



Haven Banks, Exeter

## CONSTRUCTION MANAGEMENT PLAN

For Proposed Mixed-Use Redevelopment

On behalf of Welbeck CP

21/5945/CMP08

July 2022

## DOCUMENT CONTROL

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For Proposed Mixed-Use Redevelopment

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## 1 INTRODUCTION

### 1.1 Background to Development Proposals

- 1.1.1 RGP is commissioned by Welbeck CP to provide highway and transport planning advice with respect to the proposed redevelopment of the Haven Banks Retail Park ("the site") to provide a new residential-led scheme with ground floor commercial uses.
- 1.1.2 The site is located within the administrative boundaries of Exeter City Council (ECC), as Local Planning Authority and Devon County Council (DCC), as County Highway Authority.
- 1.1.3 The existing site comprises three vacant commercial units which formerly operated collectively as the Haven Banks Retail Park, located a short distance to the south of Exeter Quayside. The Retail Park contains two large retail superstores and a leisure use with a shared car park containing 205 spaces, accessible from Water Lane. The existing retail and leisure units comprise the following approximate floor areas:
- The Range (use class Ea): 3,496 sqm;
  - Matalan (use class Ea): 1,382 sqm; and
  - Tenpin (use class Ed): 1,964 sqm.
- 1.1.4 The Water Lane access into the on-site car park facilitates two-way vehicle movements. A secondary point of egress from the site is provided onto Haven Road to the north, with no entry permitted into the car park from this location. The site also contains a rear service yard which is accessed via Water Lane separately to the visitor car park.
- 1.1.5 The development proposals comprise a demolition of the retail park to provide a new mixed-use scheme including 434 residential dwellings, comprising a mix of 246 flats and 188 co-living apartments. Each of the co-living apartments would contain a single bedroom, whilst the proposed 246 flats would comprise the following mix of units:
- 131 x 1 bedroom / 2 person units;
  - 75 x 2 bedroom / 4 person units; and
  - 40 x 3 bedroom / 6 person units.
- 1.1.6 envisaged to comprise small café/restaurant uses. The commercial floorspace would amount to 639m<sup>2</sup>. Additionally, an ancillary management suite would be provided at ground floor level of Block D for the estate management providing residential services to the site, comprising 113m<sup>2</sup>.
- 1.1.7 The specific breakdown of the proposed on-site land uses by each building is provided in the following table:

**Table 1 Proposed Land Uses**

Block	C3: 1 bedroom units	C3: 2 bedroom units	C3: 3 bedroom units	C3: Co-living apartments	E(b) Café / Restaurant	Ancillary Office Space
Block A	11	6	5	-	349 sqm	-
Block B	14	7	-	-	220 sqm	-
Block C	105	63	35	-	-	-
Block D	-	-	-	188	70 sqm	228 sqm
<b>TOTAL</b>	<b>130</b>	<b>76</b>	<b>40</b>	<b>188</b>	<b>639 sqm</b>	<b>228 sqm</b>

- 1.1.8 The development proposal would include the closure of the car park's two points of vehicular access / egress to redesign the main throughfare as 'car-free', including the formation of a central pedestrian route through the site between Haven Road and Water Lane. The existing service road from Water Lane within the southern section of the site would be retained for the continued use of the site and would provide access to a limited number of residential parking spaces and retain access for servicing vehicles.
- 1.1.9 A total of 32 car parking spaces would be provided on-site, accessible from Water Lane in place of the existing service yard to the rear of the retail units currently located within the site. Additional laybys would be provided adjacent to the site on Water Lane and Haven Road respectively to facilitate deliveries and waste collections.
- 1.1.10 All residential blocks would be provided with secure refuse storage and cycle parking facilities. A marked cycle lane would be provided within the site's central courtyard, connecting to the wider cycle network, with NCR 34 forming a route along the southern bank of the River Exe. Communal amenity space and associated landscaping would be provided for the use residents and visitors.
- 1.1.11 The proposed site layout is illustrated on the following extract, whilst the full plan is attached at **Appendix 1**.

Figure 1 Proposed Site Layout



## 1.2 Construction Management Plan Objectives

1.2.1 This Construction Management Plan (CMP) is prepared to accompany the planning application for the above development proposals and to provide a strategy for safely and efficiently managing construction traffic generated by the site during the demolition and construction phases associated site's redevelopment.

1.2.2 It is important to note that this CMP is prepared as an outline document to support the planning process involving the proposed development. Following any forthcoming planning consent granted by ECC, a detailed CMP should be prepared with the input of the Main Contractor once appointed. This document therefore provides an overview of the likely implications of the construction phase of the development, with preliminary mitigation measures to reduce any associated impact.

1.2.3 The main objectives of this CMP are to:

- i) Lower vehicle emissions associated with construction vehicles arriving and departing the site;
- ii) Improve efficiency of construction methods – establish the construction site set-up and the procedures to accommodate construction deliveries within the worksite;
- iii) Enhance safety – improved vehicle and road user safety on Haven Road, Water Lane and within the wider areas of Exeter;

- iv) Environmental management – Establish a range of management measures to protect local air, soil and water quality during the construction period;
- v) Reduce congestion – reduced construction vehicle trips overall, especially in peak periods.

1.2.4 This CMP provides a strategy for the processes and practices required for the proposed demolition and construction phases of the redevelopment. A CMP provides a considered approach to how the potential impact of construction related traffic would be minimised and mitigated against.

1.2.5 The CMP should evolve through each phase of the development and any alterations to the strategy defined in this document would be provided and submitted to ECC by the Main Contractor to supplement this document. Following any approval of the CMP, the defined measures would be implemented during demolition and construction works and would be strictly adhered to.

### 1.3 Management of this CMP

1.3.1 The CMP is a live document that will be updated as required throughout the course of the construction programme. The CMP will be reviewed and updated by the appointed Main Contractor prior to commencement of the site set up and enabling works. It will then be the ongoing responsibility of the Main Contractor to regularly update and implement the final document and ensure that all site personnel are made aware of its contents.

1.3.2 The contact details of the chosen management personnel are as follows and will be updated as necessary following the appointment of a Main Contractor:

Role	Name	Contact Details
Developer	Welbeck CP	Tel. 0191 4911212 E. info@welbeckcp.com
Main Contractor	TBC	TBC
CMP Preparation	RGP Consulting Engineers Ltd	Tel. 01483 861681 E. enquiries@rgp.co.uk

1.3.3 Following the appointment of the Main Contractor, this CMP will be updated accordingly to provide details of the following activities/responsibilities:

- i) Establish site logistics, access and welfare facilities;
- ii) Set out site management protocols and health and safety practices;
- iii) Prepare a detailed Method Statement for construction activities;
- iv) Re-assess site activities which may give rise to environmental impacts;
- v) Prepare a detailed Traffic Management/Logistics Plan;
- vi) Prepare a detailed Site Waste Management Plan;
- vii) Confirm responsibilities for actioning and reporting; and
- viii) Develop a communications strategy, including a log of liaison and feedback from the public and actions made in response.



## 1.4 CMP Structure

1.4.1 This CMP comprises the following sections:

- Section 2:** Context, considerations and challenges;
- Section 3:** Construction programme and methodology;
- Section 4:** Vehicle routing & Site Access;
- Section 5:** Strategies to reduce impact;
- Section 6:** Environmental Management;
- Section 7:** Implementing, monitoring and updating.

## 2 CONTEXT, CONSIDERATION & CHALLENGES

### 2.1 Local Highway Network

2.1.1 The site is located approximately 750 metres to the south of Exeter city centre in an area known locally as Haven Banks. The surrounding area is characterised by a range of land uses, including residential, retail, leisure and industrial uses within close proximity. The site's location in context of the surrounding highway network is illustrated by the following extract.

Figure 2 Site Location Plan



2.1.2 Haven Road provides a route to the site from the A377 Alphington Street to the west and also serves as the main point of access into Exeter Quayside to the north of the site. The existing access into the site will be retained from Haven Road.

2.1.3 Both sides of Haven Road are marked by double yellow lines in the vicinity of the site, except for the provision of 2 designated disabled parking bays marked adjacent to the pedestrianised zone at the quayside opposite the site. Additionally, there is a section of on-street pay and display parking bays provided on Haven Road to the north of the site, with the chargeable tariff applied within controlled hours (09:00 – 18:00, Monday to Saturday, and 11:00 – 17:00 on Sundays).

2.1.4 Water Lane is also subject to double yellow line kerbside restrictions adjacent to the site and provides sections of on-street parking bays for resident permit holders only to the northwest and south east of the site's access points.

2.1.5 Principal access to Haven Banks is provided from the A377 Alphington Street, which in turn forms a connecting route to Junction 31 of the M5 (via the A30) to the south of Exeter. The site is therefore conveniently located in terms of access from the wider strategic highway network. This is beneficial in that delivery and servicing vehicles require minimal deviation from these major highway links in order to reach the site, subsequently reducing the level of impact on surrounding residential areas.

## **2.2 Access by Active Modes of Transport**

2.2.1 There is a good provision of pedestrian infrastructure provided throughout the local area and the wider city centre. There are lit footways provided along both sides of Haven Road and Water Lane in the vicinity of the site, affording direct pedestrian links into the site from both points of access.

2.2.2 These footways continue onto the surrounding road network with dropped kerbs provided at local crossing points, providing safe and convenient walking routes away from the site.

2.2.3 To the north, there is a pedestrianised area opposite the site leading to the riverfront at Haven Banks. Footpaths are provided along the edges of the river banks, forming attractive walking routes towards the town centre. A pedestrian footbridge over the river is accessible via a 1-minute walk to the north of the site, providing a principal walking route into the city centre.

2.2.4 It is also worthy of note that signalised pedestrian crossing facilities are provided across all arms of the Haven Road / Alphington Street junction, including the provision of dropped kerbs, tactile paving and central refuges. These crossing facilities enable safe and convenient pedestrian access to the nearby rail station.

2.2.5 The surrounding area is also well-suited to cycling, with a number of designated cycle routes provided in close proximity to the site. The local highway network is conducive to cycle journeys owing to the quiet nature of nearby roads, their flat topography and good visibility at junctions.

2.2.6 National Cycle Route (NCR) 34 forms a route in the vicinity of the site along the southern bank of the River Exe. NCR 34 caters for convenient trips towards Exeter St David's rail station to the north, as well as connecting to areas further afield to the southeast of the city. Furthermore, there are marked cycle lanes located along sections of the A377 Alphington Street, providing an alternative cycle route into the city centre.

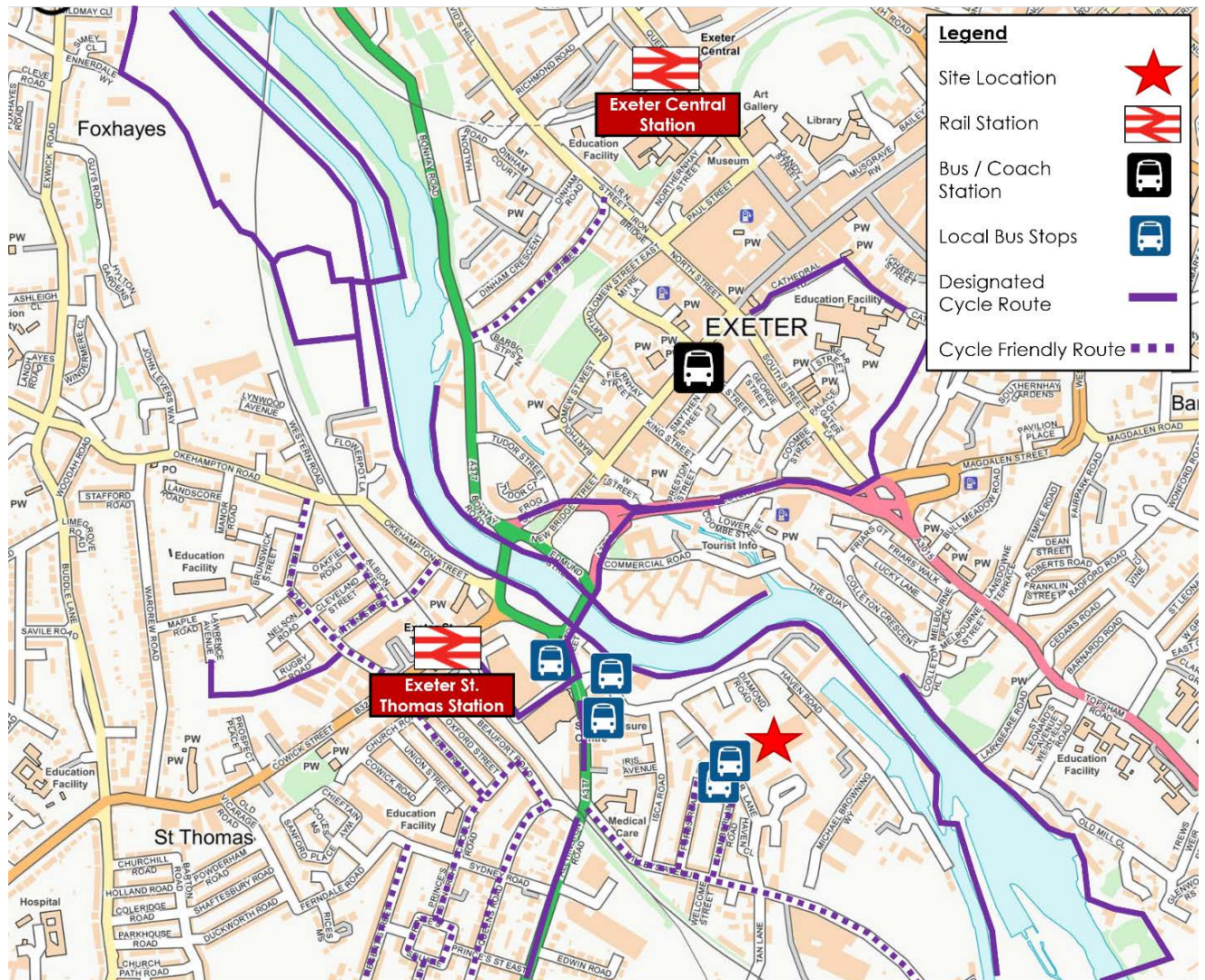
2.2.7 Furthermore, there is an existing traffic-free cycle trail that forms a route through Haven Banks between Michael Browning Way and Haven Road. This route would be extended into the site and incorporated with the cycle infrastructure that would be provided for the development.

2.2.8 In addition to these cycle routes and there are short-stay cycle parking spaces provided in the local area for public use, including within the pedestrianised waterfront plaza opposite the site.

## **2.3 Access by Public Transport**

2.3.1 The site's location in context of the surrounding cycle network and public transport infrastructure is illustrated by the following extract.

Figure 3 Site Location & Accessibility Plan



- 2.3.2 The nearest bus stops to the site are located on Water Lane, in the immediate vicinity of the site's access. These stops are served by Stagecoach's 'Green' bus route which provides services every 20 minutes between Marsh Barton and Sowton Park & Ride.
- 2.3.3 Additionally, there are bus stops located on Alphington Street, approximately 300m (a 3-4 minute walk) to the northwest of the site via Haven Road. This set of stops provides seating, shelter and full timetable information. Bus route 'B' calls at the Alphington Road stops, providing half-hourly services towards both Exeter city centre and either Dawlish, Exminster or Marsh Barton.
- 2.3.4 With respect to rail services in Exeter, there are 3 main stations serving the city (St Thomas, St David's and Central), each of which are located within a reasonable walking and cycling distance from the site.
- 2.3.5 The site is located approximately 600m (a 7-minute walk) to the southeast of Exeter St Thomas rail station. The station is operated by Great Western Railway and provides services every 30 minutes in each direction toward Paignton and Exmouth.
- 2.3.6 Connecting services from Exeter St David's would accommodate onward trips towards major destinations such as Bristol Temple Meads, London Paddington, Birmingham New Street, Manchester Piccadilly, Leeds, Newcastle and Edinburgh. Exeter St David's station is also accessible via an 20-25 minute walk or 8 minute cycle journey from the site.

2.3.7 Furthermore, Exeter Central is located approximately 1.25k to the north of the site in the city centre (an 18 minute walk). Similarly to St Tomas station, Exeter Central also provides half-hourly services towards Paignton and Exmouth, however, the Central station is also served by hourly trains providing direct travel to London Waterloo.

2.3.8 It should be noted that passengers with mobility impairments should board services from either Exeter Central or St David's, as step-free access is provided onto all platforms at these stations.

## **2.4 Considerations and Challenges**

2.4.1 There are some notable constraints associated with the construction works at the site. The following considerations and challenges are noted for this site:

- i) The neighbouring residential properties on Haven Road, Water Lane, Diamond Road, Stream Crescent and Chandlers Walk;
- ii) The operation of the adjacent indoor climbing centre on Haven Road;
- iii) The operation of the gym and vehicle repair garages on Water Lane;
- iv) Pedestrian footfall along Haven Road associated with various waterfront attractions;
- v) The public right of way connecting Haven Road to Michael Browning Way;
- vi) The efficient functioning of Haven Road and Water Lane in providing access to local residential / commercial properties.

2.4.2 The applicant is therefore committed to carrying out these works in the most practicably sustainable manner. Given the site's location and that the adjacent residential / commercial properties remain occupied throughout the proposed construction process, the need to minimise the impact associated with the construction works is fully recognised within this CMP.

2.4.3 The Main Contractor will be responsible for the monitoring of all construction works and traffic movements and ensuring the safety of the neighbouring properties, as well as passing vehicles, pedestrians and cyclists at all times.

### 3 CONSTRUCTION PROGRAMME

#### 3.1 Overview

[This section is to be updated further once a Main Contractor has been appointed].

3.1.1 For the purposes of the assessments undertaken in this report, it is assumed that construction works could begin by mid 2023 [date to be confirmed], lasting for up to approximately 34 months.

3.1.2 The schedule of construction activity is expected to be as follows:

- i) Site set-up, clearance and demolition;
- ii) Levelling, access works & car parking;
- iii) Excavation and piling;
- iv) Substructure;
- v) Superstructure;
- vi) Cladding;
- vii) Building services, fit-out and commissioning;

3.1.3 The contact details of the chosen Main Contractor and management personnel, when appointed, shall be made available to all.

Role	Name	Contact Details
Main Contractor	TBC	TBC

3.1.4 The contact details for the Main Contractor and Construction Manager shall be clearly detailed at the front of the site for the duration of the development.

#### 3.2 Construction Programme

[A full detailed programme of works shall be provided by the chosen Main Contractor prior to commencement of construction and monitored regularly throughout the process.]

3.2.1 **Table 2**, below, summarises an indicative programme of works, highlighting the approximate duration of key phases of the project. Once the construction programme is confirmed, key dates can be added.

**Table 2 Indicative Construction Programme**

Construction Programme	Duration
Site clearance, setup and demolition	3 months
Levelling, access works and car park	3 months
Basement excavation and piling	4 months
Substructure	4 months
Superstructure	8 months
Cladding	8 months
Fit-out, testing and commissioning	4 months

3.2.2 This table is indicative and would be updated with more accurate timings, once the Main Contractor has been appointed.

- 3.2.3 The following sections provide a summary of activities during each phase of works, however further detail with regard to the practices and procedures likely to be implemented can be provided by the Main Contractor, as appropriate.

#### ***Site Set-up Clearance & Demolition***

- 3.2.4 Hoarding panels shall be installed along the curtilage of the site works to prevent unauthorised access to the construction areas of the site and to warn of the potential dangers of construction zones, whilst also ensuring safe and suitable access is maintained to the adjacent residential properties.
- 3.2.5 Clearance of land will be made within the site to accommodate the new access works and construction site set-up. This includes demolition of the existing commercial units within the site, with any remaining structures and street furniture cleared from the existing car park and service yard.
- 3.2.6 Demolition works to the existing buildings will progress on a top to bottom basis, in a sequence that prevents any form of structural collapse. The demolition rubble will then be broken down and any waste loaded to tipper trucks on stationed within the rear service yard and / or car park.
- 3.2.7 The existing points of vehicular access into the site would be used during the initial demolition phases, prior to the commencement of the proposed access works.
- 3.2.8 The demolition, clearance and initial set up phase is anticipated to last for up to 3 months.

#### ***Levelling, Access Works and Car Park***

- 3.2.9 Following the site clearance works, the ground would be levelled whilst the renewed access routes and car park would be constructed to facilitate appropriate vehicle access during the later stages of construction.
- 3.2.10 The initial construction works would be set up during this phase, including the proposed construction compound areas and established access arrangements.
- 3.2.11 The retained service yard access into the site's service yard would then comprise the main point of construction access to the site's delivery and compound areas. The remaining access points from Water Lane and Haven Road would be retained for the purposes of skip collections and small deliveries when necessary.

#### ***Basement Excavation and Piling***

- 3.2.12 4 small basement areas would be provided within the site, primarily to contain sprinkler tanks and pumps for the new buildings. These basement sections would be excavated using non-road mobile machinery (NRMM), such as excavators with mounted piling equipment. The appropriate piling techniques would be employed by the main contractor to reduce any risks of vibration damage to surrounding properties.
- 3.2.13 It is anticipated at this stage that these works could last for up to 4 months following completion of the site levelling works.

### ***Substructure***

- 3.2.14 At the locations where basement works are required, the substructure will be implemented following completion of excavation works. This process will include concrete flooring and the construction of any walls that do not adjoining the encasing earthworks.
- 3.2.15 The substructure construction period will not involve an intensive level of works and would likely require up to 4 months to complete.

### ***Superstructure***

- 3.2.16 The main deliveries during this phase are anticipated to be concrete and steel deliveries. Decking systems will be used to construct the frames of the structures with the decking being re-used on site to progress the buildings as each floor is constructed. There will be some initial deliveries of the decking materials and deliveries to increase the quantity of the decking system on site as works progress.

### ***Cladding***

- 3.2.17 The facades of the building are proposed to be clad with insulated brick, whilst the roof elements would likely contain metal sheet cladding. These will be delivered sporadically throughout the cladding phase of works.

### ***Building Services and Fit Out***

- 3.2.18 It is anticipated that elements of the fit out will be manufactured off site and brought to site ready for final install, as far as reasonably possible, in order to improve delivery efficiency and minimise construction activity and subsequent noise and emissions levels on the site.

## **3.3 Proposed Working Hours**

- 3.3.1 Construction works on the site will typically commence and finish at the following times:
- i) Monday to Friday 8.00am - 6.00pm
  - ii) Saturday 8.00am - 1.00pm
  - iii) No Sunday, bank holiday or public holiday working
- 3.3.2 Under no circumstances will works outside of these hours be undertaken, unless otherwise agreed in advance with ECC.
- 3.3.3 The term 'working' shall, for the purpose of clarification of this condition include the use of any plant or machinery (mechanical or other), the delivery of construction material and the carrying out of any maintenance/cleaning work on any plant or machinery.
- 3.3.4 There are no vehicle weight restrictions implemented along the A377 or Haven Road in the site's vicinity that would otherwise limit the construction vehicle routing establish for the proposed works.



## 4 VEHICLE ROUTING AND SITE ACCESS

This section shall be updated and maintained once a Main Contractor is appointed and a construction plan has been prepared.]

### 4.1 Site Set-Up

- 4.1.1 Prior to any works commencing it is proposed that hoarding panels are installed along the site boundaries, with the principal objective of preventing unauthorised access to the site and to warn of the potential dangers of the commencing works.
- 4.1.2 The hoarding lines will also serve to provide protective screens adjacent to the residential properties along Diamon Road, Stream Crescent, Water Lane, Chandlers Walk and Maritime Crescent / Haven Road.
- 4.1.3 Prior to the commencement of works, compound areas will be set up on vacant land within the site which would be relocated as necessary during the levelling and access works. There is ample space provided within the site for materials and waste storage.
- 4.1.4 During the initial demolition phase, the access points into the existing car park from Haven Road and Water Lane, respectively, would be available for the use of construction contractors. Following the completion of the proposed access works, these entry points would be closed with the temporary access gates removed and full hoarding instated at these locations. The retained access from Water Lane into the site's service yard would form the main construction access, accommodating deliveries and waste removals.
- 4.1.5 Furthermore, there is sufficient space to accommodate staff parking and delivery / waste removal vehicles. The parking areas will be appropriately allocated by the Site Manager during each stage of construction.
- 4.1.6 The specific phasing of construction is yet to be confirmed and will be included within a Detailed CMP prior to the commencement of works with input from the Main Contractor, once appointed.
- 4.1.7 All scaffolding would be set up within the site and would not be required to overhang neighbouring land. The site will be designed appropriately to ensure that there is no requirement for skips to be located on the public highway with all goods stored on the site at all times. Temporary lighting will also be provided across the site, as necessary.
- 4.1.8 **Figure 4**, below, provides an extract of the indicative construction set-up for the site during the demolition phases, prior to the commencement of the approved access works. The site-set up will evolve during each phase of development as discussed below.

Figure 4 Indicative Demolition Set-Up



- 4.1.9 As illustrated above, the it is envisaged that the main compound and materials storage area would be located within the site’s car park, which would be set-up prior to the demolition works. Scaffolding would be erected around much of the existing commercial units, with waste storage containers provided within convenient reach of the worksite. Staff parking would be accommodated within the existing car park, as shown above.
- 4.1.10 There would be no requirement to maintain a vehicle through-route between Haven Road and Water Lane during demolition / construction. It is therefore expected that vehicle entry to the site would be provided from the current access points on Water Lane with the Haven Road access closed during demolition works. Temporary access gates would be provided at the retained access locations to ensure authorised access only.
- 4.1.11 Wheel-washing facilities should be provided at both points of access illustrated above, which would connect to the main water supply serving the development. Should there be no ready access to a water supply within the site, a dust suppression bowser (measuring circa 2m x 4m) would be hired by the Construction Manager, enabling water supply to the wheel washer.
- 4.1.12 The following extract provides an illustration of the indicative site set-up for the main construction works which would commence after the completion of all demolition and access works.

Figure 5 Indicative Construction Set-Up



- 4.1.13 During the main construction works, all large deliveries made to the site would be accommodated within the retained service road via Water Lane. Materials would be unloaded adjacent to the main compound area on-site (to the rear of Block 'C'). Waste skips would also be contained adjacent to the service road for convenient collections.
- 4.1.14 The remaining access points at Water Lane and Haven Road, respectively, would provide restricted vehicle entry for the purposes of scheduled waste collections and small deliveries of materials. There would be no vehicular through-route provided within the construction site between Haven Road and Water Lane.
- 4.1.15 The indicative site set-up shown in **Figures 4 & 5** do not represent definitive arrangements and have been used for planning purposes within this CMP. A detailed site set-up will be designated by the Main Contractor following their appointment.
- 4.1.16 Monitoring of the above elements will be undertaken by the Main Contractor, throughout the programme of works to ensure the safety of all those staff associated with the works and users of the public highway, at all times. The above elements will be amended, with additional mitigation processes put in place, as required, as the construction programme evolves.

- 4.1.17 All materials and waste will be securely held within the site at all times. Under no circumstances will any equipment be stored or used on the public highway.
- 4.1.18 Any debris that may result from the access works will be cleaned from the site and stored appropriately to ensure no materials or waste spill onto neighbouring land or the public highway. Detailed measures pertaining to waste storage are provided within Section 6 of this report.

**4.2 Vehicle Specifications**

- 4.2.1 It is anticipated that both transit type vans and large delivery vehicles (HGVs) would generally be used by the various trades employed and throughout the various phases of construction in order to reduce the frequency of deliveries, which would be managed appropriately to avoid excessive impact on the local highway network.
- 4.2.2 The following list provides an indication of the types of vehicles anticipated during the construction process.

**Table 3 Summary of Construction Vehicle Specifications**

Construction Vehicle	Operation	Dimensions
Skip Lorries	Waste Removal	Length: 6.3m Width: 2.9m Height: 2.9m
Large Tipper Lorries	Transporting loose material to/from the site.	Length: 10.2m Width: 2.5m Height: 2.9m
Small Tipper Lorries	Transporting loose material to/from the site.	Length: 6.5m Width: 2.5m Height: 2.9m
Concrete Lorries	Mixing components and materials	Length: 8.4m Width: 2.4m Height: 4.0m
Flat-bed Trucks	Transport Materials / Steels etc	Length: 8.0m Width: 2.1m
Transit Vans	It is anticipated that these will be used for the majority of finishing materials and sanitary ware	Length: 5.3m Width: 2.0m Height: 2.5m

**4.3 Construction Vehicle Access**

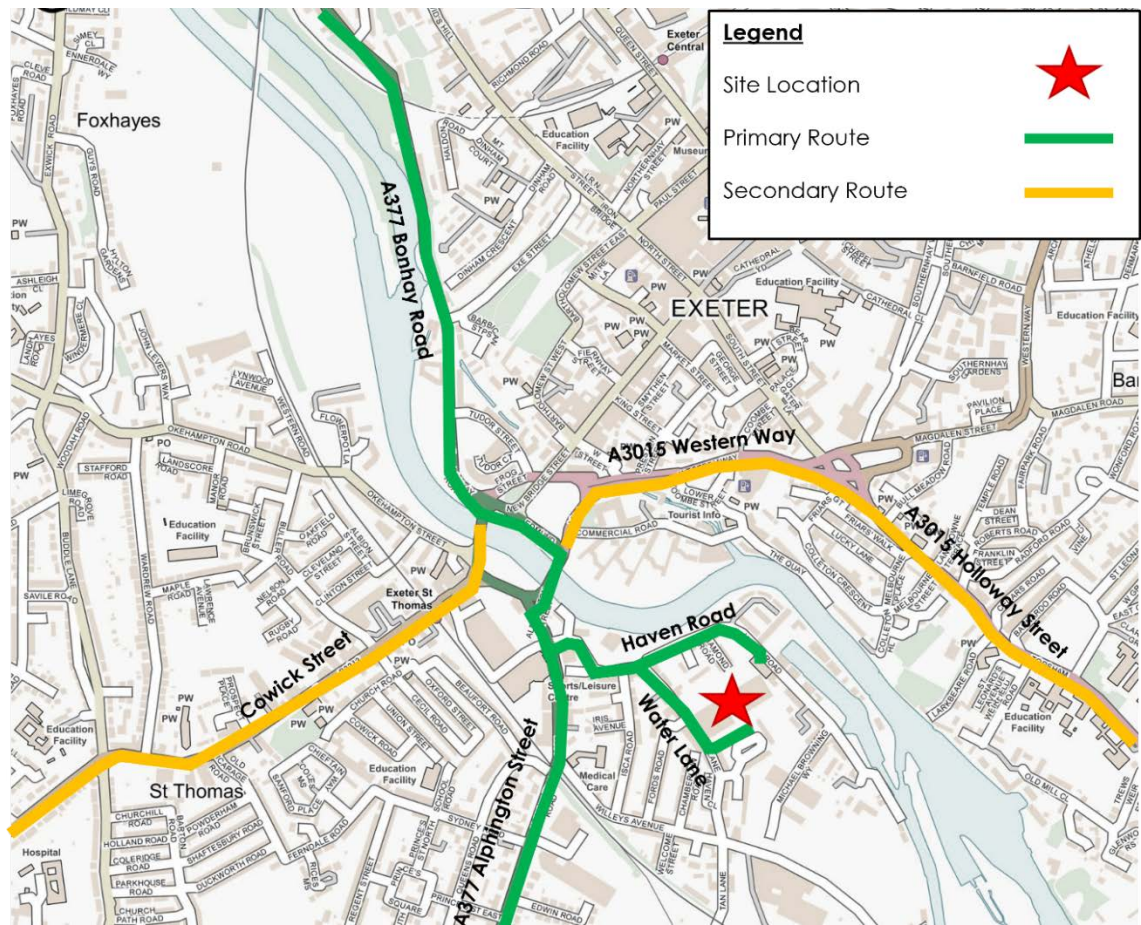
- 4.3.1 The service yard provided for the existing retail park would be retained post-development, albeit for some minor modifications. This service yard would continue to afford access into the site from Water Lane during the construction phases and would therefore accommodate construction delivery vehicle arrivals.
- 4.3.2 RGP prepared a swept path assessment for the accompanying Transport Assessment that confirms HGVs could continue to utilise the service yard from Water Lane including a 12m rigid lorry. As demonstrated on drawings 2021/5945/010 and 2021/5945/011, attached at **Appendix 2**, a vehicle of this size would be provided with enough space to safely manoeuvre on-site following the completion of deliveries. It is evident that no complex turning procedures are required for such vehicles to egress the site in a forward gear back onto Water Lane.
- 4.3.3 As the dimensions of each construction vehicle required at the site (as listed above in Table 3), the site’s retained point of access from Water Lane is sufficient to accommodate construction vehicles throughout the duration of works.

- 4.3.4 Temporary access gates would be installed at the site's retained access to ensure authorised vehicle entry only.
- 4.3.5 All construction deliveries would be booked in advance with the Construction Manager and undertaken in a timely fashion to ensure only one delivery vehicle arrives at the site at any given time. Through the use of a delivery schedule and limited delivery hours, the number of construction deliveries each day would be restricted in order to minimise impact on the adjacent highway network.
- 4.3.6 All vehicle manoeuvres and loading / unloading would be assisted by a site operative or traffic marshal. The marshals would be situated at the site entrance and main compound area when construction vehicles are expected to undertake deliveries. The marshals will guide vehicles to the loading areas and assist with manoeuvring HGVs on departure from the site.
- 4.3.7 The following procedures would be followed for all construction deliveries to minimise impact:
- i) Delivery drivers would notify the Construction Manager when the delivery is 5 minutes away;
  - ii) The traffic marshal would permit construction vehicle entry and guide vehicles through the access gates towards the designated loading area. The marshal would halt any pedestrian / cycle movements past the site's access during construction vehicle arrivals / departures;
  - iii) The vehicle would enter the site's designated loading areas in a forward gear under the supervision of a traffic marshal stationed within the site;
  - iv) The arrival process is anticipated to take no longer than 60 seconds in duration;
  - v) When the vehicle has finished loading / unloading at the site, the delivery vehicle would depart in a forward gear safely and conveniently under the guidance of the marshal and the access gates would be closed.

#### **4.4 Routing Strategy**

- 4.4.1 Principal access to Haven Banks is provided from the A377 Alphington Street, which as outlined above, provides a major highway link through Exeter and enables convenient access to the site via Haven Road.
- 4.4.2 All delivery vehicles generated during the demolition / construction phases would utilise the A377 on arrival and departure to prevent disruption to nearby residential and commercial properties as far as possible. The A377 Alphington Street / Haven Road junction is suitable to accommodate HGV manoeuvring and would continue to facilitate delivery vehicle access to the site post-development.
- 4.4.3 As the A337 provides connecting route to Junction 31 of the M5 (via the A30) to the south of Exeter, it is considered that the site is conveniently located for trips made by goods supplies based further afield. The site's location in context of access to the wider strategic highway network assists in reducing impact to surrounding neighbourhoods as minimal deviation from these major highway links is required to reach the site.
- 4.4.4 The regional and local routing plans are illustrated on the following extracts. The full plan depicting the localised haulage routing (drawing 2021/5945/007) is provided at **Appendix 2**.

Figure 6 Regional & Local Routing Plans





- 4.5.4 Any storage of materials on-site will need to be constantly reviewed as work progresses and the site conditions change to ensure that all materials are accommodated on the site and not on the highway. Loading or unloading at any other time outside the designated delivery hours or at other locations not stated by the site management will in no instances be acceptable, unless otherwise agreed with ECC in advance.
- 4.5.5 NRMM such as small excavators or road rollers will be contained within the secured site boundary where practical to do so to avoid repeated transportation of machinery, which may otherwise cause disturbance to the adjacent properties and road users.

#### **4.6 Pedestrian and Cycle Routes**

- 4.6.1 The site currently provides a through-route between Haven Road and Water Lane via the existing on-site car park. As this route would be closed during the demolition and construction periods, signage would be placed on the hoarding panels to instruct pedestrians and cyclists to divert via the footways connecting Water Lane and Haven Road at their junction to the northwest.
- 4.6.2 Additionally, a public right of way connects Haven Road to Chandlers Way and Michael Browning Way, forming a route to the east of the site. This existing right of way would be extended into the site as part of the redevelopment. It is not confirmed at this stage as to what extent of the right of way would be subject to closure, however, appropriate diversion signage will be provided during the construction period involving this right of way.
- 4.6.3 The existing footways provided adjacent to the site along Haven Road and Water Lane would be retained and largely unaffected by the initial construction works. However, the section of Haven Road adjacent to the site would be raised to form a pedestrian priority zone between the site and the existing pedestrianised zone at Haven Banks waterfront. It is anticipated that a footway closure would be required for a short duration and a vehicle / pedestrian diversion would be instated during this period.
- 4.6.4 These closures and diversion will be presented in full within the CMP when confirmed by the Main Contractor.



## 5 STRATEGIES TO REDUCE IMPACT

### 5.1 Management of Traffic and Deliveries

5.1.1 The appointed Construction Manager will ensure that all vehicles accessing and egressing the site adhere to the agreed strategies highlighted within this CMP. In order to minimise congestion on local roads and inconvenience to third parties the following principles are proposed:

- i) All construction deliveries would be undertaken within the site boundaries only.
- ii) All construction deliveries would take place between 10.00am and 4.00pm only to ensure all construction deliveries take place outside of peak hours and thereby minimising the impact of construction deliveries on the local highway network.
- iii) All delivery vehicles would accord with those outlined in this document.
- iv) All deliveries will be booked in advance and managed by the Construction Manager, in liaison with the relevant supplier/construction company, in order to ensure that only one delivery vehicle arrives and/or departs the site at any given time.
- v) All construction deliveries would be booked with 30 minute time slots allocated to each delivery vehicle (unless greater time is needed).
- vi) A delivery schedule will be prepared and kept up to date by the Construction Manager, when appointed. The delivery schedule will detail the anticipated time of the delivery, contact details for the supplier, the type of delivery (i.e. plant, materials, scaffolding) and the size of vehicle anticipated (no larger than those in this document, unless otherwise agreed with ECC/DCC in advance).
- vii) All deliveries must be booked at least 48 hours in advance with the Construction Manager and made in accordance with the specified delivery hours outlined in this document.
- viii) Any deliveries not booked in may be turned away at the Contractor's expense.
- ix) All deliveries will be supported by traffic marshals, as appropriate, to ensure the safe passage of materials to and from the site, without impacting on highway safety and other road users.
- x) Vehicles being off-loaded with goods at the site shall switch off their engines to avoid nuisance to the adjacent uses and to prevent dust generation.
- xi) The contractor will sweep the roads and footpaths on the local highway network as required on a daily basis to remove any spoil or debris deposited on the highway resulting from the construction period.
- xii) A wheel washing facility should be implemented at the site entrance for the use of departing vehicles to prevent the spread of dust and debris onto the local road network.
- xiii) Co-ordination will take place with other construction sites / businesses if found to be necessary when larger vehicles are required to deliver to site.
- xiv) Any vehicle attempting to deliver outside these hours will be moved on and will only be permitted to return to site within the delivery hours noted above.
- xv) The Main Contractor will request all delivery drivers to telephone ahead of arrival to site so that the necessary steps can be made to enable a smooth and efficient operation.
- xvi) Traffic Marshals will be informed and will be ready for arrival of the delivery, anticipating the type of delivery and the unloading method to be utilised.

- xvii) All construction vehicles would adhere to the vehicle routing strategy detailed in Section 4, above.
- xviii) Deliveries are not to be made outside the site perimeter onto public footpaths or at other locations on the highway, unless safe provision for pedestrians has been made and agreed in advance with the relevant highways department.
- xix) A weekly review of forthcoming deliveries will be undertaken at a Logistics Progress meeting and the deliveries for the coming week will be agreed with the Construction Manager in advance.
- xx) Although located outside of London, delivery companies should be encouraged to sign up to TfL's Freight Operators Recognition Scheme (FORS). This is a voluntary industry-led membership scheme which aims to raise the standard of the fleet and freight industry by improving operators' performance with regards to safety, fuel efficiency, economical operation and vehicle emissions. It seeks to provide a quality and performance benchmark for the freight industry.
- xxi) Staff parking will be managed and allocated accordingly by the Site Manager to ensure no operatives park within neighbouring properties.

## 5.2 Staff Travel Plan

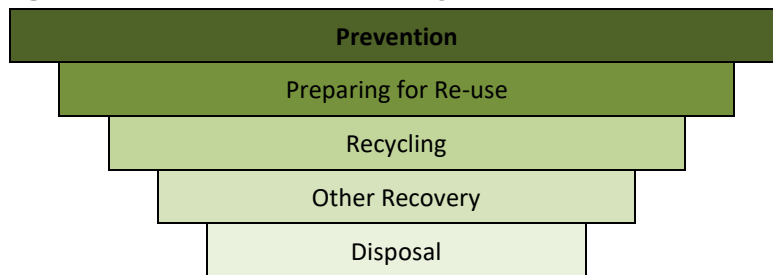
- 5.2.1 Although at this stage it is expected that adequate levels of staff parking will be provided within the site, the Construction Manger should limit and allocate space accordingly whilst promoting the use of sustainable travel modes. Opportunities should be sought at all stages of the construction works to limit the level of impact caused by vehicle trips generated by site operatives.
- 5.2.2 As discussed in Section 2 of this report, there is a good standard of pedestrian and public transport infrastructure provided throughout the local area. The site is served by local bus and rail routes with the nearest stops / station located within a 10 minute walk from the site.
- 5.2.3 In order to encourage the use of sustainable travel modes and reduce reliance upon private car use by staff, a number of travel planning measures will be considered by the Main Contractor. The following principles will be followed:
  - i) Use of local suppliers, as far as reasonably possible, to reduce distance travelled and associated vehicle emissions;
  - ii) Use of local labour / operatives who are more likely to reside within the local area and therefore travel by sustainable modes, as far as reasonably possible;
  - iii) Providing operatives with timetable bus/rail information, if requested;
  - iv) The potential to provide lockers on-site for tools and materials of construction staff will be explored by the Main Contractor to make sustainable travel more convenient.
- 5.2.4 An induction programme for all staff, making them aware of the parking arrangements and the opportunities to complete trips via sustainable modes. Car sharing will also be encouraged as a suitable alternative.
- 5.2.5 Should any additional staff parking be required for staff at any stage of construction, operatives should utilise the nearby Haven Banks public car parks.

## 6 ENVIRONMENTAL MANAGEMENT

### 6.1 Waste Management

- 6.1.1 The Main Contractor will be responsible for the careful management of waste as a result of construction works at the site. This will be achieved by adopting the key principles of the Waste Hierarchy (Figure 7, below), as outlined by the Department for Environment, Food & Rural Affairs (DEFRA).

Figure 7 DEFRA Waste Hierarchy (Preferred to Least Preferred Option)



- 6.1.2 This gives top priority to preventing waste in the first instance and provides a procedure to follow when waste is created, including re-using, recycling, recovery and the disposing of waste as a worst case.
- 6.1.3 It is the contractor's duty of care that all waste is managed in accordance with the procedures as set out within this document. A summary of waste management measures should be included and clearly defined within relevant sub-contract documents, and a copy of this document should be made available to all agents as necessary.

#### Storage

- 6.1.4 It is anticipated that general materials waste generated during the construction phases of the site would be held within skips on-site. The waste skips would be contained within the curtilage of the site.
- 6.1.5 Where large volumes of soil or aggregates are removed from the site, such as during the levelling and access works, it is anticipated these materials would be loaded directly into a removal lorry with the use of excavators.
- 6.1.6 Should any chemical waste arising occur during construction, such as oil or de-icing spillages, it must be stored within a separate secure container or skip with clear labelling to notify staff of the nature of waste being contained. The type of chemical waste must be recorded and indicated on the container to ensure the correct disposal procedures are arranged.
- 6.1.7 Reusable waste materials should be retained and stored separately by the contractor to reduce the level of residual waste generated during construction. These materials may be stored off-site for reuse in future construction works.
- 6.1.8 Recyclable waste should be sorted from general residual waste and stored in separate containers to be disposed of at an appropriate recycling facility. Storage provisions should be made by the contractor to accommodate the anticipated level of recyclable waste, including designated rubble sacks or bins, for example. These containers should be identified prior to the commencement of works and labelled where necessary to indicate their intended use to staff.

### **Removals**

- 6.1.9 Waste removals would typically be undertaken using a 6.3m x 2.9m skip lorry. It is anticipated that approximately 15-20 weekly collections would be required during the construction period. The frequency of skip collections would be adjusted accordingly throughout each phase of construction to meet the volumes of waste generated. It is likely that a greater volume of waste removals would be required during the initial demolition stage of the site's redevelopment.
- 6.1.10 Vehicles of this size would be comfortably accommodated within the site within the designated loading area. Site marshals would be present to assist in the manoeuvring of collection vehicles and align them to the skip prior to loading.
- 6.1.11 Where smaller volumes of construction waste are generated throughout a day, removals would take place using staff vans with rubble sacks used to dispose materials at local waste centres as necessary.
- 6.1.12 Any chemical waste generated during construction would be kept within secure containers and removed by a contractor that provides qualified services to undertake such removals.
- 6.1.13 Waste removals will be scheduled as not to overlap with any construction delivery vehicle arrivals at the site, enabling reserved space for skip lorries to access the site compounds and waste storage areas.
- 6.1.14 As part of the contractor's duty of care, a waste transfer note must be completed and signed for all non-hazardous skip removals. The contractor should consider registering with a government season ticket for multiple loads being disposed of. A copy of the waste transfer note should be retained for a minimum of 2 years as reference of lawful disposal. The retained copy should be provided to an enforcement officer from ECC / DCC or the Environment Agency if requested at any time.

### **Reuse and Recycling**

- 6.1.15 Reusable or unused materials should be preserved and retained by the contractor for future use where possible. A wide range of materials can be stored and reused, such as bricks, tiles, soil, asphalt, concrete, timber and plasterboard. If these unused materials are no longer required by the construction teams, they can often be sold to building suppliers or online services. Additionally, packaging and refuse sacks should be reused where possible to limit the volume of waste.
- 6.1.16 The reuse of materials would reduce the number of skip removals generated, representing a benefit to the local highway network and limiting overall vehicle emissions. A target to reduce materials waste would also result in notable financial savings to the contractor.
- 6.1.17 Where it is not practical to reuse materials, they should be recycled where possible. Many building supplies can be recycled at the appropriate processing facilities, including metals, wood, card, glass and some plastics.

### **Waste Tonnage**

- 6.1.18 In order to provide initial estimates to the projected waste tonnage and sorting, RGP has referred to Devon's Waste Audit System template which is contained in Appendix B of the Devon Waste Management and Infrastructure SPD (July 2015).

- 6.1.19 Aside from a site description and waste management procedures, which are outlined in this document, the waste audit system requires an estimate of the projected construction waste tonnage. The waste should be categorised by its type and volume, as well as the intended disposal methods.
- 6.1.20 As the redevelopment is at a planning stage, there has not yet been any form of screening undertaken by a construction contractor to determine the range or volume of materials used within the existing retail park. Additionally, until the appointment of a compactor is confirmed, it cannot be determined what construction methods and corresponding waste would be generated throughout the various phases of construction.
- 6.1.21 The waste audit system should therefore be completed by the Main Contractor following their appointment and prior to the commencement of works. The required table of outputs is provided below, whilst the full methodology is available within Devon's Waste Management and Infrastructure SPD.

Material	Annual Quantity						
	Total estimated amounts (tonnes)	% to be re-used on-site	% to be re-used off-site	% to be recycled on-site	% to be recycled off-site	% to be recovered	% to be landfilled
Inert							
Non-Hazardous							
Hazardous							
Total							

- 6.1.22 With respect to waste generated following occupation of the redevelopment, RGP has assessed the weekly and annual waste arisings for the site, as presented in the accompanying Waste Management Plan (WMP), submitted to ECC as part of the planning application. The WMP also provides the projected operational waste tonnage for the completed development, in line with Devon's waste audit system.

### **Waste Management**

- 6.1.23 All waste collections will be scheduled outside of the conventional highway peak hour periods (08:00-09:00 and 17:00-18:00 hours), in order to further reduce any impact of servicing on the local highway network. Additionally, any collection contractors used will be instructed to not carry out overnight collections to prevent disturbance to neighbouring residential properties. The site's delivery and collection schedules should aim to reduce any potential conflict with other local properties as far as reasonably possible.
- 6.1.24 To assist in minimising the duration of waste collections, the Main Contractor will ensure that a member of staff is available to greet the collection team and ensure clear access is available to the skip / waste storage areas in preparation for scheduled collections.
- 6.1.25 Should separate containers be required for hazardous or recyclable waste, staff will ensure that all signage and information stickers on the containers are clear. Replacement signage will be ordered by site management when necessary. This includes labelling on bins to assist with the correct sorting of waste on-site.
- 6.1.26 Site management will be instructed to inform employees of the construction refuse / recycling processes to ensure that they are fully aware of the requirements.
- 6.1.27 All receipts for waste removals and notes on the tonnage of transferred waste will be retained for monitoring purposes, to accompany the checklist that would be presented to ECC and DCC when required.

### **6.2 Dust Control**

- 6.2.1 Preventative measures should be undertaken by the contractor in order to minimise the risk and impact of dust generated by the construction works. The control of dust and debris is of significant importance due to the potential hazards associated with human health, air quality, water contamination, soil degradation and wider ecological stress. In terms of localised impact, it is also essential to prevent dust from impacting neighbouring properties and the operation of the local highway network.
- 6.2.2 Where Dust Risk Assessments are required, analysis should be carried out as per the methodology defined by the Institute of Air Quality Management (IAQM).
- 6.2.3 Based on the IAQM assessment guidance, the contractor should screen the potential risks of dust impact due to the site's proximity to the public highway. Consideration should be given to the four key activities involved with the development, including demolition, earthworks, construction and trackout. The trackout refers to the process of transportation of dust and dirt from the construction/demolition site onto the public road network. As part of these four stages, the contractor should take into account:
  - i) the scale and nature of the works, which determines the potential dust emission magnitude; and
  - ii) The sensitivity of the area;
- 6.2.4 Both of these aspects are examined in the following assessments with a view to understanding the likely risk of dust impact. With respect to first step of the assessment relating to the scale and nature of works, a summary of the site's assessment criteria is given as follows:

**Table 4 IAQM Dust Impact Assessment**

Activity	Site Risk Category	Dust Emission Magnitude
<b>Demolition</b>	Total building volume <20,000 m <sup>3</sup> , or; Construction material with low potential for dust release (e.g. metal cladding or timber), or; Demolition activities <10 m above ground, demolition during wetter months.	<b>Small</b>
<b>Earthworks</b>	Total site area 2,500 m <sup>2</sup> – 10,000 m <sup>2</sup> , or; moderately dusty soil type (e.g. silt), or; 5-10 heavy earth moving vehicles active at any one time, or; formation of bunds 4 m - 8 m in height, or; total material moved 20,000 tonnes – 100,000 tonnes	<b>Medium</b>
<b>Construction</b>	Total building volume 25,000 m <sup>3</sup> – 100,000 m <sup>3</sup> , or; potentially dusty construction material (e.g. concrete), or; on site concrete batching	<b>Medium</b>
<b>Trackout</b>	: 10-50 HDV (>3.5t) outward movements <sup>16</sup> in any one day <sup>17</sup> , or; moderately dusty surface material (e.g. high clay content), or; unpaved road length 50 m – 100 m.	<b>Small</b>

6.2.5 The second consideration of this assessment relates to the sensitivity of the local area. This includes 3 main categories; dust soiling, impact on human health and ecological impact. The assessment undertaken by RGP to determine the risk of each of these categories, using the methodology defined by IAQM, has established the following results.

**Table 5 Summary of Dust Risk**

Potential Impact	Sensitivity of the surrounding area			
	Demolition	Earthworks	Construction	Trackout
<b>Dust Soiling</b>	Medium risk	Medium risk	Medium risk	Low risk
<b>Human Health</b>	Negligible	Low risk	Low risk	Negligible
<b>Ecological</b>	Negligible	Low risk	Low risk	Negligible

6.2.6 As summarised above, the only notable risks to be considered at each phase of development is the risk of dust soiling. The following mitigation measures listed within this section of the CMP should therefore be applied stringently during any earthworks carried out at the site.

6.2.7 There would be a negligible or low risk to human health and local ecology throughout the duration of the site’s redevelopment.

6.2.8 Based on the above risk assessment, the following mitigation measures should be carried out, as per the recommendations set by IAQM:

**Communications**

- i) Develop and implement a stakeholder communications plan that includes community engagement before work commences on site;
- ii) Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary. This may be the environment manager/engineer or the site manager;
- iii) Display the head or regional office contact information.
- iv) Develop and implement a Dust Management Plan (DMP), which may include measures to control other emissions, approved by the Local Authority. The level of detail will depend on the risk, and should include as a minimum the highly recommended measures in this document. The desirable measures should be included as appropriate for the site.

**Site Management**

- i) Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken;
- ii) Make the complaints log available to the local authority when asked;
- iii) Record any exceptional incidents that cause dust and/or air emissions, either on- or off-site, and the action taken to resolve the situation in the log book.

**Monitoring**

- i) Carry out regular site inspections to monitor compliance with the DMP, record inspection results, and make an inspection log available to the local authority when asked;
- ii) Increase the frequency of site inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.
- iii) Agree dust deposition, dust flux, or real-time PM10 continuous monitoring locations with the Local Authority. Where possible commence baseline monitoring at least three months before work commences on site or, if it a large site, before work on a phase commences. Further guidance is provided by IAQM on monitoring during demolition, earthworks and construction;

**Preparing and Maintaining the Site**

- i) Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible;
- ii) Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site;
- iii) Avoid site runoff of water or mud;
- iv) Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period;
- v) Keep site fencing, barriers and scaffolding clean using wet methods.



### ***Operating Vehicle / Machinery and Sustainable Travel***

- i) Ensure all on-road vehicles comply with the requirements of the London Low Emission Zone and the London NRMM standards, where applicable;
- ii) Ensure all vehicles switch off engines when stationary - no idling vehicles;
- iii) Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable.

### ***Operations***

- i) 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;
- ii) Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate;
- iii) Use enclosed chutes and conveyors and covered skips;
- iv) Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.
- v) 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.

### ***Waste Management***

- i) (xviii) Avoid bonfires and burning of waste materials.

### ***Demolition Measures***

- i) Ensure effective water suppression is used during demolition operations. Hand held sprays are more effective than hoses attached to equipment as the water can be directed to where it is needed. In addition high volume water suppression systems, manually controlled, can produce fine water droplets that effectively bring the dust particles to the ground;
- ii) Avoid explosive blasting, using appropriate manual or mechanical alternatives;
- iii) Bag and remove any biological debris or damp down such material before demolition;

## **6.3 Non-Road Mobile Machinery (NRMM)**

6.3.1 NRMM refers to mobile machines, and transportable industrial equipment or vehicles which are fitted with an internal combustion engine and not intended for transporting goods or passengers on roads.

6.3.2 The site does not fall within a designated NRMM low emission zone and is therefore not restricted by specific regulations that may otherwise be implemented. However, it is nevertheless recommended that NRMM used on site meets Stage IIIB of the Directive as a minimum.

6.3.3 The emissions standards associated with Stage IIIB for non-road diesel engines are summarised within the following table, as presented by the engineering consultancy Ecopoint:

Cat.	Net Power	Date†	CO	HC	HC+NOx	NOx	PM
	kW						
<b>Stage III A</b>							
H	130 ≤ P ≤ 560	2006.01	3.5	-	4.0	-	0.2
I	75 ≤ P < 130	2007.01	5.0	-	4.0	-	0.3
J	37 ≤ P < 75	2008.01	5.0	-	4.7	-	0.4
K	19 ≤ P < 37	2007.01	5.5	-	7.5	-	0.6
<b>Stage III B</b>							
L	130 ≤ P ≤ 560	2011.01	3.5	0.19	-	2.0	0.025
M	75 ≤ P < 130	2012.01	5.0	0.19	-	3.3	0.025
N	56 ≤ P < 75	2012.01	5.0	0.19	-	3.3	0.025
P	37 ≤ P < 56	2013.01	5.0	-	4.7	-	0.025

† Dates for constant speed engines are: 2011.01 for categories H, I and K; 2012.01 for category J.

Figure 6.4. Stage III A/B emission standards for nonroad diesel engines

6.3.4 At any stage the use of NRMM is required during the demolition and construction phases at the site, the contractor should operate machinery in accordance with the above emissions standards.

## 6.4 Air Quality Management

6.4.1 Impacts on air quality can arise as a result of construction activities, particularly the annoyance of dirt, dust and debris. In addition to the dust control strategy detailed above in Section 6.2, RGP has outlined further detailed site-specific mitigation measures which are to be enforced at the site are detailed below:

- i) Using water spray to reduce dust generation.
- ii) Using protection plates and mobile screens.
- iii) Materials/waste stored on the site should be covered, particularly outside of working hours. The storage of materials or waste on the public highway and at other locations will in no instances be acceptable.
- iv) All vehicles carrying materials to / from the site should be covered to reduce the likelihood of spillages or leaks.
- v) The road edges and footways around the site will be swept by hand by staff at the end of the day.
- vi) All construction vehicles will follow the designated routes set out in **Figure 4**, to reduce the impact of vehicle emissions.
- vii) A wheel-washing facility should be implemented at the main entrance to the site to prevent the spread of dust and dirt into the surrounding areas and to preserve the integrity of nearby road surfaces.
- viii) The Main Contractor will be made aware of the Transport for London's Fleet Operator Recognition Scheme (FORS). Although the site is located outside of London, it is considered appropriate for the site management to understand the FORS scheme and to appoint FORS compliant contractors where possible. To further minimise the impact of deliveries and skip collections, the site management will be encouraged to utilise waste removal companies that are active members of FORS.
- ix) Any future waste contractors appointed to carry out the management and disposal of waste generated by the site will be approved by the Environment Agency's licensing process to ensure sustainability measures are upheld.

## 6.5 Noise

- 6.5.1 Construction works are noise generating sources of activity and a number of mitigation measures will be enforced and/or considered to suppress noise and vibration generated on the site.
- 6.5.2 The Construction Manager will be responsible for the monitoring and management of noise at the site and adhering to the Noise Working Standards set out by the Local Authority Environmental Health Department.
- 6.5.3 If the measured noise level rises more than 3dB (A) above the predicted noise level, or in the event that a noise complaint is received locally, the Construction Manager shall investigate the cause and noise levels shall be reduced, if it is reasonably practicable to do so.
- 6.5.4 RGP has also taken into consideration the requirements set out in the British Standards document BS5228 to protect against noise and vibrations. Based on the anticipated nature of works and scale of development, RGP has identified a number of mitigation measures will be considered to suppress noise generated on the site, including:
- i) Ensuring that all work is undertaken within the restricted working hours;
  - ii) Using 'silenced' plant and/or equipment and low vibration construction methods, wherever possible;
  - iii) Drop heights of materials from lorries and other plant will be kept to a minimum;
  - iv) Using mains power instead of generators, wherever possible;
  - v) Ensuring all operatives are professionally trained and provided with ear and eye protection;
  - vi) Ensuring delivery drivers turn off their engines upon arrival and when loading/unloading goods;
  - vii) Using protection plates and mobile screens around those parts of the site likely to generate significant levels of noise. Such screens will have sufficient mass as to be able to resist the passage of sound;
  - viii) Strategically placing noise generating plant as far as possible from sensitive receptors and the general public;
  - ix) Ensuring all deliveries are scheduled and assisted by a traffic marshal to ensure deliveries do not need to wait to park. Idling will in no instances be acceptable.
- 6.5.5 This list of mitigation measures is not exhaustive and the Construction Manager will be encouraged to investigate other potential measures throughout the construction process.

## 6.6 Vibration Levels

- 6.6.1 In the case of vibration, measured vibration levels shall be compared with the criteria in BS 5228:2009 part 2 (i.e. 1mms<sup>-1</sup> PPV for potential disturbance in residential properties and using a suggested trigger criterion of 2mms<sup>-1</sup> for commercial properties).
- 6.6.2 Lower limits must be agreed with the Council if there is a risk that vibration levels may interfere with vibration sensitive equipment or other vibration sensitive objects.

## **7 IMPLEMENTATION, MONITORING AND UPDATING**

### **7.1 Overview**

Main Contractor – name to be confirmed.

Construction Manager – name to be confirmed.

7.1.1 The Construction Manager will own and manage the implementation of this document. Their job description will include keeping data on:

- i) Number of vehicle movements on site - collected through the delivery booking system;
- ii) Types of vehicles on site – compliance with required sizes in this document;
- iii) Time spent on site;
- iv) Delivery accuracy compared to schedule;
- v) Vehicle routing, unacceptable queueing or parking;
- vi) FORS accreditation;
- vii) Staff travel modes to sites;
- viii) Noise levels monitored;
- ix) Dust control measures established;
- x) Air quality control measures established;
- xi) Run-off and water quality management;
- xii) Driver inductions and briefings including accreditation/qualification checks where required;
- xiii) Distributing Contractor and Driver Handbooks, as appropriate, to ensure all staff are aware of their obligations and the procedures which are set out in detail throughout this report. These would be provided to staff by the Main Contractor in advance.

7.1.2 The Construction Manager will review this document regularly and as conditions change. Records of any updated/revisions will be maintained by the Construction Manager.

7.1.3 All records will be held on file, onsite, including all certificates and inspection records for all plant, equipment, and lifting etc. that are required for traffic management and construction purposes.

### **7.2 Breaches and Complaints**

7.2.1 The contact details of the Construction Manager including an emergency out-of-hours contact will be published at the front of the site and will seek to respond to any formal complaint received within 7 business days with respect to community concerns, vehicle routing issues and unacceptable parking by staff, for example.

7.2.2 As outlined in this document, it is a requirement for vehicles and contractors to adhere to the FORS initiative. Any contractors found in breach of this scheme and requirements shall be notified and any disciplinary issues dealt with as appropriate.

7.2.3 The Construction Manager will be expected to develop a constructive relationship with those in the immediate vicinity of the development. A forum for consultation with the public will be set up, where feedback will be encouraged and updates on the development will be posted to keep the community up to date with activities on site. A letterbox drop to inform local residents of construction timing, work duration and what works are occurring at what times will also be considered.

### **7.3 Safety**

7.3.1 All personnel entering the site shall be required to wear suitable Personal Protective Equipment (PPE), which will be provided by the Contractor, if not available. Any persons not wearing suitable PPE may be asked to leave the site. This would be particularly important at the present time in light of the Covid-19 pandemic.

7.3.2 The operations of the site will be regularly inspected to ensure that all procedures are in compliance with this document. Daily inspections by the Construction Manager will ensure that the setup of the site is concurrent with the construction phases and there are no potential hazards. Any adverse impacts shall be recorded and immediately rectified if they arise.

7.3.3 All records of logistic related and staff related incidents or injuries will be held on file onsite at all times.

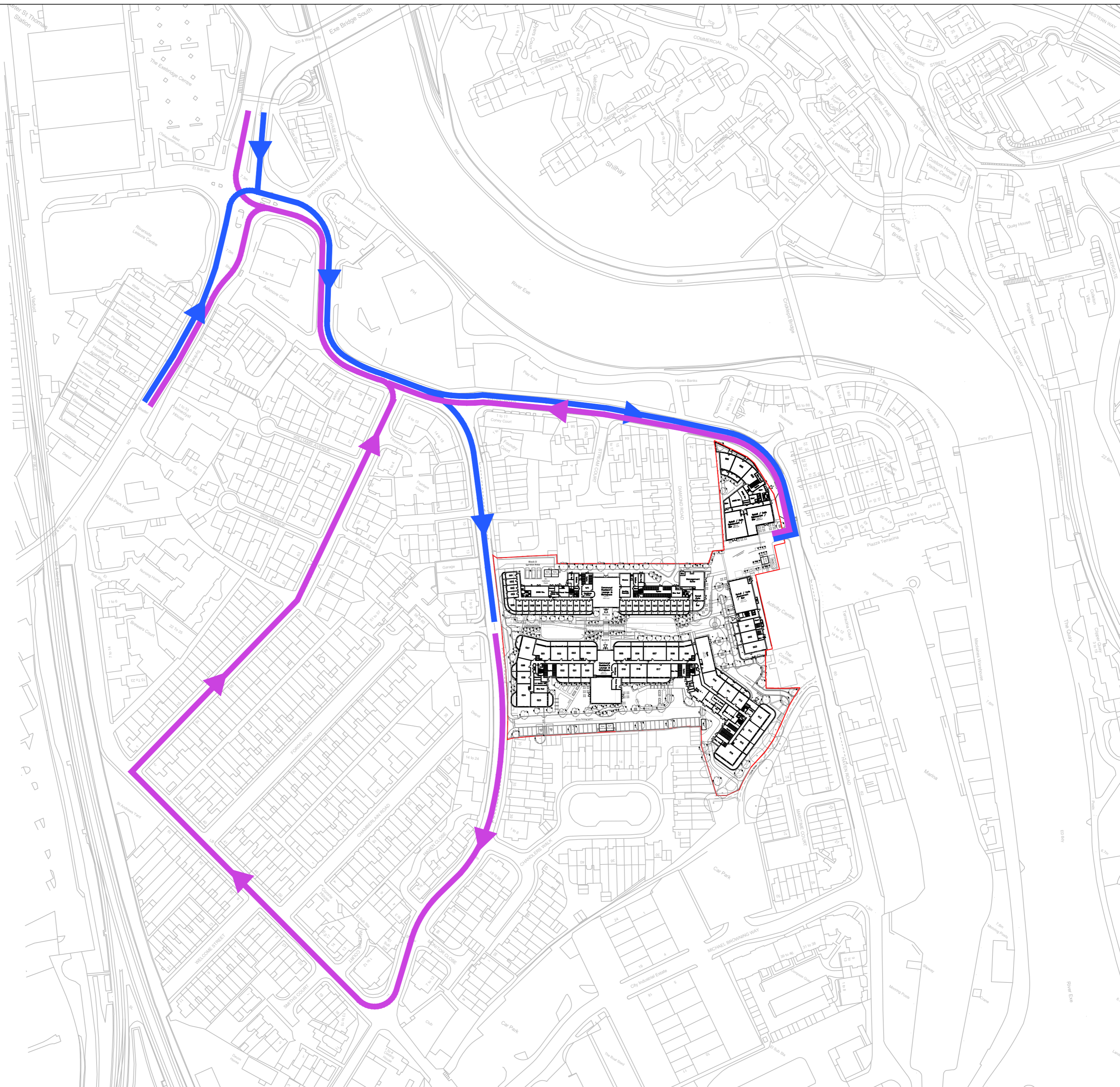
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**APPENDIX 1 PROPOSED SITE LAYOUT PLAN**



**APPENDIX 2 TECHNICAL DRAWINGS**





**NOTES**

This drawing has been prepared for the purpose of planning discussions and does not constitute a detailed design drawing, or construction drawing. A Design Hazard Inventory has been prepared by RGP setting out the hazards which have been designed out. This is available upon request.

- █ ARRIVALS
- █ DEPARTURES

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**RESIDUAL HAZARDS**

In addition to the hazards/risks normally associated with the type of work detailed on this drawing, please note the following residual hazards:

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved risk assessment and method statement.

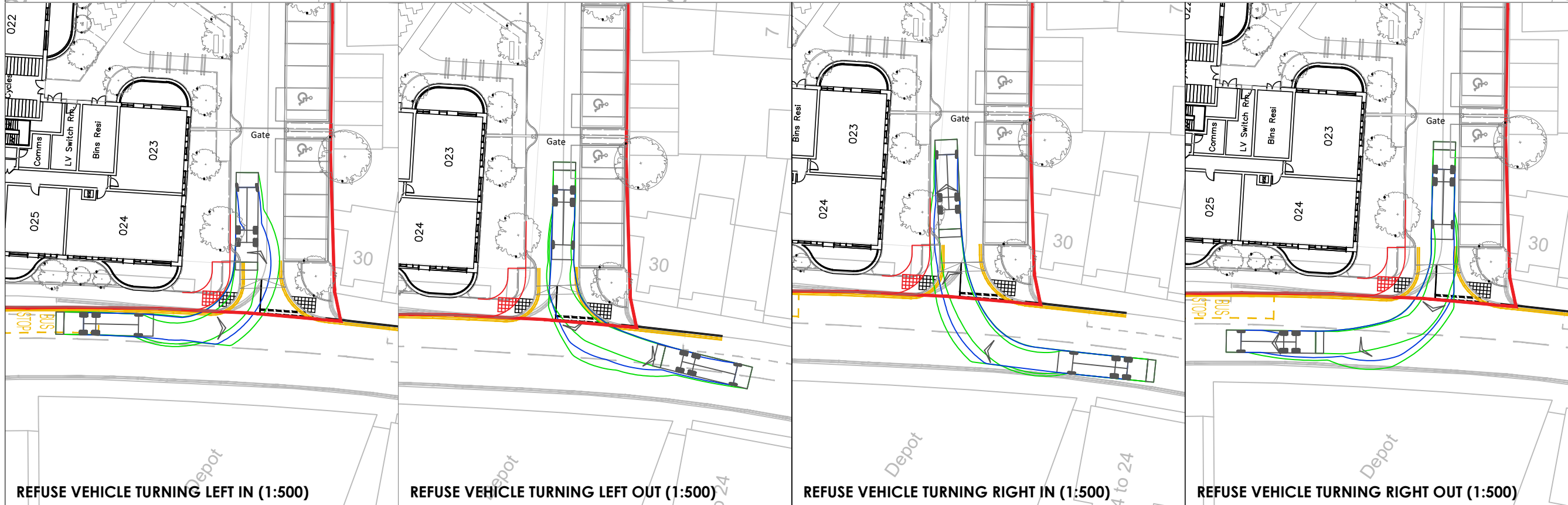
Rev.	Drawn	Comments	Date
P3	SAJ	LAYOUT UPDATED	26/07/22
P2	DLH	LAYOUT UPDATED	29/03/22
P1	DLH	FIRST ISSUE	17/01/22



Client	CoPlan Estates Limited		
Project	Haven Road, Exeter		
Drawing Title	Delivery Vehicle Routing Strategy		
Drawing No.	2021/5945/007	Rev.	P3
Scale	1:1500	Drawn By	SJ
		Checked By	NR
			A2



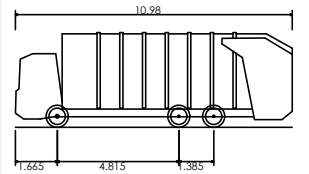
PROPOSED ACCESS ARRANGEMENTS (SCALE 1:250)



NOTES

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— SITE BOUNDARY



Phoenix 2 One-Pass (with Elite 6x4 chassis)  
 Overall Length 10.980m  
 Overall Width 2.500m  
 Overall Body Height 3.751m  
 Min Body Ground Clearance 0.304m  
 Track Width 2.500m  
 Lock to lock time 4.00s  
 Kerb to Kerb Turning Radius 9.000m

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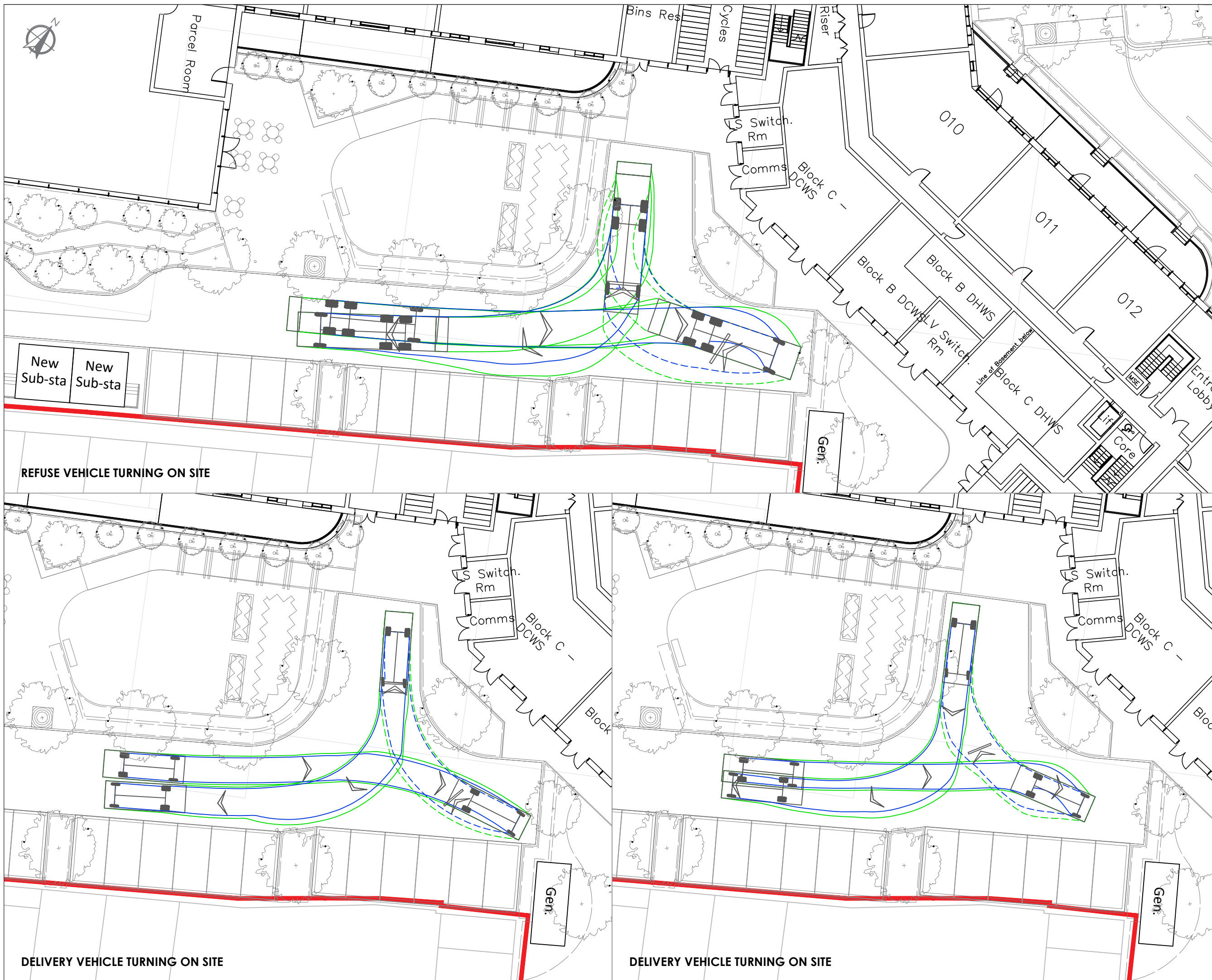
It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved risk assessment and method statement.

Rev.	Drawn	Comments	Date
P1	SAJ	FIRST ISSUE	25/04/22



Transport Planning and Infrastructure Design Consultants  
 Shackelford Suite, Mill Pool House, Mill Lane, Godalming, GU7 1EY  
 30 Stamford Street, London, SE1 9LQ  
 Tel: 01483 861681 / 020 7078 9662 www.rgp.co.uk

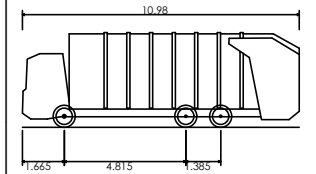
Client	CoPlan Estates Limited		
Project	Haven Road, Exeter		
Drawing Title	Proposed Servicing Arrangements Water Lane (Southern Access)		
Drawing No.	2021/5945/010	Rev.	P1
Scale	As Shown	Drawn By	SAJ
		Checked By	NDR
			A3



**NOTES**

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**SITE BOUNDARY**



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Rev.	Drawn	Comments	Date
P1	SAJ	FIRST ISSUE	25/04/22



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 Tel: 01483 861681 / 020 7078 9662 www.rgp.co.uk

Client	CoPlan Estates Limited		
Project	Haven Road, Exeter		
Drawing title	Vehicle Swept Path Assessment Delivery & Servicing Area		
Drawing No.	2021/5945/011	Rev.	P1
Scale	1:250	Drawn By	SAJ
		Checked By	NDR
			A3



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