
Appendix 4.6

Construction Traffic Management Plan

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Construction Traffic Management Plan (CTMP)

Herbata Data Centre Campus

Naas, County Kildare

May 29, 2024

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Prepared By: HDR & Donnachadh O'Brien Associates

Edited By: Jason Jensen HDR

Authorised By: Ulrich Groenewald HDR

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Appendix A. Site Phasing PlanA

1 Executive Summary

This Construction Traffic Management Plan (CTMP) has been prepared to encourage best practices and to inform the approach to construction planning, environmental and logistics of this development.

This report is to read in conjunction with the supporting documentation for the EIAR and Transport Assessment. The EIAR and its associated chapters will support the environmental assessments for the proposed development and will be referenced in this document.

An assessment of transport considerations has been undertaken to establish the intended vehicle routing and construction serviceability for the development. This assessment includes for the incoming utility elements that are to be provided on site, e.g., substation and incoming gas infrastructure, but does not include off-site utility works which are assessed separately by each utility.

An outline construction programme and construction methodology has been provided, which summarises anticipated timescales for the intended construction activities for this development.

Staff trips – The forecast for these busiest construction months (months 7 and 30) an estimated maximum of 1100 construction staff will require to travel to and from the site per day. Based on all construction staff travelling by car, with an average of 1.5 staff to each car. This will result in 733 car trips to and from the site per day, with estimated 40% (293 car trips) travelling to and from the site during the traditional peak hours that is usually between 07:00-09:30 and 16:00-19:00 of the weekdays. It is estimated that site staff will generate 425 car trips on an average day, with 175 travelling during the traditional peak hours.

We recommend the proposed development provides construction carparking for the average forecast construction activity duration which has been estimated to be 350 car parking spaces.

HGV - During the peak months 7 and 30 of construction, approximately 1221 construction vehicles (not staff) will access the site. This equates to 47 vehicles per day and 7 in the peak hour assuming 15% of vehicles arrive during the peak.

The objectives set within sections 4, 5 and 6 have been proposed to encourage contractors to reduce the impacts of construction relating to traffic, improve sustainability during construction and measures to improve efficiency during the construction phases.

Although this development is not required to do so, the report aims consider other guidelines and best practices where practical, to encourage a positive approach to construction planning and logistics. The aim is to go beyond normal consideration and to ensure the construction phases improve sustainability and safety whilst reducing the impacts of local traffic and impacts to the environment.

2 Introduction

HDR has been appointed by Herbata (the “Client”) to prepare an Construction Traffic Management Plan (CTMP) for the development of a large parcel of land located on the western side of the M7 motorway, positioned between Junctions 9a and 10. The site is bound to the north by the R409 road, which provides a direct link to the centre of Naas, approximately 2.5km to the east and located within Kildare County Council (KCC).

Herbata Data Campus will maintain overall responsibility for the CTMP throughout planning, design, and construction. HDR has prepared the CTMP to be submitted as part of the planning application documentation and will form the basis for subsequent detailed CTMP documents to be developed upon appointment of a contractor.

2.1 CTMP Objectives

The overall objectives of this CTMP are to:

- Lower emissions.
- Consider environmental needs of the development and surrounding area related to construction.
- Enhance safety – Improved vehicle and road user safety; and
- Reduce congestions – Reduced trips overall, especially in peak periods.

To support the realisation of this objective, several sub-objectives have been agreed and include:

- Encouraging construction workers to travel to the site by non-car models.
- Protecting ecology and nearby industrial areas
- Promote smarter operations that reduce the need for construction travel or that reduce or eliminate trips in peak periods.
- Encouraging greater use of sustainable freight modes.
- Encouraging the use of greener vehicles.
- Managing the on-going development and delivery of the CTMP with construction contractors.
- Communication of site delivery and servicing facilities to workers and suppliers; and
- Encouraging the most efficient use of construction freight vehicles.

2.2 Site Context

The lands are located between the existing ‘M7 Business Park’ and ‘Osberstown Business Park’. The Osberstown Wastewater Treatment Plant is located nearby to the north. The site is bounded to the east by the M7 motorway and to the west by agricultural lands. The ‘Newhall Retail Park’ is located to the south of the site, on the east side of the M7 motorway.

The site is a rectangle parcel of land equating to approximately 37.5 hectares, bordered on two sides by roads. The land is currently a lightly grazed grassland and encompasses three private dwelling that are located to the north of the site with their entrance off the R409.

The site is bordered with semi mature deciduous trees and hedgerow around its perimeter. The eastern border is along the M7 between the R445 and Sallins Bypass junctions. The site location is presented in *Figure 2-1*.

Figure 2-1. Site Location



2.3 Development Proposal

The proposed development comprises a data centre campus, for which planning permission shall be sought from Kildare County Council (KCC). The grid substation and 110kV transmission connection elements of the project are subject of a Strategic Infrastructure Development (SID) application to An Bord Pleanála.

The site is currently in agricultural use and comprises a number of fields. The site falls at a generally even grade from north to south.

The main elements of the proposed development comprise of 6 no. two storey data centre buildings (each of approximately 27,000m² and 18m in height), an administration / management building, car parking, landscaping, diesel storage and gas turbines, energy storage and other associated works.

The proposed development comprising the SID application consists of the following:

- 110kV GIS building/grid substation approximately 1350m² and 15m in height.
- Undergrounding of a 110kV transmission line.
- 2 no. dropdown towers (16m in height).
- Connection of 110kV the new underground cables into the new GIS grid substation.
- Client control building.
- Internal road layout.
- Boundary fences.
- Underground services (water, surface water, foul water, HV power, MV power, LV power, fibre, gas, earthing, district heating).
- Incoming gas, water, and fibre utility supplies from adjacent highways, and
- Ancillary works.

The proposed data centre development (KCC planning application) comprises of:

- 6 no. two storey data centre buildings,
- An administration / management building, car parking, landscaping,
- On-site power generation using gas turbines and engines.
- Above ground gas infrastructure.
- District heating building,
- Water treatment facilities.
- Fuel storage and
- All associated development.

A secondary emergency site access is proposed over the Bluebell Stream, which access will be provided via the M7 Business Park. This new road over the Bluebell Stream will be subject to a Section 50 application to the Inland Fisheries for review and approval.

Section 50 consent (under the Arterial Drainage Act 1945) will be required in respect of the proposed culvert and drainage outfall, which will cross the Bluebell Stream.

As referenced within the Transport Assessment, the proposed development includes improvement works to the R409, a new footpath, cycleway, and bus layby to the southern side of the roadway. In consultation with Kildare County Council, the improvement works will be extended across the R409 bridge over the M7 motorway and link up to the existing footway to the eastern side of the bridge.

The intention is for the project to be undertaken in three phases for that are listed in Table 2-1.

Table 2-1. Construction Phasing Sequence

Phase 1	Enabling Works Overall Construction Programme
	ESB Substation Overall Construction Programme
	AGI Building Overall Construction Programme
	DC 1 Overall Construction Programme
	R409 Road Improvement works that include the cycle lane, pedestrian walkway to both sides of the road.
	DC 2 Overall Construction Programme
Phase 2	DC 3 Overall Construction Programme
	DC 5 Overall Construction Programme
Phase 3	Construct Secondary Construction Compound around the site and remove the existing construction carpark
	DC 6 Overall Construction Programme
	DC 4 Overall Construction Programme
	Site Wide Works Overall Construction Programme

The construction phases starting with DC1 to DC 6 will also include all the works as set out in the wider planning documentation. The Principal Contractor will retain responsibility for the whole site and those working upon it for the duration of the works from inception to formal hand-over to our client Herbata.

The Principal Contractor will be responsible for coordinating the works undertaken by the various sub-contractors and specialists and to ensure that the onsite workforce will talk to each other and ensure that they are aware of each other's effect on the surrounding community.

3 Context, Considerations and Challenges

This section describes the local context and issues identified that need to be considered and addressed during construction.

Policy Context

This section of the

CTMP references policies we have considered in the preparation of the document.

National Policy

Guidelines for managing opening on public roads.

These guidelines set out a summary of the legal framework relating to road authorities, various statutory bodies and private individuals in opening or forming opening in public roads in Ireland'. It provides guidance and specifications for works within the public road, alongside material on the legal background and obligations contractors are required to observe.

Local Policy

Guidelines for managing opening on public roads.

These guidelines set out a summary of the legal framework relating to road authorities, various statutory bodies and private individuals in opening or forming opening in public roads in Ireland'. It provides guidance and specifications for works within the public road, alongside material on the legal background and obligations contractors are required to observe.

Additional best practice considerations

As part of this report, we have considered other best practice methods to inform the approach intended for the development. Although there is no required to do so, the proposed development aims to encourage a positive approach to construction, planning and logistics. The aim is to go beyond the normal consideration and to ensure the construction phases reduce the impacts of local traffic and to the environment whilst improving sustainability and safety.

Furthermore, following guidance's below has been considered in context with the proposed development.

- BRE Pollution control guide parts 1-5
- BS 4142: 2014+A1:2019 – Methods for rating and assessing industrial and commercial sound (N.B. this document should only be used in respect of the methodology for assessing background noise levels)
- BS 5228-1: 2009 + A1: 2014 – Code of practice for noise and vibration control on construction and open sites Part 1: Noise & Part 2: Vibration
- BS 7385-2:1993 – Code of practice for deconstruction and construction sites.

3.1 Context Maps

The following maps show the area around the development site.

Figure 3-1 shows a regional plan with the location of the site in the context Kildare County Council and the road network.

Figure 3-2 shows the location of the site in relation to the surrounding local area, which also includes indicative welfare, carparking and site compound during the construction phases.

Figure 3-3 shows the site boundary plan showing the extent of footways as well as further details of the temporary construction site compound and parking layout.

Figure 3-4 shows the site wide infrastructure drawing, reference number 0360452-HDR-XX-XX-DR-C-082220

Figure 3-1. Regional plan 1:25,000

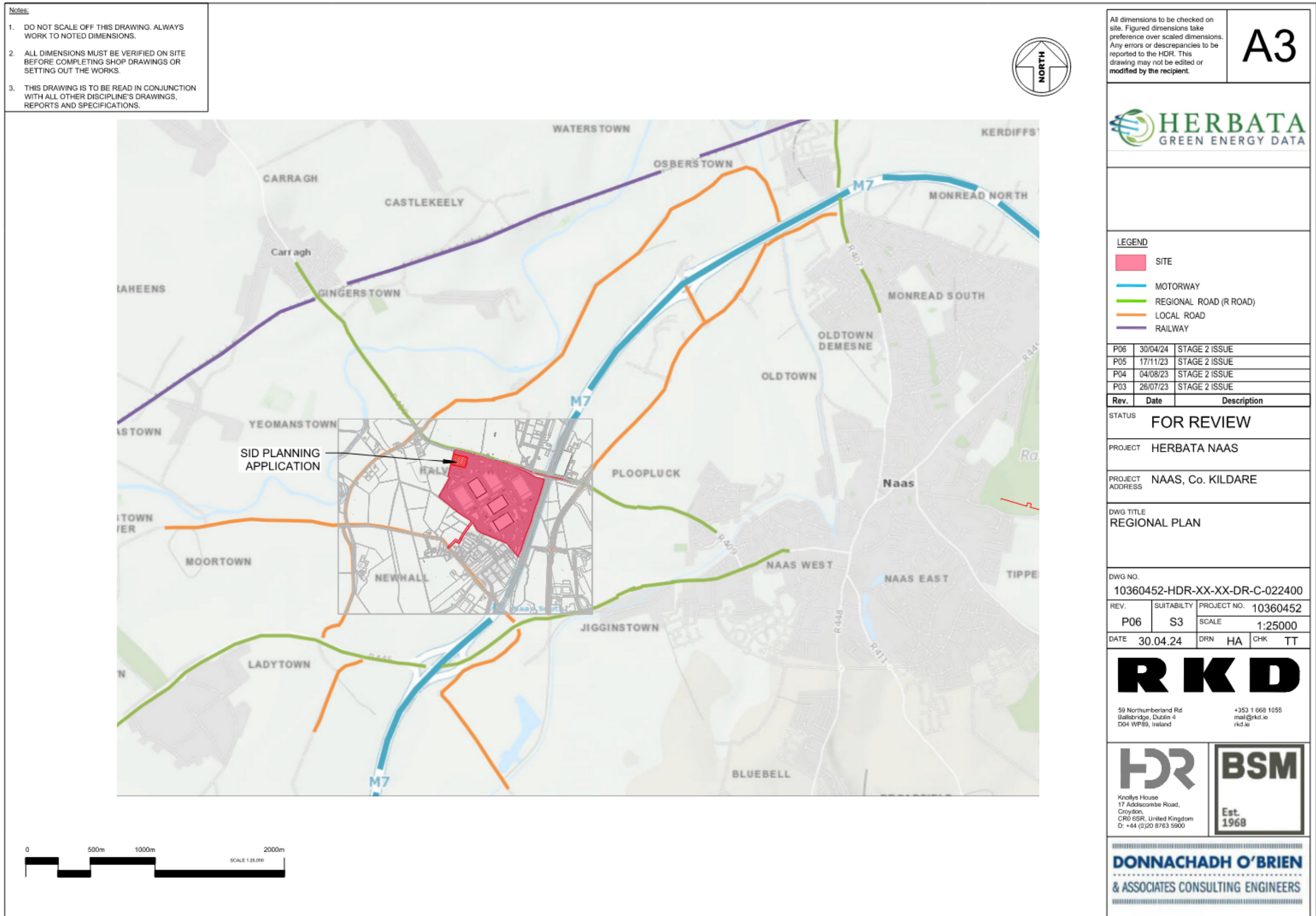


Figure 3-2. Local context plan 1:5,000

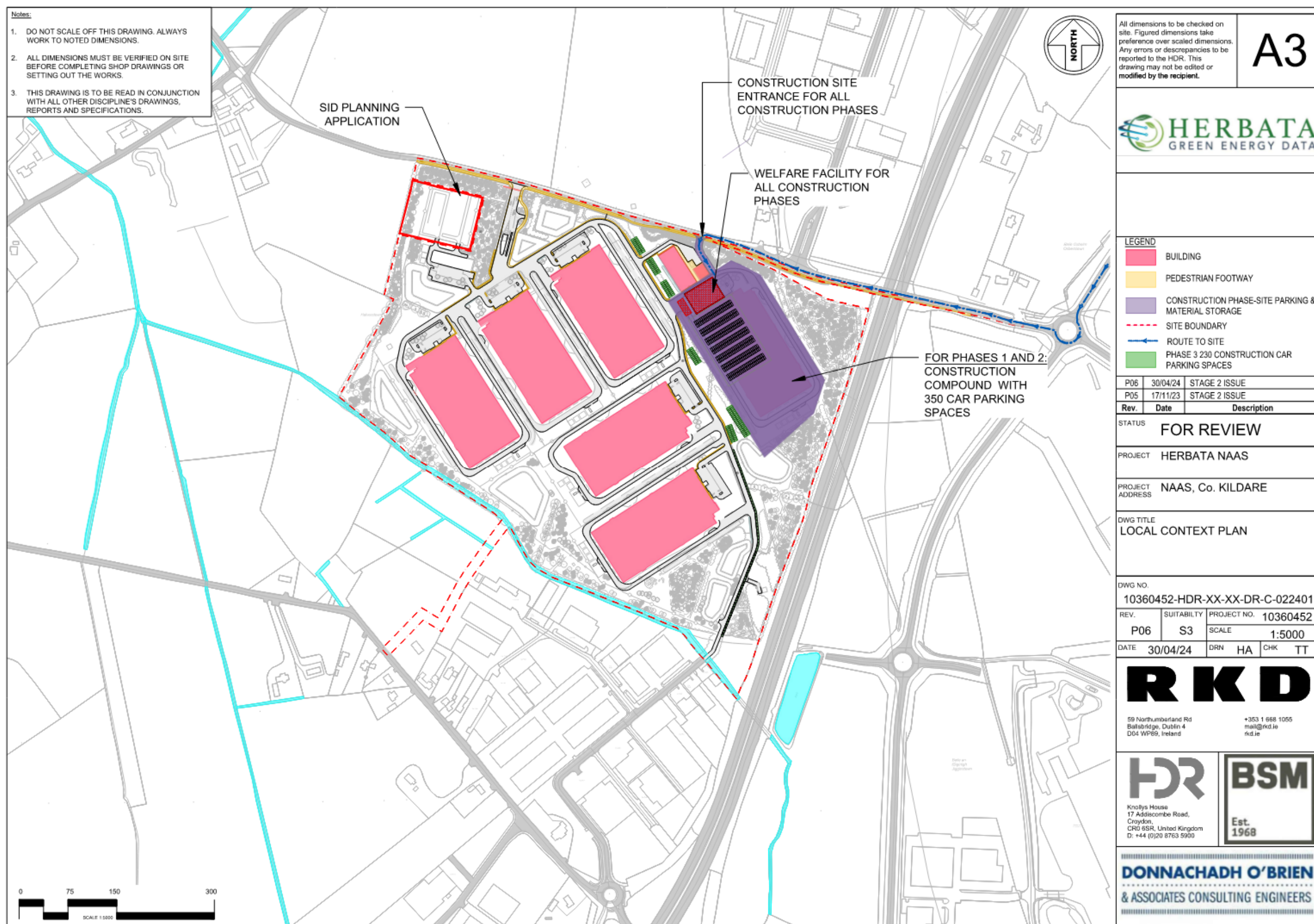


Figure 3-3. Temporary Construction Site Compound and Parking Layout 1:2,000

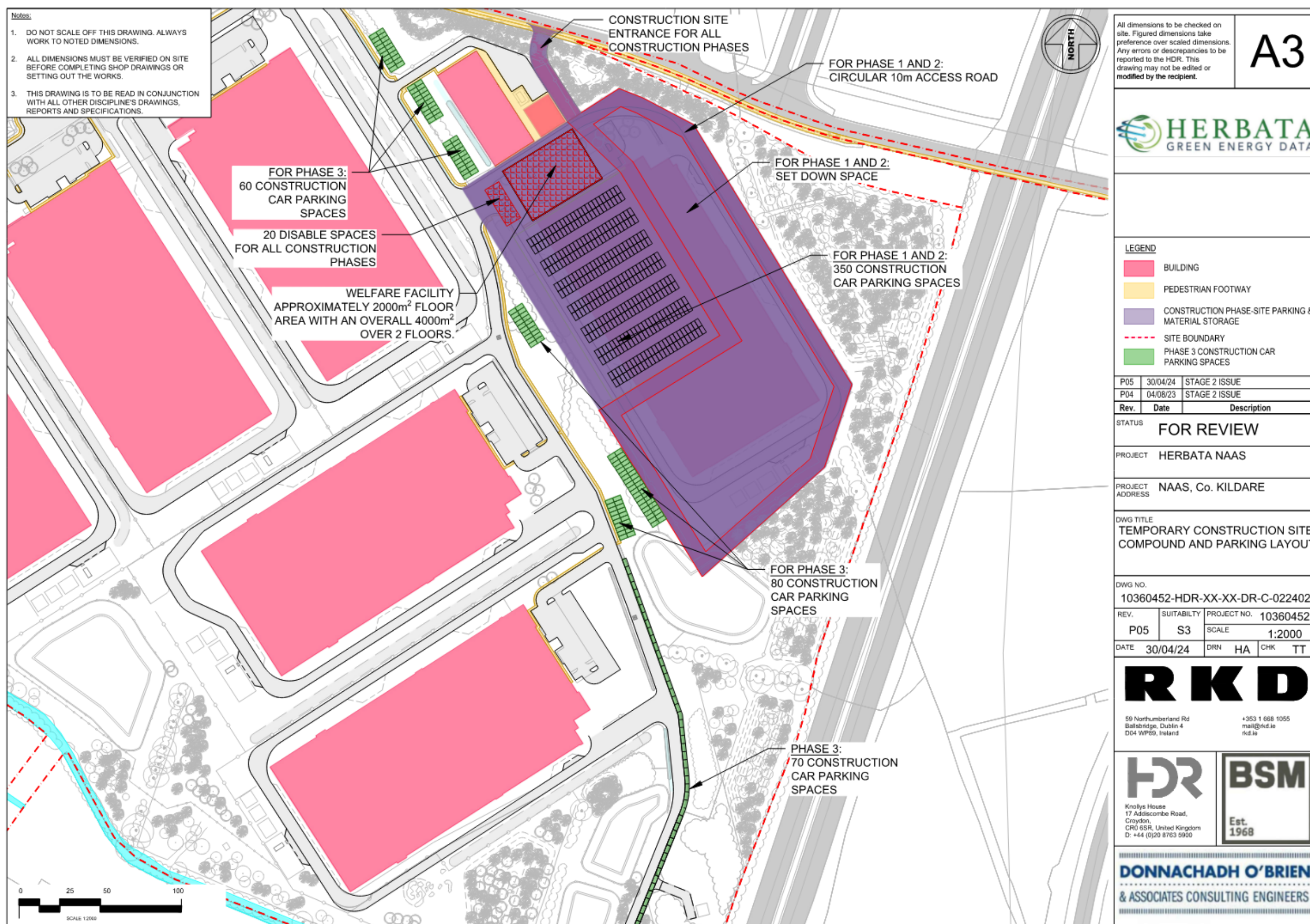
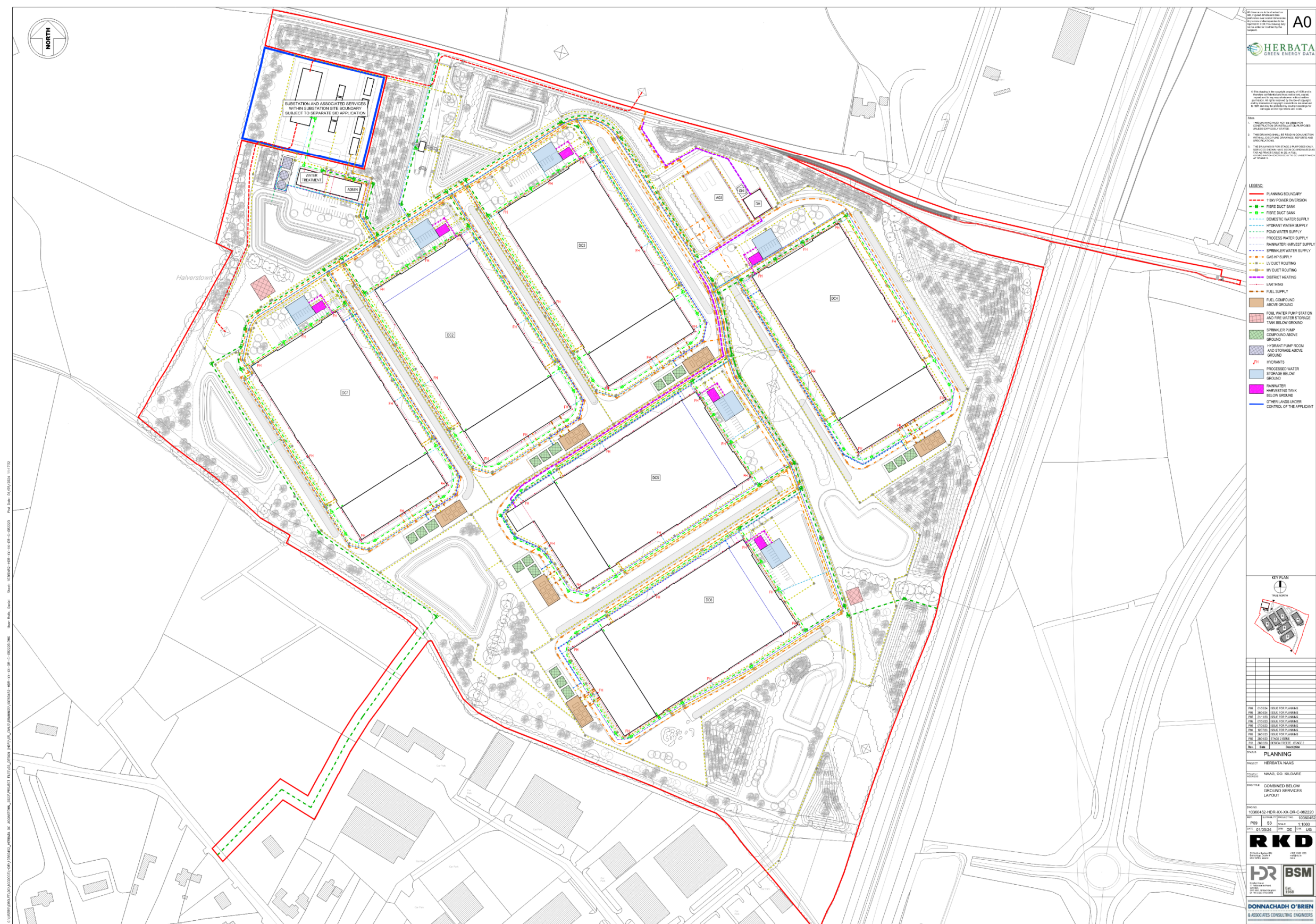


Figure 3-4. Site Wide Infrastructure Drawing 1:1,000



3.2 Local Access Including Roadways, Public Transport, Cycling and Walking

3.2.1 Roadways, Carriageways and Footways

The rectangle parcel of land has the M7 alongside the east of the site and R409 to the north of the site that bridges over the M7 at the northeast of the site. R409 is a regional road with a 60 km/h speed limit.

Figure 3-5. R409 (Site located to the left-hand side)



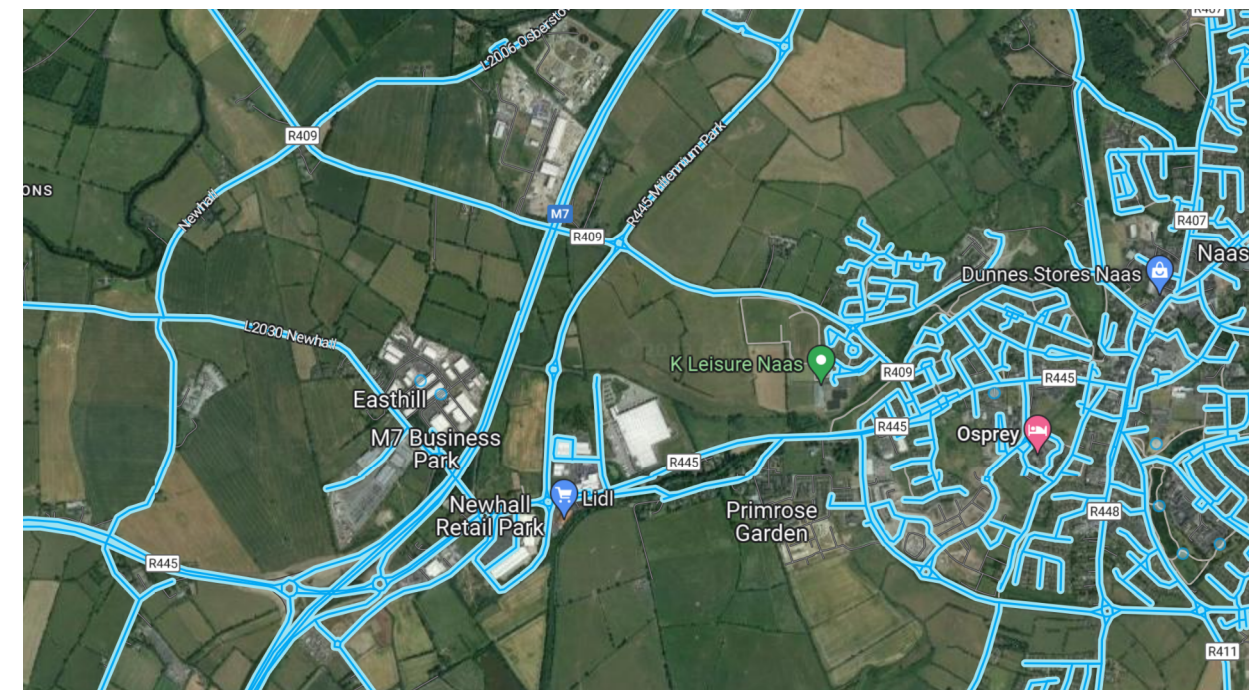
Figure 3-6. Approaching the R409 bridge over. (Site located to the left-hand side)



The M7 is set slightly lower in elevation than the site, refer to photo above.

The R409 is considered a R-road that facilitate formal road markings. There are no known parking restrictions or laybys along both sides of the road. The R409 links Naas to Caragh that bridges over the M7, see Figure 3-7 below.

Figure 3-7. Road map highlighted in blue.



The M7 runs alongside the east of the site, links to the M9 and is subject to a 120 km/h speed limit. Access to this site is from the R445 junction 10 turn off toward Naas then turn north onto the Millennium Park Road (R445) that to the R409 roundabout. Turn west onto the R409 that bridges over the M7 where the site entrance is located shortly after crossing over the M7 that is on the south side of the road.

To construct the proposed development, it is envisaged no parking bays and footpath are required along the public road. However, to facilitate new access road and construction traffic into the development, local traffic management will be required. Any access restrictions within R409 road will be pre-arranged with KCC, the Transport Infrastructure Ireland (TII), and the local police.

3.2.2 Railway

The nearest train station is Sallins & Nass station located approximately 2m to the northeast of the development. This station is located on the main Irish Rail that travels between Cork and Dublin through intermediate stations. The station provides cycle parking spaces and does not provide car parking spaces.

Please refer to the EIAR Volume III, Appendix 12.1 and 12.2 for the Transport Assessment and Mobility Management Plan for further details.

3.2.3 Bus Routes

The nearest bus stop to the development is located close to the intersection of Newhall (L2030) and the R445, near the Newhall Retail Park, called Newhall Retail Park bus stop, approximately 1.5m to the south of the site, which equates to approximately 26 minutes walking time. The northbound stop called Carragh Church Bus stop is located 500m south of the M40 junction turnoff. There is no formal shelter however, a pole and flag are present.

The southbound bus stop called Carragh, Caragh Church is located along the R409 approximately 1.5m north from the site. There are no puffin crossing along any of the surrounding road that allows pedestrian access to this bus stop. This bus stop does not benefit from sheltered bus seating.

Please refer to the EIAR Volume III, Appendix 12.1 and 12.2 for the Transport Assessment and Mobility Management Plan for further details.

3.2.4 Cycle

A layout highlighting the local facilities are within the Transport Assessment. A mobility management plan is to be submitted as part of this planning submission outlines local cycling facilities.

In addition, there are no surrounding roads that are signed or marked for use by cyclists on a mixture of quiet and busier roads.

3.3 Considerations and Challenges

The new development is located alongside the M7 and near the R445 Junction 10 and adjacent to the R409 road. Planned measures to mitigate any potential conflicts or challenges are discussed below:

3.3.1 Other Local Policy

Transport Infrastructure Ireland (TII) are a key statutory stakeholder in relation to Roads & Transport planning issues. The TII and the KCC provides guidance code which contains a guide to good practice for contractors carrying out demolition and construction works. We would expect the site construction to adhere to similar guidance during construction hours.

3.3.2 Education

There is Carach Court Montessori school situated to the east of the site on the R409. While the school is not in the immediate vicinity, it is likely pupils' parents will be using the R409 and the M7 to drive to the school.

The proposed mitigation is to appoint a Community Engagement Officer to regularly contact the school to share information to maximise child and pedestrian safety during the demolition and construction phases of the development.

3.3.3 Elderly Care Home

There are no known elderly care homes in approximately 1.5km radius around the site. The Community Engagement Officer will share information about the construction programme and any effects on the surrounding if any new home's residents and collate any issues or concerns. This liaison will ensure the highest level of safety is maintained and full transparency achieved around potential noise and vibration.

3.3.4 Sports and Leisure

The K Leisure Naas Leisure grounds is located to the East of the site with access off the R409 that is located approximately 2.5km away from the site. During the summer months if any events do take place during the week and at the weekend causing crowds of people and potential temporary event overlays on the public realm.

A timetable of upcoming events will be incorporated into the programme and overseen by the Community Engagement Officer to ensure there is minimal disruption and optimal safety in the area at these times.

3.3.5 Hospital

The Naas General Hospital is situated east of the site in Naas, which is not in the nearby vicinity of the site for at least 3.9km away. There are several medical centres to the east of the site around Naas area, which will not cause any access issues with the construction of the new development.

3.3.6 Existing Utility Services

There are three private residential dwellings that are likely supplied with power and water within the site. There is an existing substation directly North of the site that is in close proximity to the site boundary within the M7 Business Park KTL warehouse demised area. The substation serves the Business Park Buildings and warehouse.

Two overhead lines cross the site diagonally, one is at 110kV, and the other is at 220kV, both are owned by Eirgrid and operated by ESB. The 110kV overhead line is proposed to be undergrounded.

There is no surface water drainage onsite as the surrounding benefits from local ditch networks adjacent to the highways. The foul water drainage appears to be localised with each premises, which may benefit from septic tank systems. A desktop and onsite investigations will be undertaken to reduce hazardous risks in conjunction with regular contact and supervision from the statutory provider during construction.

3.3.7 Neighbouring Construction Sites

There is a current application for a distribution warehousing on Monread Road, reference 22-1478 where TII requested assessment of impact of development on the adjacent M7 junction. There are currently no other known major project development or theme parks under planning consideration in the nearby vicinity of the site. However, the distribution warehouse proposal is to be developed during the construction period of this site, consideration and liaison with the contractor undertaking the developments and TII highway authority will be require ensuring major works and construction deliveries are programmed to reduce minimal impact to traffic and safety.

Consideration and liaison with the neighbouring construction site will be require ensuring major works and construction deliveries are programmed to reduce minimal impact to traffic and safety.

When the works schedule is unknown, trip generation analysis will be cross-referenced to ensure precautions are taken to lower any compounding peak vehicle movements. The same procedure will be performed for any other construction sites in this area. In addition to vehicle analysis, an appointed contractor will be encouraged to collaborate on shared services such as marshalling areas, vehicle holding areas and stakeholder engagement. This may require further decision.

3.3.8 Rights of Way and Bridleway

The site does not benefit from any existing bridleway along or inside the boundary of the site.

3.3.9 Public Relations

A Community Liaison Officer is to be appointed to mitigate and resolve any issues and difficulties in the local community. A key aspect of the successful management of this project is to establish and maintain good relationships with all surrounding neighbours. This CTMP has prepared a strategy for preventing potential issues, however any difficulties encountered during construction will be reported/recorded in a full log and resolved using a 24 hour-staffed telephone line.

A weekly newsletter and bi-monthly community gatherings would be recommended, which could address any arising concerns such as security, site boundaries and hoardings, construction vehicle congestion and general community disruption.

3.3.10 Castles

The Jigginstown Castle is situated east of the site along the R445, which is not in the nearby vicinity of the site for at least 1.2m radius away, which will not cause any access issues with the construction of the new development.

3.3.11 Protection of Local Trees and Ecology

There are significant numbers of the trees and hedgerows on the site. The Contractor is expected to fully retain and protect those trees and hedges identified in the tree constraints, removal and protection plans which accompany the planning application.

All retained trees/hedgerows to be retained to be protected in accordance with BS 5837:2012, Trees in relation to design, demolition & construction. Prior to the commencement of any work, or any materials being brought on site, existing trees to be retained are to be protected with temporary fencing. These shall be maintained in good and effective condition until the work is completed. Allow for stabiliser struts to secure fence for duration of construction. Fully remove when construction is complete/site demobilised.

The protective fencing is to coincide, as far as is practical, with the root protection area (RPA), unless otherwise agreed. All weather notices shall be securely fixed to the fence words such as 'construction exclusion zone - no access'.

The following measures are particularly important:

- Materials are never to be stacked within the root spread of the tree.
- No oil, tar, bitumen, cement, or other material is to be allowed to contaminate the ground.
- Root Protection Area (RPA) Outside tree canopy dripline roots or other trees, or for other purposes.
- No fires shall be lit beneath or in close proximity to the tree canopy.
- Trees to be retained should not be used as anchorages for equipment or for removing stumps.
- No notices, telephone cables or other services should be attached to any part of the tree.
- Cement mixing should not be carried out within the canopy/protected area of the tree.
- Rails clamped securely to posts.
- Soil levels are to be maintained as existing within the root spread of the tree. Any alteration to soil levels in an area up to one and a half times the diameter of the tree canopy must be agreed with the ER/Landscape Architect.
- Habitats that are damaged and disturbed will be left to regenerate naturally or will be rehabilitated and landscaped, as appropriate, once construction is complete. Disturbed areas will be seeded or planted using appropriate native grass or species native to the areas where necessary. The proposed landscape plans outline the range of species which will be used. This also notes that plant material must be acclimatised to regional conditions and locally established stock.
- The planting plans and landscaping proposals will ensure that no invasive species are introduced.

Any works within a tree or hedge RPA will be monitored by a competent arboricultural consultant/landscape architect, with all necessary measures taken to protect tree roots. Where, due to site constraints, construction activity cannot be fully or permanently excluded in this

manner from all or part of a tree's RPA, appropriate ground protection should be installed with the agreement of the CA/Arborist.

Any utility ducting traversing through tree/hedgerow RPA should be avoided, and where this is not feasible, shall follow the NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees (NJUG 10[1]). This may require the use of hand digging/airspade/vac excavations or horizontal directional drilling (HDD) drilling under tree root plates.

Refer to Landscape Architect's documents, as follows:

- Tree survey and Arboricultural Impact Assessment Report, reference BSM-ZZ-ZZ-RP-L-0001.
- Existing Tree Survey Plans, references BSM-ZZ-ZZ-DR-L-0101 to BSM-ZZ-ZZ-DR-L-0104.
- Tree Constraints, Removal and Protection Plans, references BSM-ZZ-ZZ-DR-L-0211 to BSM-ZZ-ZZ-DR-L-0214.

3.3.12 Protection of SPA, SAC and NHA

SPA: South Dublin Bay and River Tolka Estuary SPA (34.9km from the site and hydrologically linked via a minor watercourse and the river Liffey) and North Bull Island SPA (37.7km from the site and hydrologically linked via a minor watercourse and the river Liffey). Both sites have extremely limited potential to be significantly affected by the proposed development given the intervening distance and the length of the supported hydrological link over which any inputs into the freshwater environment are likely to diluted to background levels.

SAC: South Dublin Bay SAC (34.7km from the site and hydrologically linked via a minor watercourse and the river Liffey) and North Dublin Bay SAC (39.1km from the site and hydrologically linked via a minor watercourse and the river Liffey). Same rationale applies as for SPAs above.

NHA: No NHAs are within proximity or hydrologically linked to the site.



4 Construction Programme and Methodology

4.1 Construction Programme (indicative)

The programme of construction for the new development has been developed whereby construction is expected to last for 8 years and 9 months and is scheduled to begin in January 2025. The buildings anticipated completion date with full occupancy is expected to be in September/October 2033.

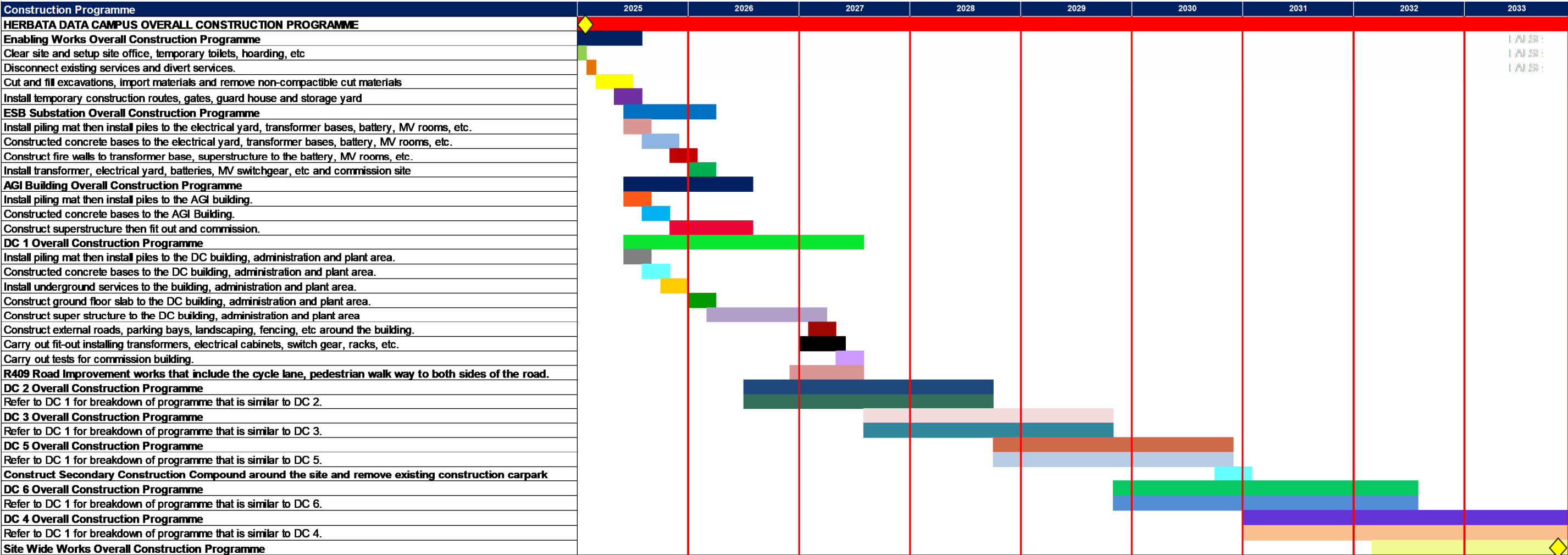
The construction programme is broken down into 3 phases as shown on the phasing drawing included in appendix A of this report.

Table 4-1 provides a high-level breakdown of the programme by the key construction stages with the key indicative construction milestones. Also included is the proposed indicative construction programme shown in *Figure 4-1*.

Table 4-1. Construction Key Milestones (Indicative)

Phases	Construction Programme	Start Date	End Date
HERBATA DATA CAMPUS OVERALL CONSTRUCTION PROGRAMMEME		08/01/2025	27/03/2033
Phase 1	Enabling Works Overall Construction Programme	08/01/2025	27/07/2025
	ESB Substation Overall Construction Programme	01/06/2025	28/03/2026
	AGI Building Overall Construction Programme	01/06/2025	28/07/2026
	DC 1 Overall Construction Programme	01/06/2025	17/07/2027
	R409 Road Improvement works that include the cycle lane, pedestrian walkway to both sides of the road.	08/12/2026	17/07/2027
	DC 2 Overall Construction Programme	16/07/2026	01/09/2028
Phase 2	DC 3 Overall Construction Programme	31/08/2027	16/10/2029
	DC 5 Overall Construction Programme	15/10/2028	30/11/2030
Phase 3	Construct Secondary Construction Compound around the site and remove the existing construction carpark	05/10/2030	30/01/2031
	DC 6 Overall Construction Programme	27/11/2029	13/07/2032
	DC 4 Overall Construction Programme	11/01/2031	27/08/2033
	Site Wide Works Overall Construction Programme	01/03/2032	27/09/2033

Figure 4-1. Construction Programme (Indicative)



4.1.1 Construction start/completion dates.

The target dates for the project are:

- Main construction works: The works will be undertaken in three phases, commencing on completion of the tender processes and the discharge of pre-commencement planning conditions (4th quarter 2024).
- The target duration of the works on site is 8 years, 8 months, and 21 days. (Completion 4th quarter 2033).

4.1.2 Proposed working hours.

The proposed site working hours will be as follows:

- 08:00 to 18:00 hours on Mondays to Fridays.
- 08:00 to 13:00 hours on Saturdays.
- No working on Sunday or Bank Holidays unless authorised by the Kildare County Council.
- Peak traffic periods (07:30-09:30 and 16:00-19:00 hours on Monday to Friday and 15:00-16:00 hours on Saturdays) will be avoided wherever possible when booking delivery vehicles.

4.2 Construction Methodology

4.2.1 Site Setup and Demolition

The existing dwellings on this site will require demolition. Demolition will be undertaken using mechanical plant and craneage. During 10-week process licensed waste carriers will deliver and collect waste skips. Following completion of soft internal strip, the dwelling will be demolished and crushed to be reused in the piling phase reducing the number of vehicles accessing the site. Any additional waste will be loaded into tipper lorries and removed from site. A record of waste material is to be documented.

Currently it is envisaged that local traffic management will be required during the demolition phase:

The R409 does not require any footpaths suspensions along the road. The following list is required during the main body of construction:

- Safe partial introduction of footpaths and carriageway along the R409,
- At all times access to neighbouring properties will be maintained.

4.2.2 Vegetation Clearance

Clearance of vegetation on site shall be undertaken strictly in line with the provisions of the Tree Survey and Arboricultural Impact Assessment Report, associated Tree Removal, Retention & Protection Plans and mitigation measures contained within the EIAR ecological assessment. The felling of and pruning of trees will be undertaken by professional tree surgeons working to BS 3998 (2010) Tree Work – Recommendations.

Timber grade material from the felled trees will be processed into planks, beams, hurleys etc. All lower grade woody material arising from the clearance works should be disposed of at an appropriate green waste facility or recycled for use on the project (woodchip mulch for new planting areas for example).

4.2.3 Earth Works

The site will then be cut and filled to levels and the site compound is to be erected with a temporary park area.

Site access roads, gate and layby areas are to be installed to allow access to the site and the site compound.

4.2.4 Piling and Excavation

The pile mat is to be constructed by the demolition contractor having reused the crushed materials from the demolition process. Additional imported hardcore is to be required and laid down to create a piling mat. Bored piles are to be installed for the foundations to support the new buildings.

The ground floor concrete base will allow construction to proceed with no new excavation required.

4.2.5 Sub-structure

Several cranes will be installed at the beginning of this phase which will not require temporary weekend road closure of the R409 and are to be erected during construction operation times.

The ground floor slab and core will be formed of concrete and therefore, concrete mixer trucks will be the primary vehicle accessing the site during this stage of construction. Lorries will be off loaded from a loading area within the site. A banksman will control the movement of vehicles, pedestrians, and cyclists when lorries are accessing and egressing the site.

4.2.6 Super-structure

The frame will be built using standard hot rolled steel girders tied into steel columns and the flooring will be metal deck slab with concrete. The girders will be brought by lorry to the site and loaded from the loading area in the site. The metal decks will also be brought to site by lorry. Using large, remanufactured components, the number of vehicles accessing the site will be reduced significantly.

4.2.7 Cladding

The design of the façade requires external access to all elevations. The strategy will be to have a minimum reliance on the crane to enable the crane to be servicing the construction of the steel and concrete slabs. The only crane dependent activity will be to lift large façade panels in position. The deliveries will be made out of hours as there will be no immediate demand for the supplies.

4.2.8 Fit out, Testing and Commissioning

Typical procurement routes using off the shelf materials and construction in situ will not suit the delivery programme of this project. Components with a precise fit and finish will be manufactured off site to ensure the quality and programme sequencing objectives are achieved. This will reduce the number of small vehicle and ad-hoc deliveries required. Bathrooms, balconies and railing and mechanical, electrical, and plumbing equipment are all expected to be manufactured and assembled offsite and brought to the site to be installed as a complete unit.

5 Vehicle Routing and Access

The following maps show the area around the development site.

Figure 5-1 shows a regional plan with the vehicle routes through KCC highlighted. These routes follow the motorway, regional and national roads to access the site.

Figure 5-2 shows vehicle routes to the site, considering local area constraints, locations with large numbers of vulnerable road users and locations for vehicle holding areas along R409.

Figure 5-3 shows the likely site construction compound, construction site parking, construction site delivery vehicular movements, including the extent of footways and proposed buildings.

Vehicle tracking into and out of the site has also been included to show the safe maneuvering of vehicles for 12m rigid vehicles and 16.5m articulated lorries within *Figure 5-4* and *Figure 5-5* respectively.

Figure 5-1. Regional vehicle route 1:25,000



Figure 5-2. Local vehicle route 1:5,000

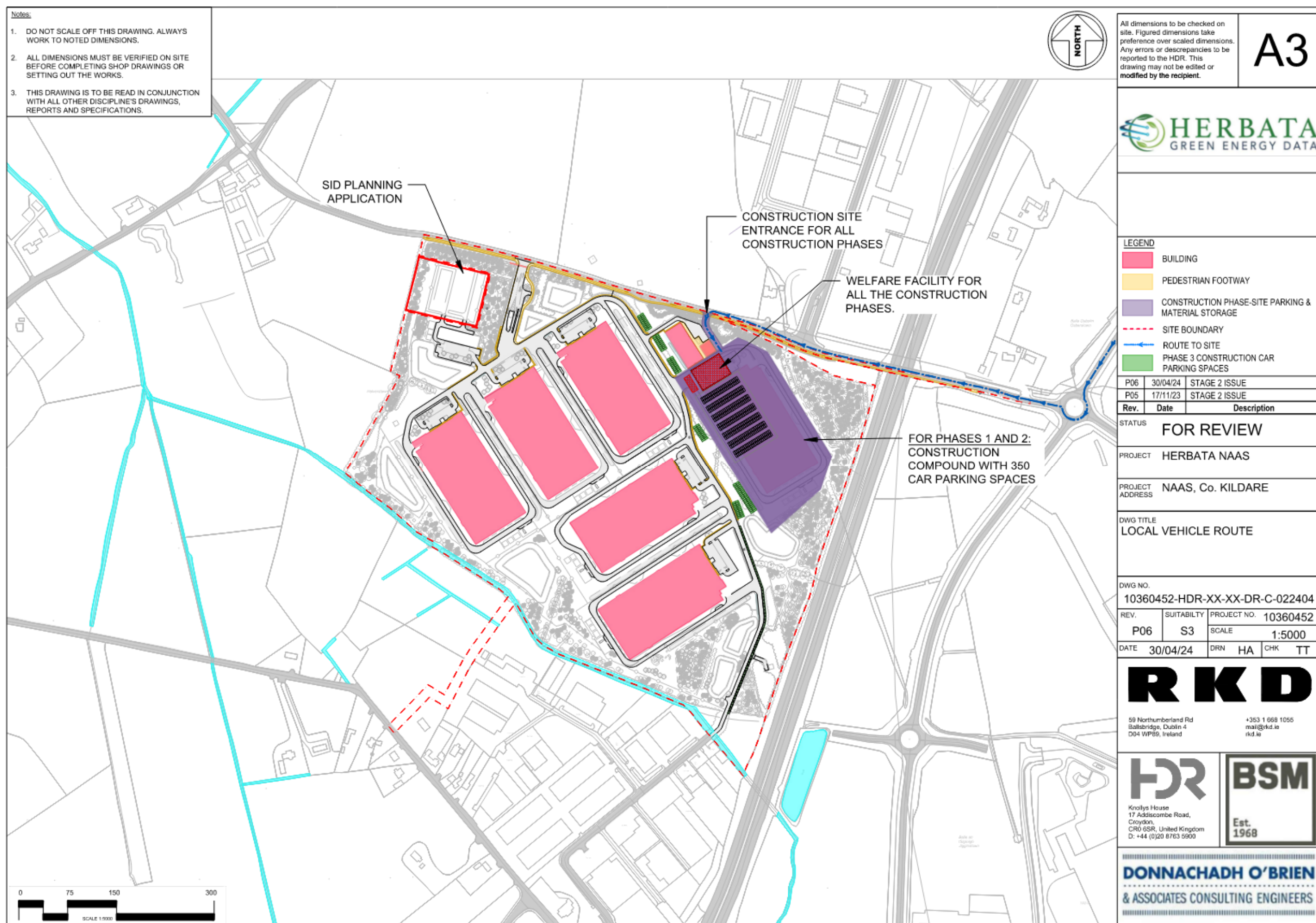


Figure 5-3. Site delivery plan 1:5,000

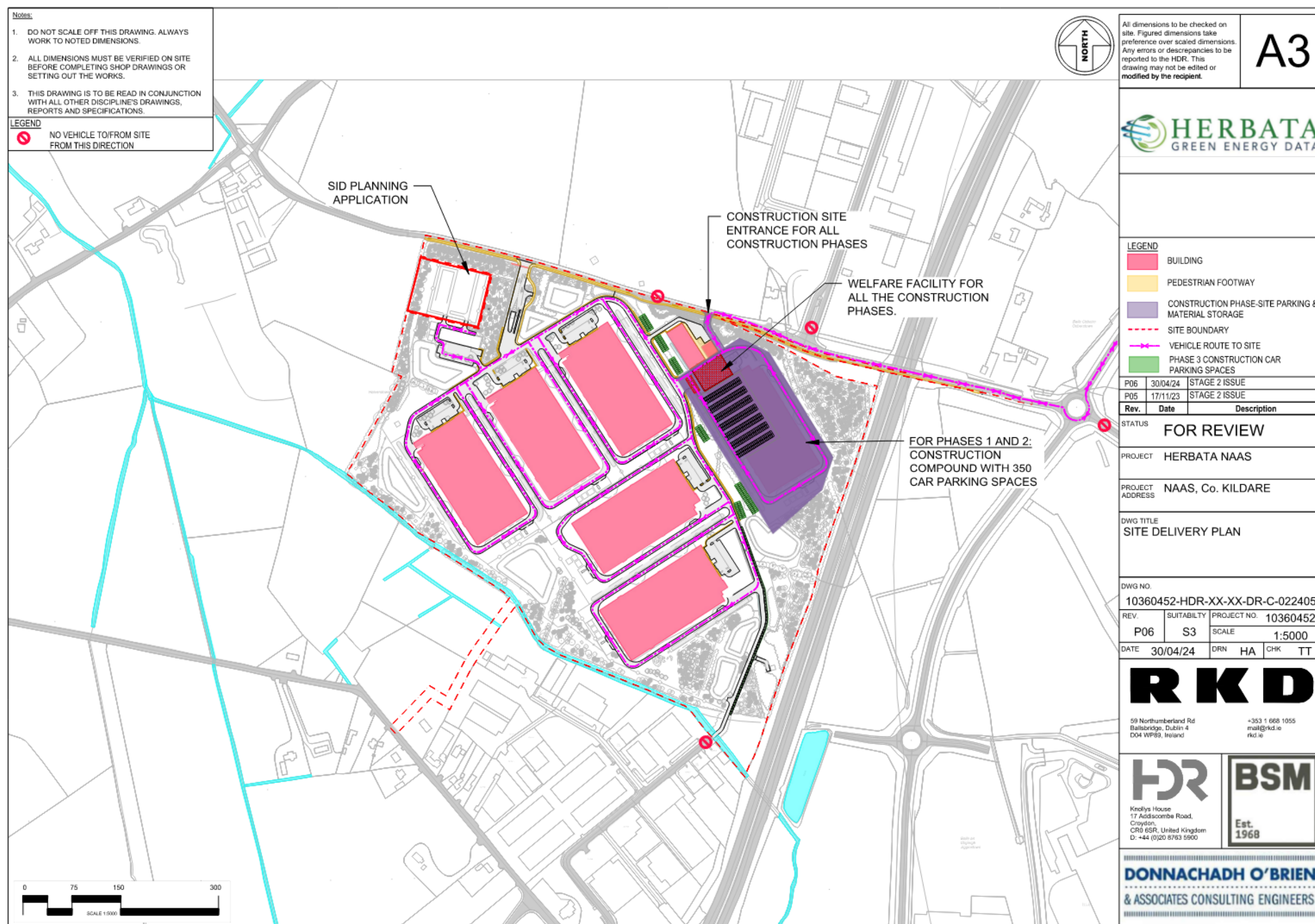


Figure 5-4. 12m Rigid vehicle swept paths 1:2,500.

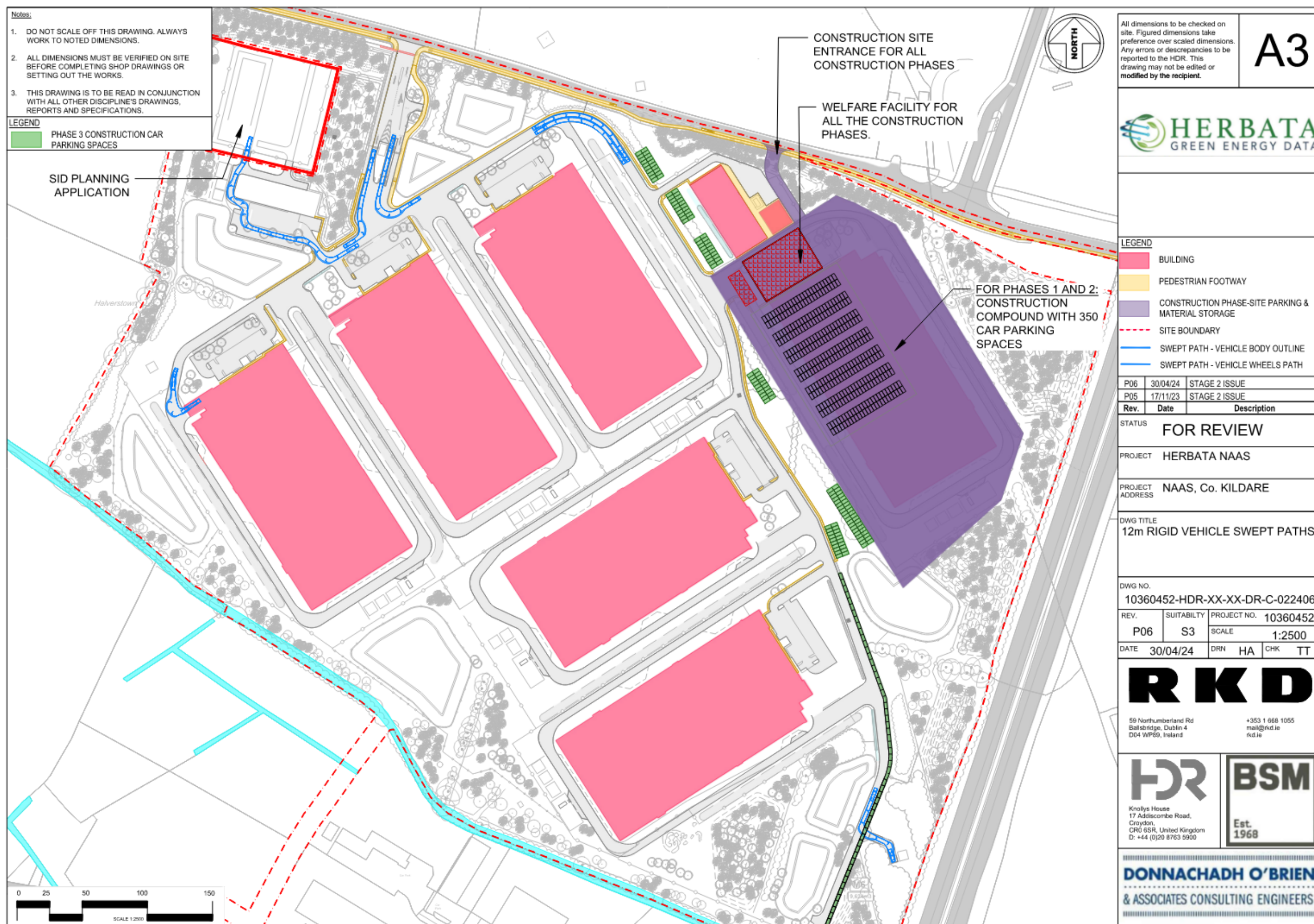
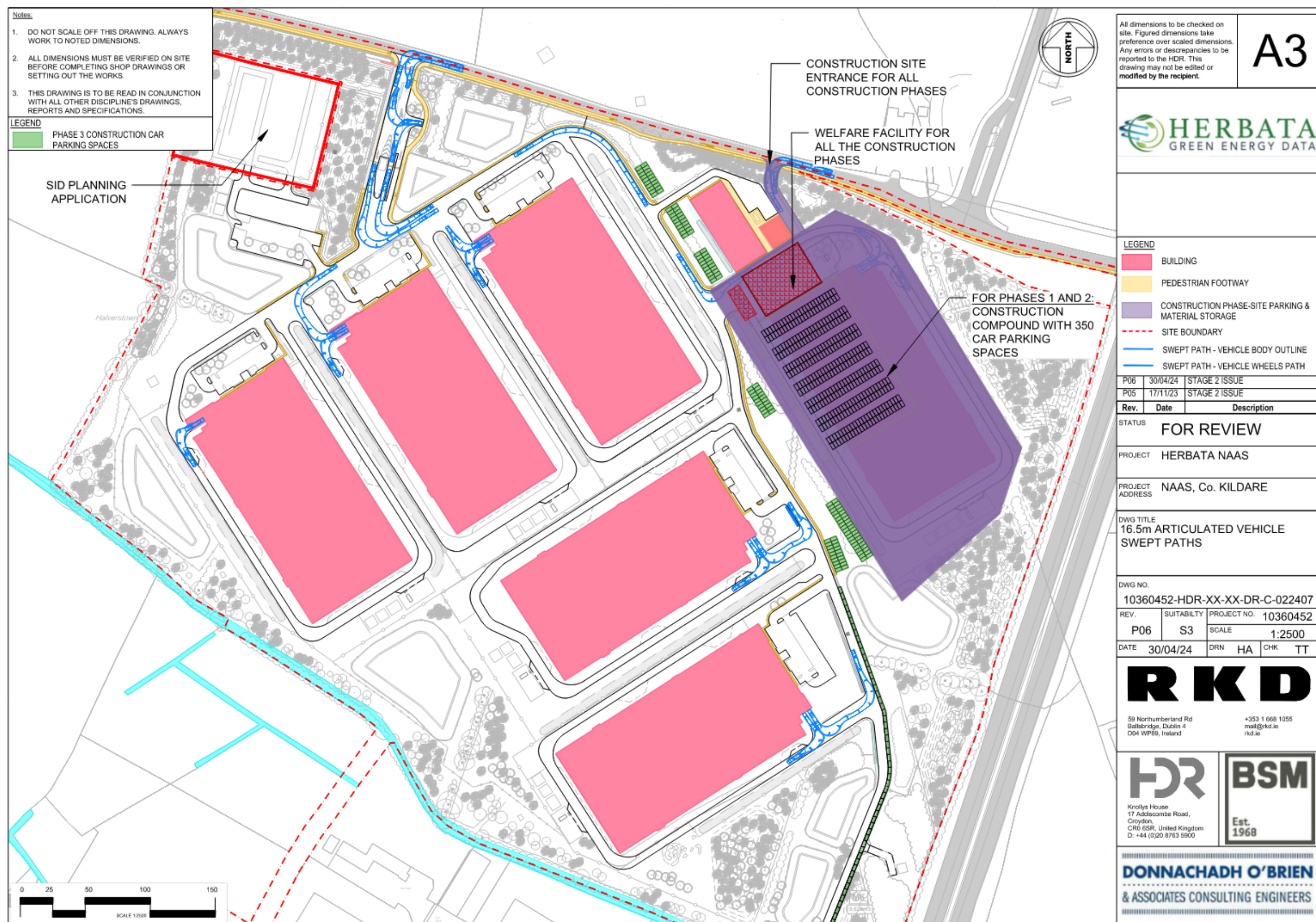


Figure 5-5. 16.5m Articulated vehicle swept paths 1:2,500



5.1 Access Arrangements for Vehicles

Access to the site will be via R409 road. There will be a single secure ingress and egress entrance which will enable vehicles to drive onto the main entrance to the site. A secondary secure entrance will be located lower down R409 road. There will be no reversing into or out of the site unless there are exceptional circumstances. The entrance will always be controlled by the principal contractors site personnel.

An onsite holding area will be provided to prevent construction vehicles waiting on R409 road or blocking the private road from access by the other businesses using this access. All deliveries will be met on site by a representative of the delivery initiating organisation to ensure the vehicle is removed from the road and unloaded / loaded in an efficient manner in compliance with the agreed delivery protocols.

An additional site personnel entrance will be created separating people accessing the site/offices from construction vehicles.

In all cases, access/egress for delivery and removal of materials will be planned, scheduled, and coordinated by the contractor and all vehicle movement both on and around the site will be controlled by competent and certified banksman. A 'booking in' system will be implemented for all deliveries to ensure traffic movements are fully controlled and monitored.

Access from the neighbouring site along R409 road will remain unobstructed during the construction phases; therefore, no further considerations are required.

5.2 Storage of Construction Materials on Site

Plant and materials will be stored in designated areas inside the boundary of the site in accordance with the manufacturer's instructions and delivered to site on a just-in-time basis to keep storage to the lowest levels reasonably possible.

5.3 Removal of Most Valuable and/or Contaminated Materials

Materials which are not to be retained on site will be removed and disposed of in accordance with all relevant statutes and current waste management and duty of care regulations.

Potential risks to construction workers during site redevelopment can be managed by the adoption of appropriate Health and Safety procedures to ensure that risks to operatives from hazardous materials at the site are minimised.

Operatives will not be allowed to eat, drink or smoke on site except in designated welfare areas and will be required to wash all exposed skin at the end of each shift.

Operatives will be informed of the potential hazards on the site and should be required to report any observations of suspect material.

It is possible that during excavations and groundworks the site team will discover conditions or soils different to those found to date. The contractor will be aware that further remediation measures may be required if such conditions are found.

Any observations of ground conditions not typical of those already discovered within the geo-environmental / geotechnical investigation reports will be reported immediately so that an assessment of appropriate action can be made. A further remediation strategy will then be agreed with KCC.

5.4 Size of Vehicles

Numerous types of delivery vehicles will be used to bring materials to and from the site. These will typically include:

- Muck away wagons for soil arising's from foundations.
- Skip lorries. These will include standard 8-yard skips for waste (approx. size 7m long and 2.4m wide).
- Ready mix concrete lorries. (Approximately. size 8.25m long and 2.45m wide).
- Flatbed delivery vehicles for the delivery of various materials including scaffolding, steelwork, reinforcement, bricks/blocks, timber, roofing materials, plaster, joinery etc. (approx. size 8.5m long and 2.45m wide).
- Articulated lorries, for delivery of steel framing, cladding components, reinforcement, major M&E plant and materials, tower cranes and other major plant and equipment.

The projected vehicle movements are approximately 47 per day during the main contract works/ peak construction period (and will be considerably less outside of these peak periods of construction).

Material specification will be considered at design stage to reduce / eliminate the need for abnormal loads to be delivered to site and where practicable prior liaison with suppliers of items of plant, equipment and materials will be carried out to identify if the shipment can be broken down for transportation.

Continual review of the specified materials and plant will be carried out and should any abnormal loads be identified due to design changes then a transport route will be pre-planned using the Electronic Service Delivery for Abnormal Loads (ESDAL). Prior notification to the relevant authorities of the use of a special vehicle will be made by the haulage company /crane hire company of the use of the special vehicle with any stipulated requirements for the vehicle use incorporated into the vehicle movement procedure.

5.5 Parking and Loading Arrangements

A strict delivery procedure will be implemented to ensure that the local road network is not overrun with site and delivery vehicles and that traffic flow on the road is always maintained.

All subcontractors and suppliers will be required to give 48 hours' notice of deliveries.

The movement of materials, particularly in the main contract works stage, will also be controlled by the main contractor who will be responsible for the control and coordination of all aspects of material deliveries and movement.

Vehicles will pull into the site for unloading and all materials will be stored within the boundary of the site.

To reduce the levels of personnel vehicle movements on the surrounding road network contractors will be challenged to encourage their personnel to travel to site in company vehicles (minibuses, vans, etc.) or to car share. The compliance with this will be monitored through the project attendance records.

5.6 Management of Traffic to Reduce Congestion

The main contractor will be responsible for the day-to-day management of all deliveries to the site. These will be booked in using a delivery schedule to prevent lorry congestion to the road network that surrounds the site. Should a lorry/vehicle arrive that has not been booked in, that lorry will be turned away if it cannot be immediately accommodated.

Wherever possible lorries will be brought onto site keeping the roads free for general traffic movement.

To reduce traffic movements, full loads will be arranged whenever possible and only accept part loads when essential.

5.7 Control of Dirt and Dust on the R409

Mud and debris on roads are one of the main environmental nuisances and safety problems arising from construction sites. Provisions will be made to minimise this problem.

In the early stages of the project when ground works are being carried out, wheel washers will be used to wash down all vehicles that leave the construction site. The wash bay area will be impermeable and isolated from the surrounding area by a raised kerb or roll over bund to contain solids, with effluent directed to the below ground drainage network or public highway.

Provisions are to be made for cleaning of the road as required by an approved road sweeper.

All muck away lorries will be fully sheeted to minimise the risk of any mud spilling onto the highway.

In times of hot weather, a misting strategy may be implemented to suppress dust on the following:

- Unpaved areas that are subject to traffic or wind.
- Sand, spoil, and aggregate stockpiles.
- Areas reserved for loading/unloading of dust generating materials.

5.8 Local Utility Works

Works will be required in adjacent roads, particularly the R409. The relevant utilities will notify Kildare County Council of proposals for road, pavement and openings for water, gas, and fibre services, all under statutory notices and licenses.

6 Strategies to Reduce Impact

The following planned measures in *Table 6-1. Planned measures.* have been identified to help the contractor achieve the goals of the CTMP and logistics which better manages the challenges identified in section 3.

Table 6-1. Planned measures.

High Impact Site Planned Measures Checklist	Committed	Proposed	Considered
Measures influencing construction vehicles and deliveries			
Safety and environmental standards and	X		
Adherence to designated routes	X		
Delivery schedule	X		
Re-timing for out of peak deliveries		X	
Re-timing for out of hours deliveries		X	
Use of holding areas and vehicle call off areas		X	
Use of logistics and consolidation centres		X	
Measures to encourage sustainable freight			
Freight by Water			X
Freight by Rail			X
Material procurement measures			
DfMA and off-site manufacture		X	
Re-use of material on site	X		
Smart procurement	X		
Other Measures			
Collaboration amongst other sites in the area	X		
Implement staff travel plan	X		
Preventing HGV movements during school drop off and pickup	X		

6.1 Measures Influencing Construction Vehicles and Deliveries

6.1.1 Safety and Environmental Standards and Programmes

All contractors and sub-contractors' vehicles arriving at site comply with sufficient safety measures and requirements relating to work related road risks.

It is a requirement for all vehicles and driver management practices to comply with the FORS and Construction Logistics and Community Safety (CLOCS). FORS Bronze, with progression to Silver within 90 days, will need to be confirmed by all sub-contracted transport/haulage providers that the contractor intends to use. An up-to-date list of trained companies and drivers is available at www.rsa.ie.

A collision reporting system will be mandated to ensure all collisions and accidents involving the projects' vehicle and drivers are reported to the project manager and any relevant parties. The RSA manager' reporting tool will be used; www.rsa.ie.

6.1.2 Adherence to Designated Routes

Details of routes to be used for journeys to and from site for road operations are provided in section 5.

The routes to / from the local road network are specified. Designated routes from both the holding area and potential Construction Consolidation Centre (CCC) are also supplied. These access routes have been reviewed with respect to potential impacts, conflicts, and hazards. Junctions and parts of the routes of potential concern have been identified in terms of coming into conflict with other road users, with particular attention paid to pedestrians and cyclists around access to work sites.

A copy of the route plan will be given to all suppliers when orders are placed to ensure drivers are fully briefed on the required route to take. The supplier will be made aware that these routes are always required to be followed unless agreed or alternate diversions are in place.

6.1.3 Delivery Scheduling

A web-based delivery management system will be used to control the volume of deliveries to site. This system will work by defining the number of 'resources' a site has and thus can service in 30- minute intervals. It then limits the number of delivery bookings per half-hour to this defined capacity.

Sub-contractors and hailers must be booked in a minimum of 48-hours in advance to allow the request to be reviewed and subsequently approved/declined. The system can be accessed by completing a new user application form and submitting it, countersigned by your supplier relationship manager or package manager to the delivery manager.

KPIs will be proposed to indicate that; zero unplanned vehicles, zero non-compliant vehicles and zero instances of project-related vehicles involved in a collision, arrive at site.

6.1.4 Re-timing for out of peak deliveries

Re-timing out of peak time will aid the operational efficiency of the construction site and the neighbouring area. The developer commits to attempting to re-time as many deliveries as possible out of the morning peak (07.00-11.00).

6.1.5 Re-timing for out of hours deliveries

The developer will seek planning permission for out of hour's deliveries and commit to deliveries in these times where possible.

6.1.6 Use of holding and vehicle call off areas.

The site has a limited storage area and the congested nature of the site location, it is intended that a holding point local to the site will be allocated. This will allow vehicles to arrive early and delay their final approach to site until the pre-arranged delivery time. This will lead to greater logistical efficiency and reduced disturbance in the surrounding area.

Use of logistics and Construction Consolidation Centres (CCC)

An efficient and effective logistical operation is of high importance to Herbata and therefore we will strongly encourage the use of a consolidation service. The final decision will be made when a contractor is appointed.

If procured the intention is that the service, be available to all sub-contractors and utilised to provide storage space ahead of onward delivery to the site in accordance with the scheduled or revised delivery Programme. The use of a CCC will ensure all vehicles arriving at site can achieve an aim of 65% full loads or greater. The advantages of using such a service will be reduced on-site storage requirements, reduced quantity of vehicle movements with mixed load delivery to the project and a smoothing of peak demand for off-load bays and hoist/lift facilities to the project. A CCC will also allow deliveries to be 'just-in-time' and therefore reduce the likelihood of damage to materials.

6.2 Measures to Encourage Sustainable Freight

6.2.1 Freight by water

There is no water route in the nearby vicinity of the site therefore this does not impact the material transport network.

6.2.2 Freight by rail

Initial discussion on the possibility of using the Irish Railway line as a freight network has been considered to not be a solution as it will disrupt the main commercial passenger train line.

6.2.3 Material Procurements Measures

Design for Manufacture and Assembly and off-site manufacture.

Reducing delivery numbers and effective delivery management is a core value of this development. Therefore, the option of off-site construction will be discussed upon appointment of a contractor and used where possible.

6.2.4 Re-use of material on site

Several measures will be explored to re-use material on site. These will be decided upon in agreement with our contractor. For instance, the piles are proposed to be formed of deconstructed site material from the previous development where possible. The welfare facilities will be recycled from a completed site. These are proposed to recycle material to decrease environmental impacts and to reduce the number of vehicles required to deliver to site.

6.2.5 Smart procurement

We would encourage the main contractor to explore suppliers in the procurement stage that use rail freight (but road for last mile), as well as sourcing local suppliers to contribute to the local economy. We will also explore opportunities to source materials from the same supplier(s) as other developers for the distribution warehousing on Monread Road.

6.3 Other Measures

6.3.1 Collaboration amongst other sites in the area

The developer and appointed contractor will consult with the KCC, neighbouring County Councils, TII, and other contractor/developers in the area to minimise disruption and undertake joint trip generation analysis.

We are aware of the neighbouring potential distribution warehousing development on Monread Road, if this does go into construction the contractor is to be engaged to pursue the possibility of collaborating on holding areas and shared services when their works schedule.

6.3.2 Implement a staff travel plan.

There will be no on-site parking provided for construction worker's vehicles. Restrictions will also be imposed to prevent on-street parking. As there are known local transport links nearby, travel by public transport will be strongly encouraged.

Please refer to the EIAR Volume III, Appendix 12.1 and 12.2 for the Transport Assessment and Mobility Management Plan for further details.

6.3.3 Preventing HGV movements during school drop off and pickup.

As shown in Section 3, there are no nearby school that requires extra attention and care to increase safety and reduce unnecessary risk. However, HGV deliveries will be scheduled, where possible, outside of school drop off and pickup times.



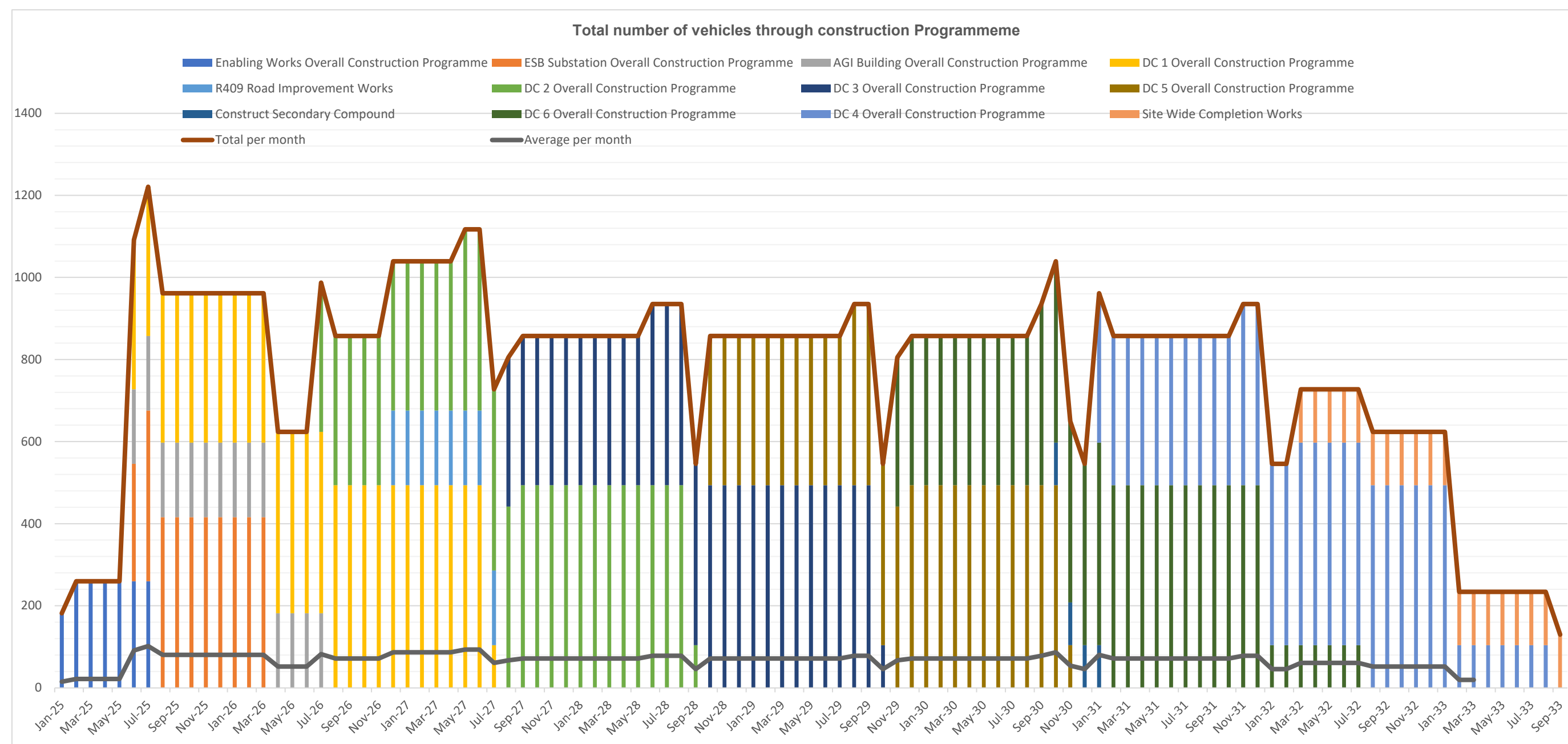
7 Estimated Vehicle Movements

The number of vehicles accessing the site has been estimated according for each of the 3 stages of construction. Our construction expertise has been applied to the proposed programme and construction methodology tool to develop the estimates below. The estimated number of trips are summarised in *Table 7-1* and *Figure 7-1* below.

Table 7-1. Estimated Construction Vehicles – average monthly and daily.

Construction Stage	Period of stages (Indicative)	No. of trips (monthly)	Peak no. of trips (daily)
Phase 1			
Enabling Works Overall Construction Programme	Q1 2025 to Q3 2025	249	11
ESB Substation Overall Construction Programme	Q3 2025 to Q1 2026	403	19
AGI Building Overall Construction Programme	Q3 2025 to Q3 2026	182	8
DC 1 Overall Construction Programme	Q3 2025 to Q3 2027	421	19
R409 Road Improvement Works	Q4 2026 to Q3 2027	182	8
DC 2 Overall Construction Programme	Q3 2027 to Q4 2028	423	20
Phase 2			
DC 3 Overall Construction Programme	Q3 2027 to Q4 2029	423	20
DC 5 Overall Construction Programme	Q4 2026 to Q4 2030	421	19
Phase 3			
Construct Secondary Compound and remove Existing Construction Carpark	Q4 2030 to Q1 2031	104	5
DC 6 Overall Construction Programme	Q4 2029 to Q3 2032	447	21
DC 4 Overall Construction Programme	Q1 2031 to Q3 2033	425	20
Site Wide Works Overall Construction Programme	Q1 2032 to Q4 2033	130	6

Figure 7-1. Estimated Construction Vehicles - monthly and daily.



Traffic volumes and impacts of traffic during construction – A summary of the traffic volumes and the forecast impacts of additional traffic movements generated during the construction of the site, (as set out in detail in Figure 7-1 and Table 7-1 above) is as follows.

Staff trips – The forecast for these busiest construction months (months 7 and 30) an estimated maximum of 1100 construction staff will require to travel to and from the site per day. Based on all construction staff travelling by car, with an average of 1.5 staff to each car. This will result in 733 car trips to and from the site per day, with estimated 40% (293 car trips) travelling to and from the site during the traditional peak hours that is usually between 07:00-09:30 and 16:00-19:00 of the weekdays. It is estimated that site staff will generate 425 car trips on an average day, with 175 travelling during the traditional peak hours.

HGV - During the peak months 7 and 30 of construction, approximately 1221 construction vehicles (not staff) will access the site. This equates to 47 vehicles per day and 7 in the peak hour assuming 15% of vehicles arrive during the peak.

The Vehicles arriving at site will be of a variety of sizes. The anticipated number and type of vehicles accessing the site during each stage of construction are shown in Figure 7-2 below.

Travel plan and parking for construction workers – While the traffic impact assessment included in the EIAR Volume III, Appendix 12.1 and 12.2 for the Transport Assessment and Mobility Management Plan for further details the worst scenario that all construction workers will drive to the site. The construction company will be required to implement a travel plan for construction staff, which will include the provision of buses to/from the site for a significant portion of the workforce.

Construction Car Parking Spaces - During the construction phases 1 and 2 based on the average forecast that up to 350 parking spaces will be required to be available for site staff during the busiest construction months. If a spike of parking is required, temporary parking will be allowed along the site internal construction roads to allow for the overspill that will be temporary fenced off. However, it is anticipated this will only occur infrequently and over several months during these phases of the construction Programme.

During the phase 3 construction programme there will be no earthworks construction and the sequence of construction of the Data Centre 6 and 4 will require for materials to be delivered on site as and when required thus avoiding the requirement for storage space on site. The phase 3 supply as required will extend the construction programme for the last two Data Centres, however this will reduce the amount of construction car parking space required.

The proposed phase 3 construction programme will reduce the 350 number construction carparking spaces, which are provided in phases 1 and 2.

The phase 3 has been estimated to require 230 construction car parking spaces that are shown in the green hatches on Figures 5-1 to 5-5. These have been distributed over the site in strategic locations to not interrupt the operations of the then live data centres buildings. Buildings 1, 2, 3 and 5 that are to be completed during phases 1 and 2 of the construction programme.

8 Detail list of construction machinery or estimate of numbers.

8.1 General Site Set Up

8.1.1 Plant and Equipment

The plant and equipment likely to be associated with the construction process is set out as follows:

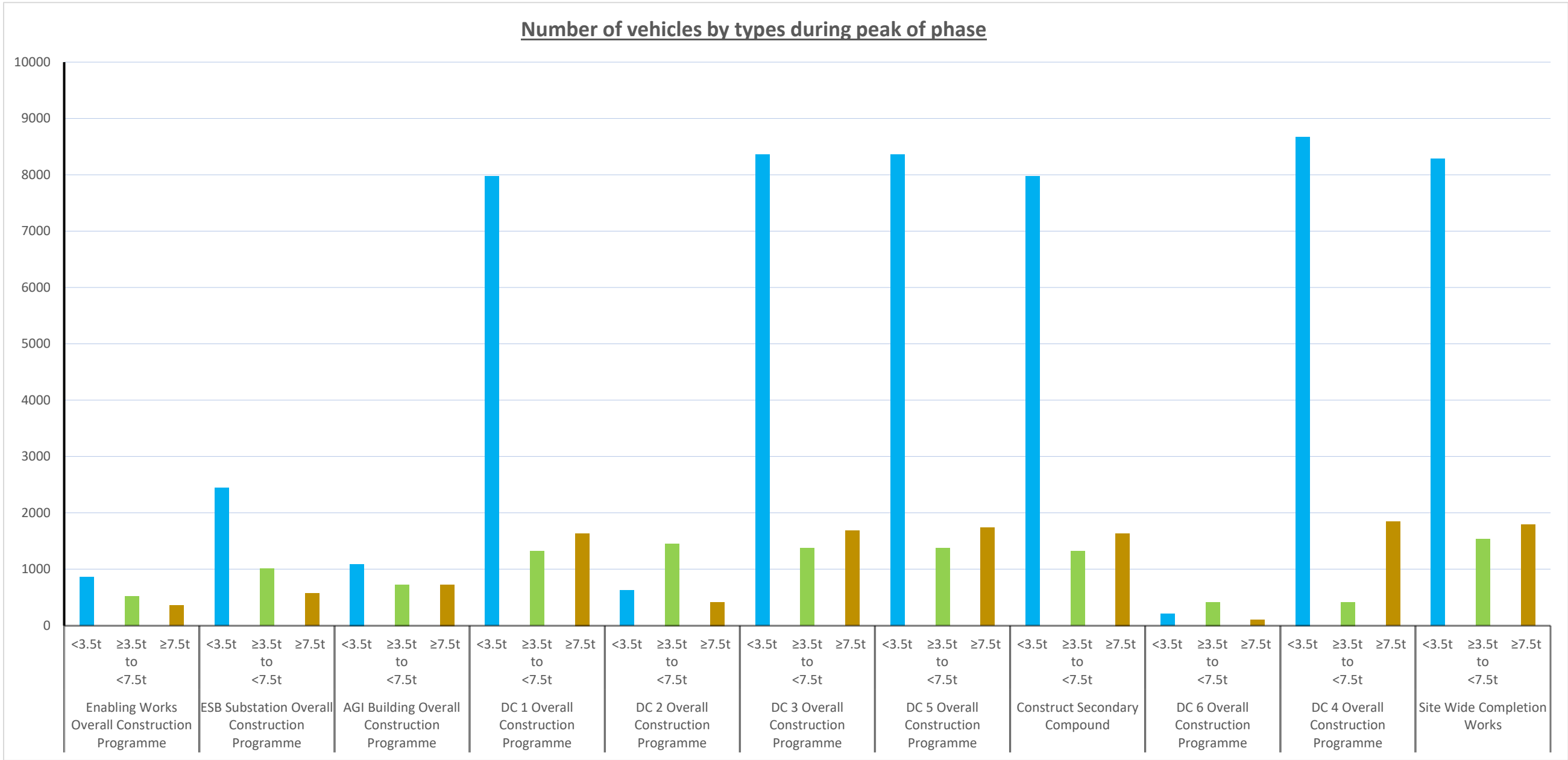
- 360° tracked excavator.
- Dumper.
- Concrete crusher.
- Ready-mix concrete lorries.
- Concrete splitters and concrete saws.
- Cutters, drills, and small tools.
- Hydraulic excavators.
- Skip lorries.
- Tracked bulldozers.
- Road rollers.
- Pneumatic drills / hammers (handheld and on back of excavators).
- Cement mixers.
- Generators.
- Pumping equipment.
- 'Cherry pickers' / mobile platforms.
- Cranes.
- Works vans and 4WD vehicle.

8.1.2 Specific to plant and tools

Specific to plant and tools the following shall be adhered too:

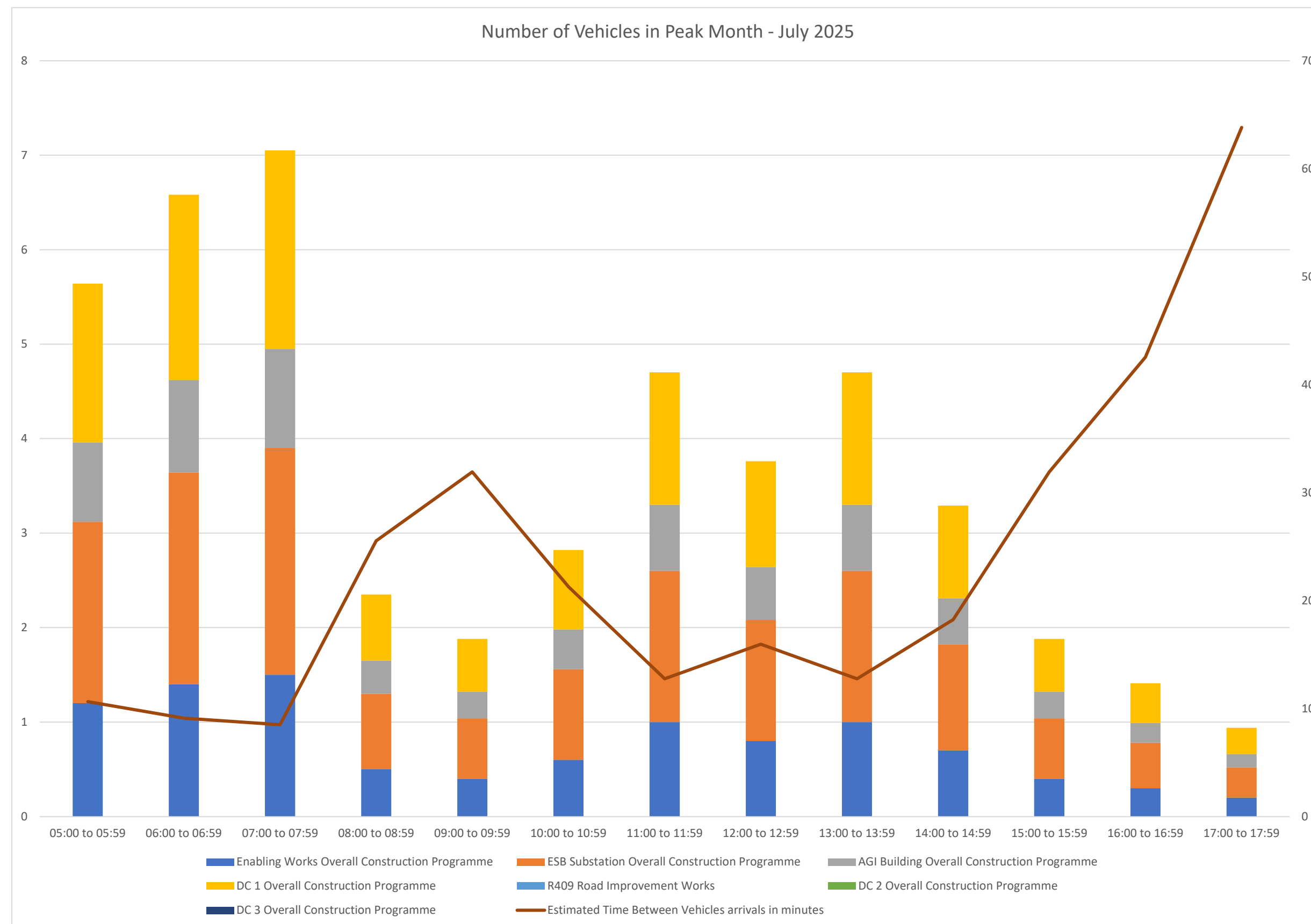
- All electrical tools that will be used on site will have a valid PAT Test within the last 12-month period.
- All electrical/ hand tools are to be checked prior to use by the operators to ensure they are fit for purpose.
- Regarding kango hammers, grinders, still saws and drills all users are to be competent to operate and have had the relevant training applicable to that tool.
- Electrics will be provided on site for all tools by means of a petrol and diesel generators these must have an RCD fitted for emergency purposes.
- All plant i.e., forklift, excavator, dumper trucks, cherry pickers, Mobile Elevating Work Platforms (MEWPS) must be certified and a copy of this placed on file.
- Any lifting equipment i.e., slings, chains, shackles and harnesses, inertial reels etc. must have valid certs every 6 months.

Figure 8-1. Number and vehicle type by phase of construction.



Where possible, peak times will be avoided for deliveries. Figure 7-3 provides a summary of the average daily construction trips during each construction period. This estimate will be refined once the contractor is appointed, and the construction programme is finalised. The contractor will provide delivery schedule information when appointed.

Figure 8-2. Hourly Arrival Profile of Vehicles During Peak



9

Site Welfare Facility

The proposed site welfare facility location is shown on *Figure 9-1* to *Figure 9-4* that are to remain throughout the construction phases. The welfare facility is to comprise of a two-storey porta cabin approximately 2000m² floor with an overall 4000m² over 2 floors. The below images are typical layouts and elevations of the proposed facility.

Figure 9-1. Proposed Ground Floor Plan

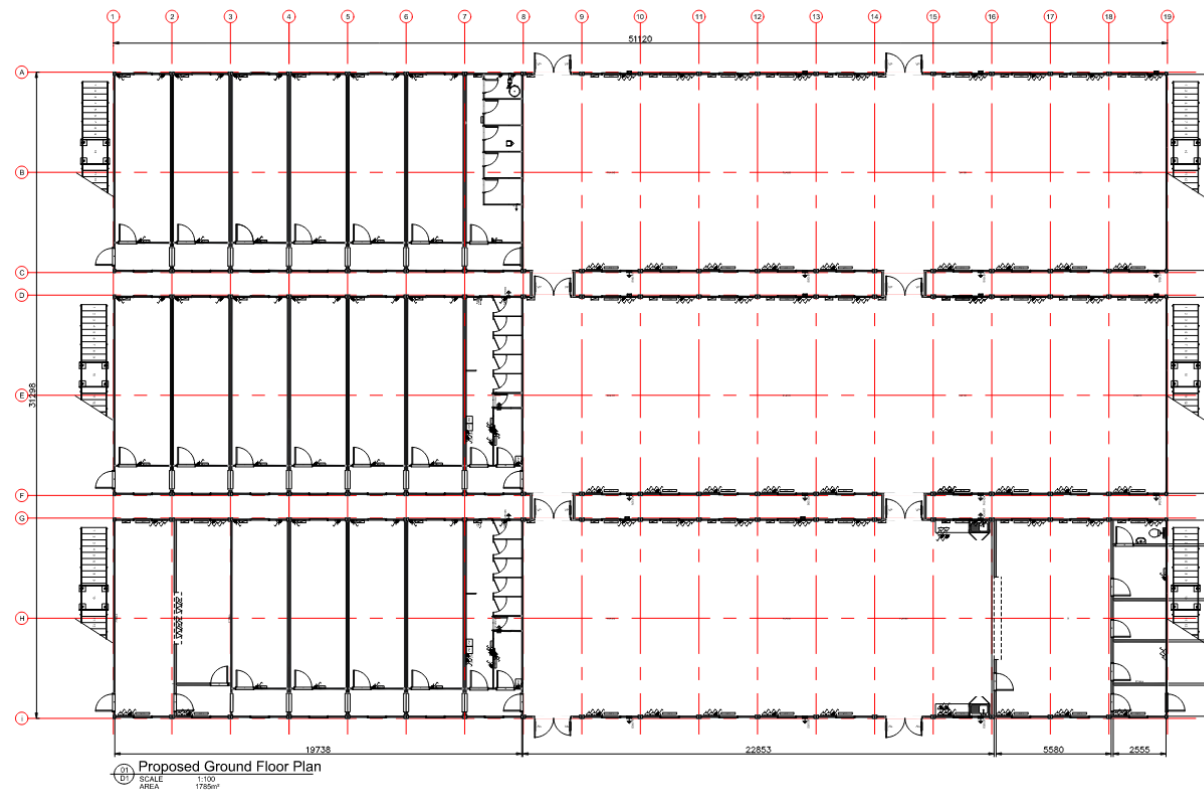


Figure 9-2. Proposed First Floor Plan

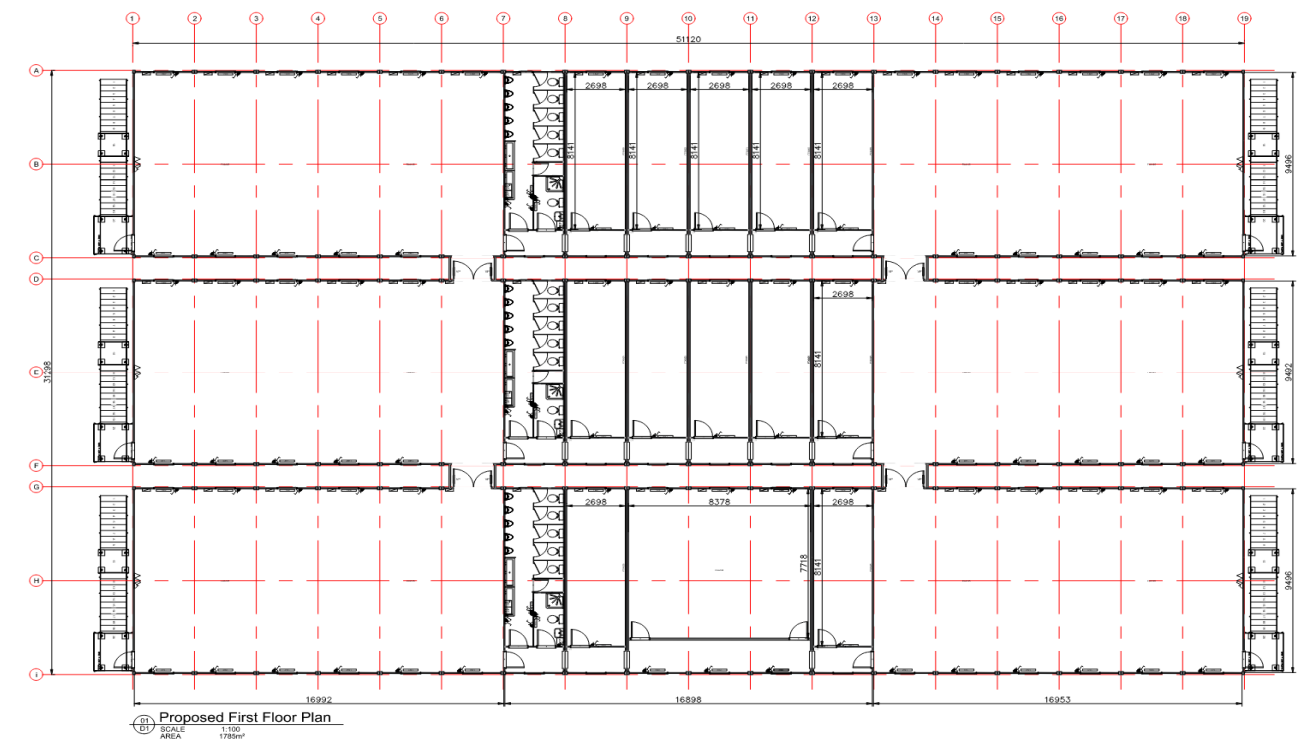


Figure 9-3. Typical Side Elevation

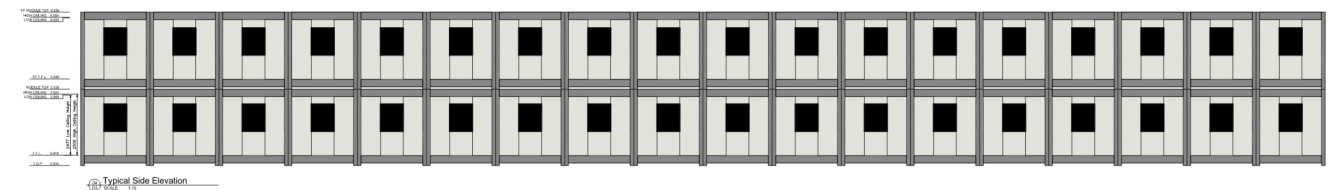
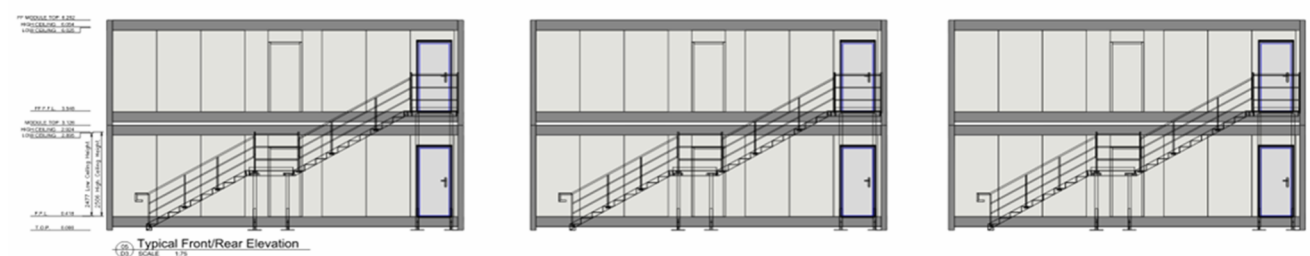


Figure 9-4. Typical Front /Rear Elevation



10 Energy Usage

Where practicable, the contractor will seek to source green energy providers for the construction phase. Meters will be supplied for the site enabling energy consumption levels to be monitored.

11 Fuel Consumption

Where viable local contractors are to be appointed for the development therefore minimising transport costs and impact on the local environment. The use of electric, HVO or hybrid machinery should be encouraged.

12 Waste Management

Reducing waste during the construction stage will be a key priority. The construction works will be planned to take advantage of any foreseeable waste reduction opportunities. Waste production and disposal will be managed and recorded by the contractor in their Resource and Waste Management Plan-(RWMP).

The following procedures will be implemented on the project:

- All construction personnel including sub-contractors will be briefed through toolbox talks regarding the importance of minimising, segregating, and recycling wastes during the construction process.
- Guidance will be provided on the segregation of certain waste streams such as aggregates, excavated materials, metal, wood, cardboard, and polythene packaging waste.
- Deliveries will be on a just-in-time basis to minimise potential damage and wastage of materials.
- Clearly labelled waste skips will be provided at the site for the segregation of waste streams for recycling and for general waste to be disposed of to landfill. The skips will be stored in a secure location on-site to prevent waste nuisance issues arising.
- Construction materials will be stored in a secure compound to prevent the potential for vandalism and theft of material.
- Segregated waste for recycling will be removed from site by a licensed contractor to an appropriate Materials Recycling Facility (MRF).
- Waste that cannot be recycled will be removed from site by a licensed waste contractor to an appropriate licensed landfill facility ensuring adherence to the Environmental Protection (Duty of Care) Regulations.
- Waste will only be placed in the approved locations to minimise litter and pollution.
- Canteen waste will be stored in covered bins whilst awaiting collection by a licensed carrier.

13 Local Air Quality and Dust Management

[To be read in conjunction with the EIAR and measures within Table 2.1 of CEMP with reference to run-off prevention etc., avoiding impact upon watercourse [and consequently, SPA/SAC sites].

To reduce dust creation to its lowest level some or all the following will be implemented on the project:

- Finished ground/road surfaces will be set down as early as is feasible to seal the ground to ensure that the generation of dust is kept to a minimum. Surfaced and unsurfaced site access roads will be kept in good order and will be watered as necessary using a water bowser. This will be monitored daily during hot, dry weather.
- A water supply will be maintained across the site to ensure that dusty surfaces and activities can be damped as appropriate.
- There will be no burning of any material anywhere on-site.
- Any exposed soil or material stockpiles will be appropriately damped, if necessary, using sprinklers and hoses.
- All areas of completed earthworks that are not subject to subsequent works such as drainage will have a stone capping layer placed on them, which will be covered with permanent building works. Areas not covered with permanent building works will be covered with topsoil and vegetated as soon as is practicable.
- Screening monitoring through a visual inspection of the site perimeter will be carried out weekly during dry periods to check for dust deposition (evident as soiling and marking) on vegetation, cars, and other objects.
- The programme of works will be sequenced such that any deliveries to site will either be onto a stone capping layer or hard surfacing again minimising the risk of any mud or debris being deposited on to the R409 Road. The surrounding area will always be monitored and if necessary and as required Road Sweeping plant will be on hand to deal with any debris/mud on the Highway.
- All work tasks will be risk assessed to identify the potential for dust creation. Where dust creating tasks are identified, the task will be reviewed with the subcontractor to identify if the dust creation can be eliminated or to ensure the most suitable dust control measures are selected.

14 Noise

[To be read in conjunction with the EIAR and measures within Table 2.1 of CEMP.]

All work tasks will be risk assessed to identify the potential for noise creation. Where noise creating tasks are identified, the task will be reviewed to identify if the noise creation can be eliminated or to ensure the most suitable noise control measures are selected.

Construction works will not be carried out outside the working hours detailed in this management plan without prior written agreement with the KCC.

Where noisy work operations are required outside the standard working times the affected receptors will be prior notified.

All plant items will be properly maintained and operated in accordance with the manufacturer's recommendations, so that excessive noise is minimised.

All employees and contractors will be informed about the need to minimise noise. As part of on-site training, they will be advised regularly of the following:

- The proper use and maintenance of tools and equipment.
- The positioning of machinery on site to reduce the emission of noise to the neighbourhood and to site personnel.
- Avoidance of unnecessary noise when carrying out operations, and when operating plant and equipment.
- Use and maintenance measures adopted for noise control.
- Requirement to report defective noise control equipment.

To assist with maintaining noise levels at the lowest levels possible during the construction delivery, some or all the following will be implemented on the project:

- Where practical and where there is a positive environmental benefit, use will be made of temporary spoil heaps to shield the surrounding receptors from the construction works. For example, this may be utilised during the earthworks and site preparation phases of the works.
- Where practicable, plant known to emit noise strongly in one direction will be orientated so that the noise is directed away from noise sensitive areas.
- Acoustic covers will be kept closed when engines are in use and idling.
- Compressors that have effective noise enclosures and are designed to operate when their access panels are closed will be selected.
- Materials will be lowered where practicable and not dropped.
- Stationary plant such as compressors and generators will be positioned away from sensitive locations within the confines of the operational use of the equipment.
- Where reasonably practical, noisy plant or processes will be replaced by less noisy alternatives (BPM). Annex B of BS5228-1:2009+A1:2014.

- Plant and machinery in intermittent use will be shut down in intervening periods of non-use or, where this is not practicable the plant will be throttled down to minimum.
- Where practicable white noise reversing alarms will be fitted to all mobile plant.

15 SPA, SAC and NHA Mitigation

The closest Special Protection Areas (SPA) and Special Areas of Conservation (SAC) to the proposed development, for which there is a supported pathway for effect, are those within the Dublin Estuary, connected via a considerably remote, hydrological pathway.

Construction works have the potential to impact upon these sites via pollution and/or sediment discharge to the watercourse to the south of the site (Bluebell Stream). Construction traffic and associated emissions would not result in potentially significant adverse effects to designated sites, during either of the demolition and construction or operation stages of the proposed development.

16 Staff Numbers

At peak construction, it has been estimated up to 1100 operatives on site, but the number will be significantly lower when fit out of the data centre buildings and phase 3 construction works commence.

17 Contact Details

Contact details for the site project manager will be provided once a main contractor has been appointed.

18 Hoardings / Fencing

A secure fence is already present around the perimeter of the site. It is proposed that this will be maintained during the construction works to secure the site, with supplementary hoarding / fencing installed as required. The fencing / hoarding will always be inspected and maintained while in use. Any protection for trees and root protection should be inspected frequently.

19 Community Liaison

We acknowledge that the construction works may be viewed as an inconvenience to the local community and hence to address any queries and alleviate any concerns, a newsletter will be circulated to local residents and businesses on a regular basis to keep them informed of key activities.

20 Considerate Constructors

The main contractor for the development will be required to register the site under the national Considerate Constructors Scheme.

The data collected will be reported back to TII Transport Department with full transparency to the local government.

21 Implementing, Monitoring and Updating

This CTMP cannot include a detailed and defined description of how the CTMP, and logistics will be implemented, monitored, and updated. However, the following strategy can be confirmed at this stage.

An appointed Construction Logistics Manager will oversee implementing a detailed CTMP on behalf on the contractor. Their job description will include collecting data on:

Number of vehicle movements to site; collected through a delivery booking-in system.

- Total
- By vehicle type/size/age
- Time spent on site.
- Consolidation centre utilization
- Delivery/collection accuracy compared to schedule.

22 Breaches and Complaints

Vehicle routing

- Damaging wildlife and habitats
- Unacceptable queuing
- Unacceptable parking
- Supplier RSA accreditation

23 Safety

Logistics-related accidents

- Record of associated fatalities and serious injuries
- Ways staff are travelling to site.
- Vehicles and operations not meeting safety requirements.
- Description of the contractor's handbook
- Description of the driver's handbook



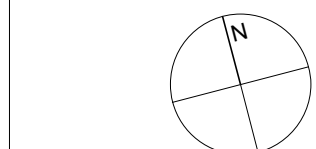
Appendix

Appendix A. Site Phasing Plan

SITE PHASING:	
	PHASE 1* - DC 1 & DC 2: GENERAL SITE WORKS
	PHASE 1* - SUB STATION SUBJECT OF SEPARATE APPLICATION
	PHASE 2* - DC 3 & DC 5
	PHASE 3* - DC 4 & DC 6
	ON-SITE CONSTRUCTION COMPOUND
	TEMPORARY CONSTRUCTION ACCESS
DC	PROPOSED DATA CENTRE
AGI	PROPOSED ABOVE GROUND INSTALLATIONS
DH	PROPOSED DISTRICT HEATING
GNI	PROPOSED ACCESS TO GAS NETWORKS IRELAND

* Note: Please refer to Outline Construction Traffic Management Plan (OCTMP) 10360452-HDR-XX-XX-RP-T-000002 for anticipated Construction Program.

All trees/hedges to be retained are to be protected in accordance with BS 5837:2012. Trees in relation to design, demolition & construction. Prior to the commencement of any work, or any materials being brought on site as part of Phase 1, existing trees to be retained are to be protected with temporary fencing. These shall be maintained in good and effective condition until the work is completed. Allow for stabiliser struts to secure fence for duration of construction. Fully remove when construction is complete. Please refer drawing BSM-ZZ-ZZ-DR-L-0211-0214 for further detail.



KEY PLAN

TRUE NORTH



Rev.	Date	Description
P08	03/11/2023	PLANNING ISSUE
P07	02/08/2023	PLANNING ISSUE
P06	11/07/2023	PLANNING ISSUE
P05	02/06/2023	DRAFT PLANNING ISSUE
P04	26/04/2023	STAGE 2 ISSUE
P03	10/03/2023	DRAFT ISSUE
P02	28/02/2023	DESIGN FREEZE - STAGE 2
P01	24/02/2023	Pre-Planning

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P03	10/03/2023	DRAFT ISSUE
P02	28/02/2023	DESIGN FREEZE - STAGE 2
P01	24/02/2023	Pre-Planning

STATUS	PLANNING
PROJECT	HERBATA DATA CENTRE CAMPUS
PROJECT ADDRESS	NAAS, CO. KILDARE
DWG TITLE	SITE PHASING PLAN

DWG NO.	22217-RKD-ZZ-ZZ-DR-A-1030
REV.	SUBMITALTY PROJECT NO. 22217
P08	S3 SCALE 1:1500
DATE	03/11/2023 [RCD] [CHK] [KOS]



DONNACHADH O'BRIEN
& ASSOCIATES CONSULTING ENGINEERS

ESB SUB STATION SUBJECT OF SEPARATE SID APPLICATION.

ON SITE CONSTRUCTION COMPOUND - SEE ENGINEER DRAWINGS FOR FURTHER DETAILS.

TEMPORARY CONSTRUCTION ENTRANCE

A1030 - PROPOSED SITE PHASING PLAN
1 : 1500