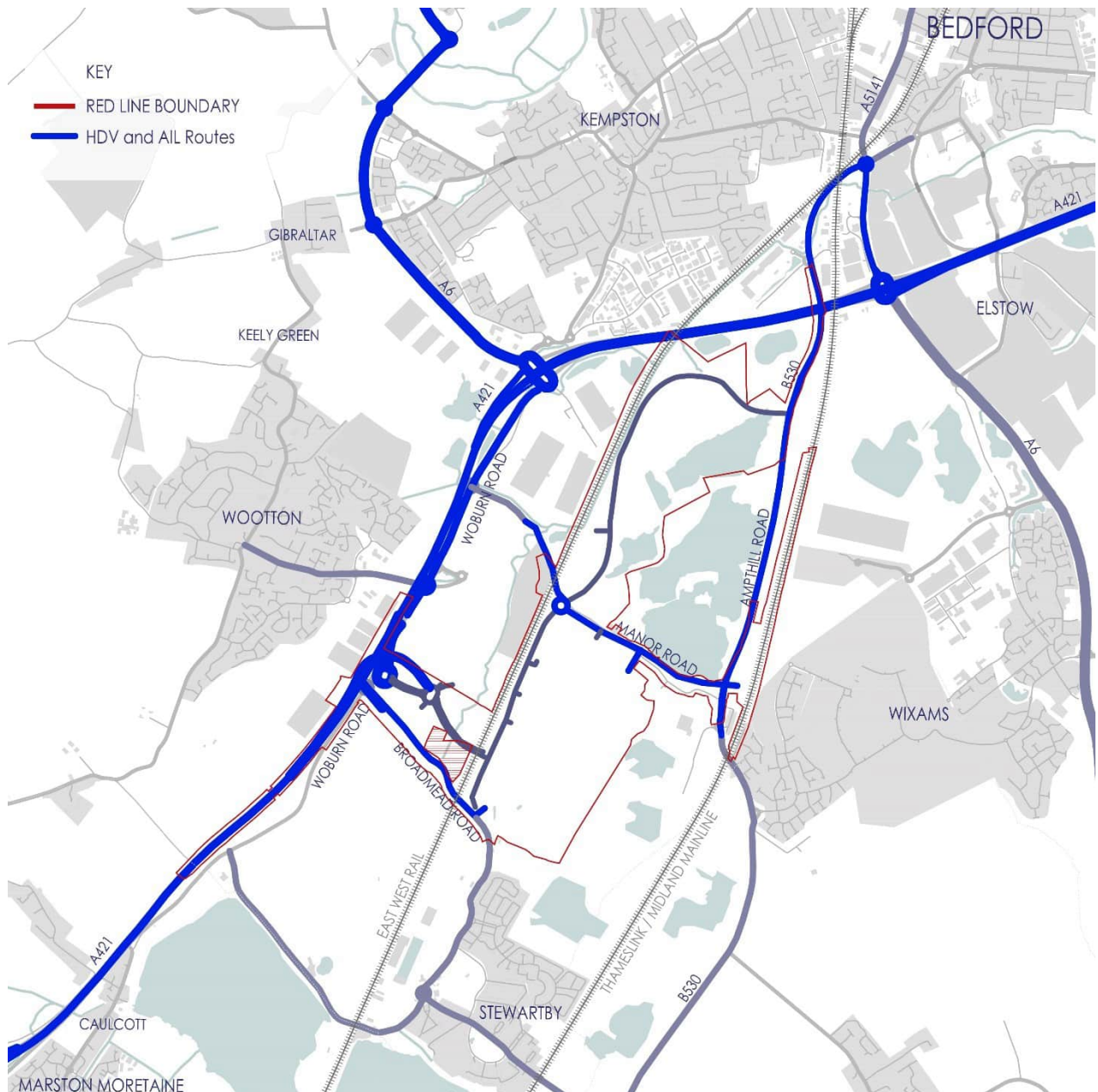
- 3.3.13 The relevant Undertaker(s) through their Principal Contractor(s) and Sub-contractor(s) will adhere to the key elements as follows:
- Wherever possible HDVs should use the strategic road network; and
  - Suppliers of materials will make use of the strategic road network.
- 3.3.14 The routing phasing is as follows:
- Route via Ampthill Road (to access East Gateway Zone), via Ampthill Road and Manor Road East (to access Lake Zone) and Broadmead Road (via Woburn Road to access West Gateway and Core Zone) in the initial phases;
  - Route via Ampthill Road (to access East Gateway Zone), via Ampthill Road and Manor Road East (to access Lake Zone) for the remaining phases;
  - Once the new Woburn Road Roundabout, the West Gateway Roads and the new bridge over the Marston Vale Railway are complete, the primary access for construction traffic for the Core Zone and the West Gateway Zone will route this way via Woburn Road Manor Road will remain as a secondary access; and
  - Once the A421 junction is complete, the primary access for construction traffic for the Core Zone and the West Gateway Zone will route this way via the A421. Manor Road will remain as a secondary access.
- 3.3.15 In the event that there is a delay to the A421 junction, construction vehicles will continue to route as detailed in bullet three above.
- 3.3.16 Contractor agreements will include provisions securing that all commercial vehicles, including HDVs and light goods vehicles (LGVs), will be required via a routing agreement, to enter and leave the construction Site in accordance with the above Paragraph 3.3.14 (except in abnormal



circumstances).



3.3.17 **Figure 3.1** provides the HDV and AIL Routes to the Site.



**Figure 3.1: HDV and AIL Routes**

### ABNORMAL INDIVISIBLE LOAD ROUTES

- 3.3.18 National Highways (NH) has identified national routes that were considered suitable for heavy loads and classified them by weight capacity. The extent of these routes is detailed on **Figure 3.2**.
- 3.3.19 The relevant Undertaker(s) will ensure all AIL movements will be coordinated with Stakeholders and keep to the roads identified depending on the size and weight of the vehicles. Prior to that the relevant Undertaker(s) will agree a routing strategy with Bedford BC in consultation with Stakeholders for any AILs.

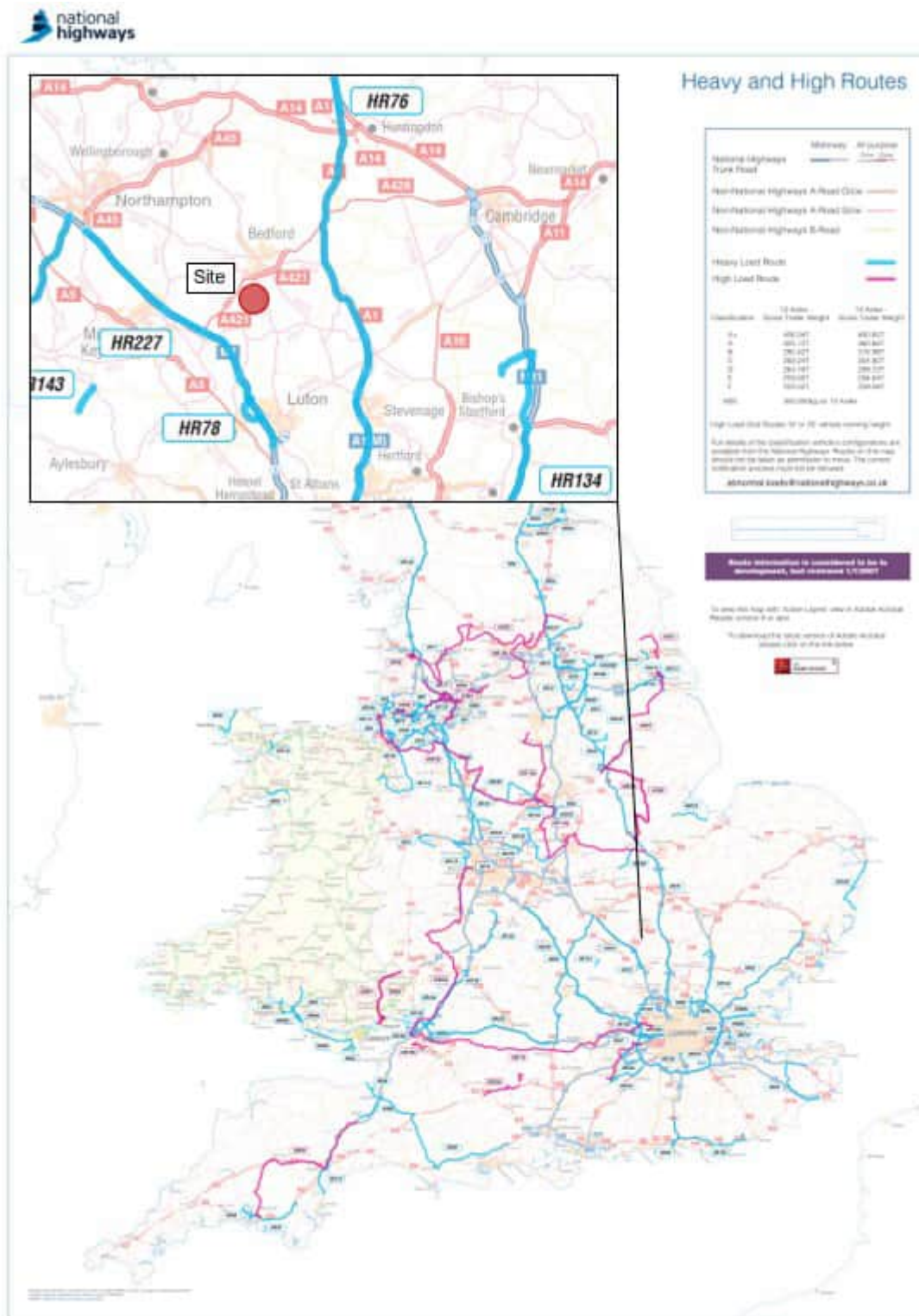


Figure 3.2: National Highways Heavy and High Routes



## WORKFORCE STRATEGY

### Workers per Day

- 3.3.20 The number of workers employed will vary by day, week and month and this is set out in the **Chapter 2: Description of the Proposed Development (Volume 1)** of the Environmental Statement.

### Travel Planning for Workers during Construction

- 3.3.21 A key measure to reduce and mitigate the effects of traffic during construction will be to manage the travel behaviour of the workforce. **Annex 2: Construction Worker Travel Plan** outlines the key components that will be implemented to encourage sustainable travel.

## FREIGHT MANAGEMENT MEASURES

### Introduction

- 3.3.22 This section summarises the freight management measures that the relevant Undertaker(s) through their Principal Contractor(s) and Sub-contractor(s) will implement. All contractors appointed as part of the construction will be required to adhere to the freight management measures.
- 3.3.23 There are two key elements of construction traffic that need to be managed, namely:
- Management of construction material deliveries; and
  - Management of ALLs.
- 3.3.24 The above elements need to be managed in terms of quantum and profile of deliveries as well as routing of the deliveries.

## CONSTRUCTION MATERIAL DELIVERY MANAGEMENT

### Capping of HDV Movements

- 3.3.25 The number of HDV movements that are permitted as part of the Site works will be capped prior to the delivery of the new Woburn Road Roundabout, the West Gateway Roads and the new bridge over the Marston Vale Railway and necessary aspects of Public Road A (includes some form of road between those points). The proposed HDV movements cap is set out as follows:
- A cap of 500 HDV Deliveries per Day (or 1,000 movements two way) is proposed, in total, to and from all construction access points into the Site from the public highway which is the assessed number plus 10%; and
  - On Manor Road, east of the Marston Vale Railway Line, a cap of 3,035 passenger car unit movements is proposed, in total, based on the current (2023) level of vehicles on Manor Road.
- 3.3.26 This cap shall no longer be applicable when the new Woburn Road Roundabout, the West Gateway Roads and the new bridge over the Marston Vale Railway are complete and construction traffic for the Core Zone and the West Gateway Zone can route this way via Woburn Road.
- 3.3.27 The monitoring of this cap and default mechanisms should this cap be breached are set out later in this OCTMP section.

### Delivery Management System

- 3.3.28 A Delivery Management System (DMS) will be used to achieve the following objectives:

- Regulate flow of HDVs to and from the Site; and
- Ensure HDV arrivals do not exceed the HDV upper limit (other than in exceptional circumstances)

- 3.3.29 Such systems have been proven effective in controlling the flow of traffic on construction projects by reducing the number of vehicles that arrive at any given time, especially at peak times. In addition, they have reduced the element of vehicle queuing at sites that is associated with the “*arrive anytime*” scenario.
- 3.3.30 The relevant Undertaker(s) through their Principal Contractor(s) will procure and implement a web-based DMS in advance of the construction works commencing.
- 3.3.31 All HDVs arriving at the Site will be required to book in advance via the DMS. HDVs without a valid booking will be refused entry to the Site. The specifics of the DMS will include:
- Mandatory advance booking (i.e. no booking, no admittance to the Site);
  - Bookings can be made up to seven days in advance;
  - Confirmed booking to relate to a specific vehicle (i.e. vehicle registration number); and
  - A telephone helpline will be available to amend bookings in advance of the delivery.
- 3.3.32 The management of the DMS will be undertaken by the Principal Contractor(s). The bookings will be recorded via an electronic database to allow monitoring of arrivals against the bookings recorded in the DMS. These records form the basis of the regular monitoring report that will be provided as required by this OCTMP, see section on Monitoring and Review below.

#### **Recording and monitoring and compliance system**

- 3.3.33 The relevant Undertaker(s) will ensure a recording and monitoring system will be implemented around the Site particularly on key HDV routes. At this stage the mechanism is unknown, but could include traffic surveys on key routes, GPS tracking, or other similar methods to allow monitoring and control.

#### **Vehicle Compliance**

- 3.3.34 All vehicles used for construction will be compliant with the Construction Logistics and Community Safety (CLOCS) standards<sup>3</sup>.

#### **HDV Route Compliance**

- 3.3.35 A signing schedule for the identified HDV routes will be set in engagement with stakeholders and implemented on the Site and will remain until the Construction Phase is complete, or an earlier date if agreed with the TSG. There will be a requirement to establish the TSG prior to commencement of Phase 1 as defined in **Annex 2: Construction Worker Travel Plan** of this document.
- 3.3.36 The recording, monitoring and compliance system will be used to monitor adherence to the HDV routes. This system will be implemented prior to the commencement of construction.

---

<sup>3</sup> CLOCS Standards (2024). Available at: [CLOCS - Construction Logistics and Community Safety](#) [Accessed: 23 May 2025].

- 3.3.37 The HDV routes will be communicated to all individuals involved in the transport of material as set out below in the Communication Strategy.

Holding Facility

- 3.3.38 The relevant Undertaker(s) through their Principal Contractor(s) will provide holding facility at each construction access point into the Site to ensure that construction vehicles do not back up onto the adopted highway.

Communication Strategy

- 3.3.39 An information pack will be distributed to all contractors, suppliers, hauliers and HDV drivers involved in the Construction Stage. The pack will be a convenient size so it can be stored in a HDV cab. It will be the Transport Coordinator's responsibility to produce and maintain the information pack.
- 3.3.40 The pack will include key information on the following aspects of the CTMP:
- HDV maximum limit;
  - HDV routes;
  - DMS;
  - Default Mechanisms for non-compliance;
  - Location of appropriate rest stops, parking etc on the approaches to the Site to prevent the use of inappropriate routes/facilities and ensure drivers' needs are appropriately catered for;
  - Contact information for the DMS manager; and
  - What to do/not to do if unable to meet DMS slot.

- 3.3.41 The CTMP will also form part of the induction for all staff working on the Site.

Abnormal Indivisible Load Management

- 3.3.42 If and when there is a requirement for AILs then the routes will be agreed as set out in Paragraph 3.3.19.
- 3.3.43 The law requires the haulier to give 'in excess of two days' notice to the police, highway authorities and Road and Bridge authorities before moving the load.
- 3.3.44 The notification process will be initiated as soon as possible in order to avoid any potential complications and delays to the work programme.

## **MONITORING AND REVIEW**

### **Introduction**

- 3.3.45 The relevant Undertaker(s) will ensure that the CTMP is fully implemented in compliance with the agreed strategy which will include the following details:
- Delivery Times;
  - Construction related vehicle movements; and
  - HDV flows on key routes.

## Monitoring Report

- 3.3.46 The DMS will keep a record of all HDVs entering and exiting the Proposed Development. When a booking is made the vehicle registration number will be recorded in the DMS for the allocated time. When the HDV arrives at the Site the vehicle registration number will be cross referenced against the booking system. The DMS records will be used to monitor the HDV deliveries against the HDV limits set out previously in this OCTMP section.
- 3.3.47 The DMS will be monitored on a daily basis against the actual HDV deliveries and if there is a breach of the HDV upper limits, the relevant Undertaker(s) via their TC's will notify the TSG as part of the reporting procedure. By undertaking this monitoring on a daily basis, it will help to ensure that any issues are identified at an early stage and dealt with promptly.
- 3.3.48 In addition to notifying the TSG of any breaches, every three months the relevant Undertaker(s) via their TC's will prepare a monitoring report and submit it to the TSG for review. The quarterly reports will include the following for the previous quarter:
- Record of DMS bookings;
  - Comparison of DMS bookings against HDV deliveries;
  - Comparison of HDV deliveries against HDV limits;
  - Monitoring data; and
  - Details of any breaches of HDV limits including a report on movements that have been identified as fulfilling the exceptional circumstances criteria.

## REVIEW

- 3.3.49 The review process for the measures and commitments detailed within the CTMP will be through the TSG. Reviewing the results of the monitoring process is therefore essential to ensure that the CTMP delivers the required outcomes.
- 3.3.50 Effective review mechanisms can avoid the need for invoking any default mechanisms or resorting to enforcement action, through the TSG considering remedial actions at an early stage to avoid repeated non-compliance.
- 3.3.51 As stated above, the TSG will be notified of any breaches of the HDV restrictions through the DMS system.
- 3.3.52 The TSG will also be provided with a quarterly monitoring report summarising the monitoring results for the previous quarterly period. The monitoring report will be provided at least three working days before the TSG meeting.
- 3.3.53 The TSG will meet every three months and will discuss the monitoring report and agree any refinements to the CTMP that are required to avoid repeat non-compliance. The following will be discussed at each TSG meeting:
- Consider the performance and effectiveness of the freight management measures;
  - Discuss any required variations; and
  - Agree information that can be disseminated from the TSG and other interested parties.



- 3.3.54 The relevant Undertaker(s) commit to having an open-door policy, as well as behaving in a respectful and responsive manner.

### **COMPLIANCE**

- 3.3.55 This section provides a summary of the mechanisms that will ensure compliance with the CTMP.
- 3.3.56 It is important to establish principles for default mechanisms so that all parties, including the Sub-contractor(s), are clear what may occur if the CTMP requirements are not achieved.
- 3.3.57 The enforcement of the CTMP is considered under the following headings:
- Planning Proposal: The relevant Undertaker(s) and its Principal Contractor(s) and sub-contractor(s) are obliged to comply with the CTMP pursuant to the planning proposal;
  - Best Practice: The relevant Undertaker(s) are under scrutiny from the TSG and Stakeholders to adhere to the requirements of the CTMP and demonstrate best practice. The relevant Undertaker(s) will instigate management practices with its contractors to ensure compliance; and
  - Default Mechanisms: Should the relevant Undertaker(s) breach its commitments set out in the CTMP then corrective measures set out herein would need to be taken.

### **Best Practice**

- 3.3.58 The relevant Undertaker(s) will use internal management procedures to ensure compliance with the requirements of the CTMP including:
- Contractor Kick Off Meetings – Contractors reminded of the relevant Undertakers' standards and expectations as set out in contract documentation;
  - Site Induction – Driver induction to include briefing on aims and objectives of delivery management system, including booking system, designated routes, driver behaviour, and procedures;
  - Drivers User Group – established to provide feedback from drivers and update briefings on traffic management and compliance;
  - Learning Reports – incidences of potential breaches or non-compliance with the CTMP will be investigated. Learning reports from each incident will be raised and shared with the relevant contractor; and
  - TSG feedback reports – feedback from the TSG deliberation will be fed back to the contractors so that actions suggested by the TSG or changes to the CTMP can be considered and where relevant taken on board.

### **Default Mechanisms**

- 3.3.59 Should the monitoring of the CTMP show that the requirements are not being met, default mechanisms will be implemented.
- 3.3.60 The proposed stages of the default procedure are set out below:
- The relevant Undertaker(s) will notify the TSG of a breach of the HDV restrictions;
  - TSG will issue a warning letter to the Principal Contractor(s). The Principal Contractor(s) will subsequently Issue a warning letter to the relevant Sub-contractor(s) outlining what action would be taken in the event of a further breach (see Paragraph 3.3.60); and

- Meet with TSG to report the details of the breach and the response, including any corrective actions.

3.3.61 In the event that the Sub-contractor(s) breaches for a second time, then regardless of the time lapsed since the first breach, the Sub-contractor(s), in engagement with the relevant Undertaker(s), shall be required to submit a proposal for corrective action. The corrective action would need to be commensurate with the nature of the breach. The corrective action would need to be agreed with the TSG. If there are repeat instances of HDV drivers diverging from the HDV route the Contractor(s) will be required to replace the HDV driver responsible for the breach.

## 3.4 HEALTH AND SAFETY

3.4.1 Health and safety issues are a primary factor in influencing the demolition and construction methods. In accordance with the *Construction (Design and Management) Regulations 2015* the construction teams will be required to prepare detailed written health and safety plans, specific fire and emergency procedures, risk assessments and method statements for each phase of demolition or phase of construction.

3.4.2 Any work being performed in proximity to the rail tracks are to be assessed for safety measures and covered under a safety management plan prepared by the Principal Contractor(s).

3.4.3 Compliance with UDX health and safety requirements, and all relevant health and safety legislation will be enforced including:

- *Health and Safety at Work Act 1974;*
- *Management of Health and Safety at Work Regulations 1999;*
- *Construction (Design and Management) Regulations 2015;*
- *Control of Asbestos Regulations 2012;*
- *Air Quality Standards Regulations 2010;*
- *The Contaminated Land (England) Regulations 2006;*
- *Special and Hazardous Waste (England and Wales) Regulations 2005;*
- *Confined Spaces Regulations 1997;*
- *Control of Substances Hazardous to Health Regulations 2002;*
- *Lifting Operations and Lifting Equipment Regulations 1998;*
- *Manual Handling Operations Regulations 1992;*
- *Control of Noise at Work Regulations 2005;*
- *Personal Protective Equipment at Work Regulations 2002;*
- *Provision and Use of Work Equipment Regulations 1998;*
- *The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013;*
- *Control of Vibrations at Work Regulations 2005; and*
- *Work at Height Regulations 2005.*

## 3.5 LANDSCAPE AND VISUAL

3.5.1 The Construction Phase mitigation measures reflect those which are committed to within **Chapter 7: Landscape and Visual Impact Assessment (Volume 1)**.

3.5.2 Landscape and visual impacts arising during the Construction Phase typically arise from vegetation removal, excavations, embankments/re-profiling, topsoil stripping. Where relevant landscape operations as outlined below will be undertaken in accordance with BS 4428:1989 Code of Practice for general landscape operations. The following mitigation measures are required to limit impacts on landscape and visual receptors:

- Prior to the start of construction works, and throughout their duration, all existing vegetation identified for retention shall be protected by fencing, in accordance with *BS 5837:2012 Trees in relation to design, demolition and construction*, to protect roots from compaction and prevent damage to the structure of the vegetation. No activity, storage of materials or liquids of any sort shall be permitted within the protective fencing at any time;
- Decisions to remove vegetation and its timing will be discussed and agreed upon with the Environmental Clerk of Works in order that vegetation is not unnecessarily removed;
- A suitably qualified tree surgeon will oversee any works relating to the management and protection of trees;
- Site management shall reduce the visual clutter associated with construction works through appropriate storage of materials/plant/equipment, and management of materials and waste on-Site;
- Appropriate location, organisation and phasing of construction activities shall be applied to ensure areas for construction are cleared as close as possible to works commencing, and top soiling, seeding and planting will be undertaken as soon as practicable after sections of work are complete. Advanced planting where practicable will provide accelerated Site integration and visual screening;
- In general, plant and material storage areas will be located away from the Site Boundary, to limit landscape and visual impact. However, based on construction logistics, temporary soil mounds or hoarding will be located close to the Site boundary in areas where no existing vegetation is being retained and where it does not impede construction access to the Site, to help screen views for neighbouring residents at Stewartby, Wootton and Kempston Hardwick. At locations where it is known that there will be no future works that would require their removal, soils will be placed in their final locations and landscaped, creating permanent landscape bunds, reducing the need for double handling and to provide opportunities for planting to be carried out;
- Where hoardings are used, these will be sensitively coloured and positioned to minimise the visual impact to nearby sensitive receptors;
- Measures will be applied to minimise impacts on soil quality through appropriate stripping and storage of topsoil and subsoil. Works to be carried out in accordance with BS 3882:2015;
- Landscape planting will be maintained for a period of five years following completion in accordance with the relevant approved Landscape and Ecological Management Plan, to ensure successful establishment; and
- As much as feasible, and in line with the Construction Lighting Management Plan (see Paragraphs 3.2.7 and 3.2.8 above), lighting will utilise directional cowls to reduce light spill and will be directed inwards to the Site and kept at as low a height as is practicable in order to carry out activities safely.

## 3.6 AIR QUALITY

3.6.1 These Construction Phase mitigation measures reflect those which are committed to within **Chapter 8: Air Quality (Volume 1)**:

- The Principal Contractor(s) will be required to ensure the use of Best Practicable Means (BPM) at all times during the works in mitigating emissions from construction sites and activities to avoid causing a statutory nuisance (Part III, Section 79, *Environmental Protection Act 1990*);
- In line with best practice to be implemented at the Site, Institute of Air Quality Management (IAQM) guidelines, and to minimise the nuisance and impact arising from dust, before commencing each phase of works the Principal Contractor(s) will be required to prepare a Dust Management Plan (DMP); and
- The DMP should identify all sensitive human and ecological receptor locations within 250m, set out the procedure for mitigating dust emissions including roles and responsibilities for this, monitoring and reporting protocol(s) and measures to be applied wherever reasonably practicable to do so.

### SITE MANAGEMENT

- Record all dust and air quality complaints, identify cause(s), act appropriately to reduce emissions in a timely manner, and record the measures taken;
- Make the complaints log available to the relevant authority when requested;
- Record any exceptional incidents that cause dust and/or air emissions, either on-Site or off-Site, and the action taken to resolve the situation in the logbook; and
- Hold regular liaison meetings with other construction sites within 250m of the Site boundary, to ensure plans are co-ordinated and dust and particulate matter emissions are minimised. It is important to understand the interactions of the off-Site transport/deliveries which might be using the same road network routes.

### MONITORING

- Undertake daily on-Site and off-Site inspection, where receptors (including roads) are nearby, to monitor dust, record inspection results, and make the log available to Bedford BC when asked. This should include regular dust soiling checks of surfaces such as street furniture, cars, and windowsills within 100m of the Site boundary, with cleaning to be provided if necessary;
- Carry out regular Site inspections to monitor compliance with the DMP, record inspection results, and make an inspection log available to Bedford BC when asked;
- Increase the frequency of Site inspections by the Environmental Clerk of Works (EnvCoW) for air quality and dust issues on-Site when activities with a high potential to produce dust are being undertaken and during prolonged dry or windy conditions; and
- For locations where there is a risk of affecting sensitive human receptors, agree dust monitoring requirements with Bedford BC at least four months in advance of work commencing on-Site to enable at least three months of baseline monitoring.

## PREPARING AND MAINTAINING THE SITE

- Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible;
- Fully enclose Site or specific operations where there is a high potential for dust production and the Site is active for an extensive period;
- Avoid Site runoff of water or mud;
- Keep Site fencing, barriers and scaffolding clean using wet methods; and
- Remove materials that have a potential to produce dust from Site as soon as possible, unless being re-used on-Site. If they are being re-used on-Site cover as described below.
  - Damp down existing areas of hard standing to be removed prior to breaking out; and
  - Cover, seed or fence/screen stockpiles to prevent wind whipping.

## OPERATING VEHICLE/MACHINERY AND SUSTAINABLE TRAVEL

- Ensure all vehicles switch off engines when stationary and not in use - no idling vehicles;
- Avoid the use of diesel or petrol-powered generators and use mains electricity or battery powered equipment where practicable;
- Impose and signpost a maximum-speed-limit of 15mph on surfaced and 10mph on unsurfaced haul roads and work areas (if long haul routes are required these speeds may be increased with suitable additional control measures provided, subject to the approval of the nominated relevant Undertaker and with the agreement of Bedford BC, where appropriate);
- Adhere to the traffic management principles set out in the OCTMP (**Section 3.3** of this OCEMP) to manage the sustainable delivery of goods and materials; and
- Implement a Travel Plan (**Annex 2: Construction Worker Travel Plan**) that supports and encourages sustainable travel (public transport, cycling, walking, and car-sharing) to Site for employees during the Construction Phase.

## GENERAL OPERATIONS

- Only use cutting, grinding, or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g., suitable local exhaust ventilation systems;
- Ensure an adequate water supply on the Site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate;
- Use enclosed chutes and conveyors and covered skips;
- Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate;
- Ensure equipment is readily available on-Site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods; and
- No bonfires or burning of waste materials on-Site.

## MEASURES SPECIFIC TO EARTHWORKS

- Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable;
- Use Hessian, mulches or tackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable; and
- Where practicable, remove the ground cover in small areas during work and not all at once.

## MEASURES SPECIFIC TO CONSTRUCTION

- Avoid scabbling (roughening of concrete surfaces) if possible;
- Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place;
- Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery; and
- For smaller supplies of fine powder materials ensure bags are sealed after use and stored appropriately to prevent dust.

## MEASURES SPECIFIC TO TRACKOUT

- Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out of the Site;
- Avoid dry sweeping of large areas;
- Ensure vehicles entering and leaving Sites are covered to prevent escape of materials during transport;
- Inspect on-Site haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable;
- Record all inspections of haul routes and any subsequent action in a Site logbook;
- Install hard surfaced haul routes, where practicable, which are regularly damped down with fixed or mobile sprinkler systems or mobile water bowsers and regularly cleaned;
- Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the Site where reasonably practicable);
- Ensure there is an adequate area of hard surfaced road between the wheel wash facility and the Site exit, wherever Site size and layout permits; and
- Access gates to be located at least 10m from receptors where possible.

## 3.7 NOISE AND VIBRATION

- 3.7.1 These Construction Phase mitigation measures reflect those which are committed to within **Chapter 9: Noise and Vibration (Volume 1)**.



3.7.2 The construction works will comply with BS 5228:2009+A1+2014 *Code of practice for noise and vibration control on construction and open sites* Part 1: *Noise* and Part 2: *Vibration*. The following mitigation measures are recommended to mitigate noise and vibration impacts on sensitive receptors:

- The Principal Contractor(s) and their Sub-contractor(s) will at all times apply the principle of BPM as defined in Section 72 of the *Control of Pollution Act 1974* (see **Annex 1: Relevant Legislation** of this document) and carry out all work in such a manner as to avoid or reduce any disturbance from noise (and vibration) as far as is practicable;
- Guidance given in BS 5228-1 (Section 8: Control of noise and Annex B: Noise sources, remedies and their effectiveness) will be followed as far as is practicable and advice and training on noise minimisation given to staff during Site induction procedures;
- All plant brought onto Site will comply with the relevant EC/UK noise limits applicable to that equipment or shall be no noisier than would be expected based on the noise levels quoted in BS 5228-1. Each plant item will be well maintained and operated in accordance with manufacturers' recommendations;
- Electrically powered plant will be preferred, where practicable, to mechanically powered alternatives;
- Where practicable, plant generating significant levels of noise is to be fitted with suitable silencers or operated within enclosures;
- Pneumatic tools will be fitted with silencers or mufflers;
- Deliveries to Site will be programmed and routed to reduce disturbance to local residents;
- Items of plant operating intermittently will be shut down in the periods between use;
- Where practicable, all stationary plant will be located so that the noise effect at receptors is reduced and, if practicable, every item of static plant, when in operation, will be noise attenuated using methods based on the guidance and advice given in BS 5228-1;
- Careful selection of construction methods and plant will be implemented and utilised, for example, breaking-out of concrete structures using, where practicable, low noise methods such as munching or similar, rather than percussion breaking;
- Temporary acoustic barriers and other noise containment measures such as screens, sheeting, and localised acoustic hoarding at the Site boundary close to existing sensitive receptors will be erected where appropriate to reduce noise breakout and reduce noise levels at potentially affected receptors;
- In general, plant and material storage areas will be located away from the Site boundary, to limit impact on nearby sensitive receptors. However, where applicable temporary soil mounds (or other appropriate screening methods) shall be located as close as practicable to the redline boundary, to help screen noise from neighbouring residents;
- Impact piling should be avoided in close proximity (within 100m) of any sensitive receptor to avoid significant adverse impacts, and CFA or press-in piling should be adopted instead subject to acceptable conditions;
- Where reasonably practicable, plant and/or methods of work causing significant levels of vibration at sensitive premises should be replaced by other less intrusive plant and/or methods of working;



- To reduce any potential adverse impacts as a result of vibration from stationary plant, equipment immediately adjacent to sensitive receptors could be relocated or isolated using resilient mountings;
- The characteristics of vibration emissions from each item of plant, and their collective effect, should be assessed during the selection process for the acquisition of plant. Where practicable, plant should be selected which will have the least impact in terms of vibration;
- Large concrete pours (for which an extension of working hours may be necessary) will commence as early as practicable within normal working hours so that activities can be completed within normal working hours as far as possible;
- There will be a considerate and neighbourly approach to relations with local residents; and
- The Site manager, or other appointed Site representative (Principal Contractor/(s) relevant Undertaker), will be responsible for logging all received environmental noise and vibration comments/complaints, as well as the action that is taken in response to each point raised, and whether that action was successful in remedying the issue. Where not successful, supplementary actions will be carried out and resulting effects logged. The contact details for the Site representative will be openly advertised so that local residents have a point of contact in case of any issues arising. The Site representative will be responsible for keeping an open line of contact with local residents and providing advice with respect to the timing and programming of potentially noisy works.

3.7.3 A revised construction noise and vibration assessment shall be carried out once the Principal Contractor(s) has been appointed and the final confirmed construction working methods and programme are known. The results of this re-assessment shall be used to identify any areas where construction noise and vibration has the potential to give rise to significant effects. The current construction noise and vibration assessment is provided within **Appendix 9.2: Construction Noise and Vibration Assessment (Volume 3)**.

## 3.8 CULTURAL HERITAGE AND ARCHAEOLOGY

3.8.1 These Construction Phase mitigation measures reflect those which are committed to within **Chapter 10: Cultural Heritage (Volume 1)**.

### BURIED HERITAGE ASSETS

3.8.2 **Appendix 10.3: Archaeological Mitigation Strategy (Volume 3)** sets out a programme of targeted archaeological excavation and recording where significant archaeological remains have been identified in the Core, Lake and West Gateway Zones by the archaeological trial trenching summarised in **Appendix 10.2: Archaeological Trial Trench Evaluation Report (Volume 3)**. This programme of archaeological work, carried out in advance of construction, will entail archaeological excavation, including targeted excavation and Strip, Map and Sample excavation, and recording, with artifacts carefully removed, examined, and preserved with proper documentation to form 'preservation by record'. Consequently, any significant archaeological remains will have been sufficiently excavated and recorded prior to the start of construction. No additional measures are therefore required in this OCEMP within these areas.

- 3.8.3 For East Gateway Zone, where evaluation trenching has not previously been possible due to ecological constraints, **Appendix 10.3: Archaeological Mitigation Strategy (Volume 3)** sets out a programme of archaeological watching brief (archaeological monitoring and recording) during construction. This will be integrated into the construction process and will ensure that any previously unrecorded remains, are not removed without record. The relevant Undertaker's Archaeological Clerk of Works (ACoW) will attend Site regularly to ensure that the work is being carried out to agreed scope and high professional standards. If known or possible archaeological remains are encountered the general approach will be to cease work to allow sufficient time for archaeological remains to be recorded without causing significant delays to the construction programme.

## ABOVE GROUND HERITAGE ASSETS

### Historic Hedgerow

- 3.8.4 Mitigation of the Historic Hedgerow within the Core Zone will compromise preservation by record. A photographic record will be undertaken prior to hedgerow removal. The hedgerow will be examined archaeologically to establish whether there are any associated buried earthworks, such as an earlier boundary bank or hedgerow bank and ditch. This would be achieved through digging a slot every 100m (a maximum of five) archaeologically recording any remains and retrieving any dating evidence (e.g. pottery), where this is feasible (considering ecology or other concerns).

### Accidental Strike Damage

- 3.8.5 With regard to above ground heritage assets, Kempston Hardwick moated site, a scheduled monument, lies outside of the Site but is adjacent to the southern edge of the Lake Zone. Given that the constraint area lies outside the Site and is set back from the road, there is little possibility of accidental strike damage from plant. Any enabling works/construction plans will need to highlight the scheduled monument constraint area so that contractors are aware.

### Noise and Vibration

- 3.8.6 In terms of noise and vibration impacts during Construction Phase on the significance of above ground heritage assets due to changes to their setting, these will adhere to the requirements set out in **Section 3.7**.
- 3.8.7 Regarding Kempston Hardwick moated site, there is the potential for adverse impacts from vibration (e.g. movement of plant, or piling) that could be significant, if they occur close to the monument. The constraint area of the monument lies outside the Site and no construction or piling is proposed in its vicinity. The monument is also set back from the road. The monument is not located on 'soft' deposits that might be more prone to vibration, such as alluvium. While the asset is unlikely to experience direct physical impacts, the vibration assessments for piling and vibratory rollers have evaluated that, at 30m, the asset, like the moated site, has a predicted maximum of 2.4mm/s peak particle velocity (PPV) from vibratory rollers and 5.8mm/s PPV from piling. BS 5228-2 gives a guideline value of 15mm/s PPV at a frequency of 4Hz as the minimum needed to result in cosmetic damage to light-framed, unreinforced above ground structures. Piling is unlikely to generate vibrations at frequencies as low as 4Hz. Values of <6 mm/s PPV would not be significant for above ground structures. In addition, structural remains (e.g. foundations) that might survive below ground and encased in soil would be less susceptible to damage than above ground structures.

- 3.8.8 Nevertheless, it is recommended that ground borne vibration from construction related activities is limited to no more than 2mm/s peak particle velocity (PPV) at the monument, reflecting both the sensitive nature of the asset and unknowns regarding its structural integrity. Should vibration levels approach this threshold, a strict monitoring program and a comprehensive Piling Risk Assessment will be required which shall take into account the above proposed vibration limit.
- 3.8.9 Mitigation measures outlined in **Appendix 9.2: Construction Noise and Vibration Assessment (Volume 3)** and listed in **Section 3.7** of this OCEMP include careful selection of construction methods, avoiding impact piling within 100m of sensitive receptors, replacing high-vibration equipment with less intrusive alternatives, and assessing vibration emissions during equipment selection.

### Hydrology

- 3.8.10 It should be noted that Kempston Hardwick moated site is a terrestrial site and is not located in an area affected by water. The British Geological Survey solid and drift geology mapping shows that the monument is not located on the alluvial floodplain. It lies within Government flood zone 1 which has a low probability of flooding (development within zone 1 does not require a flood risk assessment for planning). There is no element of the construction proposals that would change the baseline conditions from this perspective.

### Lighting

- 3.8.11 Within the Kempston Hardwick moated site constraint area, low-intensity lighting with brightness levels (around 100-300 lumens) is recommended, to help minimize light pollution and avoid distracting from the monument's appearance, especially at night. Lights with a warmer colour temperature (below 3,000 Kelvin) are preferable. Using low height, downward-facing or shielded lights can limit light spillage and focus illumination where required, while protecting the monument's character.

### Modifications to Railway Infrastructure

- 3.8.12 Within the East Gateway Zone modifications are proposed to Midland Mainline infrastructure at SPC1/176 Bedford Road Underpass (B530) and SPC1/177 Henmans Underpass, as well as an overbridge, at SPC1/178 Hardwick. The railway line was initially established in 1863 and whilst it has undergone phases of redevelopment over the years, most notably in the early 1980s, these non-designated assets retain some historic interest. It is proposed that prior to modification during the Construction Phase, that these structures are subject to a Level 1 historic building survey (basic visual record) as defined by Historic England 2016 *Understanding Historic Buildings*.

## 3.9 GROUND CONDITIONS, SOILS AND AGRICULTURAL LAND

- 3.9.1 These Construction Phase mitigation measures reflect those which are committed to within ES **Chapter 11: Ground Conditions, Soils and Agricultural Land (Volume 1)**. A number of mitigation measures are described in the **Appendix 11.4: Outline Land Remediation Strategy (Volume 3)**. No further mitigation measures are provided for Human Health exposure to Third Party Receptors or Controlled Waters.
- 3.9.2 Any remediation or removal of asbestos or contaminated waste shall be undertaken by a suitably licensed contractor. The Contractor shall be responsible for the provision of all necessary environmental controls during the remediation works. As applicable, these measures will include:

- Protection of surface water drains and catchments of surface run-off to reduce the risk of contaminated run-off and high-suspended solids moving off-Site;
- Management of stockpiles of recycled (crushed) construction aggregates and contaminated soils awaiting off-Site disposal and/or on-Site treatment to minimise the potential for generation of contaminated run-off and dust;
- Use of dust and odour suppression techniques during development to minimise off-Site impacts; and,
- Storage of all fuels, oils and chemicals will be stored in appropriate containers within bunded compounds.

- 3.9.3 Guidelines presented within the Environment Agency document, “*Pollution Prevention Guidance 6 – Working at Construction and Demolition Sites*” should be adhered to and all relevant licences obtained.
- 3.9.4 Once the boreholes associated with the Ground Investigation are no longer required, they will be decommissioned in line with the Environment Agency Guidance in order to ensure that no pollutant pathways are created as a part of the Proposed Development of the Site.
- 3.9.5 The Principal Contractor(s) shall comply with all relevant legislation and regulations when dealing with contaminated materials. The Principal Contractor(s) will prepare a full management plan, also referring to the Preliminary Risk Assessment. See **Appendix 11.1: Contaminated Land Preliminary Risk Assessment (Volume 3)** and **Appendix 11.4 Outline Land Remediation Strategy (Volume 3)**, where contaminated land is identified to comply with all relevant handling and disposal legislation.
- 3.9.6 A Soil Resource Survey, in accordance with the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (Defra, 2009) and Sustainable management of surplus soil and aggregates from construction (C809, CIRIA), will be undertaken, as a precursor to preparing a Soil Management Plan, to inform how soils within the Site may best be managed, protected or re-used.
- 3.9.7 A Soil Management Plan, informed by the Soil Resource Survey, would be produced prior to any enabling or construction works commencing as part of the CEMPs. The Soil Management Plan will include detail on the stripping, stockpiling, maintenance (such as seeding) and restoration of soils. With regards to stockpiling, the Soil Management Plan will set out appropriate locations for stockpiles, maximum heights for stockpiles, and restrictions on the length of time different soils can be stockpiled. Stockpile maximum heights will be set in accordance with a height risk assessment informed by soil type, potential for soil compaction, site conditions, and neighbouring activities. Measures outlined within Annex E and Appendix K of the *IEMA A New Perspective on Land and Soil in Environmental Impact Assessment guidance* will be followed by the Contractor. In addition, best practice construction methods will be included in the CEMPs to provide methods of minimising the loss or reduction of soil functions.

- 3.9.8 A Piling Risk Assessment will be produced to outline measures to protect the underlying aquifers during the construction phase and mitigate risk of creating preferential pathways for potential contamination. The Piling Risk Assessment would be undertaken in accordance with the Environment Agency document titled Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination: Guidance on Pollution Prevention. Further, the Piling Risk Assessment would take into account the potential risk of vibration impacts at the Kempston Hardwick moated site, to ensure that the recommended piling vibration limit is not exceeded.
- 3.9.9 Prior to commencing any applicable grading works on-Site, an Earthworks Specification would be produced and would include protocols for testing and limiting values to ensure that imported materials are suitable for their intended use in terms of their chemical and geotechnical quality.
- 3.9.10 Further measures detailed in **Appendix 11.4: Outline Land Remediation Strategy (Volume 3)** are also listed below:
- General good construction working practices such as dust suppression (damping down), windbreak netting around excavations and/or perimeter fencing, covering stockpiles with tarpaulins and road sweeping to prevent construction workers and local residents/employees in the vicinity of the earthworks from being exposed to windblown dusts, vapours and asbestos fibres;
  - Appropriate stockpile segregation, locations and containment measures to minimise the exposure of surface water and groundwater from contaminated run-off and construction workers and local neighbours from windblown dusts, vapours and asbestos fibres;
  - All workers on-Site will be made aware of potential contamination issues on the Site and will use best practice techniques during the Construction Phase;
  - Use of appropriate PPE at all times during the construction works;
  - Appropriate Site hygiene facilities will be put in place and the presence of contaminants, and the associated risks will be explained to construction staff undertaking groundworks before they begin work;
  - Wheel washing of Site vehicles will be carried out in order to minimise the potential for dust generation and tracking of mud/silt onto local roads;
  - Unexploded ordnance (UXO) awareness briefing for all construction staff involved with below ground excavations to be undertaken where necessary.
  - Construction vehicles and plant will be regularly maintained and supplied with spill kits and drip trays to reduce the risk of hydrocarbon contamination;
  - Refuelling must be undertaken in specified areas where there is non-permeable hardstanding and Site drainage passes through an oil interceptor prior to discharge. Drip trays will be installed to collect leaks from diesel pumps;
  - Adequate bunded and secure areas with impervious walls and floors, with a capacity of 110% of substance volume, are to be provided for the temporary storage of fuel, oil and chemicals on Site during construction;
  - Oil interceptor(s) will be installed on discharge points from any temporary oil storage/refuelling areas;

- Development of Site pollution control procedures in line with Environment Agency's PPGs, and appropriate training for all construction staff. Provision of spill containment equipment such as absorbent material on Site;
- Hazardous materials already present on-Site or proposed to be used during the construction works will be identified and an appropriate Control of Substances Hazardous to Health (COSHH) Assessment carried out
- The Principal Contractor must comply with relevant legislation, technical guidance and regulations in the identification, handling, storage, recovery and disposals of waste. Provision will be made for a suitably qualified consultant to identify "*hazardous waste*" so that materials can be appropriately managed and disposed of during works
- Disposal sites and routes will be identified by the Principal Contractor and Project Manager in engagement with the Bedford BC and the Environment Agency. Consideration should be given to transportation modes and alternatives to reduce the adverse environmental effects, times, landfill capacity and license conditions;
- The Principal Contractor must comply with all relevant legislation and regulations when dealing with contaminated materials. The Principal Contractor will prepare a full management plan, also referring to the Preliminary Risk Assessment under the Proposed Development, where contaminated land is identified to comply with all relevant handling and disposal legislation; and
- It is anticipated that some of the excavations will encounter groundwater (perched or otherwise). Water ingress has the potential to be contaminated and will require management through either dewatering and/or disposal under Duty of Care to dispose appropriately of excavated water or discharge to a surface water lake within the Site under an appropriate surface water discharge consent. Measures should be taken to ensure that when emptying and/or excavating such structures, contaminated liquids do not contaminate the surrounding soil or other materials or enter groundwater or any surface water feature.

### 3.10 WATER ENVIRONMENT

3.10.1 These Construction Phase mitigation measures reflect those which are committed to within ES **Chapter 12: Water Resources (Volume 1)**.

#### **STANDARD BEST PRACTICE MEASURES**

3.10.2 The following general mitigation measures for the water and sediment environment should be applied:

- The Site Manager should perform good Site management including minimising the environmental impacts to the surrounding water bodies, controlling surface water runoff rates and volumes, being able to monitor, report and respond to Site conditions, controlling dust and sediment, preventing pollution from accidental releases, preparation of emergency response plans including storage and operation of spill kits, effective training for workers, and compliance with relevant regulations (3.10.4);
- All plant to be refuelled over bunded hard standing/concrete with separate drainage systems;
- Spill kits to be stored at selected locations and workers to be trained in their use;
- Emergency response plans will be prepared prior to construction and reviewed/updated subject to Site conditions, where relevant;



- Stockpiled materials will be covered to reduce their movement and ensure stockpiled material are not severing overland flow paths or within close proximity to watercourses and drainage networks e.g. 10m away;
- There should be no uncontrolled run-off of water or mud from the Site - runoff should be directed and captured in sacrificial Sustainable Drainage Systems (SuDS) for settlement and retention;
- All machinery will be regularly checked for oil leaks or similar, which, if found, must be prevented from entering the drainage ditches or watercourses either through immediate repair of the machinery or through use of a drip tray/spill kit or similar;
- Local weather forecasts will be monitored and works scheduled accordingly;
- Control and treatment measures will be inspected weekly to ensure they are working effectively;
- Fuel, oil and chemicals will be stored in secondary containment and located a minimum of 10m from any watercourse. The secondary containment system must provide storage of at least 110% of the tank's maximum capacity and ensure that any valves, filters, sight gauges, vent pipes or other ancillary equipment are also situated within the secondary containment system and arranged so that any discharges are contained;
- Waste fuels and other fluid contaminants will be collected in leak-proof containers prior to removal from Site to an approved processing facility;
- Wash out of any cement or concrete lorries will not be discharged to receiving water environment or foul water sewer; and
- Foul drainage from Site welfare facilities will be disposed of appropriately. This may be by discharge to the foul sewer or by collection from septic tanks for disposal off Site.

3.10.3 In addition to the above, the following mitigation measures should also be applied:

- Other than on screening berms/bunds, finished soil level gradients should be relatively shallow to slow down surface water runoff and reduce excessive mobilisation of loose soils. However, Site levels must not be flat which could result in ponding and overly moist sub-soil;
- The Contractor will keep earthworks free of water including arranging for rapid removal of water, lowering and maintaining water levels in excavations to enable permanent works to be finalised;
- Subsoil shall be stockpiled immediately upon excavation to reduce the degradation of the material to a minimum. Subsoil shall be sealed daily to prevent ingress of moisture;
- Reduce where practicable large Site clearance excavations via construction phasing. Exposed areas should be reseeded or vegetated as quickly as practicable;
- Management of stockpiles, avoiding proximity to waterbodies and drainage systems e.g. 10m;
- Effective wheel washing and supporting temporary SuDS to prevent sediment loaded water entering the proposed finished or existing networks;
- Temporary sacrificial SuDS features during construction e.g. ditches/grips/basins/berms/settlement pond, used to intercept and treat sediment loaded runoff from the Site before entering the receiving network;
- Dust suppression, damping down, and wheel washing. Control of boundary fencing, loose waste material and debris leaving the Site;



- Necessary drainage interceptors for high risk areas e.g. refuelling, large car parking, hazardous material storage;
- Bunded areas, concrete aprons, and contained drainage areas where the risk of pollutant entering and contaminating the watercourse is high;
- Location of high risk activities placed away from water bodies and drainage systems 10m e.g. mixing of materials, hazardous storage materials, fuel storage tanks;
- Store on-Site spill kits and train operatives in their use;
- For temporary foul drainage systems, include and maintain septic tanks or temporary connections to existing public foul system to prevent risk of contamination to groundwater and Elstow Brook;
- Location of temporary toilet blocks 10m away from water bodies and surface water systems where appropriate;
- Dewatering of excavations into temporary SuDS and ponds allowing interception, settlement and mitigation of pollutants before entering the receiving watercourse;
- Suitable management of surface water runoff to prevent both on and off-Site flood risk and pollution effecting the drainage network, the Coronation Pits. the Lake and Kempston Hardwick Clay Pits (North) – disused pits;
- Specification of low flow water supply equipment to reduce incoming demand during construction;
- Education of Site workers conserving water e.g. switching off taps, plant, and equipment when not in use;
- Wheel washing recycling systems e.g. collection of used water, filtering debris/sediment and reuse for washing supply purposes;
- The Flood Risk Assessment (**Appendix 12.1: Flood Risk Assessment (Volume 3)**) and Site Wide Drainage Strategy (**Appendix 12.3: Drainage Strategy (Volume 3)**) include flow controls and attenuation to prevent permanent capacity issue within the network. The Contractor may discharge accumulated water and groundwater into the permanent outfalls of the drainage system where practicable and provide adequate means for trapping silt in temporary systems discharging into permanent drainage systems;
- Developing and implementing a Flood Emergency Plan considering plant machinery, Site operatives, and evacuation where appropriate, during a flood event;
- Construction workers to be informed on Site specific flood risk based on the FRA and ODS in **Appendix 12.1: Flood Risk Assessment (Volume 3)** and **Appendix 12.3: Drainage Strategy (Volume 3)** from rivers, surface water, and ground water sources;
- Groundwater monitoring is required to understand seasonal fluctuations, which may impact excavations in proximity to ground water levels. This should be controlled on-Site to reduce the risk of workers drowning in excavations, or plant machinery being damaged;

- Sediment laden water generated on-Site will be appropriately treated before discharge. This may be through the use of silt fences, silt traps, filter bunds (possibly straw bales or gravel bunds), settlement ponds and/or proprietary units such as a 'siltbuster'. Discharges will not be direct to any watercourse, but will be made to ground (where appropriate);
- Control and treatment measures will be regularly inspected to ensure they are working effectively;
- At the detailed design stage if any works are deemed to require significant dewatering (groundwater control) operations further consideration will be given to potential impacts and requisite mitigation. At present, the requirement for significant dewatering is considered very unlikely however, where long-term dewatering operations (>6 consecutive months) are proposed this will be subject to licensing consent through the EA;
- During the detailed design for the Drainage Strategy consideration will be given to scheduling early provision of proposed SuDS infrastructure so this can serve a construction mitigation function wherever practicable; and
- All relevant consents will be sought from the EA for temporary discharges and in-stream works.

3.10.4 All construction activities will be undertaken in accordance with legislation and the following EA Pollution Prevention Guidance (PPG).

- PPG 1: General Guide to the Prevention of Pollution of Water Resources (EA, reviewed July 2013);
- PPG 2: Choosing and using Storage Tanks (EA, April 2014);
- PPG 3: Choosing and using Oil Separators (EA, 2006);
- PPG 6: Working at Construction and Demolition Sites (EA, April 2014);
- PPG 7: Operating Refuelling Facilities (EA, August 2011);
- PPG 13: Vehicle Washing and Cleaning (EA, July 2007);
- PPG 21: Pollution Incident Response Planning (EA, 2004); and
- PPG 22: Dealing with Spills (EA, April 2011).

3.10.5 The Principal Contractor(s) and all Sub-contractor(s) must take precautions during the Construction Phase to protect the entire drainage system from siltation or pollution. During the Construction Phase, water supplies are required for Site staff, sanitary facilities, wheel washing, and concrete mixing. Used water will discharge into the receiving public foul water network. Anglian Water have advised that expected water supplies required for Construction Phase can be provided.

## 3.11 SOCIO-ECONOMICS

3.11.1 These Construction Phase mitigation measures reflect those which are committed to within ES **Chapter 13: Socio-Economics (Volume 1)**.

3.11.2 From a socio-economic perspective, it is anticipated that the construction of the Proposed Development may impact the accommodation market and employment generation on the labour market, skills and training. The following mitigation/enhancement measures are recommended to limit negative or enhance positive impacts on these socio-economic receptors:

- UDX would cause the Principal Contractor(s) to undertake monitoring, with a worker campus implemented to house some construction workers if thresholds are exceeded. This measure is secured through **Condition 16 in Draft Conditions for Approval (Document Reference: 1.5.0)**; and
- An **Employment and Skills Plan (Document Reference 6.12.0)** has been produced for the Proposed Development. This plan has been designed with the intention of increasing the level of local employment and the skill level of local residents. The implementation of this plan will enhance the temporary effect of employment generation on the labour market, skills and training.

- 3.11.3 The construction of the Proposed Development is also anticipated to impact local business assets from a socio-economic perspective. Throughout the construction period access for emergency vehicles will be maintained to and around the Site. Any closure to any such routes shall be controlled and managed to maintain access and suitable through routes for emergency vehicles at all times.
- 3.11.4 The relevant Undertaker(s) will ensure that the Principal Contractor(s) will provide first aid support for workers, including basic life support such as cardiopulmonary resuscitation (CPR), automatic external defibrillator (AED) use, bleeding control, and fracture stabilisation. Serious cases, including life-threatening emergencies or illnesses requiring ongoing care, will be referred to healthcare providers. Patients will be referred to definitive health care when:
- A life threatening medical emergency is present or presented.
  - The injury or illness episode cannot be fully assessed or treated within the scope of first-aid;
  - The illness presents a health risk to others (i.e. communicable disease other than flu/cold);
  - The condition is chronic or needs ongoing regular health care; and
  - Where required under public health law, NHS standard of care or when requested by the injured or ill party.
- 3.11.5 The relevant Undertaker(s) will collaborate with local health services and emergency responders to ensure efficient incident response, sharing protocols and offering joint training and onsite drills. Emergency vehicle access will be maintained at all times, with key routes managed to ensure they remain open and accessible during construction.
- 3.11.6 The relevant Undertaker(s) will liaise with the local health care system providers to validate shared understanding of available resources and support opportunities, share knowledge of operations and protocols for occupational incidents and return to work availabilities, and patient communications and information. The Principal Contractor(s) will also liaise with emergency responders related to site response locations, protocols, operational risks, and site familiarity to facilitate efficient and effective incident response. The Principal Contractor(s) will communicate and gain mutual understanding of onsite rescue/response resources and identification of agency support and equipment needs. The relevant Undertaker(s) will offer and provide onsite emergency drills and training opportunities for responder agencies.

## 3.12 GREENHOUSE GAS

- 3.12.1 These Construction Phase mitigation measures reflect those which are committed to within ES **Chapter 14: Greenhouse Gases (Volume 1)** and **Appendix 14.1: Carbon Management Plan (Volume 3)**.

- 3.12.2 Greenhouse Gas (GHG) emissions linked to the Construction Phase typically arise from embodied emissions associated with the extraction, manufacture and transport of materials and products used in construction; emissions from fuel and electricity used in vehicles and equipment on-Site; and emissions from the transport and disposal of construction waste.
- 3.12.3 UDX's own internal design standards for sustainability will be applied to the Proposed Development, including with respect to GHG emissions during construction. Additionally, an objective for the Theme Park aspects of the Proposed Development is to adopt measures that support LEED GOLD Certification for sustainability. In line with LEED certification criteria, Theme park aspects of the Proposed Development will be designed to optimise opportunities for energy reduction and a reduced carbon footprint, with a focus on the following areas:
- Energy – Reducing emissions, improving efficiency, and shifting to clean energy;
  - Materials – Prioritising circular, low-carbon materials;
  - Waste – Strive to limit waste in facility construction; and
  - Water – Conserving freshwater resources through reduction and recycling.
- 3.12.4 In support of UDX's internal design standards for sustainability and the LEED certification, application of the PAS 2080:2023 carbon reduction hierarchy will ensure the benefits and efficiencies of whole-life carbon management are reflected in the Proposed Development, through consideration of the following during design and construction:
- Avoid: aligning the outcomes of the Proposed Development and/or programme of work with the UK's trajectory towards net zero at the system level and evaluate the basic need at the asset and/or network level;
  - Switch: assess alternative solutions and then adopt one that reduces whole life emissions through alternative scope, design approach, materials, technologies for operational carbon reduction, among others, while satisfying the whole life performance requirements; and
  - Improve: identify and adopt solutions and techniques that improve the use of resources and design life of an asset/network, including applying circular economy principles to assess materials/products in terms of their potential for reuse or recycling after end of life.
- 3.12.5 In line with UDX's targets to achieve LEED certification for the Theme Park aspects of the Proposed Development and application of PAS 2080, further carbon reduction measures are recommended to limit impacts from GHG emissions for the Proposed Development during the Construction Phase:
- Ensuring that the application of PAS 2080 in relation to the Proposed Development is verified by a PAS 2080 accredited organisation;

- Early-stage design and specification for construction of the Proposed Development with a view to minimising future GHG emissions, using the PAS 2080 standard for carbon management in buildings and infrastructure as a basis for design optimisation and establishing metrics and targets for carbon reduction during the Construction Phase, incorporating LEED certification goals;
- Maximising the opportunity to use more sustainable materials by specifying in procurement documentation, that materials and products with reduced embodied carbon emissions, and materials/resources featuring recycled content (where safe and of sufficient integrity for engineering), supported with eco- and carbon labels or verified Environmental Product Declarations (EPD) are favoured and should be used;
- Specifying efficient mechanical and electrical equipment (such as lighting and telecommunications) that is long-lasting and chosen for its durability and energy efficiency credentials, with a view to maximising the operational lifespan and minimising the need for maintenance and refurbishment (and all associated emissions);
- Designing, specifying and constructing the Proposed Development with a view to maximising the potential for re-use and recycling of materials/components at their end-of-life stage;
- Using more modern and efficient construction plant and delivery vehicles, and/or those powered by electricity from alternative/lower carbon fuels;
- Transportation of materials to be optimised to minimise GHG emissions, including sourcing construction materials from local suppliers, making use of local waste management facilities where practicable and ensuring the construction programme considers requirements for on-Site storage of materials and waste;
- Construction waste to be recycled or reused where practicable to avoid disposal to landfill, including the reuse of excavated arisings on-Site, where suitable; and
- Ensuring that an 'as built' carbon report is produced aligned to PAS 2080 which summarises the whole life carbon management process followed, including the identification of key potential sources of carbon emissions at the design stage and how they have been managed. This will also show performance against the initial carbon baseline to demonstrate best practice carbon management.

### 3.13 MAJOR ACCIDENTS AND DISASTERS

- 3.13.1 These Construction Phase mitigation measures reflect those which are committed to within ES **Chapter 16: Major Accidents and Disasters (Volume 1)**. Major Accident and Disaster (MA&D) risks identified during the Construction Phase typically arise from external influencing factors, such as proximity to high risk infrastructure and natural disasters. The following mitigation measures, which are provided in further detail in **Appendix 16.2: Major Accidents and Disasters Risk Record (Volume 3)**, are required to reduce the vulnerability of the Proposed Development to a MA&D:
- The construction and management of the Proposed Development will be in accordance with the following non-exclusive list of standards and systems:

- Programme of hazard identification studies to produce an inherently safe design and to make sure residual risks are managed to be 'As Low As Reasonably Practicable', as required by legislative drivers;
  - Environmental, Health and Safety Management systems;
  - CDM Risk Register will consider the potential risks associated with the Construction Phase; and
  - Supplier management environmental, health and safety standards (e.g., Construction Skills Certification Scheme).
- The crane operators will notify the CAA;
  - The relevant Undertaker(s) has engaged with the Health and Safety Executive (HSE) to understand the potential risks to construction personnel;
  - Engagement with the operators of the Liquefied Natural Gas (LNG) storage facility to agree emergency procedures as set out in the **Security and Emergency Management Plan (Document Reference 6.4.2.0)**;
  - A Construction, Design and Management Risk Register will consider the potential risks associated with the presence of the LNG storage facility and identify appropriate mitigation following engagement with the LNG storage operator;
  - The **Security and Emergency Management Plan (Document Reference 6.4.2.0)** has outlined the actions to be taken in the event of a release of LNG;
  - The Proposed Development will be designed and constructed in accordance with relevant standards, including design standards to mitigate against hostile vehicle attack;
  - Presence of trained security personnel;
  - CCTV monitoring;
  - Security checks prior to entering the Site;
  - A cyber security risk assessment will be undertaken; and
  - Digital technology will align with UK Cyber Security Standards.

### 3.14 POPULATION AND HUMAN HEALTH

- 3.14.1 These Construction Phase mitigation measures reflect those which are committed to within ES **Chapter 17: Population and Human Health (Volume 1)**.
- 3.14.2 Health effects created by the Proposed Development during construction are largely driven by traffic disruption and associated noise, and so the chapter cross refers to mitigation measures outlined in the OCEMP and **Appendix 5.1: Transport Assessment (Volume 3)** that would limit the scale of impact.
- 3.14.3 The following mitigation/enhancement measures are recommended to limit negative or enhance positive impacts on these receptors:



- In the Construction Phase, UDX will implement initial first aid treatment support services designed to provide timely response to a variety of commonly seen urgent/emergent injuries and illnesses presented by team members and contractors. Initial treatment will include basic first aid up to and including the application of basic life support. Basic life support means non-invasive emergency procedures applied to assist in the immediate survival of the patient including CPR, application of an AED, bleeding control, fracture stabilisation, and spinal immobilisation. Patients will be referred to definitive health care when:
  - A life threatening medical emergency is present or presented;
  - The injury or illness episode cannot be fully assessed or treated within the scope of first-aid;
  - The illness presents a health risk to others (i.e. communicable disease other than flu/cold);
  - The condition is chronic or needs ongoing regular health care; and
  - Where required under public health law, NHS standard of care or when requested by the injured or ill party;
- UDX will liaise with the local health care system providers to validate shared understanding of available resources and support opportunities, share knowledge of operations and protocols for occupational incidents and return to work availabilities, and patient communications and information;
- UDX will also liaise with emergency responders related to Site response locations, protocols, operational risks, and Site familiarity to facilitate efficient and effective incident response;
- UDX will communicate and gain mutual understanding of on-Site rescue/response resources and identification of agency support and equipment needs;
- UDX will offer and provide on-Site emergency drills and training opportunities for responder agencies; and
- Throughout the Construction Phase access for emergency vehicles should be maintained to and around the Site.

## 3.15 WASTE

- 3.15.1 The disposal of construction waste has the potential to have a significant environmental impact due to the nature of the material, the limited future capacity at local landfills, the increased heavy vehicle traffic movements and the consumption of virgin raw materials. Furthermore, the nature of the material and limited local disposal capacity may result in the need to transport waste substantial distances to waste treatment/disposal locations. Long distance haulage and disposal of waste is in contradiction to the 'Proximity Principle' as promoted in national and regional waste management plans and policies.
- 3.15.2 Detailed Construction Waste Management Plan(s) will be prepared as part of each CEMP based on the requirements set out below.



- 3.15.3 Waste produced on-Site will be subject to the Duty of Care<sup>4</sup> under the *Environmental Protection Act (1990)* and *Environmental Protection Regulations (1991)*. The code of practice issued under *section 34(7)* of the *Environmental Protection Act (1990)* sets out practical guidance on how to meet waste Duty of Care requirements.
- 3.15.4 The waste stream will be managed so far as is reasonably practicable to maximise the reuse of surplus materials and to ensure any adverse environmental effects are minimised. Waste will be segregated on-Site into key waste streams such as excavated soil and stones, metals, wood/timber and general construction waste.
- 3.15.5 The transportation of waste to and from the Site will comply with the Duty of Care requirements. These include ensuring waste is transported by registered carriers, disposal to appropriately licensed sites and maintenance of appropriate waste transfer documentation.
- 3.15.6 A core requirement in mitigating impacts from construction waste will be the inclusion of these mitigation measures. The waste hierarchy will promote legal compliance and provide guidance on best practice, monitoring and reporting of Construction and demolition waste.
- 3.15.7 With regards to managing Construction Demolition & Excavation (CD&E) waste, this OCEMP has the following additional aims:
- to contribute towards achieving current, emerging, and long term, project, national (England), regional and local targets for circularity of materials, limitation of material usage, waste minimisation, recycling, and reuse of CD&E waste arisings;
  - to provide a summary of the CD&E works and context for anticipated waste arisings and management;
  - to assist the relevant Undertaker(s) in complying with all applicable legal requirements for handling CD&E waste; and
  - to assist the relevant Undertaker(s) in achieving high standards of waste management performance.
- 3.15.8 The OCEMP further looks to:
- Minimise waste production and disposal during the Primary Phase of Construction;
  - Capture and record the benefits of best practice waste minimisation;
  - Improve material resource efficiency during the Primary Phase of Construction; and
  - Encourage activity that incentivises the move towards a circular economy.

## THE WASTE HIERARCHY

- 3.15.9 The *Waste Framework Directive* sets out the Waste Hierarchy (**Figure 3.3**) against which action to reduce the production and disposal of waste shall be taken throughout this Project.

---

<sup>4</sup> The Duty of Care legislation makes provision for the safe management of waste to protect human health and the environment.

## Waste hierarchy



**Figure 3.3: Waste Hierarchy**

3.15.10 The main principles of the Waste Hierarchy<sup>5</sup> are:

- **Prevention** - using less material in design and manufacture; keeping products for longer; re use; using less hazardous materials;
- **Preparing for reuse** - checking, cleaning, repairing, refurbishing, whole items, or spare parts:
  - Uncontaminated arisings will be reused, where possible, on-Site for future development. Surplus deconstructed, demounted and demolition materials will be managed in compliance with:
    - A Materials Management Plan, adhering to the CL:AIRE Definition of Waste Code of Practice (DoWCoP);
    - A permit issued in accordance with the *Environmental Permitting Regulations 2016*, unless the reuse of the material is covered by a Regulatory Position Statement<sup>6</sup> or an exemption<sup>7</sup>; and/or
    - The criteria and thresholds for exemption, allowing for reuse of materials, subject to specific material types and use.

<sup>5</sup> Defra (2011) *Guidance on applying the Waste Hierarchy*.  
[\[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/69403/pb13530-waste-hierarchy-guidance.pdf\]](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69403/pb13530-waste-hierarchy-guidance.pdf).

<sup>6</sup> UK Government (2025) *Environmental permits: regulatory position statements*.  
[\[https://www.gov.uk/government/collections/basic-rules-environmental-permitting-regulatory-positions#using-waste\]](https://www.gov.uk/government/collections/basic-rules-environmental-permitting-regulatory-positions#using-waste)

<sup>7</sup> UK Government (2024) *Choosing waste exemptions for waste management activity*.  
[\[https://www.gov.uk/guidance/choosing-waste-exemptions-for-waste-management-activity\]](https://www.gov.uk/guidance/choosing-waste-exemptions-for-waste-management-activity)

- **Recycling** - turning waste into a new substance or product; includes composting if it meets quality protocols;
- (Other types of) **Recovery** - anaerobic digestion; incineration with energy recovery; gasification and pyrolysis which produce energy (fuels, heat, and power); recovering materials from waste; some backfilling; and
- **Disposal** - landfill and incineration without energy recovery.

## WASTE CHARACTERISATION

3.15.11 Waste will be classified by the relevant Undertaker(s), through their Principal Contractor(s) and Sub-contractor(s), as inert, non-hazardous, or hazardous. In order to determine the suitability of a landfill or recovery facility to receive different waste classifications, Waste Acceptance Criteria (WAC) testing will be deployed as required. Responsibility for the basic classification of waste rests with the relevant Undertaker(s), through their Principal Contractor(s) and Sub-contractor(s), and any Landfill Operator.

## WASTE SEGREGATION

3.15.12 Specific areas at the Site shall be laid out and clearly demarcated to facilitate the separation of wastes and materials, ready for potential diversion from landfill in accordance with the Waste Hierarchy. Discussions will be held between the waste contractor and the relevant Undertaker(s) to validate space requirements to accommodate skips and storage of materials and waste.

## WASTE STORAGE

3.15.13 All wastes will be:

- Stored in a dedicated waste storage area which is secure, well maintained and located away from any water courses and other sensitive environmental receptors. Where appropriate, secondary containment will be provided, e.g., for waste oil;
- Stored in skips and waste containers that are checked for serviceability on arrival (i.e., are in good condition with no holes, are clean, with doors and covers fit for purpose);
- Protected from windy conditions to prevent nuisance where waste is temporarily stored on-Site;
- Stored in waste bins that are kept clean and clearly marked to avoid contamination of materials. This will reduce levels of contamination in the skips and increase the likelihood that a load will be accepted off-Site for reprocessing. In cases where a load is rejected, the likely destination would be landfill, which will increase the costs of the project and have adverse environmental effects;
- Monitored to ensure that cross-contamination of segregated waste does not occur;
- Stored and handled appropriately on-Site and during transport; and
- Dust suppression measures will be put in place, and drainage shall be carefully addressed to eliminate the potential for pollution of nearby drainage ditches, water courses and groundwater.

## WASTE MOVEMENTS

3.15.14 Where the relevant Undertaker(s), through their Principal Contractor(s) and Sub-contractor(s), move waste from the Site, the following actions and principles will be adopted:

- All movement of waste will be undertaken in accordance with the relevant waste regulations;

- Any waste being transported off Site will be done so by a registered waste carrier;
- A waste transfer note/hazardous waste consignment note will be completed and retained prior to waste leaving the Site;
- Before waste is allowed to leave Site, the relevant Undertaker(s), through their Principal Contractor(s) and Sub-contractor(s), will ensure that the site it is being transported to is appropriately licensed; and
- Vehicles transporting waste will be suitably secured so as not to allow waste to escape.

## **3.16 MONITORING AND REPORTING**

### **MONITORING, CONTINUAL IMPROVEMENT AND REVIEW**

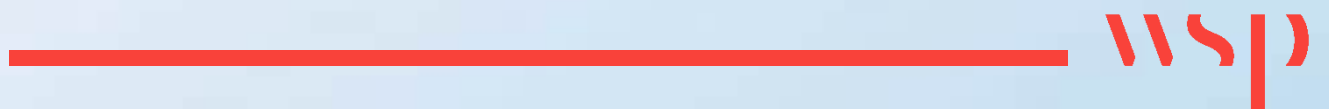
- 3.16.15 The Environmental Manager will have responsibility for maintaining a register of all required environmental monitoring, which will be made available for auditing and inspection.

### **REPORTING**

- 3.16.16 Reporting procedures will be defined by the Site Manager who will have overall responsibility for providing feedback to the Principal Contractor(s) and UDX on the environmental performance of the construction works.

# Annex 1

## **RELEVANT LEGISLATION**



Environmental Legislation	Summary of Relevance to the Site
<b>Hazardous Substances</b>	
<i>The Control of Substances Hazardous to Health Regulations 2002 (as amended) (COSHH regulations)</i>	The COSHH regulations provide a legal framework for controlling the exposure of persons to hazardous substances in the workplace. There are various requirements including: undertaking an assessment of the risk to the health of employees arising from their work; identifying what precautions are needed; providing appropriate measures to prevent or control the risk (ensuring that measures of control do not increase the overall risk to Health and Safety); implementing, maintaining and monitoring control measures as appropriate (including maintenance of equipment).
<i>Control of Asbestos Regulations (2012)</i>	<p>The regulations impose a duty to manage asbestos in non-domestic premises on persons responsible for the repair/maintenance of or who have control over such premises. Duties are also imposed on employers in relation to any premises where work is being carried out that may expose employees or others to asbestos. Where certain “licensable” work is undertaken, the employer must obtain a licence from the Health and Safety Executive (“HSE”).</p> <p>Management includes determining the risk (i.e. by undertaking appropriate assessments), preparing a written plan to manage the risk, implementing measures and recording the same. The guidance in the relevant Approved Code of Practice issued by the HSE should be followed.</p>
<b>Discharge to Water/Land</b>	
<i>Water Industry Act 1991</i>	<p>The Act prohibits certain discharges to sewers including:</p> <ul style="list-style-type: none"> <li>Any matter likely to injure the sewer or interfere with the free flow of its contents or to affect the treatment, disposal of its contents;</li> <li>Liquid waste or steam at a temperature higher than 110°F or any other chemical waste which is dangerous, a nuisance or prejudicial to health;</li> <li>Any petroleum spirit; and</li> <li>Calcium carbide.</li> </ul> <p>Trade effluent may be discharged into public sewers only with the consent, or by agreement with, the sewerage Undertaker (i.e. local water company). The consent may stipulate conditions relating to:</p> <ul style="list-style-type: none"> <li>Nature or composition of the effluent;</li> <li>Maximum daily volume allowed;</li> <li>Maximum daily rate of flow; and</li> <li>Sewer into which the effluent is discharged.</li> </ul>



Environmental Legislation	Summary of Relevance to the Site
<p><i>Environmental Permitting (England and Wales) Regulations 2016 (as amended)</i></p>	<p>Consent is required if there is a need to discharge polluting matter, waste matter or trade or sewage effluent to surface or ground water. Consents are granted by the Environment Agency subject to conditions (i.e. controlling the composition, volume and rate of the discharge).</p> <p>Exemptions may be available for certain water discharge activities. Exemptions must be registered with the Environment Agency.</p> <p>It is an offence 'to cause or knowingly permit' a water discharge activity (i.e. the discharge of poisonous, noxious, or polluting matter into controlled waters) without an environmental permit or to fail to comply with the conditions of a permit.</p>
<p><i>Water Resources Act 1991 (as amended)</i></p>	<p>The abstraction of water from surface waters and groundwater requires a licence from the Environment Agency. Exemptions to this requirement are available (i.e. for the abstraction of 20 cubic metres or less in a 24-hour period). Licences are granted subject to conditions and are time limited.</p> <p>It is an offence under the Act to abstract water without a licence or to fail to comply with the conditions of a licence.</p> <p>Certain impoundment activities/works also require a licence from the Environment Agency. Exemptions can apply.</p> <p>The Environment Agency can serve a notice on a person responsible for causing or knowingly permitting pollution to controlled waters to carry out specific works to remedy the pollution.</p>
<p><i>Control of Pollution (Oil Storage) (England) Regulations 2001</i></p>	<p>The Regulations regulate the storage of oil for industrial or commercial purposes in containers with a capacity of more than 200 litres. They do not capture containers situated in a building, underground, on premises used for refining oil or on premises used for onward distribution. The Regulations require a person having custody or control of oil to carry out certain works and to take certain precautions and other steps for preventing pollution of any waters which are controlled waters for the purposes of Part III of the Water Resources Act 1991.</p> <p>The Regulations impose general requirements in relation to the storage of oil and the types of container used. Where the Environment Agency considers that there is a significant risk of pollution of controlled waters from the oil in question it has the power to serve a notice on the person having custody or control to minimise the risk. The storage of waste oil is dealt with under the Environmental Permitting (England and Wales) Regulations 2016 (as amended), in respect of</p>

Environmental Legislation	Summary of Relevance to the Site
	which an environmental permit (or registered exemption may be required).
<i>Environmental Damage (Prevention and Remediation) (England) Regulations 2015 (as amended)</i>	<p>The Regulations require those who cause environmental damage to be liable for remedying it, whilst those who cause an imminent threat of environmental damage are required to take preventive action. Environmental damage is specifically defined - in the case of damage to water, it must be sufficiently serious to cause a deterioration in water's status; and for damage to land, it must result in a significant risk of adverse effects on human health.</p> <p>Strict liability (i.e. no need to show fault or negligence) applies where the damage results from certain activities.</p> <p>If an operator causes environmental damage or an imminent threat of damage, the operator must immediately take all practicable steps to prevent the damage or furtherance of that damage and notify the appropriate enforcing authority.</p>
<i>Building Act 1984 (as amended (including by the Building Safety Act 2022)) and the Building Regulations 2010 (as amended)</i>	<p>The Regulations impose requirements upon people carrying out certain building operations, including new buildings, building extensions and a material change of use of land or a building. Building work must comply with schedule 1 of the Regulations (supplemented by the Approved Documents which accompany the building regulations) which include minimum standards for various aspects including site preparation, toxic substances, drainage and waste disposal etc.</p>
Emissions to Air/Noise	
<i>Environment Act 1995</i>	<p>The Environment Act 1995, Part IV, requires local authorities to review the quality of air within their area. The reviews have to consider the existing air quality and the likely future air quality during the 'relevant period'. Such reviews have to be accompanied by an assessment of whether any prescribed air quality standards or objectives are being achieved or are likely to be achieved within the 'relevant period'. Where any of the prescribed objectives are not likely to be achieved, the authority must designate that area as an air quality management area (AQMA). For each AQMA an air quality action plan (AQAP) will be required to set out how the authority will exercise its powers to achieve the objectives.</p>
<i>Environment Act 2021</i>	<p>This Act sets a legally binding duty on the Secretary of State to bring forward air quality targets into secondary legislation; with specific regard to the annual mean level of PM<sub>2.5</sub> in ambient air.</p> <p>Schedule 11 of the Environment Act 2021 provides amendments to the Environment Act 1995 regarding</p>

Environmental Legislation	Summary of Relevance to the Site
	the duty of the Secretary of State to report on air quality in England as well as the functions and duties of relevant public authorities including, but not limited to, the duty of a Local Authority to prepare an action plan for an AQMA “...for the purpose of securing that air quality standards and objectives are achieved...”
<i>Air Quality Standards Regulations 2010 (as amended)</i>	The Regulations transpose into the legislation the 4 <sup>th</sup> air quality daughter directive (2004/107/EC) that sets targets for levels in outdoor air of certain toxic heavy metals and polycyclic aromatic hydrocarbons and Directive 2008/50/EC on ambient air quality and cleaner air.
<i>Control of Pollution Act (COPA) 1974 (Sections 60,72) (amended 1989)</i>	<p>Introduced to cover a wide range of environmental pollution including construction noise and vibration.</p> <p>Section 60 of COPA gives powers to the Local Authority to control noise and vibration from construction sites. The basis of the COPA legislation is that Best Practicable Means should be used to control noise and vibration pollution.</p> <p>Control is by service of a notice (under Section 60) on the person responsible for the works requiring specific controls to minimise noise and vibration. The notice may specify controls on the types of plant and machinery, hours of work, boundary noise levels, etc having regard to the provisions of the relevant code of practice (British Standards BS5228) and the need for ensuring Best Practicable Means.</p> <p>Section 72 defines Best Practicable Means as being “...reasonably practicable having regard among other things to local conditions and circumstances, to the current state of technical knowledge and to the financial implications. The means to be employed include the design, installation, maintenance and manner and periods of operation of plant and machinery, and the design, construction and maintenance of buildings and acoustic structures. The test of best practicable means is to apply only so far as compatible with any duty imposed by law, and in particular is to apply to statutory undertakers only so far as compatible with the duties imposed on them in their capacity of statutory undertakers. The said test is to apply only so far as compatible with safety and safe working conditions, and with the exigencies of any emergency or unforeseeable circumstances.”</p>
<i>Clean Air Act 1993</i>	The Act seeks to abate air pollution and prohibits, subject to certain conditions, the emission of dark and black smoke from chimneys serving boilers and other industrial plant. Limits also apply to dust, grit, sulphur and car fume emissions. All new furnaces shall be so far as practicable, smokeless. The Local Authority is empowered to undertake an examination of a plant

Environmental Legislation	Summary of Relevance to the Site
	likely to be causing air pollution, taking into account the possible relevance of statutory exemptions, obtain information about air pollution (including by serving notices) and designate smoke control areas).
<i>Noise and Statutory Nuisance Act 1993</i>	This Act amends the Environmental Protection Act 1990 to make noise emitted from vehicles, machinery, or equipment in the street a statutory nuisance.
<i>Noise Act 1996</i>	Provides Local Authorities with powers to prevent excessive noise (particularly at nighttime) including powers to seize noisy equipment and serve notices.
<i>Control of Noise at Work Regulations 2005</i>	Places a duty on employers to reduce the risk to their employees' health from noise. Requires that all employers must conduct an assessment of the exposure (and risk of exposure) of their employees to noise where they have reason to believe that any of the specified action levels for various noise exposures is or could be exceeded.
<i>Environmental Protection Act 1990: Part III – Statutory Nuisance</i>	The statutory nuisance regime set out 11 categories of matters which can amount to a statutory nuisance. These include any premises maintained in such a state to be prejudicial to health or a nuisance; smoke from premises, fumes or gases, any dust, steam, smell, or other effluvia arising on industrial, trade or business premises, any accumulation or deposit, insects/animals, artificial light from premises, noise (and vibration), noise emitted from premises, noise from vehicles or equipment in the street (and other matters declared by statute to be a nuisance) in each case being prejudicial to health or a nuisance. When a complaint of statutory nuisance is made to the Local Authority by a person living in its area, the Authority has to take steps to investigate the nuisance.
<i>Environmental Targets (Fine Particulate Matter) (England) Regulations 2023</i>	In response to the duties within the Environment Act 2021, the UK government introduced legally binding targets for air quality to reduce annual mean levels of particulate matter PM <sub>2.5</sub> concentrations in ambient air across England to <b>10µg/m<sup>3</sup></b> and achieve a 35% reduction in population exposure (when compared to 2018 levels) by 2040. In addition to these targets, the government published two new interim targets (within the Environmental Improvement Plan 2023) aimed at reducing population exposure to PM <sub>2.5</sub> by 22% (when compared to 2018 levels) and reducing annual mean concentrations to <b>12µg/m<sup>3</sup></b> by the end of January 2028.
<b>Greenhouse Gases</b>	
<i>Climate Change Act 2008 and the Climate Change Act 2008 (2050 Target Amendment) Order 2019</i>	The Climate Change Act (and related legislation) sets the UK's target to reduce greenhouse gas emissions by at least 100% (compared to 1990 levels) by 2050.

Environmental Legislation	Summary of Relevance to the Site
<i>United Nations Framework Convention on Climate Change 1992</i>	The UK is a member of the United Nations Framework Convention on Climate Change ('UNFCCC') which drives international action on climate change. The UK has pledged to reduce emissions under the 'Paris Agreement' in 2015, as a part of a joint pledge by members of the EU. This provides an overarching commitment by the UK. In December 2020, the UK communicated its Nationally Determined Contribution (NDC) to the UNFCCC in line with Article 4 of the Paris Agreement. In its NDC, the UK commits to reducing economy-wide greenhouse gas emissions by at least 68% by 2030, compared to 1990 levels. The government has announced that it is committing to a 2035 target of reducing territorial greenhouse gas emissions by 81% compared to 1990 levels.
<i>The Carbon Budgets Order 2021</i>	The carbon budgets set the carbon budget for the relevant budgetary 5-year period with a view to meeting legally binding targets in the UK to reduce greenhouse gas emissions.
<i>The Building Regulations 2010 (as amended) Conservation of fuel and power: Approved Document L (2021 edition incorporating 2023 amendments – for use in England)</i>	All buildings on a site have to comply with the relevant version of Part L of the Building Regulations (supplemented by the Approved Documents which accompany the building regulations). Part L2A sets out minimum legal requirements for energy efficiency in non-residential building design. Changes to this regime (including with regard to performance requirements for non-domestic buildings) are expected to be introduced in 2025.
<b>Major Accidents and Disasters</b>	
<i>Health and Safety at Work etc. Act 1974 (c. 37)</i>	The Act provides the framework for the regulation of workplace health and safety in the UK. It sets out the general duties which employers have towards employees and members of the public and provides a legal framework for the provision of safe plant and equipment and prevention of harm to people from occupational hazards present in a workplace, including emergencies, which may affect those offsite or visiting the Proposed Development. The Act is supplemented by various regulations aimed at managing health and safety risk in the workplace and supported by Approved Codes of Practice issued by the HSE.
<i>Construction (Design and Management) (CDM) Regulations 2015</i>	<p>These Regulations place legal duties on almost all parties involved in construction work, with specific duties on clients, designers and contractors, so that health and safety is considered throughout the life of a construction project from inception to demolition and removal.</p> <p>The client, designer(s) and contractor(s) must avoid foreseeable risks, so far as is reasonably practicable,</p>

Environmental Legislation	Summary of Relevance to the Site
	<p>by eliminating hazards associated with the design, construction, operation and maintenance of the Proposed Development.</p> <p>The Regulations ensure that mechanisms are in place to continually identify, evaluate and manage safety risks throughout the design, construction and operation phases of the Proposed Development. Many of the risks identified and managed at the detailed design phase also serve to eliminate or reduce the risk of a major accident (and therefore environmental consequence) occurring during the construction and operation phases.</p>
<i>Control of Major Accident Hazards (COMAH) Regulations 2015</i>	<p>The purpose of the COMAH Regulations is to prevent major accidents involving dangerous substances and limit the consequences to people and the environment of any accidents which do occur.</p> <p>There is one COMAH site within a 5km radius of the Proposed Development.</p>
<i>The Planning (Hazardous Substances) Regulations 2015</i>	<p>These Regulations transpose the land-use planning requirements of the European Seveso III Directive and relate to the way hazardous substances consents operate, and the way in which the planning system reduces the likelihood and impact of major accidents.</p> <p>Establishments at which certain hazardous substances are present above defined threshold limits are required to hold a hazardous substances consent from the Hazardous Substances Authority (usually the local planning authority) subject to certain exceptions.</p> <p>Hazardous substance consents focus on ensuring the safety of the public around the consented site from potential major accident hazards.</p> <p>There is one site which holds a hazardous substance consent, the consultation zone associated with which, overlaps the Site boundary.</p>
<i>Occupier's Liability Act 1984 (c.3)</i>	<p>The Act provides a legal framework for the prevention of harm to people from safety and health hazards present on premises under the control of the occupier, including to those visiting the premises (which includes, in certain circumstances, trespassers).</p> <p>The Proposed Development will include premises controlled by UDX that will attract visitors who could be impacted by MA&amp;D whilst on/crossing those controlled premises.</p>
<b>Landscape</b>	
<i>The Hedgerows Regulations 1997 and the Management of Hedgerows (England) Regulations 2024</i>	<p>Protects certain hedgerows from removal and sets criminal penalties for their loss where removed or lost to development. Certain hedgerows located on land used for agriculture are protected from damage by</p>



Environmental Legislation	Summary of Relevance to the Site
	ensuring green cover buffer strips are established or maintained on land adjacent to them. The cutting or trimming of certain hedgerows during a specified time period is prohibited to protect hedge nesting birds.
<i>Forestry Act 1967</i>	The Act provides that a tree felling licence is needed for the felling of growing trees except in specific circumstances (e.g. based on the size of the trees).
<b>Ecology</b>	
<i>The Conservation of Habitats and Species Regulations 2017 (as amended)</i> , known as the 'the Habitats Regulations'	<p>The Conservation of Habitats and Species Regulations 2017 (as amended), known as the 'the Habitats Regulations' implements the European Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora (the 'Habitats Directive') and European Directive 2009/147/EC on the Conservation of Wild Birds ('Birds Directive'). The Habitats Regulations protect wildlife sites as well as rare or vulnerable animal, bird and plant species in England. All species listed under Annex IV of the Habitats Directive require strict protection and are known as European Protected Species (EPS). Under Regulation 43 of the Habitats Regulations, it is unlawful to:</p> <ul style="list-style-type: none"> <li>■ Deliberately kill, capture or disturb;</li> <li>■ Deliberately take or destroy the eggs of; and</li> <li>■ Damage or destroy the breeding site/resting place of any species protected under this legislation.</li> </ul>
<i>The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017</i>	<p>The purpose of the WFD is to establish a framework for the protection of inland surface waters (rivers and lakes), transitional waters (estuaries), coastal waters and groundwater and for water all waterbodies (unless artificial or heavily modified) to achieve "good" ecological status.</p> <p>When considering the effect of a development or activity on a waterbody the relevant authority is under a duty to assess if it will cause or contribute to a deterioration in status or jeopardise the waterbody achieving good status in the future.</p>
<i>Wildlife and Countryside Act 1981 (as amended)</i>	<p>The Act gives protection to native species, controls the release of non-native species, enhances the protection of Sites of Special Scientific Interest (SSSI) and builds upon the rights of way legislation. Many species are protected by from intentional or deliberate disturbance, taking, and risk of harm. Licences from Natural England are required to permit activities that disturb or remove protected wildlife, or damage their habitats, which would otherwise be unlawful.</p> <p>Species and habitats as discussed in this document are afforded protected under this Act.</p>

Environmental Legislation	Summary of Relevance to the Site
<i>The Natural Environment and Rural Communities Act 2006 (as amended)</i>	<p>This Act places a general duty upon public bodies or statutory undertakers in England to further the objective of the conservation and enhancement of biological diversity in the exercise of their functions.</p> <p>Species and habitats of principal importance listed under pursuant to Section 41 of the Act and should be used to guide decision-makers when implementing their duty to have regard for the conservation of biodiversity in the exercise of their normal functions.</p>
<i>The Protection of Badgers Act 1992</i>	<p>The Protection of Badgers Act 1992 makes it an offence to kill or take a Badger <i>Meles meles</i>, or to interfere with a Badger sett unless such action is licenced by Natural England. Sett interference includes damaging or destroying a sett, obstructing access to a sett and disturbing a Badger whilst it is occupying a sett. The Act defines a Badger sett as ‘any structure or place, which displays signs indicating the current use by a Badger’ and Natural England takes this definition to include seasonally used setts.</p>
<i>Salmon and Freshwater Fisheries Act 1975</i>	<p>This Act covers regulation of fisheries in England and Wales and includes provisions that cover the introduction of polluting effluents, the obstruction of fish passage (screens, dams, weirs, culverts etc) illegal means of fishing, permitted times of legal fishing and fishing licencing (which covers electric fishing).</p> <p>Under this Act, it is an offence to cause or knowingly permit any liquid or solid matter that is poisonous or injurious to fish, spawn, spawning areas or food of fish to enter any waters containing fish. Other offences can also apply.</p>
<i>The Eels (England and Wales) Regulations 2009</i>	<p>The aim of the regulations is to achieve 40 per cent escapement of adult eels relative to escapement levels under pristine conditions. The measures, as set out in the legislation, by which this is to be achieved is to reduce fishing pressures, improve access and habitat quality and reduce the impact of impingement and entrainment.</p> <p>Under the Regulations, the regulators can serve notice to companies detailing their legal obligation to screen intakes and outfalls for eel and/or to remove or modify obstructions to eel migration.</p>
Ground Conditions	
<i>Part IIA of the Environmental Protection Act 1990 and Contaminated Land (England) Regulations 2000 (as amended) and the Contaminated Land Statutory Guidance (2012)</i>	<p>Local Authorities have a duty to inspect land in their area for the purpose of identifying contaminated land (i.e. land that causes (or poses a risk of) significant harm to the environment or pollution of controlled waters) and to decide whether any such land should be designated as “contaminated land” and remediated so that it is suitable for use. Certain contaminated sites will</p>

Environmental Legislation	Summary of Relevance to the Site
	be designated as a 'special site', for which the Environment Agency will act as the enforcing authority. Public registers of contaminated land and special sites are kept by the Local Authority and the Environment Agency. Following designation of land as "contaminated land" (or a "special site"), the enforcing authority can serve a remediation notice on the appropriate person(s) specifying what needs to be done and the period within which remedial work should be completed. The appropriate person will be the person(s) who caused or knowingly permitted the contamination of the land. If an appropriate person cannot be identified, then responsibility falls to the current occupier or owner of the land. The regime allows for the contractual allocation and transfer of liability between private parties.
<i>CIRIA. (2001). 'Contaminated land risk assessment. A guide to good practice (C552)'.</i>	Examines the risk assessment of contaminated land and explains the key elements of risk assessment practices and procedures.
<i>British Standards Institute. (2017). 'BS 10175:2011+A2:2017: Investigation of Potentially Contaminated Sites' Code of Practice.</i>	Provides recommendations for the investigation of potentially contaminated land or land with naturally elevated concentrations of potentially harmful materials.
<sup>[1]</sup> <i>Land contamination risk management (LCRM). Available at: <a href="https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm">https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm</a></i>	Guidance on how to assess and manage the risks from land contamination.
<i>CIRIA. (2009). 'Unexploded ordnance (UXO): A guide for the construction industry (C681)</i>	This publication provides the UK construction industry with a set and defined process for the management of risks associated with UXO from WWI and WWII aerial bombardment. It is also broadly applicable to the risks from other forms of UXO that might be encountered. It focuses on the needs of the construction professional if there is a suspected UXO on-site and covers issues such as what to expect from an UXO specialist.
<i>CL:AIRE. (2011). 'The Definition of Waste: Development Industry Code of Practice'.</i>	<p>The DoW CoP provides a clear, consistent and efficient process which enables the reuse of excavated materials on-site or their movement between sites.</p> <p>The DoW CoP enables:</p> <ul style="list-style-type: none"> <li>■ the direct transfer and reuse of clean naturally occurring soil materials between sites;</li> <li>■ the conditions to support the establishment/operation of fixed soil treatment facilities; and</li> <li>■ the reuse of both contaminated/uncontaminated materials on their site of origin and between sites within defined <u>Cluster</u> projects.</li> </ul>

Environmental Legislation	Summary of Relevance to the Site
<i>CIRIA. (2023). Sustainable management of surplus soil and aggregates from construction (C809)</i>	This publication encourages early consideration and planning for the management of surplus soils using a designing out approach.
<i>DEFRA (2009). Construction Code of Practice for the Sustainable Use of Soils on Construction Site</i>	The Code outlines current guidance and legislation concerning the use of soil in construction projects, before offering stage by stage guidance on the use, management and movement of soil on site.
Waste	
<i>Waste Framework Directive (2008/98/EC) (as revised) (“WFD”) and as transposed and implemented in the UK by the Environmental Protection Act and related regulations including The Waste (England and Wales) Regulations 2011 (as below)</i>	<p>The WFD provides a comprehensive foundation for the management of waste across the European Union and forms the basis of waste law in the UK. A definition of waste is provided in Article 3 of the WFD which defines waste as:</p> <p><i>“Any substance or object that the holder discards or intends or is required to discard”.</i></p> <p>Waste classification is based on the <i>European List of Waste (LoW) (Commission Decision 2000/532/EC)</i>; and Annex III to <i>Directive 2008/98/EC</i>.</p> <p>The WFD, establishes a waste hierarchy which sets out the priority order for waste management.</p> <ol style="list-style-type: none"> <li>1. Prevention</li> <li>2. Preparing for re-use</li> <li>3. Recycling</li> <li>4. Other recovery</li> <li>5. Disposal</li> </ol> <p>The waste hierarchy remains a central concept to waste management in the UK (as below).</p>
<i>Section 34 Environmental Protection Act 1990 (Waste Duty of Care) and Waste Duty of Care Code of Practice (2018)</i>	<p>A Duty of Care is imposed (under section 34 of the Act) on anyone handling controlled waste to take all reasonable steps to ensure that the waste:</p> <ul style="list-style-type: none"> <li>• is not disposed of unlawfully, without a permit or in breach of any permit, or treated, kept or disposed of in a way that causes pollution or harm;</li> <li>• does not escape from a person's control;</li> <li>• is only transferred to an authorised person.</li> </ul> <p>Under the Duty of Care Code of Practice (2018), producers of waste must:</p> <ul style="list-style-type: none"> <li>■ Prevent unauthorised treatment or disposal of waste;</li> <li>■ Provide storage to prevent uncontrolled escape of waste;</li> <li>■ Ensure proper transfer of waste to third parties;</li> </ul>

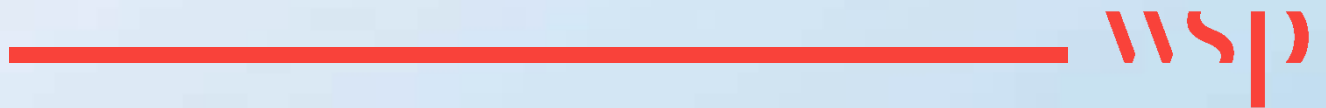
Environmental Legislation	Summary of Relevance to the Site
	<ul style="list-style-type: none"> <li>Retain copies of waste transfer documentation for two years for non-hazardous waste, and three years for hazardous waste consignment notes; and</li> <li>Undertake regular audits of the Duty of Care process and paperwork.</li> </ul>
<i>Environmental Permitting (England and Wales) Regulations 2016 (as amended)</i>	<p>Permits are required for regulated activities which are considered to have the potential to harm the environment or human health (unless an exemption applies). Regulated activities include, in particular, certain waste operations, groundwater activities, flood risk activities, operation of mobile plant (i.e. for crushing and screening), industrial/large energy activities (these activities are set out in Schedule 1 of the Regulations).</p> <p>Waste operations comprise the carrying out of the recovery or disposal of waste. Certain waste treatment, recovery or disposal operations that are low risk are exempt from the requirement to obtain an environmental permit. Where an exemption is relied upon it must be registered with the Environment Agency.</p> <p>It is an offence 'to cause or knowingly permit' a regulated activity without an environmental permit or to fail to comply with the conditions of a permit.</p>
<i>The Waste (England and Wales) Regulations 2011 (as amended) and the Separation of Waste (England) Regulations 2024 and Separation of Waste (England) Regulations 2025</i>	<p>These Regulations require a person who produces, handles, manages or disposes of waste to take all reasonable measures to apply the following waste hierarchy in priority order: .</p> <ol style="list-style-type: none"> <li>1. Prevention</li> <li>2. Preparing for re-use</li> <li>3. Recycling</li> <li>4. Other recovery (e.g. energy recovery)</li> <li>5. Disposal</li> </ol> <p>Regard should be had to DEFRA guidance on complying with the waste hierarchy.</p> <p>The Regulations set out what must be included in the waste transfer note to be provided as part of the waste Duty of Care, including that the transferor has followed the waste hierarchy. The introduction of mandatory digital waste tracking in April 2025 has been delayed and is now anticipated for 2026 (scope and timeframe to be confirmed).</p> <p>Waste collection authorities are required to collect six recyclable waste streams separately (including paper, metal, plastic, and glass) and require producers of relevant waste to arrange for the collection of these waste streams.</p>
<i>Hazardous Waste (England and Wales) Regulation 2005</i>	<p>The Regulations govern the hazardous waste regime and impose various requirements regarding the mixing of hazardous waste and non-hazardous waste (or</p>

Environmental Legislation	Summary of Relevance to the Site
	different categories of hazardous waste), the transportation of hazardous waste and record-keeping to track the movement of hazardous waste (including consignment notes and records of its disposal).
<i>Waste Minimisation Act 1998</i>	Enables Local Authorities to take the appropriate steps to reduce and minimise the generation of household, commercial or industrial waste within their area.
<i>The Control of Pollution Act 1974</i>	Makes provisions with respect to the generation and revision of 'waste disposal plans' and prohibits the unlicensed disposal of waste.
<i>Control of Pollution (Amendment) Act 1989 and the Waste (England and Wales) Regulations 2011</i>	<p>Under a combination of the Act and the Regulations, the following entities must be registered with the Environment Agency:</p> <ul style="list-style-type: none"> <li>• carrier of controlled waste;</li> <li>• brokers of controlled waste; or</li> <li>• dealers in controlled waste.</li> </ul> <p>Controlled waste is defined as household, industrial and commercial waste or any such waste.</p> <p>Professional waste carriers, brokers and dealers must register every three years. Carriers carrying waste from their own business need only carry out a single one-off registration that last indefinitely (except where the waste in question is construction and demolition waste). Reform of the registration system has been proposed but its implementation is delayed.</p>



# Annex 2

## **CONSTRUCTION WORKER TRAVEL PLAN**



HEADS OF TERMS CONSTRUCTION WORKER TRAVEL PLAN (CWTP)

# Universal Destinations & Experiences

Universal Destinations & Experiences UK Project

Appendix 2.3 – Annex 2

---

June 2025

---

[vectos.co.uk](https://vectos.co.uk)

## Contents

1	Introduction .....	1
2	Travel Demand .....	2
3	Objectives and Targets .....	3
4	Travel Plan Strategy.....	4
5	Measures .....	6
6	Monitoring and Review .....	7

# 1 Introduction

- 1.1 This Heads of Terms Construction Worker Travel Plan (CWTP) has been prepared on behalf of Universal Destinations & Experiences (UDX) which is seeking planning permission for the construction and operation of a Universal Entertainment Resort Complex, and associated development, in Bedford. The proposal is sponsored by the Department for Culture Media and Sport (DCMS). The Department for Transport (DfT) and its associated arm's-length bodies have assisted in the development of the highways and rail related elements of the proposal with Bedford Borough Council (Bedford BC). The proposal intends to provide sufficient information to enable the Secretary of State for Housing, Communities and Local Government (MHCLG) to engage with and consider making a planning decision.
- 1.2 This Annex refers hereafter to 'the relevant Undertakers' who comprise UDX, the Department for Transport (DfT), National Highways (NH), Network Rail (NR), and Bedford Borough Council (Bedford BC).

## Scope

- 1.3 This Annex sets out the proposed 'heads of terms' for the CWTP. It sets out the measures and activities to which the relevant undertakers commit to, in order to maximise the uptake of sustainable modes of transport at the Proposed Development. The intent is that these 'heads of terms' will be used as the basis for developing a detailed and full CWTP for implementation once the Construction Phase begins at the Proposed Development.
- 1.4 The CWTP is structured as follows:
- a. Section 2: Travel Demand;
  - b. Section 3: Objectives and Targets;
  - c. Section 4: Travel Plan Strategy;
  - d. Section 5: Measures; and
  - e. Section 6: Monitoring and Review.

## 2 Travel Demand

- 2.1 The number of workers employed during the Construction Phase will vary by day, week and month across the entire construction period as set out within **Appendix 2.3: Outline Construction Environmental Management Plan (OCEMP) (Volume 3)**.

### 3 Objectives and Targets

- 3.1 A key part of reducing and mitigating the effects of worker travel during the Construction Phase is to manage the travel behaviour of the workforce.

#### Objectives

- 3.2 The overriding objective of the CWTP will be to:

*Put in place the management tools deemed necessary so that operatives of the Site are able to make informed choices about their travel, while at the same time minimising the adverse impacts of their travel on the environment, surrounding highway network and local residents.*

- 3.3 This will involve supporting sustainable and public transport use, to minimise the number of single-occupancy car trips made by construction workers, thus, promoting carbon saving travel.

- 3.4 Throughout the Construction Phase operatives visiting the Site will be encouraged to:

- a. Utilise available public transport located around the Site;
- b. Utilise the shuttle/minibuses provided by contractors; and
- c. Utilise car sharing.

- 3.5 The sub-objectives are:

- a. Raise awareness of sustainable travel modes available to operatives through inductions and awareness; and
- b. Ensure that the maximum level of access to the Site is available during the construction phase for walking whilst maintaining the required levels of security across the Site.

- 3.6 These objectives will be achieved by introducing a package of physical (hard) and management (soft) measures that will facilitate travel by sustainable modes. An overview of these measures are contained within this Annex.

#### Targets

- 3.7 The target is:

- a. Travel information will be provided to all employees at the Site prior to them starting work
- b. Targets will be included in the Detailed CWTP to reduce the number of construction workers arriving by single occupancy private vehicles.



## 4 Travel Plan Strategy

### Transport Co-ordinator

- 4.1 Prior to the commencement of construction of the Site, a Transport Co-ordinator (TC) will be appointed. Each Undertaker, who is responsible for delivering a phase of works, will appoint a TC for that entire phase of works and these are likely to be the same person but that will be subject to contractual arrangements. If separate TC(s) are appointed for different phases and these phases overlap then either there would be a joint TC (subject to agreement) or there will be monthly meetings between the TC from each Undertaker to ensure the works are coordinated.
- 4.2 The TC(s) will analyse construction worker travel and identify opportunities for workers to make use of sustainable modes of transport.
- 4.3 Prior to commencement of construction each TC will prepare an implementation plan detailing the timeframe and specific detail which will be introduced. In many cases measures will be introduced from the outset, however other measures may be more effective or appropriate at different times of the Construction Phase. It may be necessary to adjust the timeframe within the implementation plan if needed and this will remain a live document. The implementation plan will therefore be flexible to enable it to respond to adapting travel demands and emerging trends as and when they become apparent.
- 4.4 The implementation plan will be made available to the Transport Steering Group (TSG) and the TC(s) will attend regularly to update on activities.
- 4.5 On commencement of construction, the TC will:
  - a. Undertake a baseline travel survey (within three months) as explained below;
  - b. Initiate a promotional campaign to make workers aware of the sustainable travel options, facilities, and other forms of support that will be available;
  - c. Make all construction workers aware of the overall aim of the plan;
  - d. Prepare and distribute a Staff Welcome Pack and intranet details (and ensure this is done when new employees start);
  - e. Oversee the implementation of the CWTP including the measures listed within it;
  - f. Make workers aware of any changes to the sustainable travel measures being implemented as part of the CWTP;
  - g. Carry out day to day promotion and engagement of the CWTP with the aim of minimising social exclusions and the carbon effects of travel;
  - h. Provide personal travel planning advice to all workers on a request basis; and
  - i. Be the first point of contact for employees for all matters related to the CWTP.

- 4.6 The TC(s) will monitor travel patterns and uptake of sustainable transport measures on an annual basis until construction is completed. On an annual basis the TC(s) will:
- a. Review and update the CWTP, including its objectives and targets, to ensure it remains up-to-date;
  - b. Review and update a Staff Welcome Pack to ensure it remains up-to-date;
  - c. Undertake an annual review of public transport services and timetables and provide feedback on any substantive changes to the TSG as part of the annual review;
  - d. Undertake an annual review of car parking usage and allocation and provide feedback on any substantive changes to the TSG as part of the annual review; and
  - e. Report on the progress of the CWTP to the TSG, including:
    - i. overall changes to travel behaviour;
    - ii. progress against the objectives and actions; and
    - iii. proposed changes to the CWTP.

## 5 Measures

- 5.1 The CWTP will encourage the use of sustainable modes of travel and seek to minimise the use of single occupancy private vehicles where practicable. A key feature of this will be encouraging car sharing amongst construction workers and providing changing/showering facilities on the Site for workers that are able to use active travel to get to/from the Site.
- 5.2 A number of 'hard' and 'soft' measures will be set out in the CWTP, in order to maximise the potential uptake of sustainable modes of transport.
- 5.3 'Hard' measures will include (but may not be limited to):
- a. Contractors to provide convenient and attractive staff shuttle buses;
  - b. Provide priority car parking for car sharers; and
  - c. Provide clear wayfinding signage at the entrance to the Site.
- 5.4 'Soft' measures will include (but may not be limited to):
- a. Provide all workers with a Staff Welcome Pack advising of the measures contained in the CWTP. This information will also be disseminated through an intranet available to all construction workers;
  - b. Promoting existing park and ride facilities in the region, in combination with aforementioned public transport measures;
  - c. Implementing a construction worker bus strategy coordinated by contractors; and
  - d. Set up a lift/car sharing platform for workers to match journeys.
- 5.5 Additional awareness raising measures will include:
- a. Provide up to date public transport timetable information on relevant local bus and rail services, including shuttle bus timetable; and
  - b. Participate in engagement campaigns.

## 6 Monitoring and Review

- 6.1 Monitoring will be undertaken to ensure the Site achieves the CWTP objectives.
- 6.2 To establish 'baseline' travel behaviour of construction workers, the TC will undertake a survey of travel movements by all workers and visitors (during the Construction Phase) within three months of commencement of construction.
- 6.3 Recognising that travel behaviour will vary from day to day, the survey will be a snapshot survey of movement at a single point in time.
- 6.4 The survey will collect the following information:
- a. Time of arrival;
  - b. Purpose of visit (employee, visitor etc);
  - c. How often they visit the Site;
  - d. Home or journey origin postcode if not travelling from home (to comply with GDPR, this will only include the first three characters);
  - e. Main mode of transport to the Site (longest distance);
  - f. Final mode of transport to the Site;
  - g. Expected time of departure;
  - h. Expected mode of transport from the Site;
  - i. Reasons for choosing this/these mode(s) of transport;
  - j. Views on alternative more sustainable modes of transport (i.e. barriers to sustainable transport);
  - k. What initiatives would incentivise them to make use of sustainable transport; and
  - l. Demographic data (e.g. age, gender, car ownership).
- 6.5 The outcome of this baseline survey will be used to inform the development of the detailed CWTP. This will follow on from the approval of the detailed CEMP approval as it is only possible to survey staff once construction has commenced and the CWTP remains a live document which will continue to evolve throughout the phases of construction.
- 6.6 Within the first year of construction starting, a second survey of all workers will be carried out. Further surveys will then take place annually until construction is completed.

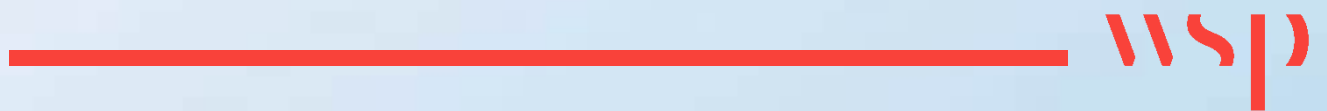
- 6.7 The outcome of these surveys will be used to check progress against the CWTP targets, which will be set out within the detailed CWTP, and objectives and will inform the need for updates to the CWTP.

### **Transport Steering Group**

- 6.8 The management of the CWTP will be informed by the TSG. This is explained below.
- 6.9 The role of the TSG in relation to the CWTP will be to:
- a. Review and approve the results of the annual travel survey;
  - b. Review and approve any changes to car parking provision/allocation;
  - c. Review and consider any changes to transport services and infrastructure that may impact the uptake of sustainable modes of transport;
  - d. Review and approve any changes to the measures included in the CWTP intended to promote and maximise the uptake of sustainable travel modes of transport; and
  - e. Liaise with stakeholders where appropriate.
- 6.10 The TSG will comprise of relevant Undertakers and Stakeholders including the Local Highway Authority, National Highways, representatives of local Parish Councils, other community representatives, representatives from UDX and other ERC occupiers along with any relevant public transport operators. This group will form a forum to address matters pertaining to the Construction Worker Travel Plan. The TSG set up will be agreed in due course and it will be established prior to construction.

# Annex 3

## **CONSTRUCTION ACCESS AND PHASING PLAN**







## UNIVERSAL DESTINATIONS & EXPERIENCES UK PROJECT

Former Kempston Hardwick Brickworks  
and adjoining land, Bedford

### Appendix 2.3 Annex 3 – Construction Access and Phasing Plan

Report reference: 4.2.3.0

Revision number: 00

Date: 26 June 2025



## TABLE OF CONTENTS

<b>1.0</b>	<b>Introduction</b>	<b>3</b>
<b>2.0</b>	<b>Construction Phase Definitions</b>	<b>4</b>
<b>3.0</b>	<b>Indicative Timeline for Sequencing of Construction Works</b>	<b>8</b>
<b>4.0</b>	<b>Construction Phasing Diagrams</b>	<b>9</b>

## 1.0 INTRODUCTION

This Construction Access and Phasing Plan has been prepared on behalf of Universal Destinations & Experiences (UDX) (“the Promoter”) which is seeking planning permission for the construction and operation of a Universal Entertainment Resort Complex, and associated development, in Bedford. The proposal is sponsored by the Department for Culture, Media and Sport (“DCMS”). The Department for Transport (“DfT”) and its associated arm’s-length bodies have assisted in the development of the highways and rail related elements of the proposal with Bedford Borough Council (“Bedford BC”). The proposal intends to provide sufficient information to enable the Secretary of State for Housing, Communities and Local Government (“MHCLG”) to consult on and consider making a planning decision.

The Site is located south-west of Bedford, Bedfordshire and is broadly to the east of the A421 and west of the Midland Main Line and is on the former Kempston Hardwick brickworks and agricultural land. The Site is divided into four main land areas referred to as the Core Zone, Lake Zone, West Gateway Zone, and East Gateway Zone , as shown in the **Zonal Plan (Document Reference 1.8.0)**.

The planning proposal also includes a series of infrastructure improvements including:

- a new slip road to provide access to and from the A421;
- an expanded railway station on the Thameslink/Midland Main Line at Wixams;
- improvements to Manor Road; and
- improvements to certain other local roads.

It also safeguards land for a potential new railway station on the proposed East West Railway (EWR) Bletchley to Bedford line, should this come forward in the future.

The purpose of this document is to define the contents of the construction phases of the Proposed Development. The information is contained in the table at Section 2 of this document which is submitted for approval.

Additional information on the likely sequencing of the defined construction phases is also set out in the subsequent sections of this document, which is indicative information based on current assumptions and is not submitted for approval.

## 2.0 CONSTRUCTION PHASE DEFINITIONS

The table below shows summary descriptions against each construction phase, the applicable works areas, and the applicable zones for each phase. A description of each Works Package is included in the **Description of Development (Document Reference 1.9.0)**.

PHASE	NAME	SUMMARY	ESTIMATED DURATION <sup>1</sup>	APPLICABLE ZONE				DESCRIPTION
				CZ	LZ	WG	EG	
<b>1</b>	<b>PRIMARY PHASE CONSTRUCTION</b>							
<b>1a</b>	Advanced Works	Site Establishment in Lake Zone, Vegetation Removal, Habitat Creation to Enable Species Relocation, Security Measures, Temporary Access Works, Topsoil Strip, Archaeological Investigation.	9-12 months	✓	✓	✓	✓	<ul style="list-style-type: none"> <li>Phase 1a covers the initial works prior to completion of the road upgrades and site entrances required for construction traffic on Broadmead Road and Manor Road.</li> <li>During this period, access to the site will be via Manor Road, making use of the existing hard standing area in the Lake Zone.</li> <li>Utility connections will be made for Temporary Building Supplies (site accommodation).</li> <li>An overhead UKPN 33kV line crossing Western Gateway Zone from the junction of Broadmead Road and Woburn Road, running northwest to the boundary of the site and then continuing north out of the site boundary before undergrounding at Manor Road, will be diverted underground to accommodate proposed works.</li> <li>Accesses to the Core Zone will be formed from both Manor Road and Broadmead Road.</li> <li>The initial works will begin by securing the site through installation of security fencing. Existing Public Rights of Way in the Lake Zone (Public Rights of Way A1 and 8) and Core Zone (Public Rights of Way 1 and 2) will be temporarily closed prior to commencement of any construction work on the respective Public Right of Way. The Public Rights of Way in the Core Zone (Public Rights of Way 1 and 2) will be permanently stopped up prior to the temporary closure period expiring.</li> <li>Demolition will include Vine Cottages 1 and 2 and their respective outbuildings, as well as the derelict Gate House building located within the Lake Zone.</li> <li>Archaeological works, vegetation removal, and protected species mitigation works (translocation of species and related local habitat removal), will take place. Notable species include badger, great crested newt, reptiles, roosting, foraging and commuting bats, breeding and wintering birds and terrestrial and aquatic invertebrates.</li> <li>The road upgrades and site entrances required for construction traffic on Broadmead Road and Manor Road are expected to take 4-6 months including all required agreements and licenses.</li> </ul>

<sup>1</sup> This column and any dates set out in this table are indicative and for information only based on current assumptions and is not submitted for approval.

PHASE	NAME	SUMMARY	ESTIMATED DURATION <sup>1</sup>	APPLICABLE ZONE				DESCRIPTION
				CZ	LZ	WG	EG	
1b	Enabling Works & Grading	Remaining Site Establishment, Surface Water Management, Cut & Fill, Earthwork Importation, Soil Remediation	14-18 months	✓	✓	✓	✓	<ul style="list-style-type: none"> <li>Phase 1b covers the period of works after completion of the road upgrades and site entrances required for construction traffic on Broadmead Road and Manor Road.</li> <li>During this period, access to the site will be via Broadmead Road and Manor Road, with an alternative access formed from Ampthill Road into the northeast corner of the Lake Zone.</li> <li>A new watercourse diversion will be formed along the eastern and northern boundary of the Core Zone, connecting into a culvert under Manor Road and into the existing Kempston Hardwick Clay Pits South in the Lake Zone.</li> <li>The new watercourse will be designed to accommodate the future proposed surface water network. Once complete, the existing watercourses crossing the Core Zone will be redundant, allowing earthworks in this area to proceed. The Lake Zone includes water treatment and storage volumes for both Core and Lake Zones, and a connection into Elstow Brook.</li> <li>Earthworks will include cut and fill to all zones, and imported fill where necessary. The site levels will subsequently form a self-draining plane up to the required masterplan levels, and with roads to formation level.</li> <li>Edge treatment and slope stability to the existing Kempston Hardwick Clay Pits in the Lake Zone will take place.</li> <li>Earth berms will be formed and appropriately landscaped.</li> <li>Areas will be established for material stockpiles, as well as crushing and mixing operations.</li> <li>The volume of earthworks cut and fill across the site is expected to take 14-18 months to complete, including two spring/summer cycles benefitting from drier site conditions.</li> </ul>
1c	Primary Infrastructure Works	Underground Utility Works, Internal Roads and Car Parking to Base Course Level, Soft Landscaping	14-18 months	✓	✓	✓		<ul style="list-style-type: none"> <li>Phase 1c overlaps with 'Phase 1b - Enabling Works and Grading', progressing the site to the finished levels required prior to Theme Park Construction and Roadway Works.</li> <li>During this period, access to the site will be via Broadmead Road and Manor Road, with alternative access also available from Ampthill Road into the northeast corner of the Lake Zone.</li> <li>Primary Infrastructure Works include any final earthworks regrading to theme park levels.</li> <li>All underground site utilities in the Core Zone east of Public Road A, to Theme Park points of connection, typically in combined utilities routes below the internal loop roads and footways.</li> <li>Internal loop roads and car parks will be constructed up to base course level, leaving final wearing course to be installed prior to opening.</li> <li>The Phase 1c – Primary Infrastructure Works are expected to take 14-18 months prior to handing over areas for Theme Park Construction and Roadway Works.</li> </ul>

PHASE	NAME	SUMMARY	ESTIMATED DURATION <sup>1</sup>	APPLICABLE ZONE				DESCRIPTION
				CZ	LZ	WG	EG	
1d	Property Infrastructure	Off-Site Utility Connections, Utility Compound	30-36 months	✓	✓			<ul style="list-style-type: none"> <li>During this period, access to the Utility Compound will be via Manor Road, with alternative access also available from Ampthill Road into the northeast corner of the Lake Zone.</li> <li>Offsite utility connections will be completed for new supplies, including High Voltage Power, Water, Sewer, Gas and Fibre.</li> <li>During this period, the Utility Compound will be installed at the southern end of the Lake Zone with equipment including substation, process water treatment plant, heating and cooling plant.</li> <li>On site foul water pumping stations and associated pipework will be installed.</li> <li>The permanent Utility Connections are expected to take 30-36 months to complete on site, prior to final commissioning and Operational Acceptance Testing (OAT).</li> </ul>
1e	Roadway Works	Roadway Development (all except Public Road B), Active Travel Corridors	24-30 months	✓	✓	✓	✓	<ul style="list-style-type: none"> <li>All Phase 1e Roadway Works will be complete prior to the Theme Park opening. Roadway Works comprise: <ul style="list-style-type: none"> <li>Package 1 – West Gateway and Approaches. This includes the Woburn Road roundabout, other roads in the West Gateway Zone, the Marston Vale Railway Road Bridge including ramps down to grade to the north and south.</li> <li>Package 2 – Realignment of Manor Road. This includes Manor Road realignment from Public Road A to Ampthill Road, the Manor Road pedestrian active travel bridge, and Wixams Station West transportation hub.</li> <li>Package 3 – Public Road A. This includes Public Road A through to the Manor Road roundabout.</li> </ul> </li> <li>Initially for Roadway Works, access to the site will remain via Broadmead Road and Manor Road, with alternative access also available from Ampthill Road into the northeast corner of the Lake Zone.</li> <li>Construction of Manor Road Realignment / Ampthill Road Junction Upgrade will require access directly from Ampthill Road.</li> <li>Once the West Gateway Roads and the Marston Vale Railway Road Bridge including ramps down to grade to the north and south are complete, these will become the primary access to the site from Woburn Road. Manor Road will remain as a secondary access.</li> <li>Once the A421 Slip Roads are complete (by National Highways), linking the A421 directly to the site via the West Gateway Roads &amp; the Marston Vale Railway Road Bridge, this will become the primary access to the site. Manor Road will remain as a secondary access.</li> </ul>
1f	Railway Works	Wixams Station	18-24 months				✓	<ul style="list-style-type: none"> <li>Phase 1f Railway Works includes works associated with Wixams Station, and Wixams Station West Transportation Hub.</li> <li>An expanded Wixams Rail Station will be built by Network Rail on the Midland Main Line within the Eastern Gateway Zone.</li> <li>Primary access for the Railway Works will be via Ampthill Road (B530) to the west of the Midland Main Railway Line.</li> </ul>

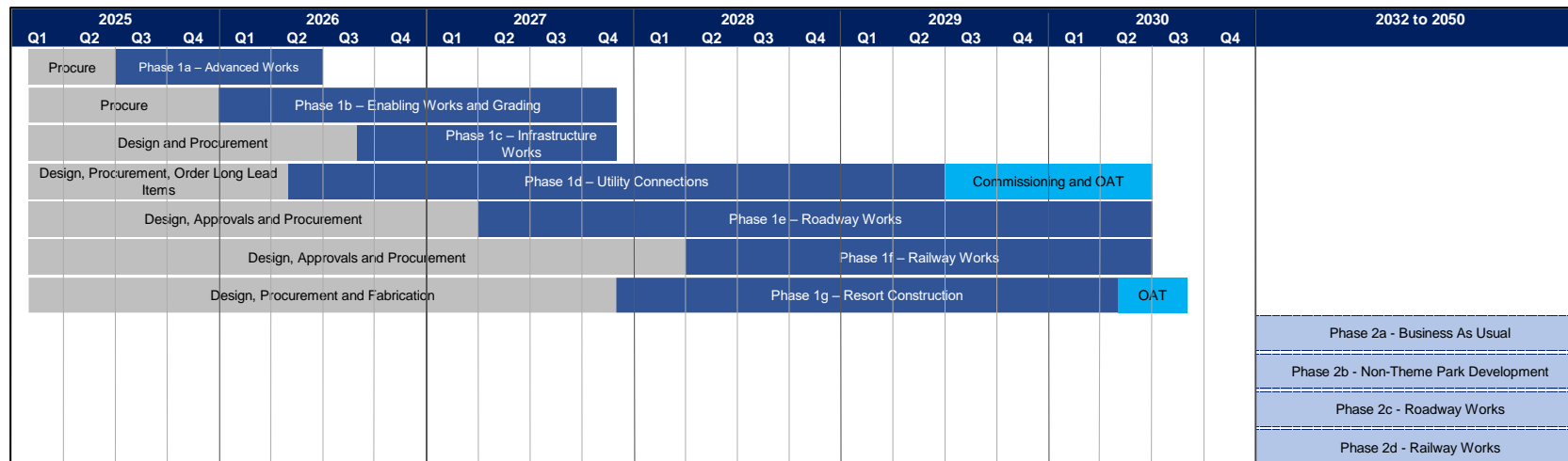
PHASE	NAME	SUMMARY	ESTIMATED DURATION <sup>1</sup>	APPLICABLE ZONE				DESCRIPTION
				CZ	LZ	WG	EG	
								<ul style="list-style-type: none"> <li>Specific timelines for the railway Works at Wixams by Network Rail are yet to be determined.</li> </ul>
1g	Theme Park Construction	Theme Park (inc. Support), Hotel, Transport Hubs	30-36 months	✓	✓			<ul style="list-style-type: none"> <li>The Theme Park is located within the Core Zone. It will involve cutting-edge technology to create fully immersive experiences where the attractions, placemaking, food, merchandise and costumes all work together.</li> <li>Theme Park Construction will also include administration and back of house buildings, a hotel, and all associated hard and soft landscaping.</li> <li>Initially during this period, access to the site will be via Broadmead Road and Manor Road, with alternative access also available from Ampthill Road into the northeast corner of the Lake Zone.</li> <li>Once the West Gateway Roads and the Marston Vale Railway Road Bridge including ramps down to grade to the north and south are complete, these will become the primary access to the site from Woburn Road. Manor Road will remain as a secondary access.</li> <li>Once the A421 Slip Roads are complete, linking the A421 directly to the site via the West Gateway Roads &amp; the Marston Vale Railway Road Bridge, this will become the primary access to the site. Manor Road will remain as a secondary access.</li> <li>An Administration Building will be complete before the Theme Park, along with the adjacent staff car park, to allow early staff onboarding and training.</li> <li>Theme Park Construction is expected to take 30 months to complete prior to final Operational Acceptance Testing (OAT)</li> </ul>
2	FULL BUILDOUT CONSTRUCTION							
2a	Business As Usual	Business as Usual	Over a 20 year period	✓				<ul style="list-style-type: none"> <li>Full Buildout consists of several component parts:               <ol style="list-style-type: none"> <li>Operation of the Theme Park,</li> <li>Theme Park evolution and expansion</li> <li>Construction of the non-Theme Park elements and other infrastructure in the West Gateway and Lake Zones, and</li> <li>Operation of subpart (3) once constructed.</li> <li>Remaining Roadway Development, Remaining Active Travel Corridors (in Lake Zone)</li> <li>East West Rail railway development in the West Gateway Area (should EWR come forward).</li> </ol> </li> <li>For purposes of this Proposed Development and assessment of a cautious worst case scenario, Full Buildout is assumed to occur over a twenty year period) following the Theme Park Opening Year.</li> </ul>
2b	Non-Theme Park Development	Mixed Use and Visitor Accommodation (both Lake Zone & West Gateway Zone)	Over a 20 year period		✓	✓		
2c	Roadway Works	Segment 2 of Public Road B and related Active Travel Corridors (in Lake Zone)	Over a 20 year period		✓	✓		



### 3.0 INDICATIVE TIMELINE FOR SEQUENCING OF CONSTRUCTION WORKS

The overall indicative sequencing for phasing of the construction works is shown below in **Figure 1**.

The purpose of Figure 1 is to show the likely sequencing of the construction phases of the Proposed Development based on current assumptions. It is indicative and is not submitted for approval. In addition, the specific dates shown in the timeline are also indicative and not submitted for approval.



**Figure 1** Indicative Timeline for Sequencing of Construction Works

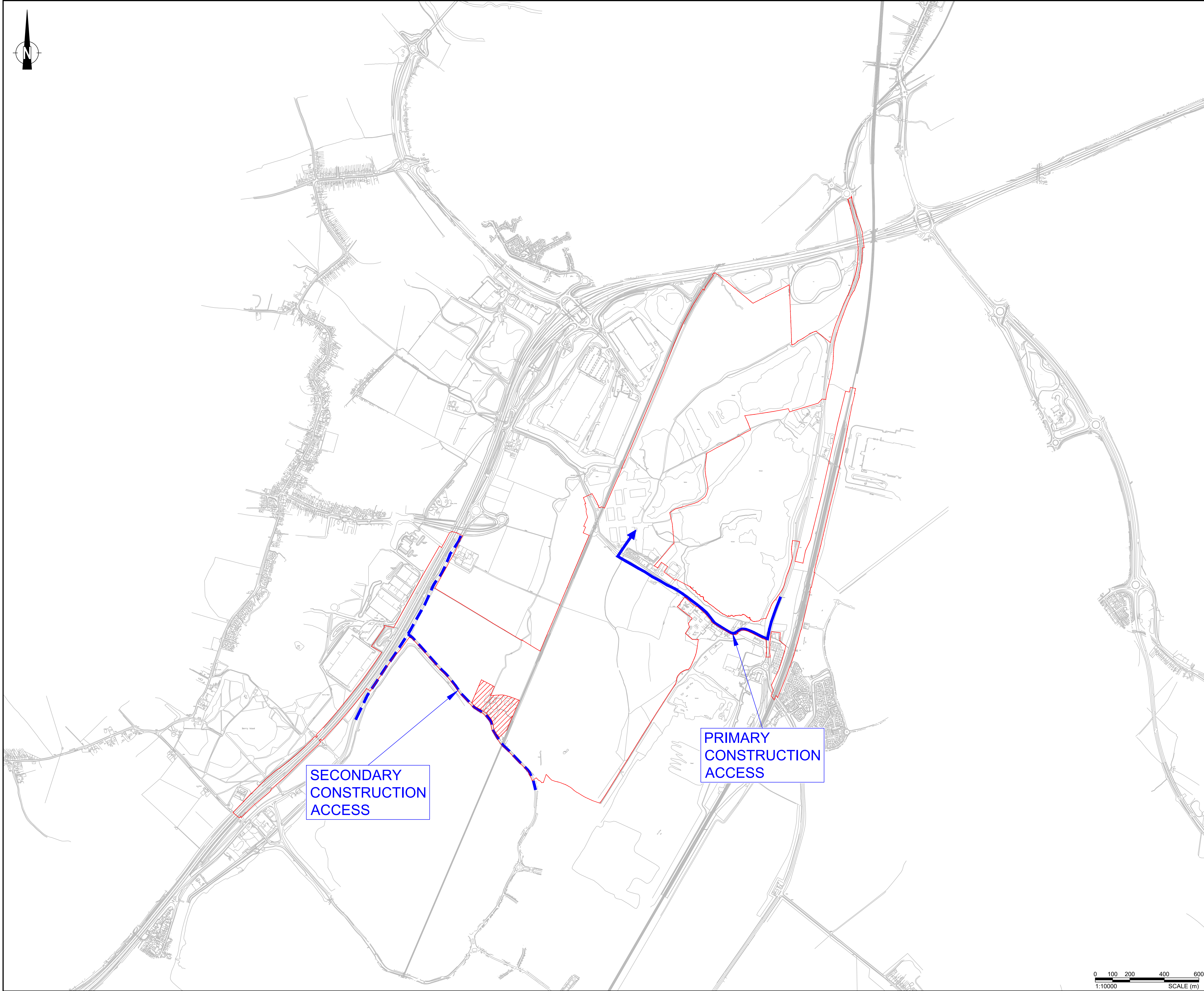
## 4.0 CONSTRUCTION PHASING DIAGRAMS

The proposed construction phasing in the table in Section 2.0 of this Construction Access and Phasing Plan is illustrated in the drawings<sup>2</sup> below.

---

<sup>2</sup> Any dates shown on these plans are indicative and for information only based on current assumptions and are not submitted for approval.





- NOTES:
1. THIS DRAWING HAS BEEN PRODUCED FOR PLANNING PERMISSION GRANTED BY MEANS OF A SPECIAL DEVELOPMENT ORDER (SDO) ONLY AND SHOULD NOT BE USED FOR DETAILED OR CONSTRUCTION INFORMATION.
  2. THE LAYOUTS ARE BASED ON OS INFORMATION ONLY AND SHOULD NOT BE USED FOR DETAILED INFORMATION.
  3. THE HIGHWAY AUTHORITIES WITHIN THE SCHEME AREA ARE NATIONAL HIGHWAYS AND BEDFORD BOROUGH COUNCIL.
  4. DO NOT SCALE FROM THIS DRAWING.
  5. DATES SHOWN ON THIS PLAN ARE STILL IN DRAFT FORM AND MAY CHANGE PRIOR TO FINAL SUBMISSION.

- KEY:
- SITE BOUNDARY
  - EXCLUDED FROM SITE BOUNDARY
  - PRIMARY CONSTRUCTION ACCESS
  - SECONDARY CONSTRUCTION ACCESS
  - ALTERNATIVE CONSTRUCTION ACCESS
  - PERMANENT ROADWAY LINK TO BE CONSTRUCTED
  - TEMPORARY HAULAGE ROUTE

00	FIRST ISSUE	VV	CR	MIS	11.10.24
----	-------------	----	----	-----	----------

Rev	Details	Drawn	Checked	Auth	Date
-----	---------	-------	---------	------	------

**vectos.**  
4th Floor Oxford Place  
61 Oxford Street  
Manchester  
M1 6EQ  
t: 0161 228 1008  
e: manchester@vectos.co.uk

PART OF

**SLR**

**LRQA**  
CERTIFIED

ISO 9001

Site Address:  
FORMER KEMPSTON HARDWICK BRICKWORKS AND  
ADJOINING LAND, BEDFORD

Project Name:  
UNIVERSAL DESTINATIONS &  
EXPERIENCES UK PROJECT

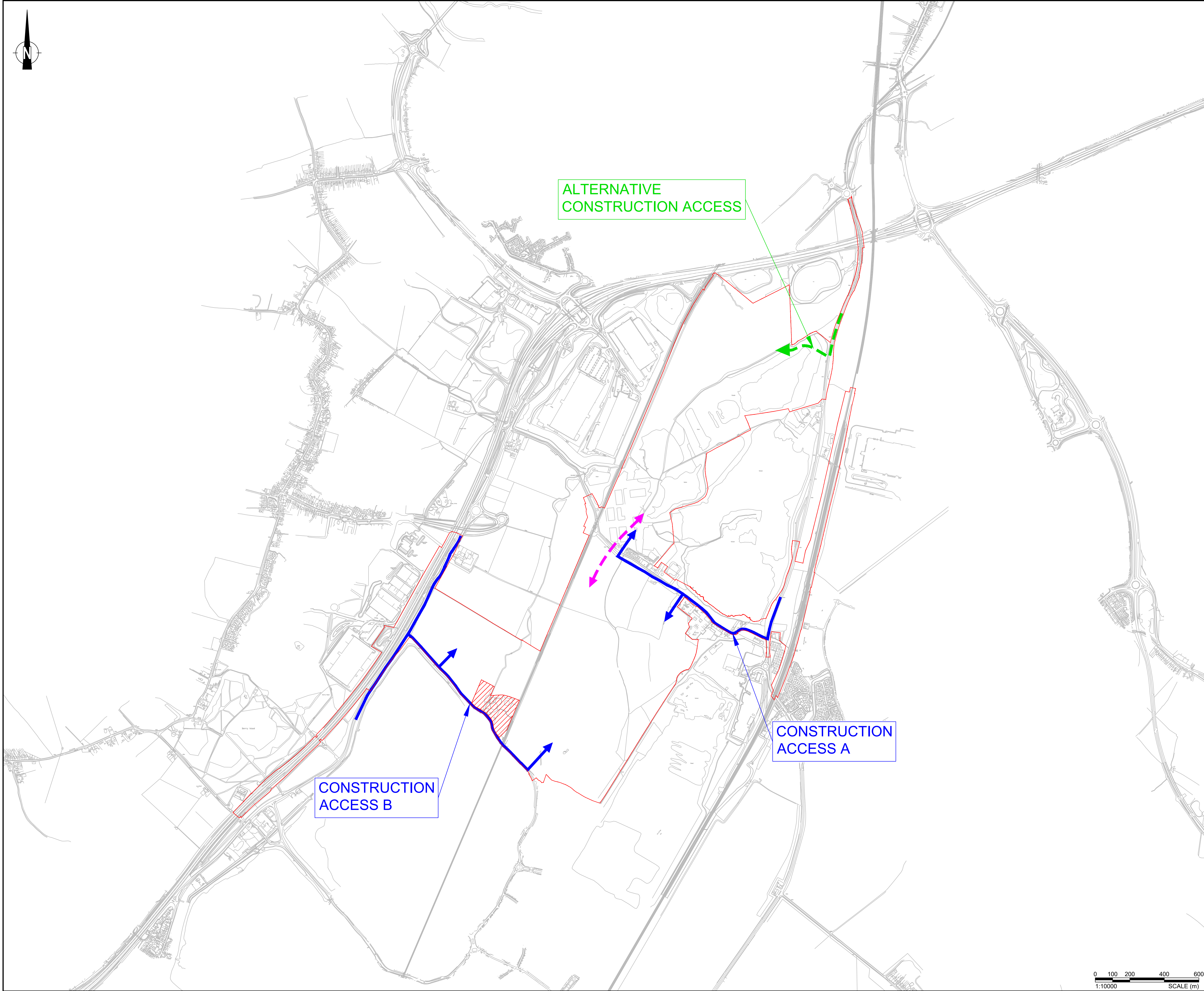
Drawing Title  
PHASE 1A: ADVANCED WORKS  
PRIOR TO BROADMEAD ROAD AND MAOR ROAD  
UPGRADES AND ENTRANCES  
(Q2 2025 TO Q4 2025)

Scale 1:10000	Designed VV	Drawn VV	Checked MIS	Authorised MIS
Original Size A1	Date 11.10.24	Date 11.10.24	Date 11.10.24	Date 11.10.24

Drawing Number PIN\Proj. Ref. No\Originator\ Volume	Location	I Type   Role   Number	Project Ref. No. P320
P320 - VEC -HGN-	SW	-SK-CH- 9101	Revision 00







- NOTES:
1. THIS DRAWING HAS BEEN PRODUCED FOR PLANNING PERMISSION GRANTED BY MEANS OF A SPECIAL DEVELOPMENT ORDER (SDO) ONLY AND SHOULD NOT BE USED FOR DETAILED OR CONSTRUCTION INFORMATION.
  2. THE LAYOUTS ARE BASED ON OS INFORMATION ONLY AND SHOULD NOT BE USED FOR DETAILED INFORMATION.
  3. THE HIGHWAY AUTHORITIES WITHIN THE SCHEME AREA ARE NATIONAL HIGHWAYS AND BEDFORD BOROUGH COUNCIL.
  4. DO NOT SCALE FROM THIS DRAWING.
  5. DATES SHOWN ON THIS PLAN ARE STILL IN DRAFT FORM AND MAY CHANGE PRIOR TO FINAL SUBMISSION.

- KEY:
- SITE BOUNDARY
  - EXCLUDED FROM SITE BOUNDARY
  - PRIMARY CONSTRUCTION ACCESS
  - SECONDARY CONSTRUCTION ACCESS
  - ALTERNATIVE CONSTRUCTION ACCESS
  - PERMANENT ROADWAY LINK TO BE CONSTRUCTED
  - TEMPORARY HAULAGE ROUTE

00	FIRST ISSUE	VV	CR	MIS	11.10.24
----	-------------	----	----	-----	----------

Rev	Details	Drawn	Checked	Auth	Date
-----	---------	-------	---------	------	------

**vectos.**  
4th Floor Oxford Place  
61 Oxford Street  
Manchester  
M1 6EQ  
t: 0161 228 1008  
e: manchester@vectos.co.uk

**SLR**  
PART OF  
**LRQA**  
CERTIFIED  
ISO 9001

Site Address: FORMER KEMPSTON HARDWICK BRICKWORKS AND ADJOINING LAND, BEDFORD

Project Name: UNIVERSAL DESTINATIONS & EXPERIENCES UK PROJECT

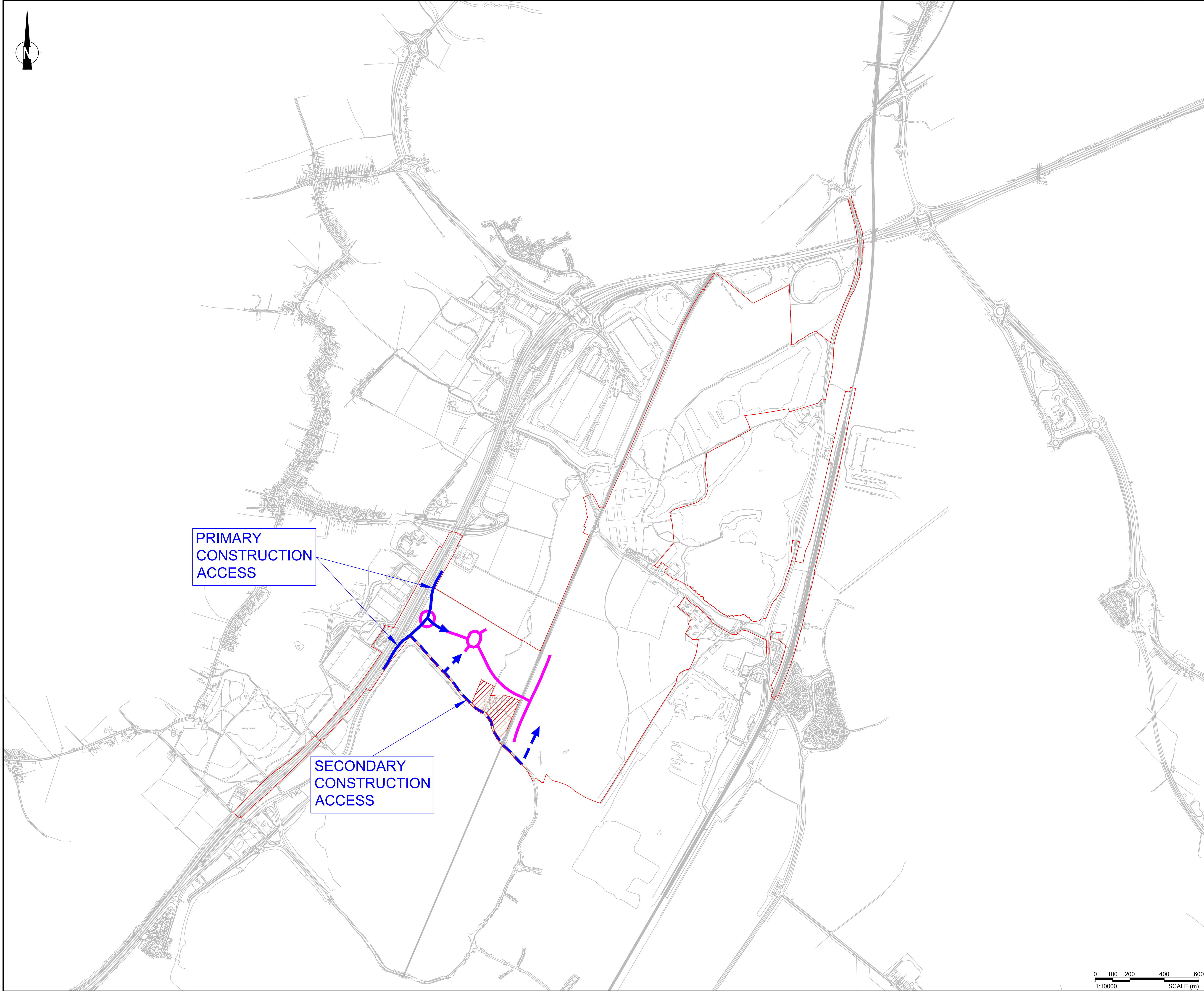
Drawing Title: PHASE 1B&1C: ENABLING WORKS, GRADING & INFRASTRUCTURE POST BROADMEAD ROAD UPGRADES (Q1 2026 TO Q4 2027)

Scale: 1:10000	Designed: VV	Drawn: VV	Checked: MIS	Authorised: MIS
Original Size: A1	Date: 11.10.24	Date: 11.10.24	Date: 11.10.24	Date: 11.10.24

Drawing Number: P320	Proj. Ref. No: -VEC-HGN-	Volume: SW	Location: -SK-CH- 9102	Project Ref. No: P320
Revision				00







- NOTES:
1. THIS DRAWING HAS BEEN PRODUCED FOR PLANNING PERMISSION GRANTED BY MEANS OF A SPECIAL DEVELOPMENT ORDER (SDO) ONLY AND SHOULD NOT BE USED FOR DETAILED OR CONSTRUCTION INFORMATION.
  2. THE LAYOUTS ARE BASED ON OS INFORMATION ONLY AND SHOULD NOT BE USED FOR DETAILED INFORMATION.
  3. THE HIGHWAY AUTHORITIES WITHIN THE SCHEME AREA ARE NATIONAL HIGHWAYS AND BEDFORD BOROUGH COUNCIL.
  4. DO NOT SCALE FROM THIS DRAWING.
  5. DATES SHOWN ON THIS PLAN ARE STILL IN DRAFT FORM AND MAY CHANGE PRIOR TO FINAL SUBMISSION.

- KEY:
- SITE BOUNDARY
  - EXCLUDED FROM SITE BOUNDARY
  - PRIMARY CONSTRUCTION ACCESS
  - SECONDARY CONSTRUCTION ACCESS
  - ALTERNATIVE CONSTRUCTION ACCESS
  - PERMANENT ROADWAY LINK TO BE CONSTRUCTED
  - TEMPORARY HAULAGE ROUTE

00	FIRST ISSUE	VV	CR	MIS	11.10.24
----	-------------	----	----	-----	----------

Rev	Details	Drawn	Checked	Auth	Date
-----	---------	-------	---------	------	------

**vectos.**

4th Floor Oxford Place  
61 Oxford Street  
Manchester  
M1 6EQ  
  
t: 0161 228 1008  
e: manchester@vectos.co.uk

PART OF

**SLR**

**LRQA**  
CERTIFIED  
ISO 9001

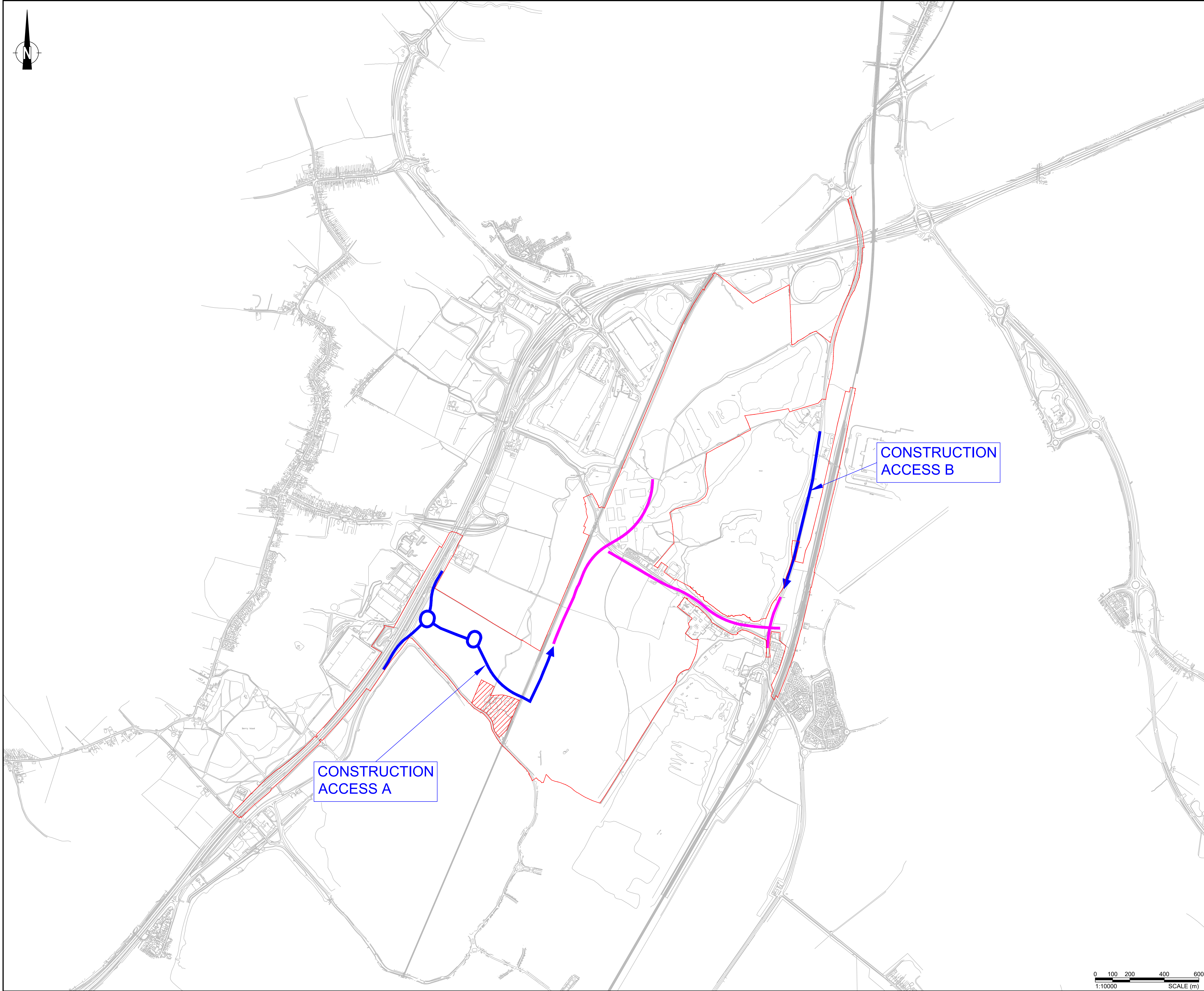
Site Address:  
FORMER KEMPSTON HARDWICK BRICKWORKS AND  
ADJOINING LAND, BEDFORD

Project Name:  
UNIVERSAL DESTINATIONS &  
EXPERIENCES UK PROJECT

Drawing Title  
PHASE 1E: ROADWAY WORKS  
WEST GATEWAY ROADS AND BRIDGES  
(Q3 2026 TO Q2 2028)

Scale 1:10000	Designed VV	Drawn VV	Checked MIS	Authorised MIS
Original Size A1	Date 11.10.24	Date 11.10.24	Date 11.10.24	Date 11.10.24
Drawing Number PIN/Proj. Ref. No./Originator/Volume I	Location I Type I Role I Number	Project Ref. No. P320		
P320 - VEC -HGN-	SW -SK-CH- 9103	Revision 00		





- NOTES:
1. THIS DRAWING HAS BEEN PRODUCED FOR PLANNING PERMISSION GRANTED BY MEANS OF A SPECIAL DEVELOPMENT ORDER (SDO) ONLY AND SHOULD NOT BE USED FOR DETAILED OR CONSTRUCTION INFORMATION.
  2. THE LAYOUTS ARE BASED ON OS INFORMATION ONLY AND SHOULD NOT BE USED FOR DETAILED INFORMATION.
  3. THE HIGHWAY AUTHORITIES WITHIN THE SCHEME AREA ARE NATIONAL HIGHWAYS AND BEDFORD BOROUGH COUNCIL.
  4. DO NOT SCALE FROM THIS DRAWING.
  5. DATES SHOWN ON THIS PLAN ARE STILL IN DRAFT FORM AND MAY CHANGE PRIOR TO FINAL SUBMISSION.

- KEY:
- SITE BOUNDARY
  - EXCLUDED FROM SITE BOUNDARY
  - PRIMARY CONSTRUCTION ACCESS
  - SECONDARY CONSTRUCTION ACCESS
  - ALTERNATIVE CONSTRUCTION ACCESS
  - PERMANENT ROADWAY LINK TO BE CONSTRUCTED
  - TEMPORARY HAULAGE ROUTE

00	FIRST ISSUE	VV	CR	MIS	11.10.24
----	-------------	----	----	-----	----------

Rev	Details	Drawn	Checked	Auth	Date
-----	---------	-------	---------	------	------

**vectos.**

4th Floor Oxford Place  
61 Oxford Street  
Manchester  
M1 6EQ  
t: 0161 228 1008  
e: manchester@vectos.co.uk

PART OF

**SLR**

LRQA

CERTIFIED

ISO 9001

Site Address:  
FORMER KEMPSTON HARDWICK BRICKWORKS AND  
ADJOINING LAND, BEDFORD

Project Name:  
UNIVERSAL DESTINATIONS &  
EXPERIENCES UK PROJECT

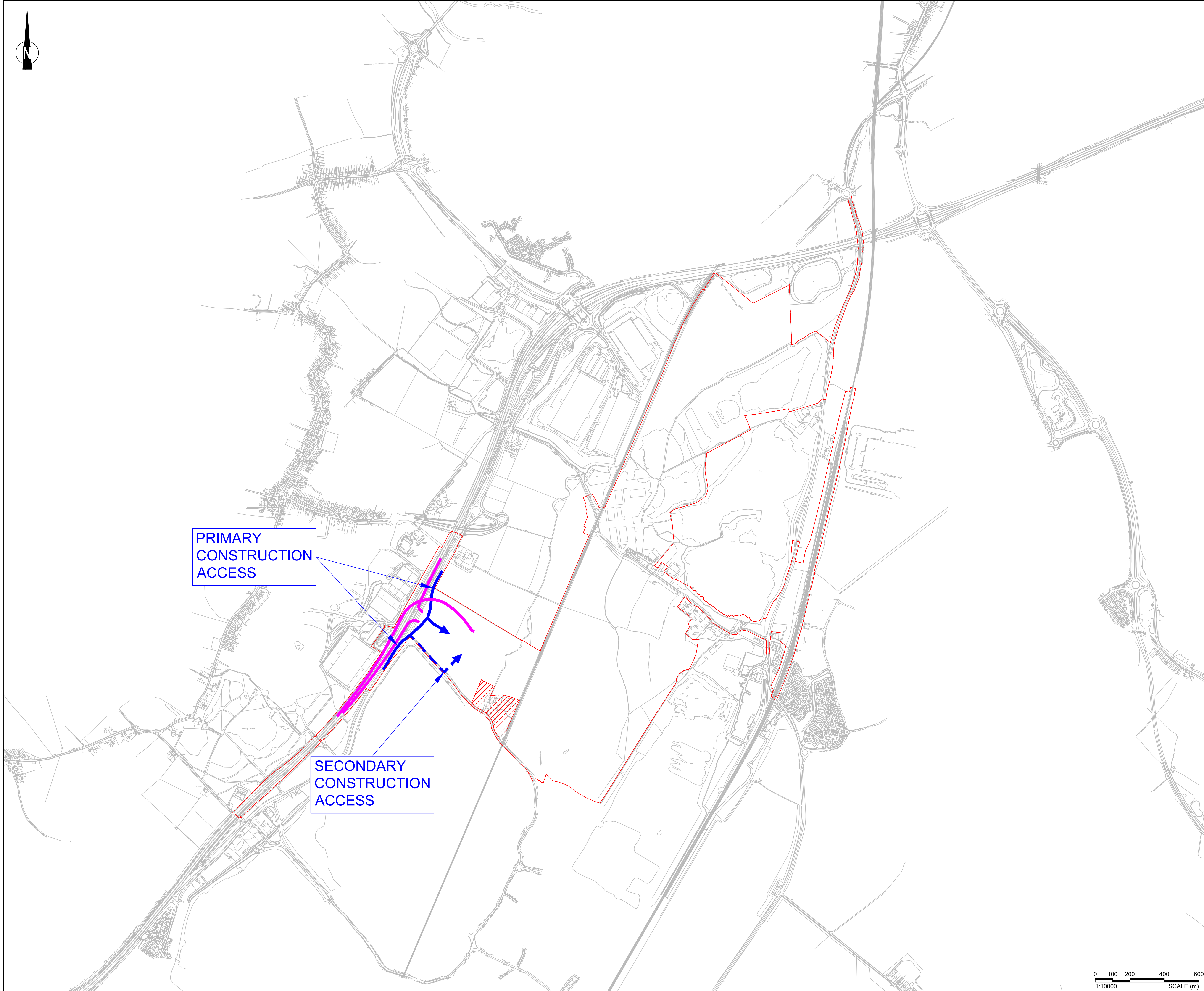
Drawing Title  
PHASE 1E: ROADWAY WORKS  
MANOR ROAD REALIGNMENT/AMPTHILL  
ROAD JUNCTION  
(Q2 2028 TO Q2 2030)

Scale	Designed	Drawn	Checked	Authorised
1:10000	VV	VV	MIS	MIS
Original Size	Date	Date	Date	Date
A1	11.10.24	11.10.24	11.10.24	11.10.24

Drawing Number	Proj. Ref. No.	Originator	Volume	Location	Type	Role	Number	Project Ref. No.
P320	- VEC -HGN-	SW	-SK-CH-	9104				P320
								Revision
								00

0 100 200 400 600  
1:10000 SCALE (m)





- NOTES:
1. THIS DRAWING HAS BEEN PRODUCED FOR PLANNING PERMISSION GRANTED BY MEANS OF A SPECIAL DEVELOPMENT ORDER (SDO) ONLY AND SHOULD NOT BE USED FOR DETAILED OR CONSTRUCTION INFORMATION.
  2. THE LAYOUTS ARE BASED ON OS INFORMATION ONLY AND SHOULD NOT BE USED FOR DETAILED INFORMATION.
  3. THE HIGHWAY AUTHORITIES WITHIN THE SCHEME AREA ARE NATIONAL HIGHWAYS AND BEDFORD BOROUGH COUNCIL.
  4. DO NOT SCALE FROM THIS DRAWING.
  5. DATES SHOWN ON THIS PLAN ARE STILL IN DRAFT FORM AND MAY CHANGE PRIOR TO FINAL SUBMISSION.

- KEY:
- SITE BOUNDARY
  - EXCLUDED FROM SITE BOUNDARY
  - PRIMARY CONSTRUCTION ACCESS
  - SECONDARY CONSTRUCTION ACCESS
  - ALTERNATIVE CONSTRUCTION ACCESS
  - PERMANENT ROADWAY LINK TO BE CONSTRUCTED
  - TEMPORARY HAULAGE ROUTE

00	FIRST ISSUE	VV	CR	MIS	11.10.24
----	-------------	----	----	-----	----------

Rev	Details	Drawn	Checked	Auth	Date
-----	---------	-------	---------	------	------

**vectos.**

4th Floor Oxford Place  
61 Oxford Street  
Manchester  
M1 6EQ  
t: 0161 228 1008  
e: manchester@vectos.co.uk

PART OF

**SLR**

**LRQA**

CERTIFIED

ISO 9001

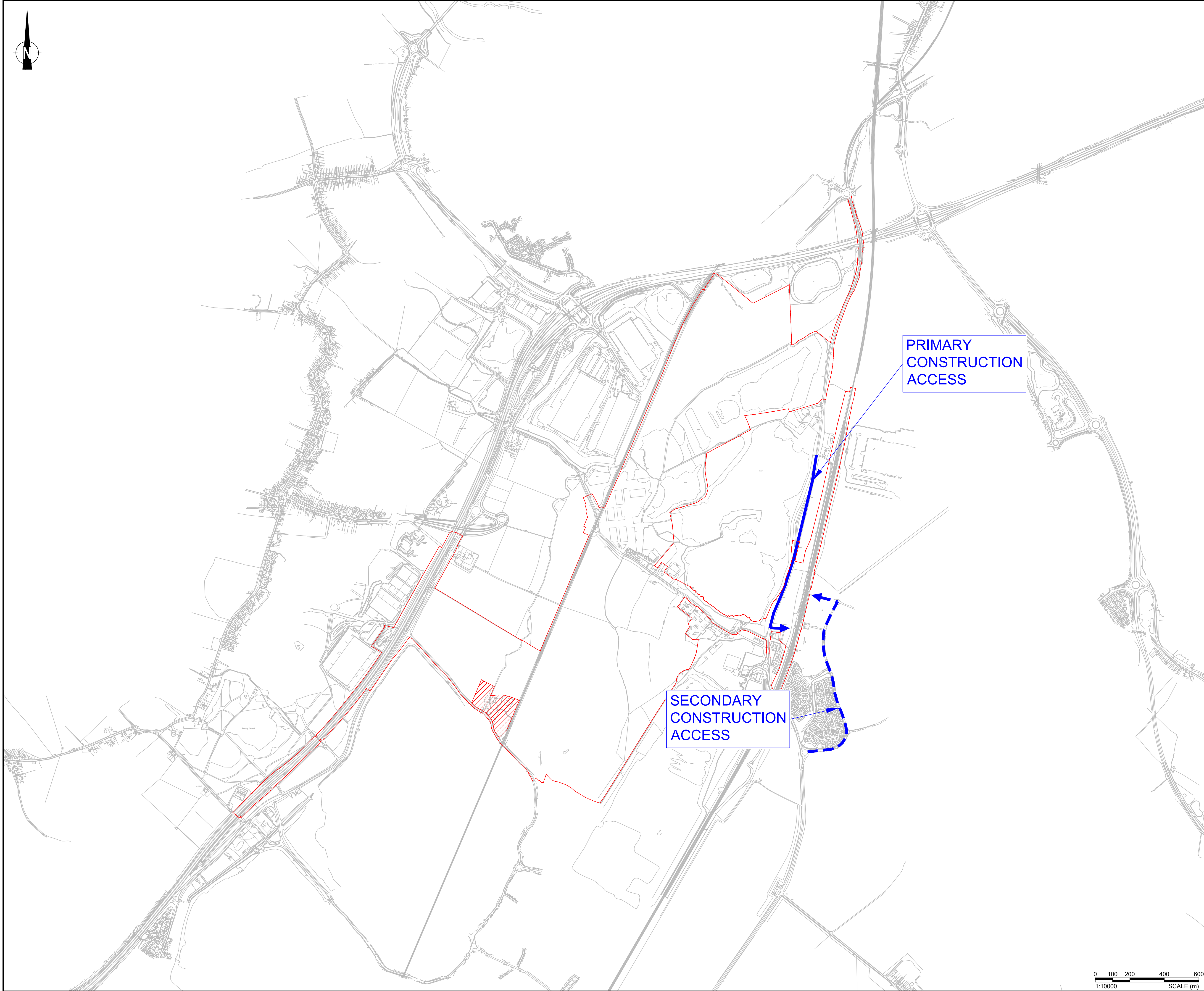
Site Address:  
FORMER KEMPSTON HARDWICK BRICKWORKS AND  
ADJOINING LAND, BEDFORD

Project Name:  
UNIVERSAL DESTINATIONS &  
EXPERIENCES UK PROJECT

Drawing Title  
PHASE 1E: ROADWAY WORKS  
A421 SLIPS ROADS  
(Q2 2028 TO Q2 2030)

Scale 1:10000	Designed VV	Drawn VV	Checked MIS	Authorised MIS
Original Size A1	Date 11.10.24	Date 11.10.24	Date 11.10.24	Date 11.10.24
Drawing Number PIN\Proj. Ref. No\Originator\ Volume	Location   Type   Role   Number	Project Ref. No. P320		
P320 - VEC -HGN-	SW -SK-CH- 9105	Revision 00		





- NOTES:
1. THIS DRAWING HAS BEEN PRODUCED FOR PLANNING PERMISSION GRANTED BY MEANS OF A SPECIAL DEVELOPMENT ORDER (SDO) ONLY AND SHOULD NOT BE USED FOR DETAILED OR CONSTRUCTION INFORMATION.
  2. THE LAYOUTS ARE BASED ON OS INFORMATION ONLY AND SHOULD NOT BE USED FOR DETAILED INFORMATION.
  3. THE HIGHWAY AUTHORITIES WITHIN THE SCHEME AREA ARE NATIONAL HIGHWAYS AND BEDFORD BOROUGH COUNCIL.
  4. DO NOT SCALE FROM THIS DRAWING.
  5. DATES SHOWN ON THIS PLAN ARE STILL IN DRAFT FORM AND MAY CHANGE PRIOR TO FINAL SUBMISSION.

- KEY:
- SITE BOUNDARY
  - EXCLUDED FROM SITE BOUNDARY
  - PRIMARY CONSTRUCTION ACCESS
  - SECONDARY CONSTRUCTION ACCESS
  - ALTERNATIVE CONSTRUCTION ACCESS
  - PERMANENT ROADWAY LINK TO BE CONSTRUCTED
  - TEMPORARY HAULAGE ROUTE

00	FIRST ISSUE	VV	CR	MIS	11.10.24
----	-------------	----	----	-----	----------

Rev	Details	Drawn	Checked	Auth	Date
-----	---------	-------	---------	------	------

**vectos.**  
4th Floor Oxford Place  
61 Oxford Street  
Manchester  
M1 6EQ  
t: 0161 228 1008  
e: manchester@vectos.co.uk

**SLR**  
PART OF  
**LRQA**  
CERTIFIED  
ISO 9001

Site Address:  
FORMER KEMPSTON HARDWICK BRICKWORKS AND  
ADJOINING LAND, BEDFORD

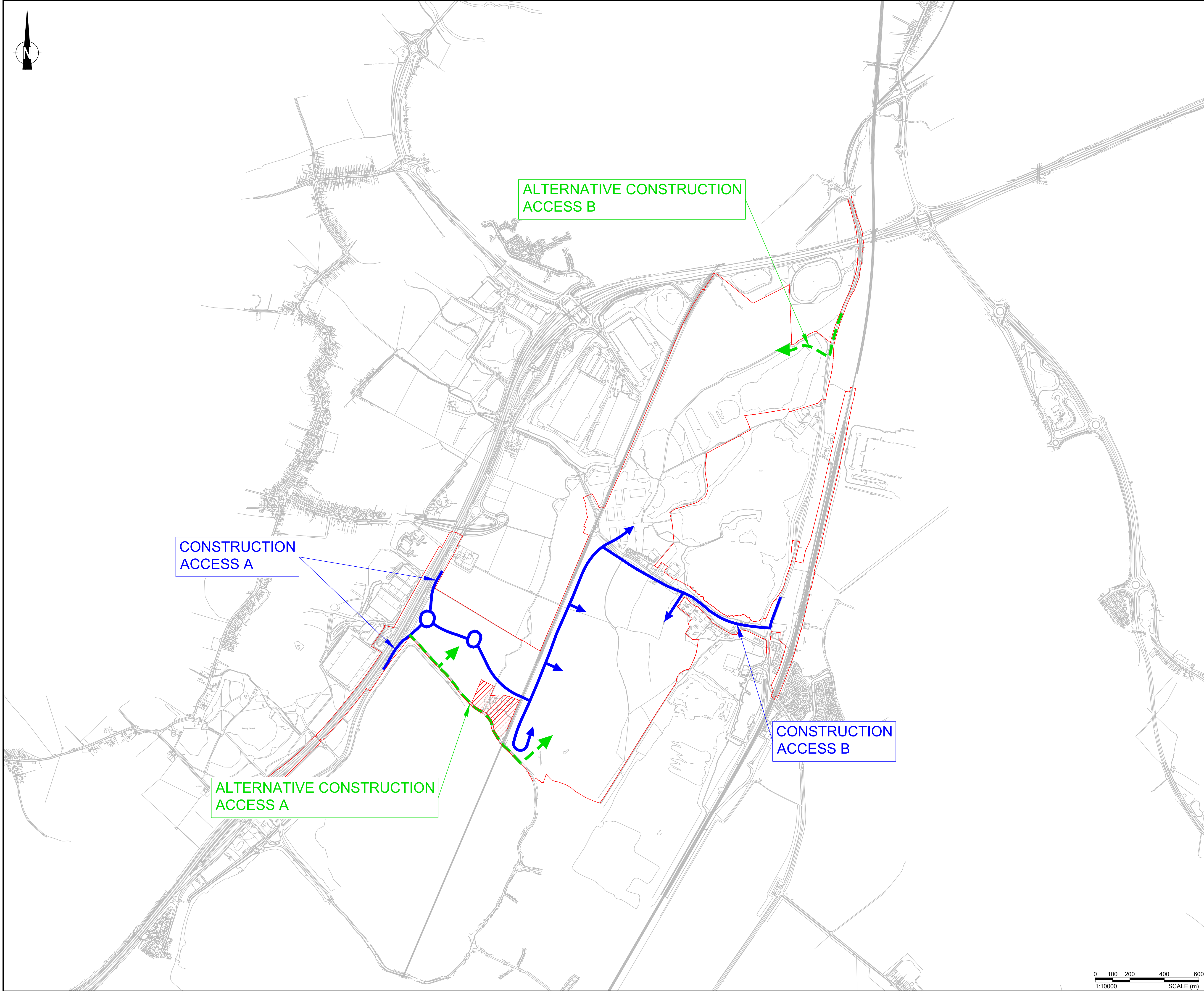
Project Name:  
UNIVERSAL DESTINATIONS &  
EXPERIENCES UK PROJECT

Drawing Title  
PHASE 1F: RAILWAY WORKS  
WIXAMS STATION WEST TRANSPORTATION  
HUB (TRACK/PLATFORM WORKS BY OTHERS)  
(Q2 2028 TO Q2 2030)

Scale	Designed	Drawn	Checked	Authorised
1:10000	VV	VV	MIS	MIS
Original Size	Date	Date	Date	Date
A1	11.10.24	11.10.24	11.10.24	11.10.24

Drawing Number	Proj. Ref. No.	Originator	Volume	Location	Type	Role	Number	Project Ref. No.
P320	- VEC -HGN-	SW	-SK-CH-	9106				P320
								Revision
								00





- NOTES:
1. THIS DRAWING HAS BEEN PRODUCED FOR PLANNING PERMISSION GRANTED BY MEANS OF A SPECIAL DEVELOPMENT ORDER (SDO) ONLY AND SHOULD NOT BE USED FOR DETAILED OR CONSTRUCTION INFORMATION.
  2. THE LAYOUTS ARE BASED ON OS INFORMATION ONLY AND SHOULD NOT BE USED FOR DETAILED INFORMATION.
  3. THE HIGHWAY AUTHORITIES WITHIN THE SCHEME AREA ARE NATIONAL HIGHWAYS AND BEDFORD BOROUGH COUNCIL.
  4. DO NOT SCALE FROM THIS DRAWING.
  5. DATES SHOWN ON THIS PLAN ARE STILL IN DRAFT FORM AND MAY CHANGE PRIOR TO FINAL SUBMISSION.

- KEY:
- SITE BOUNDARY
  - EXCLUDED FROM SITE BOUNDARY
  - PRIMARY CONSTRUCTION ACCESS
  - SECONDARY CONSTRUCTION ACCESS
  - ALTERNATIVE CONSTRUCTION ACCESS
  - PERMANENT ROADWAY LINK TO BE CONSTRUCTED
  - TEMPORARY HAULAGE ROUTE

00	FIRST ISSUE	VV	CR	MIS	11.10.24
----	-------------	----	----	-----	----------

Rev	Details	Drawn	Checked	Auth	Date
-----	---------	-------	---------	------	------

**vectos.**

**SLR**

4th Floor Oxford Place  
61 Oxford Street  
Manchester  
M1 6EQ  
t: 0161 228 1008  
e: manchester@vectos.co.uk

**LRQA**  
CERTIFIED  
ISO 9001

Site Address:  
FORMER KEMPSTON HARDWICK BRICKWORKS AND  
ADJOINING LAND, BEDFORD

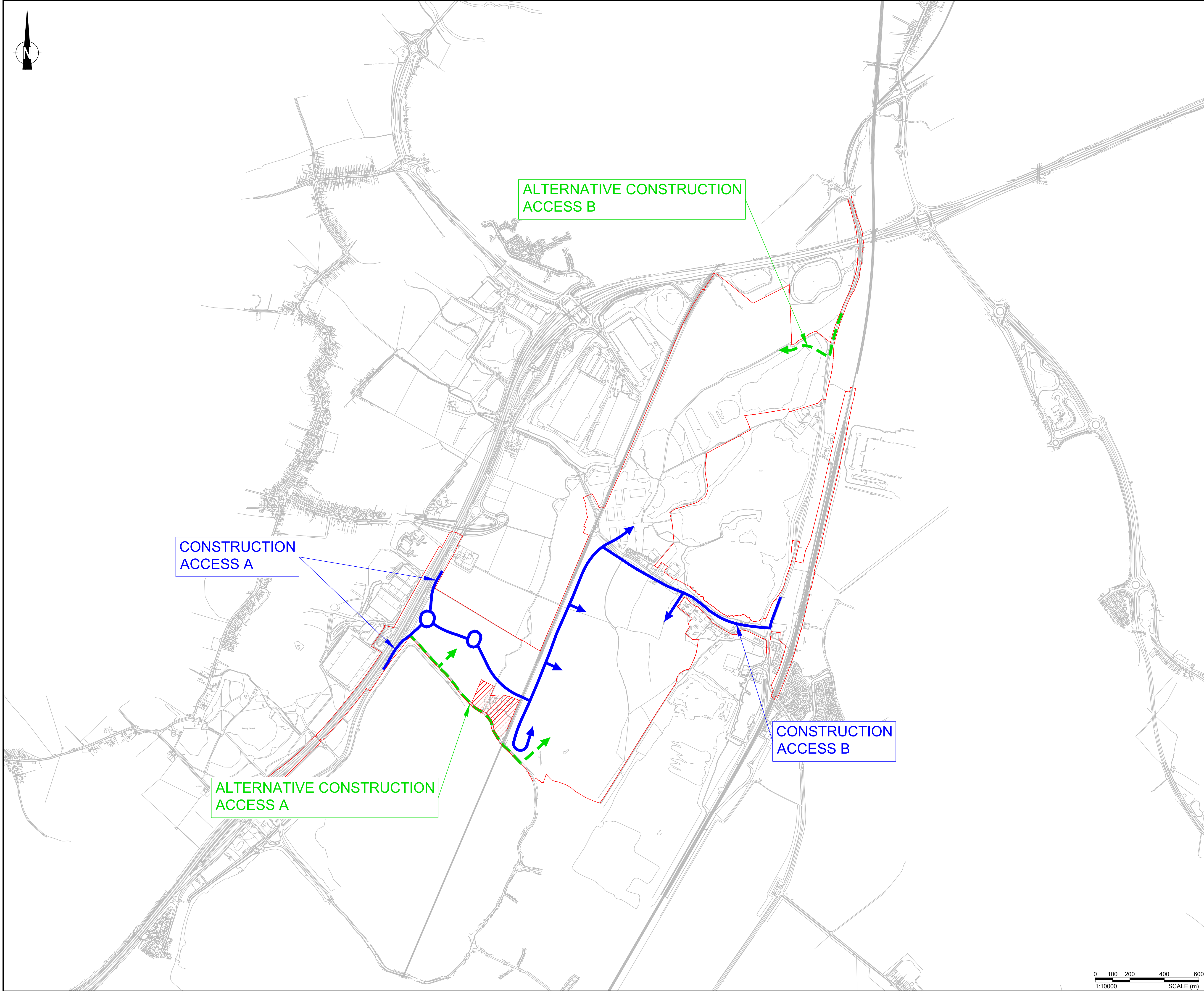
Project Name:  
UNIVERSAL DESTINATIONS &  
EXPERIENCES UK PROJECT

Drawing Title  
PHASE 1G: RESORT CONSTRUCTION WORKS  
POST WEST GATEWAY ROAD WORKS  
(Q2 2028 TO Q2 2030)

Scale 1:10000	Designed VV	Drawn VV	Checked MIS	Authorised MIS
Original Size A1	Date 11.10.24	Date 11.10.24	Date 11.10.24	Date 11.10.24
Drawing Number PIN/Proj. Ref. No./Originator/Volume/	Location	I Type	I Role	I Number
P320	- VEC -HGN-	SW	-SK-CH-	9107
Project Ref. No. P320	Revision 00			

0 100 200 400 600  
1:10000 SCALE (m)





NOTES:

1. THIS DRAWING HAS BEEN PRODUCED FOR PLANNING PERMISSION GRANTED BY MEANS OF A SPECIAL DEVELOPMENT ORDER (SDO) ONLY AND SHOULD NOT BE USED FOR DETAILED OR CONSTRUCTION INFORMATION.
2. THE LAYOUTS ARE BASED ON OS INFORMATION ONLY AND SHOULD NOT BE USED FOR DETAILED INFORMATION.
3. THE HIGHWAY AUTHORITIES WITHIN THE SCHEME AREA ARE NATIONAL HIGHWAYS AND BEDFORD BOROUGH COUNCIL.
4. DO NOT SCALE FROM THIS DRAWING.
5. DATES SHOWN ON THIS PLAN ARE STILL IN DRAFT FORM AND MAY CHANGE PRIOR TO FINAL SUBMISSION.

KEY:

- SITE BOUNDARY
- EXCLUDED FROM SITE BOUNDARY
- PRIMARY CONSTRUCTION ACCESS
- SECONDARY CONSTRUCTION ACCESS
- ALTERNATIVE CONSTRUCTION ACCESS
- PERMANENT ROADWAY LINK TO BE CONSTRUCTED
- TEMPORARY HAULAGE ROUTE

00	FIRST ISSUE	VV	CR	MIS	11.10.24
Rev	Details	Drawn	Checked	Auth	Date

**vectos.**

4th Floor Oxford Place  
61 Oxford Street  
Manchester  
M1 6EQ  
t: 0161 228 1008  
e: manchester@vectos.co.uk

PART OF

**SLR**

LRQA  
CERTIFIED  
ISO 9001

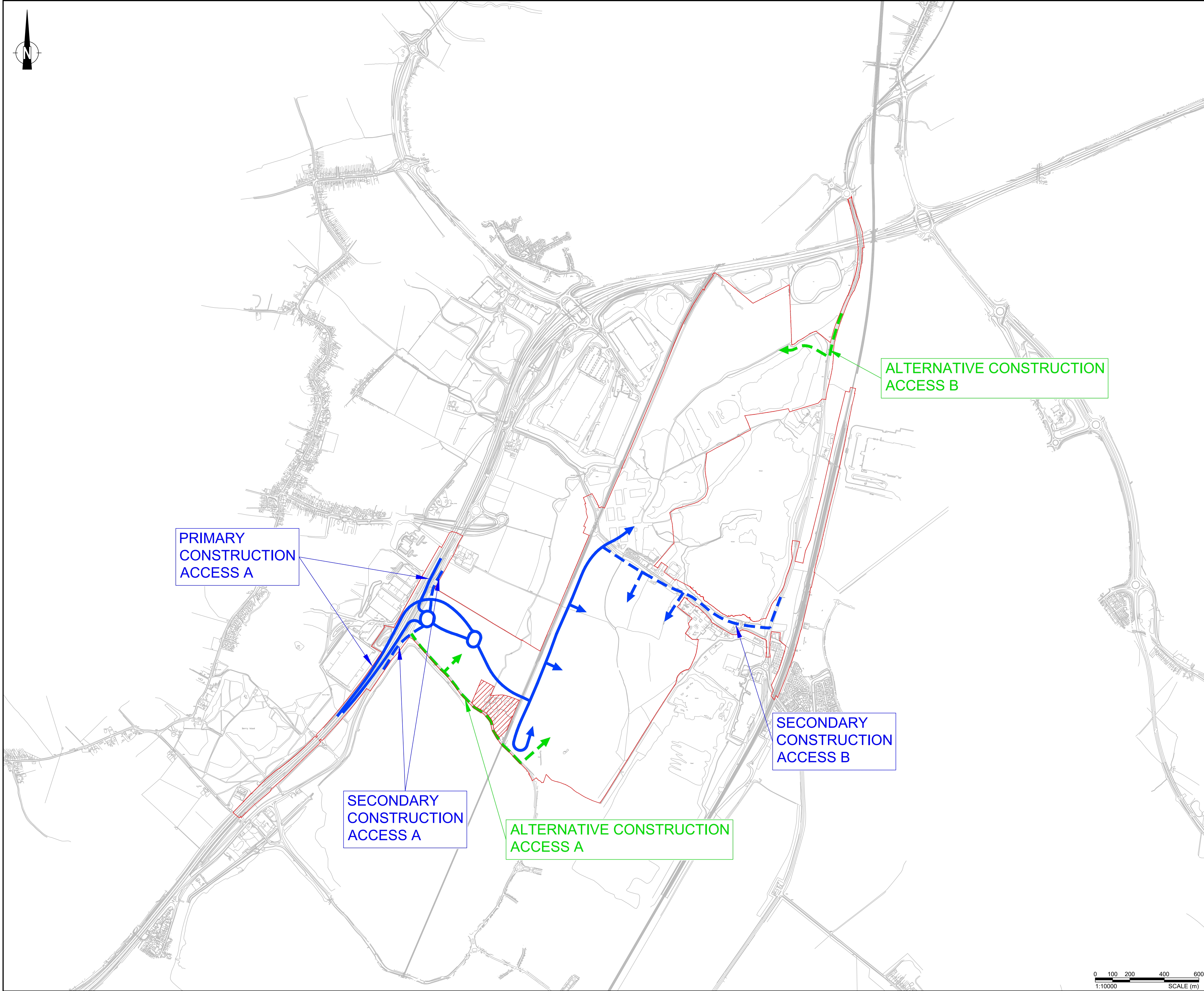
Site Address:  
FORMER KEMPSTON HARDWICK BRICKWORKS AND  
ADJOINING LAND, BEDFORD

Project Name:  
UNIVERSAL DESTINATIONS &  
EXPERIENCES UK PROJECT

Drawing Title  
PHASE 1G: RESORT CONSTRUCTION WORKS  
POST MANOR ROAD WORKS  
(Q2 2028 TO Q4 2030)

Scale 1:10000	Designed VV	Drawn VV	Checked MIS	Authorised MIS
Original Size A1	Date 11.10.24	Date 11.10.24	Date 11.10.24	Date 11.10.24
Drawing Number PIN/Proj. Ref. No./Originator/Volume I	Location	I Type	I Role	I Number
P320 - VEC -HGN-	SW	-SK-CH-	9108	P320
Revision	00			





- NOTES:
1. THIS DRAWING HAS BEEN PRODUCED FOR PLANNING PERMISSION GRANTED BY MEANS OF A SPECIAL DEVELOPMENT ORDER (SDO) ONLY AND SHOULD NOT BE USED FOR DETAILED OR CONSTRUCTION INFORMATION.
  2. THE LAYOUTS ARE BASED ON OS INFORMATION ONLY AND SHOULD NOT BE USED FOR DETAILED INFORMATION.
  3. THE HIGHWAY AUTHORITIES WITHIN THE SCHEME AREA ARE NATIONAL HIGHWAYS AND BEDFORD BOROUGH COUNCIL.
  4. DO NOT SCALE FROM THIS DRAWING.
  5. DATES SHOWN ON THIS PLAN ARE STILL IN DRAFT FORM AND MAY CHANGE PRIOR TO FINAL SUBMISSION.

- KEY:
- SITE BOUNDARY
  - EXCLUDED FROM SITE BOUNDARY
  - PRIMARY CONSTRUCTION ACCESS
  - SECONDARY CONSTRUCTION ACCESS
  - ALTERNATIVE CONSTRUCTION ACCESS
  - PERMANENT ROADWAY LINK TO BE CONSTRUCTED
  - TEMPORARY HAULAGE ROUTE

00	FIRST ISSUE	VV	CR	MIS	11.10.24
Rev	Details	Drawn	Checked	Auth	Date

**vectos.**  
4th Floor Oxford Place  
61 Oxford Street  
Manchester  
M1 6EQ  
t: 0161 228 1008  
e: manchester@vectos.co.uk

**SLR**  
PART OF  
**LRQA**  
CERTIFIED  
ISO 9001

Site Address:  
FORMER KEMPSTON HARDWICK BRICKWORKS AND  
ADJOINING LAND, BEDFORD

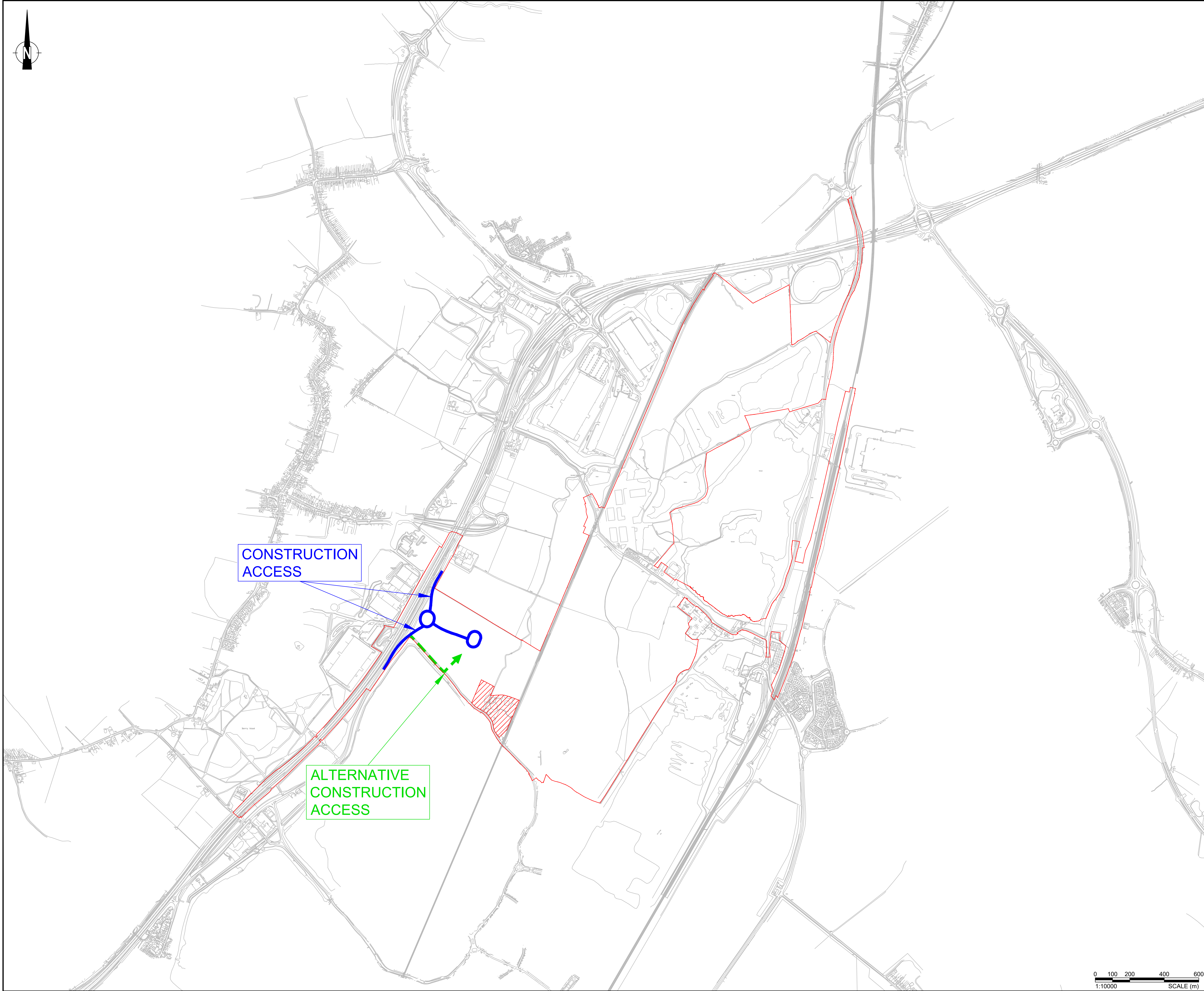
Project Name:  
UNIVERSAL DESTINATIONS &  
EXPERIENCES UK PROJECT

Drawing Title  
PHASE 1G: RESORT CONSTRUCTION WORKS  
POST A421 SLIP ROAD WORKS  
(FROM Q2 2030)

Scale 1:10000	Designed VV	Drawn VV	Checked MIS	Authorised MIS
Original Size A1	Date 11.10.24	Date 11.10.24	Date 11.10.24	Date 11.10.24
Drawing Number PIN/Proj. Ref. No./Originator/Volume/Location/Type/Role/Number				Project Ref. No. P320
P320 - VEC -HGN- SW -SK-CH- 9109				Revision 00







- NOTES:
1. THIS DRAWING HAS BEEN PRODUCED FOR PLANNING PERMISSION GRANTED BY MEANS OF A SPECIAL DEVELOPMENT ORDER (SDO) ONLY AND SHOULD NOT BE USED FOR DETAILED OR CONSTRUCTION INFORMATION.
  2. THE LAYOUTS ARE BASED ON OS INFORMATION ONLY AND SHOULD NOT BE USED FOR DETAILED INFORMATION.
  3. THE HIGHWAY AUTHORITIES WITHIN THE SCHEME AREA ARE NATIONAL HIGHWAYS AND BEDFORD BOROUGH COUNCIL.
  4. DO NOT SCALE FROM THIS DRAWING.
  5. DATES SHOWN ON THIS PLAN ARE STILL IN DRAFT FORM AND MAY CHANGE PRIOR TO FINAL SUBMISSION.

- KEY:
- SITE BOUNDARY
  - EXCLUDED FROM SITE BOUNDARY
  - PRIMARY CONSTRUCTION ACCESS
  - SECONDARY CONSTRUCTION ACCESS
  - ALTERNATIVE CONSTRUCTION ACCESS
  - PERMANENT ROADWAY LINK TO BE CONSTRUCTED
  - TEMPORARY HAULAGE ROUTE

00	FIRST ISSUE	MY	LB	LB	03.04.25
----	-------------	----	----	----	----------

Rev	Details	Drawn	Checked	Auth	Date
-----	---------	-------	---------	------	------

**vectos.**

4th Floor Oxford Place  
61 Oxford Street  
Manchester  
M1 6EQ  
t: 0161 228 1008  
e: manchester@vectos.co.uk

PART OF

**SLR**

**LRQA**

CERTIFIED

ISO 9001

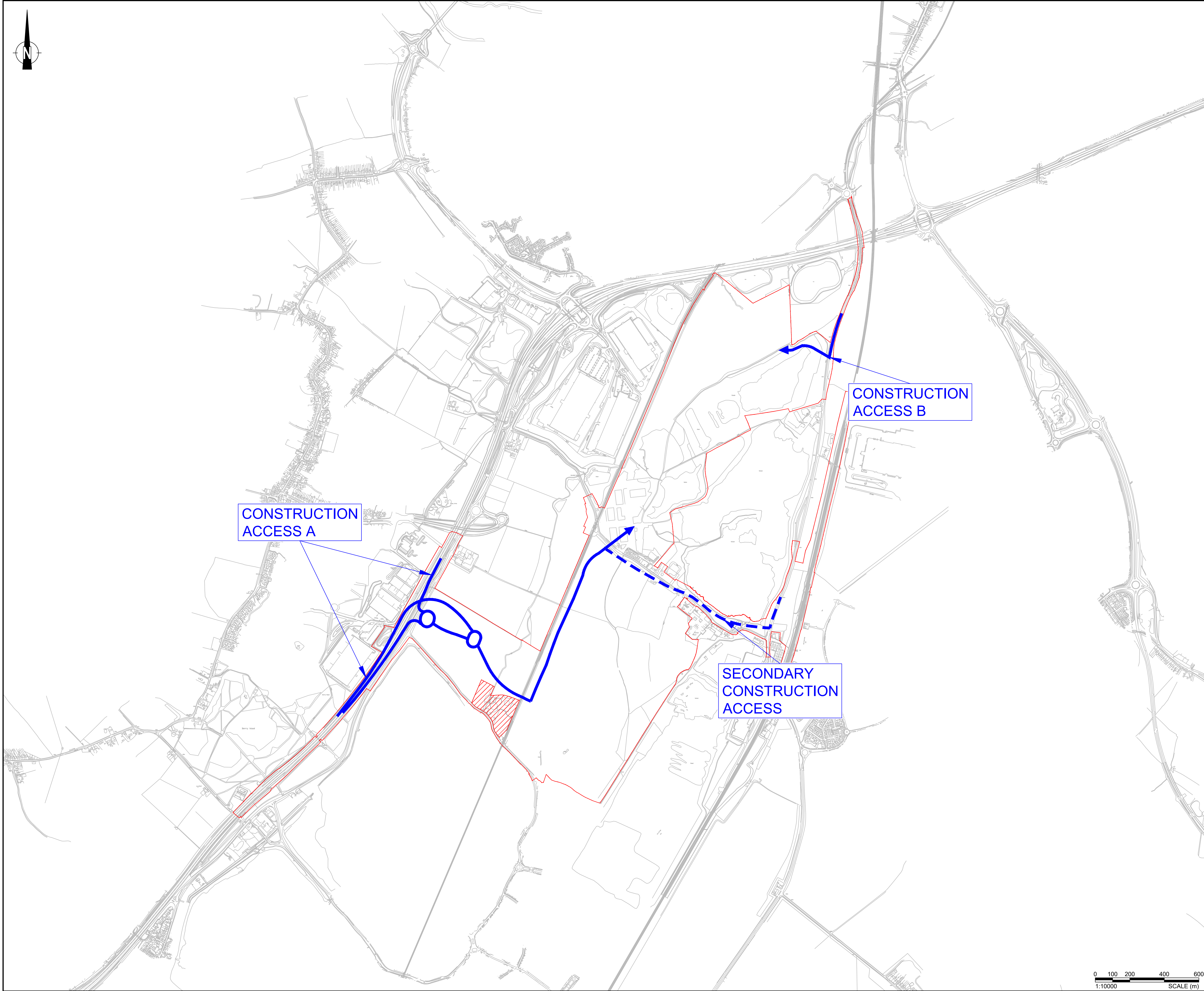
Site Address:  
FORMER KEMPSTON HARDWICK BRICKWORKS AND  
ADJOINING LAND, BEDFORD

Project Name:  
UNIVERSAL DESTINATIONS &  
EXPERIENCES UK PROJECT

Drawing Title  
**MIXED USE CONSTRUCTION  
- WEST GATEWAY ZONE  
(Q2 2028 TO Q4 2029)**

Scale 1:10000	Designed MY	Drawn MY	Checked LB	Authorised LB
Original Size A1	Date 03.04.25	Date 03.04.25	Date 03.04.25	Date 03.04.25
Drawing Number PIN/Proj. Ref. No./Originator/Volume/Location/Type/Role/Number				Project Ref. No. P320
P320 - VEC -HGN- SW -SK-CH- 9110				Revision 00





- NOTES:
1. THIS DRAWING HAS BEEN PRODUCED FOR PLANNING PERMISSION GRANTED BY MEANS OF A SPECIAL DEVELOPMENT ORDER (SDO) ONLY AND SHOULD NOT BE USED FOR DETAILED OR CONSTRUCTION INFORMATION.
  2. THE LAYOUTS ARE BASED ON OS INFORMATION ONLY AND SHOULD NOT BE USED FOR DETAILED INFORMATION.
  3. THE HIGHWAY AUTHORITIES WITHIN THE SCHEME AREA ARE NATIONAL HIGHWAYS AND BEDFORD BOROUGH COUNCIL.
  4. DO NOT SCALE FROM THIS DRAWING.
  5. DATES SHOWN ON THIS PLAN ARE STILL IN DRAFT FORM AND MAY CHANGE PRIOR TO FINAL SUBMISSION.

- KEY:
- SITE BOUNDARY
  - EXCLUDED FROM SITE BOUNDARY
  - PRIMARY CONSTRUCTION ACCESS
  - SECONDARY CONSTRUCTION ACCESS
  - ALTERNATIVE CONSTRUCTION ACCESS
  - PERMANENT ROADWAY LINK TO BE CONSTRUCTED
  - TEMPORARY HAULAGE ROUTE

00	FIRST ISSUE	MY	LB	LB	03.04.25
Rev	Details	Drawn	Checked	Auth	Date

**vectos.**  
4th Floor Oxford Place  
61 Oxford Street  
Manchester  
M1 6EQ  
t: 0161 228 1008  
e: manchester@vectos.co.uk

**SLR**  
PART OF  
**LRQA**  
CERTIFIED  
ISO 9001

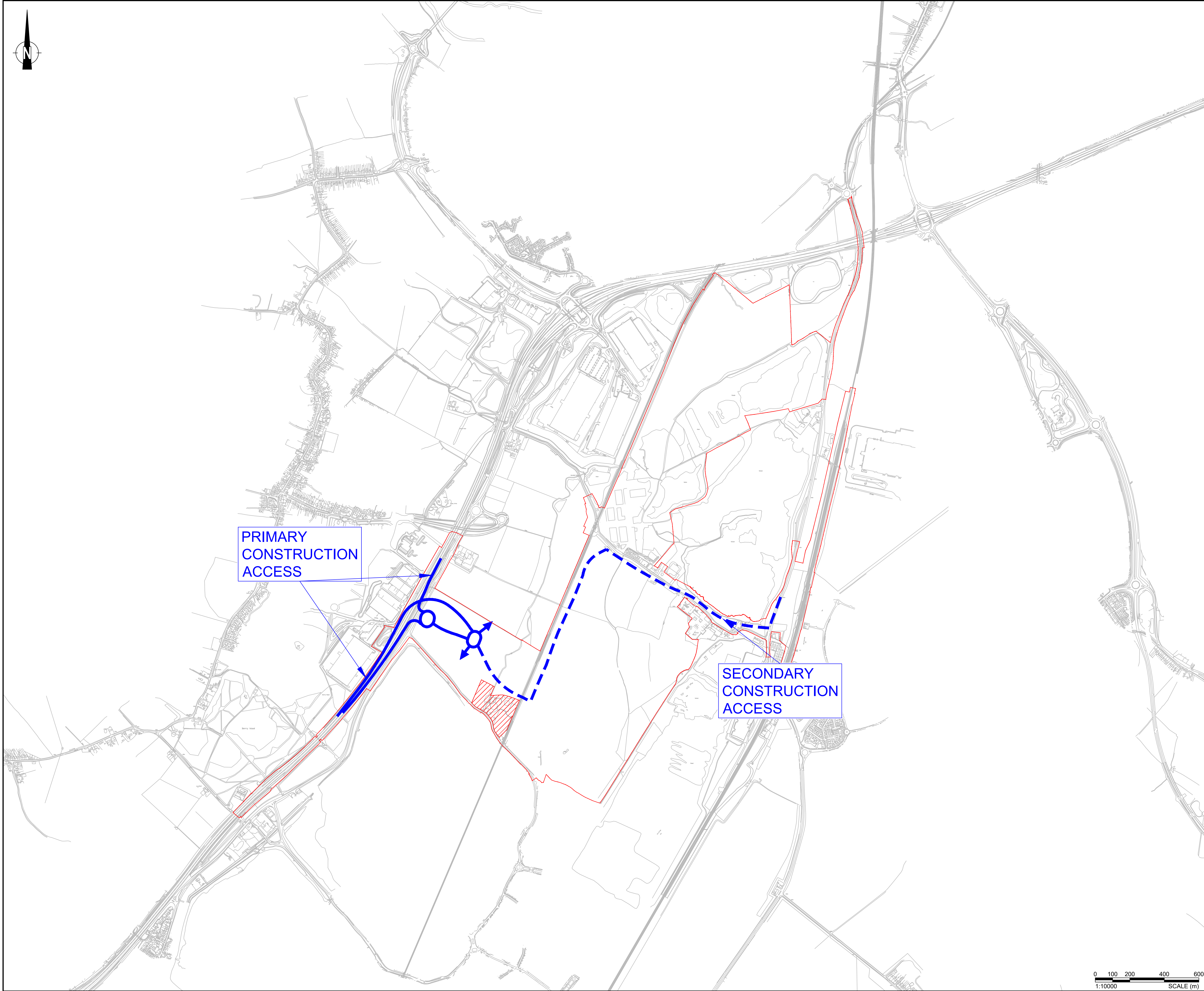
Site Address:  
FORMER KEMPSTON HARDWICK BRICKWORKS AND  
ADJOINING LAND, BEDFORD

Project Name:  
UNIVERSAL DESTINATIONS &  
EXPERIENCES UK PROJECT

Drawing Title  
PHASE 2A: FULL BUILDOUT  
CONSTRUCTION - LAKE ZONE  
(FROM 2031 ONWARDS)

Scale 1:10000	Designed MY	Drawn MY	Checked LB	Authorised LB
Original Size A1	Date 03.04.25	Date 03.04.25	Date 03.04.25	Date 03.04.25
Drawing Number PIN/Proj. Ref. No./Originator/Volume I	Location	I Type	Role	Number
P320 - VEC -HGN-	SW	-SK-CH-	9111	P320
Revision	00			





- NOTES:
1. THIS DRAWING HAS BEEN PRODUCED FOR PLANNING PERMISSION GRANTED BY MEANS OF A SPECIAL DEVELOPMENT ORDER (SDO) ONLY AND SHOULD NOT BE USED FOR DETAILED OR CONSTRUCTION INFORMATION.
  2. THE LAYOUTS ARE BASED ON OS INFORMATION ONLY AND SHOULD NOT BE USED FOR DETAILED INFORMATION.
  3. THE HIGHWAY AUTHORITIES WITHIN THE SCHEME AREA ARE NATIONAL HIGHWAYS AND BEDFORD BOROUGH COUNCIL.
  4. DO NOT SCALE FROM THIS DRAWING.
  5. DATES SHOWN ON THIS PLAN ARE STILL IN DRAFT FORM AND MAY CHANGE PRIOR TO FINAL SUBMISSION.

- KEY:
- SITE BOUNDARY
  - EXCLUDED FROM SITE BOUNDARY
  - PRIMARY CONSTRUCTION ACCESS
  - SECONDARY CONSTRUCTION ACCESS
  - ALTERNATIVE CONSTRUCTION ACCESS
  - PERMANENT ROADWAY LINK TO BE CONSTRUCTED
  - TEMPORARY HAULAGE ROUTE

00	FIRST ISSUE	MY	LB	LB	03.04.25
----	-------------	----	----	----	----------

Rev	Details	Drawn	Checked	Auth	Date
-----	---------	-------	---------	------	------

**vectos.**

**SLR**

4th Floor Oxford Place  
61 Oxford Street  
Manchester  
M1 6EQ  
t: 0161 228 1008  
e: manchester@vectos.co.uk

**LRQA**  
CERTIFIED  
ISO 9001

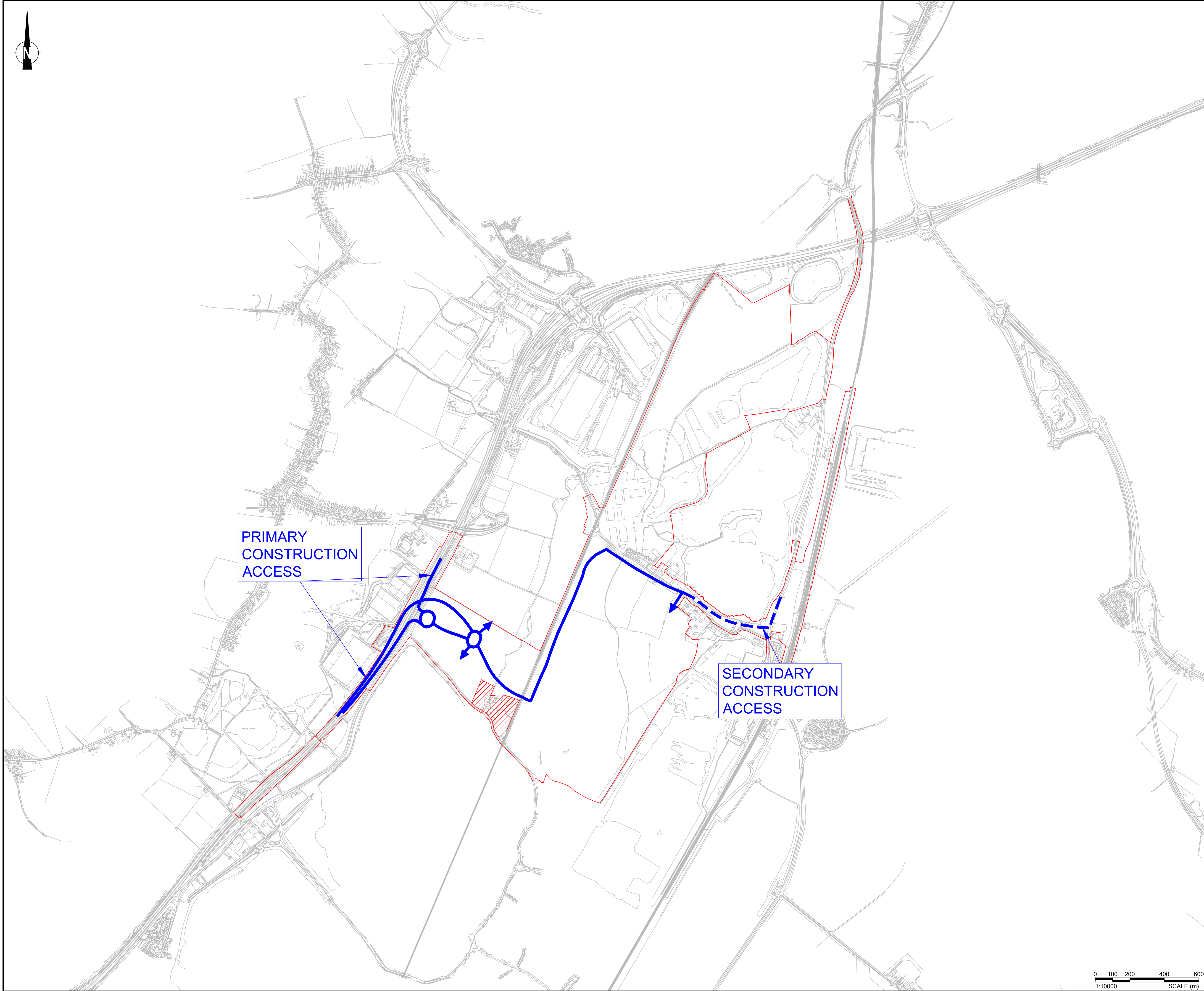
Site Address:  
FORMER KEMPSTON HARDWICK BRICKWORKS AND  
ADJOINING LAND, BEDFORD

Project Name:  
UNIVERSAL DESTINATIONS &  
EXPERIENCES UK PROJECT

Drawing Title  
PHASE 2A: FULL BUILDOUT  
CONSTRUCTION - WEST GATEWAY ZONE  
(FROM 2031 ONWARDS)

Scale 1:10000	Designed MY	Drawn MY	Checked LB	Authorised LB
Original Size A1	Date 03.04.25	Date 03.04.25	Date 03.04.25	Date 03.04.25
Drawing Number PIN/Proj. Ref. No./Originator/ Volume /	Location	I Type	I Role	I Number
P320 - VEC -HGN-	SW	-SK-CH-	9112	P320
Revision	00			





- NOTES:
1. THIS DRAWING HAS BEEN PRODUCED FOR PLANNING PERMISSION GRANTED BY MEANS OF A SPECIAL DEVELOPMENT ORDER (SDO) ONLY AND SHOULD NOT BE USED FOR DETAILED OR CONSTRUCTION INFORMATION.
  2. THE LAYOUTS ARE BASED ON OS INFORMATION ONLY AND SHOULD NOT BE USED FOR DETAILED INFORMATION.
  3. THE HIGHWAY AUTHORITIES WITHIN THE SCHEME AREA ARE NATIONAL HIGHWAYS AND BEDFORD BOROUGH COUNCIL.
  4. DO NOT SCALE FROM THIS DRAWING.
  5. DATES SHOWN ON THIS PLAN ARE STILL IN DRAFT FORM AND MAY CHANGE PRIOR TO FINAL SUBMISSION.

- KEY:
- SITE BOUNDARY
  - EXCLUDED FROM SITE BOUNDARY
  - PRIMARY CONSTRUCTION ACCESS
  - SECONDARY CONSTRUCTION ACCESS
  - ALTERNATIVE CONSTRUCTION ACCESS
  - PERMANENT ROADWAY LINK TO BE CONSTRUCTED
  - TEMPORARY HAULAGE ROUTE

00	FIRST ISSUE	MY	LB	LB	03.04.25
----	-------------	----	----	----	----------

Rev	Details	Drawn	Checked	Auth	Date
-----	---------	-------	---------	------	------

**vectos.**

4th Floor Oxford Place  
61 Oxford Street  
Manchester  
M1 6EQ  
t: 0161 228 1008  
e: manchester@vectos.co.uk

PART OF

**SLR**

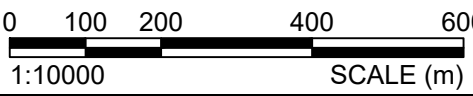
LRQA  
CERTIFIED  
ISO 9001

Site Address:  
FORMER KEMPSTON HARDWICK BRICKWORKS AND  
ADJOINING LAND, BEDFORD

Project Name:  
UNIVERSAL DESTINATIONS &  
EXPERIENCES UK PROJECT

Drawing Title  
PHASE 2A: FULL BUILDOUT  
CONSTRUCTION - CORE ZONE  
(FROM 2031 ONWARDS)

Scale 1:10000	Designed MY	Drawn MY	Checked LB	Authorised LB
Original Size A1	Date 03.04.25	Date 03.04.25	Date 03.04.25	Date 03.04.25
Drawing Number PIN/Proj. Ref. No./Originator/ Volume / Location / I Type / Role / Number				Project Ref. No. P320
P320 - VEC -HGN- SW -SK-CH- 9113				Revision 00









WSP House  
70 Chancery Lane  
London  
WC2A 1AF

**wsp.com**

PUBLIC