



CONSTRUCTION TRAFFIC MANAGEMENT PLAN

**White Heather,
South Circular Road, Dublin 8**

MARCH 2022

SYSTRA

DOCUMENT CONTROL SHEET
IDENTIFICATION TABLE

Client/Project owner	U and I (White Heather) Ltd
Project	White Heather, South Circular Road, Dublin 8
Study	Construction Traffic Management Plan
Type of document	Report
Date	16/03/2022
Reference number	300726-R004C
Number of pages	27

APPROVAL

Version	Name		Position	Date	Modifications
R004	Author	J Bennett	Senior Consultant	11/02/2021	Draft
	Checked by	E O'Neill	Associate Director	11/02/2021	
	Approved by	A Archer	Director	11/02/2021	
R004A	Author	J Bennett	Senior Consultant	06/05/2021	Issue 1
	Checked by	E O'Neill	Associate Director	07/05/2021	
	Approved by	A Archer	Director	07/05/2021	
R004B	Author	E Howell	Consultant	23/02/2022	Issue 2
	Checked by	B Fleming	Senior Consultant	23/02/2022	
	Approved by	E O'Neill	Associate Director	23/02/2022	
R004C	Author	E Howell	Consultant	16/03/2022	Final
	Checked by	B Fleming	Senior Consultant	16/03/2022	
	Approved by	E O'Neill	Associate Director	16/03/2022	

TABLE OF CONTENTS

1.	INTRODUCTION	6
1.1	BACKGROUND	6
1.2	REPORT PURPOSE	6
1.3	REPORT STRUCTURE	7
2.	BASELINE CONDITIONS	8
2.1	CONTEXT	8
2.2	SITE LOCATION	8
2.3	PEDESTRIAN AND CYCLE ACCESSIBILITY	8
2.4	PUBLIC TRANSPORT ACCESSIBILITY & INFRASTRUCTURE	8
2.5	LOCAL ROAD NETWORK INFRASTRUCTURE	10
2.6	HGV VEHICULAR TRIP GENERATION	11
2.7	CONSTRUCTION WORKER TRIP GENERATION	12
2.8	CAR PARKING	12
3.	PROPOSED DEVELOPMENT & ACCESS ARRANGEMENTS	13
3.1	GENERAL	13
3.2	DEVELOPMENT PROPOSALS	13
3.3	CONSTRUCTION PROGRAMME AND PHASING	13
3.4	ENABLING WORKS	14
3.5	SITE OFFICE	15
3.6	POTENTIAL IMPACT ON UTILITIES	15
4.	LOGISTICS	16
4.1	GENERAL	16
4.2	CONSTRUCTION VEHICLE ROUTING	16
4.3	ROUTE COMPLIANCE	17
4.4	TEMPORARY FOOTWAY AND HIGHWAY CLOSURES	17
4.5	DELIVERY AND SERVICING FOR THE SITE	17
4.6	NON-ROAD MOBILE MACHINERY	18
4.7	VEHICLE DWELL TIMES	19
4.8	CONTROL OF DELIVERIES	19
4.9	CONSTRUCTION PERSONNEL	20
5.	CONSTRUCTION TRAFFIC MITIGATION	21
5.1	GENERAL	21

5.2	CONSTRUCTION MANAGER	21
5.3	SUBCONTRACTORS	21
5.4	GOOD NEIGHBOURS POLICY	22
5.5	DUST AND DIRT CONTROL	22
5.6	FUEL CONSUMPTION / EMISSIONS	23
5.7	MUD ON ROADS	23
5.8	PEDESTRIAN SAFETY MEASURES	23
5.9	OTHER	24
5.10	ENGAGEMENT WITH LOCAL RESIDENTS AND SENSITIVE SITES	25
5.11	CONSTRUCTION TRAVEL PLAN	25
5.12	CONSTRUCTION TRAFFIC MANAGEMENT PLAN MONITORING	25
6.	SUMMARY AND CONCLUSION	26

6.2	SUMMARY	26
6.3	CONCLUSION	26

LIST OF FIGURES

Figure 1 Site Location	6
Figure 2 Local Public Transport Services	9
Figure 3 HGV Exclusion Zone and Designated Entry Points / Haulage Routes in DCC	11
Figure 4 Initial Phasing Plan	14
Figure 5 Construction Traffic Access Routes	17
Figure 6 Vehicle Types and Dimensions	18
Figure 7 Safety Measures	24

LIST OF TABLES

Table 1 Local Public Transport Services Frequency (min)	9
Table 2 Luas Services Red Line	10

1. INTRODUCTION

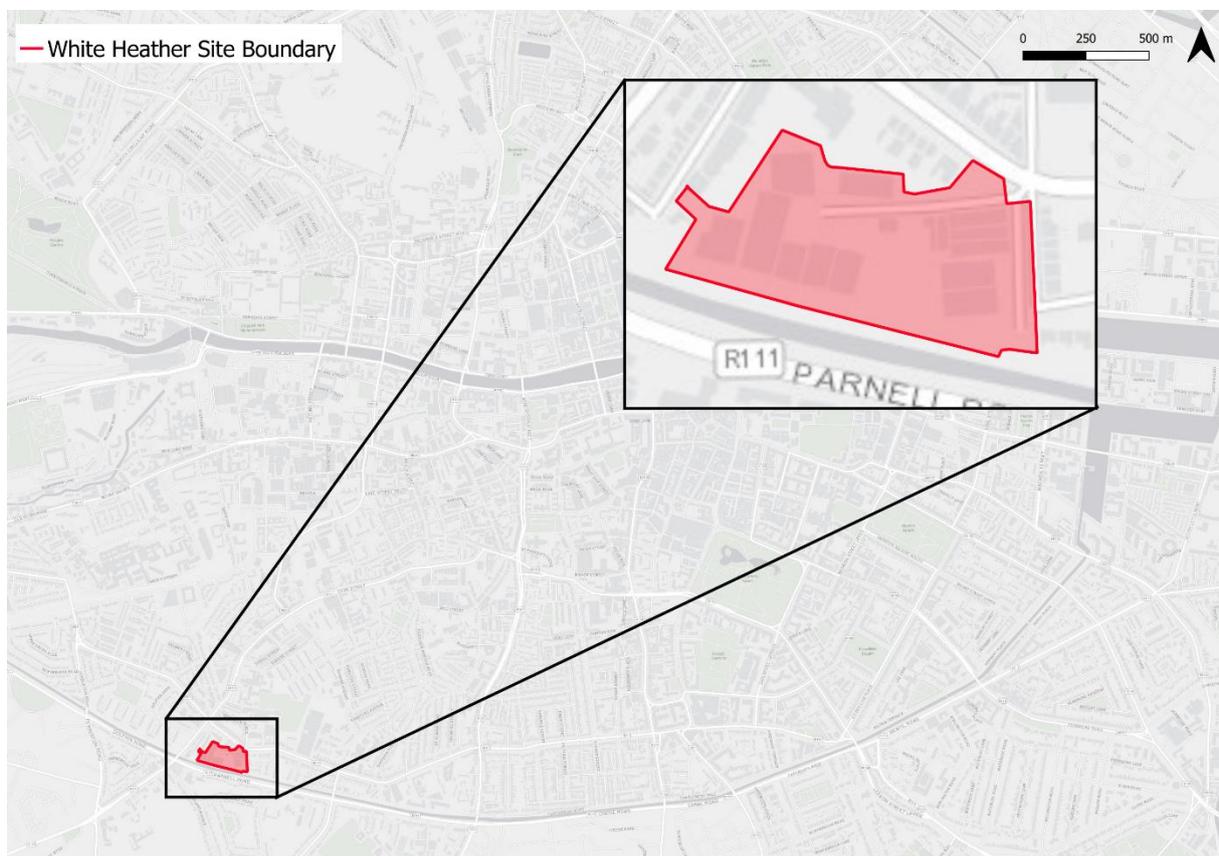
1.1 Background

1.1.1 SYSTRA Ltd has been commissioned by U and I (White Heather) Limited (the applicant) to produce a Construction Traffic Management Plan (CTMP) to accompany an application for a Strategic Housing Development at the White Heather Industrial Estate, South Circular Road, Dolphin’s Barn, Dublin 8 and No. 307 South Circular Road, Dublin 8 and an industrial building at 12a St James’s Terrace.

1.1.2 The 1.535ha site is bounded by the Grand Canal to the south; Our Lady of Dolours Church and residential dwellings on the South Circular Road to the north; Priestfield Cottages to the east; and residential dwellings at St James’s Terrace to the west.

1.1.3 Figure 1 below show the site location in both a strategic and local context.

Figure 1 Site Location



1.1.4 The development proposals comprise 335 no. residential units and associated amenities. The entrance to the scheme will be via the existing junction at the South Circular Road, which will be reconfigured and upgraded.

1.2 Report Purpose

1.2.1 This Construction Traffic Management Plan (CTMP) has been prepared to ensure traffic management practices and necessary arrangements are in place throughout the construction period. All proposed Heavy Goods Vehicle (HGV) haulage routes presented in this plan are subject to approval by DCC.

- 1.2.2 This Outline Construction Traffic Management Plan identifies measures that aim to minimise the effect of construction traffic on the surrounding road network with respect to potential temporary changes to vehicular traffic and pedestrian movements. Should permission be granted for the development, a more detailed and comprehensive CTMP will be produced by the contractor for specific phases of the development construction.

1.3 Report Structure

- 1.3.1 This Construction Traffic Management Plan has been produced in line with ‘Dublin City Council HGV Management Strategy Review 2009’ and is structured as follows:
- **Section 2: Baseline Conditions** – Describes the existing site and the surrounding area transport and highway characteristics;
 - **Section 3: Proposed Development** – Provides an overview of the proposed development, the construction scheme overview and the construction programme;
 - **Section 4: Logistics** – Considers the logistics of construction, including vehicular access routes, loading and unloading arrangements, anticipated vehicle frequencies, sizes and movements, and details of core working hours;
 - **Section 5: Construction Mitigation Measures** – Sets out the mitigation measures that will be employed during construction to minimise the impact of construction on local residents, businesses and the local highway network; and
 - **Section 6: Summary and Conclusion** – Summarises the key points of this CTMP, and provides a final conclusion.

2. BASELINE CONDITIONS

2.1 Context

2.1.1 This section provides information on the existing site and the surrounding area with a focus on local transport infrastructure and services.

2.2 Site Location

2.2.1 The 1.535ha site is bounded by the Grand Canal to the south; Our Lady of Dolours Church and residential dwellings on the South Circular Road to the north; Priestfield Cottages to the east; and residential dwellings at St James's Terrace to the west. Additionally, the site benefits from being adjacent to the Dolphin's Barn bridge, connecting the City with suburban areas such as Drimnagh and Crumlin.

2.2.2 The primary access point to the site is currently located along the South Circular Road, west of Priestfield Cottages, with an additional non-vehicular access to the southwest of the site off St James's Terrace.

2.3 Pedestrian and Cycle Accessibility

2.3.1 The site is centrally located 2.5km south of Dublin city centre. The area comprises well established networks of footways within the local area, providing access to a wide range of local facilities.

2.3.2 In the immediate vicinity of the site there are well lit, good quality pedestrian routes along South Circular Road with the width of footways varying between 2.2m and 4.2m from Donore Avenue to Dolphin's Barn Cross.

2.3.3 The city centre, Heuston Station, the Phoenix Park and the Royal Hospital Kilmainham are all within a 30-minute walk of the site.

2.3.4 There are signalised pedestrian crossing points at Dolphin's Barn Cross/ South Circular Road junction, northwest of the site, and on Donore Avenue/ South Circular Road junction east of the site.

2.3.5 Dolphin's Barn Street, Cork Street and South Circular, all benefit from wide footways and street lighting.

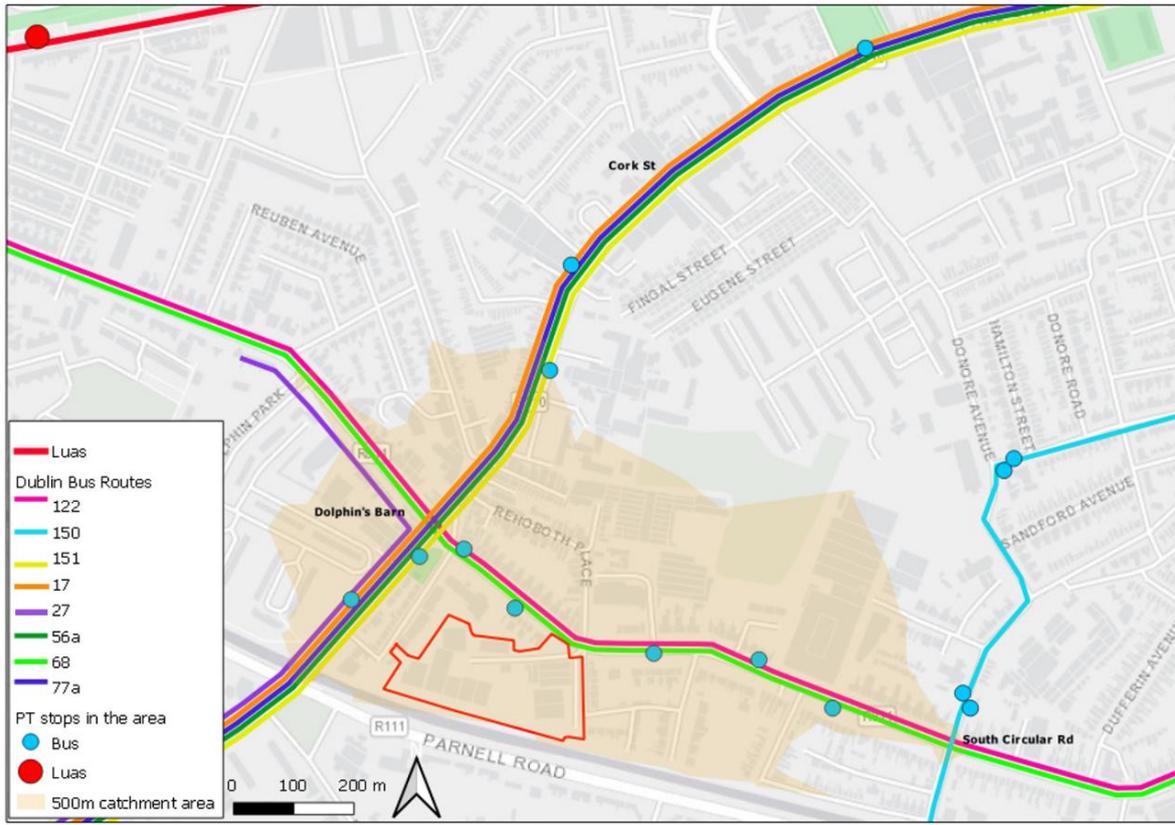
2.3.6 The site is also highly accessible by bicycle. The site benefits from proximity to bus lanes along the South Circular which provide facilities for cyclists segregated from the private vehicle driver. There are formal cycle lanes provided from Dolphin's Barn Cross to the City Centre and along the length of the Canal towards the Docklands.

2.4 Public Transport Accessibility & Infrastructure

2.4.1 The proposed development site lies within close proximity to excellent existing public transport routes and is located within a 5-minute walk of several high frequency Dublin Bus and Go-Ahead services which route along Dolphin's Barn Street/ Cork Street, a dedicated Quality Bus Corridor, and the South Circular Road.

2.4.2 Figure 2 illustrates the existing public transport network and stop locations.

Figure 2 Local Public Transport Services



2.4.3 All bus services shown are within a 5-minute walk of the site and operate frequently during weekdays and weekend.

2.4.4 Table 1 outlines the frequency of the bus services, showing a combined peak frequency of 27 buses in the hour. Based on the frequencies outlined, the site is considered an “accessible urban location” as defined by the DHPLG apartment guidelines.

Table 1 Local Public Transport Services Frequency (min)

ROUTE	WEEKDAY		WEEKEND	
	AM PEAK	INTERPEAK	SATURDAY	SUNDAY
68 Hawkins St./Newcastle	60	60	60	45-90
122 Ashington/Drimnagh	10	20	20	20
27 Clarehall/Jobstown	10	10	10	15
56a Ringsend/Tallaght	60	75	75	75
77a Ringsend/Citywest	20	20	20	30
151 Docklands/Foxborough	20	20	20	30

ROUTE	WEEKDAY		WEEKEND	
	AM PEAK	INTERPEAK	SATURDAY	SUNDAY
150 Hawkins St/Rossmore	15	20	20	30
17 Blackrock/UCD/Rialto	20	20	20	30
Luas Tallaght/Saggart/Citywest -Connolly/Point	4	4	6	9

2.4.5 Bus stops within the local area all include shelters, seating and timetable information, and are located within lay-bys off the highway network.

Light Rail (Luas Line)

2.4.6 The Luas Red Line runs between Saggart/ Tallaght Park and Ride, to Connolly and The Point. The nearest stop on the Red Line Luas is the Fatima stop approximately 850m north of the site.

2.4.7 A summary of services from the Fatima stop along the Red Line is provided in Table 2.

Table 2 Luas Services Red Line

ROUTE	WEEKDAYS			SATURDAY			SUNDAY AND BANK HOLIDAYS		
	First Train	Last Train	Peak Frequency (mins)	First Train	Last Train	Peak Frequency (mins)	First Train	Last Train	Peak Frequency (mins)
Saggart/ Tallaght P&R	05:52	00:52	4	06:53	00:52	6	07:24	23:53	9
Connolly / The Point	05:54	00:25	4	06:22	00:25	6	07:12	23:26	8

Source: <https://luas.ie/>

2.5 Local Road Network Infrastructure

2.5.1 The surrounding road network is a mix of quieter residential streets and more heavily trafficked regional, urban roads such as the R811 South Circular Road, the R110 Dolphin's Barn Street/Cork Street, the R111 Parnell Road (Canal Road). There are several busy signalised junctions, such as the Dolphin's Barn Cross, along the South Circular Road as well as along the Canal. These roads carry heavier volumes of traffic particularly during the morning and evening peaks.

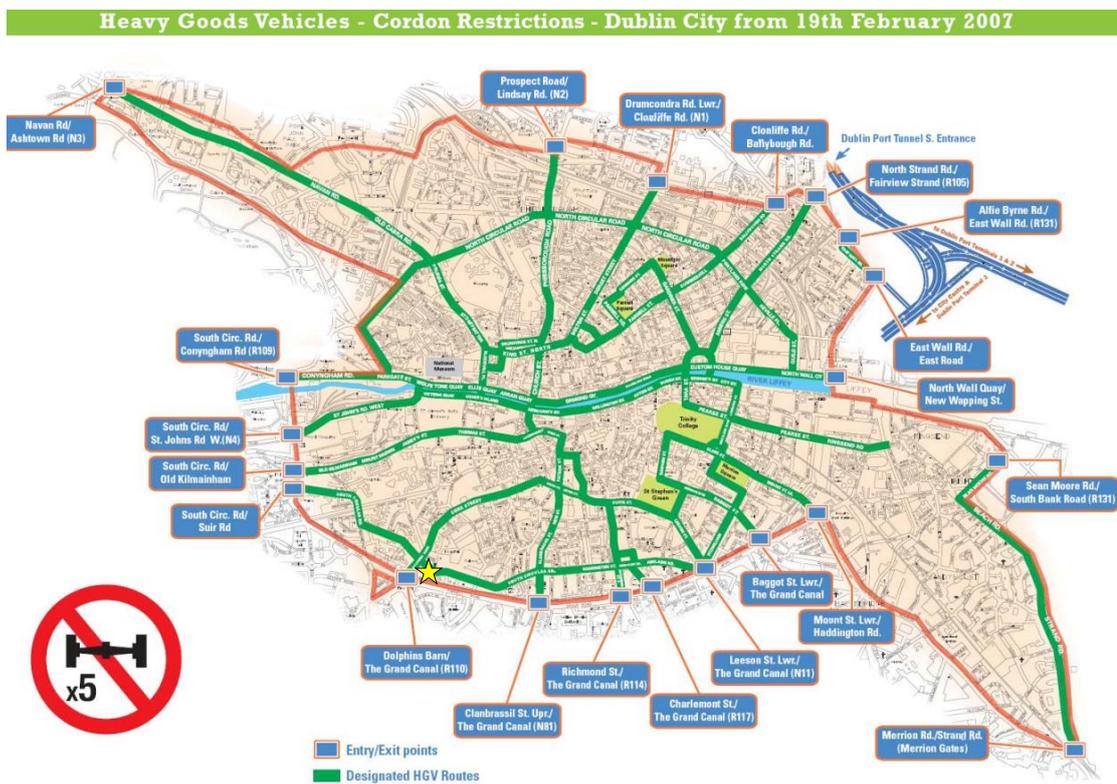
2.5.2 There are a number of restrictions of the movements of HGVs local to the site as part of the DCC HGV Strategy.

2.5.3 The strategy provides a number of designated routes and entry/exit points for HGVs travelling into the city. The strategy also outlines an exclusion zone which applies to 5+ axle

vehicles without a valid permit between 07:00-19:00. The construction site lies within this zone.

- 2.5.4 The exclusion zone and designated routes are shown in Figure 3. As shown, the South Circular Road is a designated HGV route with closest designated entry points to the site located at Dolphin's Barn Cross, Suir Road and Clanbrassil Street.

Figure 3 HGV Exclusion Zone and Designated Entry Points / Haulage Routes in DCC¹



2.6 HGV Vehicular Trip Generation

- 2.6.1 Estimates of traffic generation associated with the construction phases will be derived from first-principles using the guidance from TRICS Construction Traffic Research Report, 2008 (Ref. 14-18).
- 2.6.2 The quantum of vehicles associated with each construction phase will be derived using the formulae in the 'Construction Site Transport, The Next Big Thing', Building Research Establishment (BRE), 2003 (Ref. 14-19). 14.6.5. This guidance, suggests that construction traffic can amount to 25 arrival and 25 departures per €100,000 of project value for deliveries of materials, the indicator simply considers the final delivery journey to site, therefore not accounting for offsite storage, consolidation of loads or other factors.
- 2.6.3 The contract sum is currently estimated at €80M. Based on the approach outlined above, we might therefore expect in the order of 20,000 one-way construction vehicle trips to take place over the lifetime of the construction of the development.

¹

http://www.dublincity.ie/sites/default/files/content//SiteCollectionDocuments/map_hgv_restricted_zone.pdf

- 2.6.4 It is assumed that the total construction vehicle movements will take place over approximately 255 days per year (i.e. no movements on Sundays and Bank Holidays). This equates to approximately 22 construction days on average per month. It is envisaged that the construction works associated with the development scheme will take place over a period of approximately 3.5 years.
- 2.6.5 Whilst it is recognised that there will be some variation in flows on a day to day basis, it is envisaged that on average there would be circa 22 construction/HGV vehicle movements per day. The largest variation is likely to be during the bulk excavation period, when the undercroft car park is being built. Initial calculations suggest that up to 10,000 tonnes of material will need to be removed. However it should be noted that these are approximate figures for information purposes only. These figures are preliminary estimates and are to be confirmed by the appointed contractor who will confirm this data by their own survey of the existing site and structures
- 2.6.6 As the development progresses through planning and procurement an update will be provided on the number of HGV trips generated. This will include detail on the number of six wheel grab lorries generated during the bulk excavation period.

2.7 Construction Worker Trip Generation

- 2.7.1 As the application progresses it will be possible to make an informed assumption on the number of construction workers on site each day which is likely to range between 100-200 depending on construction stage. This will be agreed with highway officers from Dublin City Council along with likely mode share.

2.8 Car Parking

- 2.8.1 Temporary car parking facilities for construction vehicles will be provided within the site boundary.
- 2.8.2 At this stage the exact phasing of construction is not known, however as details on elements such as facilitating car parking, deliveries and storage emerges, these will be fully agreed with DCC prior to commencement of the build.

3. PROPOSED DEVELOPMENT & ACCESS ARRANGEMENTS

3.1 General

- 3.1.1 The application is yet to be determined, and therefore, exacting detail on the anticipated programme of construction works for the proposed development is not known. Notwithstanding potential short-term temporary environmental impacts arising from construction activity have been identified together with possible mitigation measures.
- 3.1.2 The planning for construction activities is indicative at this early stage and will be subject to updates and modifications following planning approval and the appointment of a contractor.

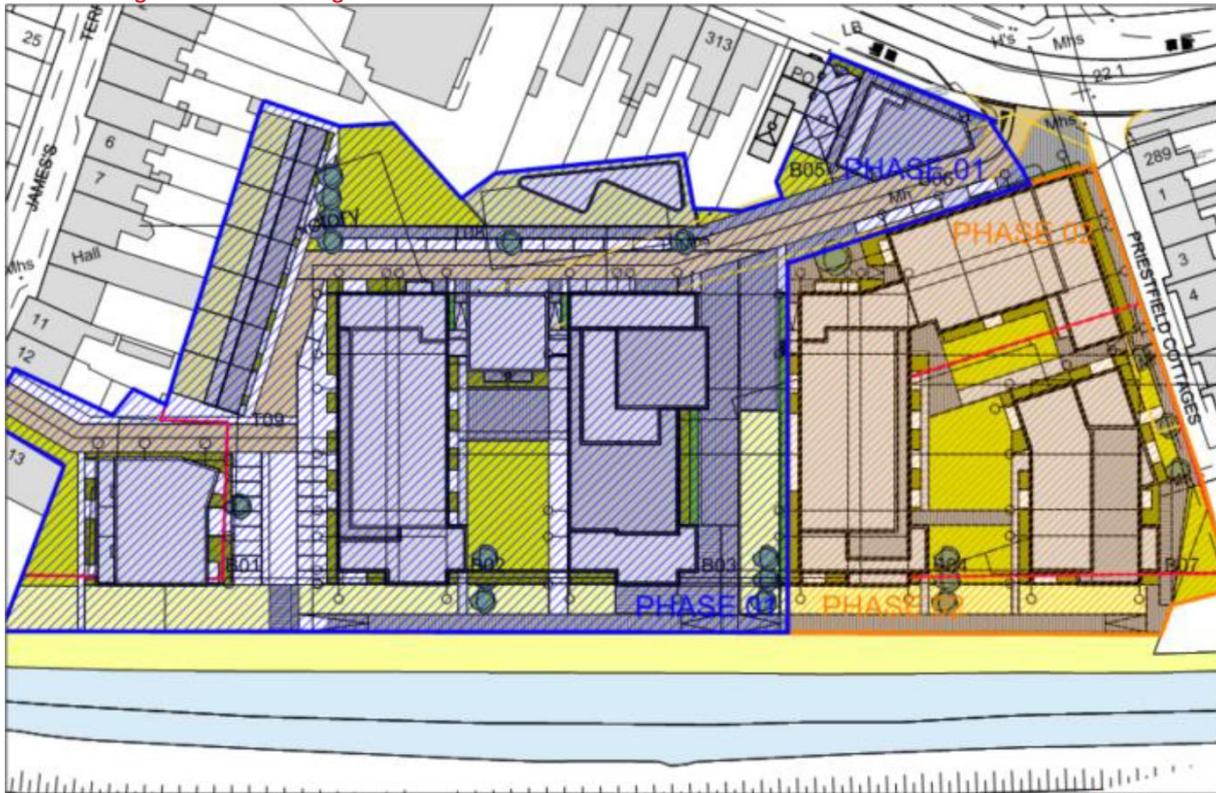
3.2 Development Proposals

- 3.2.1 The development proposals comprise the promotion of up to 335 residential dwellings and 260 sqm creche and ancillary residential amenity totalling 1,212 sqm. Access to the development site is to be gained from the South Circular Road with traffic free pedestrian and cycle accesses also promoted from St James's Terrace (to the sites west) and the canal (which forms the sites southern boundary).
- 3.2.2 It is however envisaged that access for all construction vehicles will be promoted via the South Circular. Pedestrian and cycle access will also be promoted from this location with access from St James's Terrace restricted.

3.3 Construction Programme and Phasing

- 3.3.1 Further detail on the construction programme with regards to timescales will be provided as the application progresses. An initial phasing plan has however been produced and is included as Figure 4. This plan suggests that construction will be progressed in two stages, commencing in the sites most south westerly corner, and concluding within the sites central area.
- 3.3.2 It is intended that the proposed development will be constructed in the following sequence highlighting key activities;
- Secure site and set up boundary hoarding
 - Clear site. Disconnect/divert services
 - Demolition of existing industrial buildings and ancillary structures
 - Foundation sub-structure works & bulk excavation
 - Basement construction including podium slab
 - Construction of building frame of each block of varying heights
 - Façade envelope construction
 - Interior fit out and building services construction
 - Main service connection works i.e. water, ESB, etc
 - External landscape works

Figure 4 Initial Phasing Plan



3.3.3 This is however subject to change as the application progresses however all detail of any significant changes will be agreed with highway officers at Dublin City Council prior to commencement.

3.4 Enabling Works

Site Preparation

- 3.4.1 Site setup is likely to occur for a period of two to three weeks. Site setup is important to mitigating any impacts on the surrounding highway network as well as neighbouring residents and businesses.
- 3.4.2 The site will remain presentable and tidy at all times. Hoarding or Heras fencing will be erected along perimeters of the site. The fencing will comply with the Health and Safety Authority requirements; and will be well maintained throughout the works to ensure public safety. Further details on the type of fencing proposed, will be provided when a contractor is appointed.
- 3.4.3 Building inspections to identify hazardous material/asbestos will be undertaken. The purpose of the hoarding is to provide additional security, both to prevent unauthorised personnel from accessing the site as well as providing suitable segregation between pedestrians and the work being undertaken. Lockable gates will be at the entrance to the vehicular access to prevent unauthorised vehicles entering the site.

3.5 Site Office

- 3.5.1 Site accommodation and welfare facilities will be located on site in portable cabins erected on the site on concrete pads.

3.6 Potential Impact on Utilities

- 3.6.1 Utility service diversions and temporary service connections should be carried out during the initial stages of the enabling works. The exact location of these services will not be known until a survey has been carried out post planning. Given that the proposals are new constructions, it is envisaged that services will be re-routed and extended to the new buildings.
- 3.6.2 Prior to works commencing, any existing utility services should be identified and disconnected across the site. Safe access routes would also be identified for vehicles and pedestrians across the site.

4. LOGISTICS

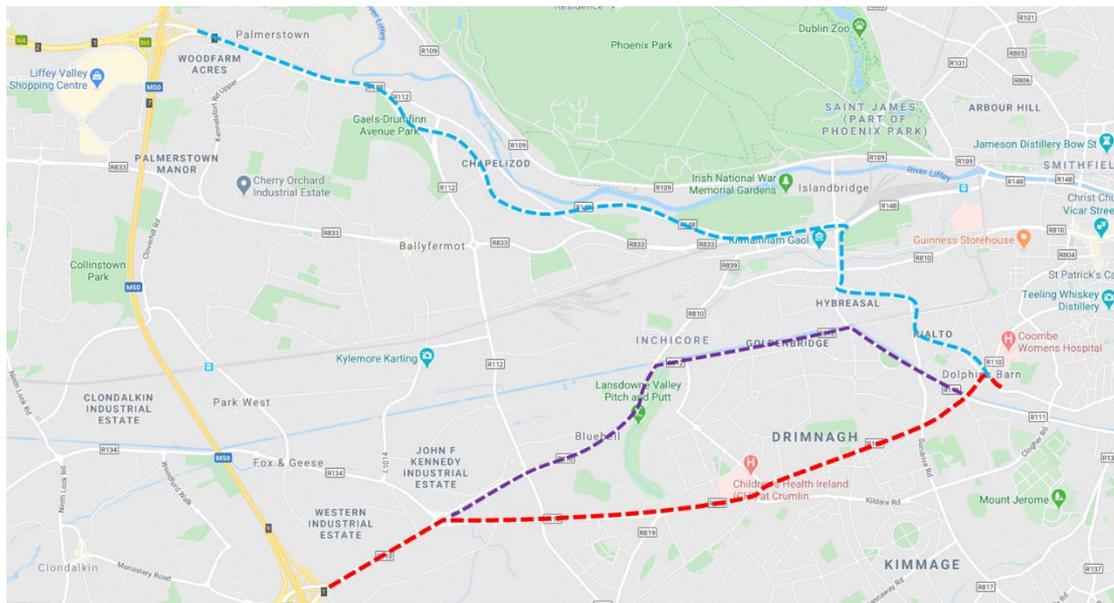
4.1 General

- 4.1.1 Local traffic and transport impacts are primary issues and concerns for all construction projects. As such, managing the potential impacts of construction is a key priority. Potential construction impacts include on-street congestion causing traffic delays, potentially increased road hazards, conflict with pedestrians and cyclists, noise from vehicles and air quality impacts from vehicle emissions and dust.
- 4.1.2 The section provides an overview of the logistics of construction, including vehicular access routes, loading and unloading locations, anticipated vehicle frequencies, sizes and movements, and details of core working hours.
- 4.1.3 It should be noted, however, that the application is yet to be determined and therefore, all details noted below are subject to change as the development progresses.

4.2 Construction Vehicle Routing

- 4.2.1 The details of the proposed construction routing will be agreed with Dublin City Council, prior to commencement of construction works, with the designated routes included within the DCC HGV Strategy being used as much as possible. To facilitate this all entry and exit points for Heavy Construction Vehicles will be located along the South Circular Road.
- 4.2.2 The proposed routes of construction vehicles across the wider network is shown in Figure 5. These routes follow the DCC designated HGV routes within the boundaries of DCC. It is proposed the red route would be the main access route with the alternative routes provided along the purple or blue routes.
- 4.2.3 It is considered appropriate to avoid routes where vulnerable road users and construction vehicles could conflict. Likewise it is considered appropriate to avoid routes where scheduled road works and construction vehicles could conflict.
- 4.2.4 All construction workers and suppliers will be advised to use the PIE Freight Journey Planner www.freightjourneyplanner.com which is designed to help freight operators plan their route for a specified size of vehicle, and identify where to stop legally. The website covers both the UK and Ireland.
- 4.2.5 The Site Manager or Banksman will keep up to date on scheduled roadworks, events and incidents in the area. Any major roadworks or events on the preferred route that result in the deviation of the preferred route will be agreed with officers at Dublin City Council in advance where feasible.

Figure 5 Construction Traffic Access Routes



4.3 Route Compliance

- 4.3.1 Use of the agreed vehicle routes should be accepted by the contractor and should be communicated to all individuals associated with the works. It is envisaged that this information will be communicated in the form of a leaflet or email and will include information with regard to times of operation, delivery routes, the call up procedure and delivery slot information.
- 4.3.2 Any repeated non-compliance of the proposed construction route could result in disciplinary procedures or the termination of the workers / suppliers contract.

4.4 Temporary Footway and Highway Closures

- 4.4.1 There may be the requirement to close or part close the South Circular Road in order to make alterations to the highway. A final contractor for the development has yet to be agreed, when this has been established, further detail on if and how this will occur, will be provided to Dublin City Council, for approval. Any closures would be managed and are likely to occur overnight.
- 4.4.2 The contractor is yet to be appointed, when an instruction has been made further information will be provided on any requirement for temporary footway closures during the construction process. The local authority will be consulted during this process.

4.5 Delivery and Servicing for the Site

Deliveries

- 4.5.1 All construction deliveries will take place on-site utilising the site access onto the South Circular. All vehicles will be met by a banksman before being directed into a dedicated unloading area. Vehicles will then load / unload before exiting via the same route.

4.5.2 All users associated with the site should be made aware of construction deliveries and appropriate safety measures should be put in place to ensure safety of staff and pedestrians. Vehicles should have to book a timeslot which will be allocated on a first come first serve basis. A board where the delivery slots can be reserved should be put up on Site. The Site Manager will stagger the deliveries to minimise the impact on and off the site. A banksman will meet all deliveries on site prior to them undertaking any manoeuvres.

Vehicle Frequency

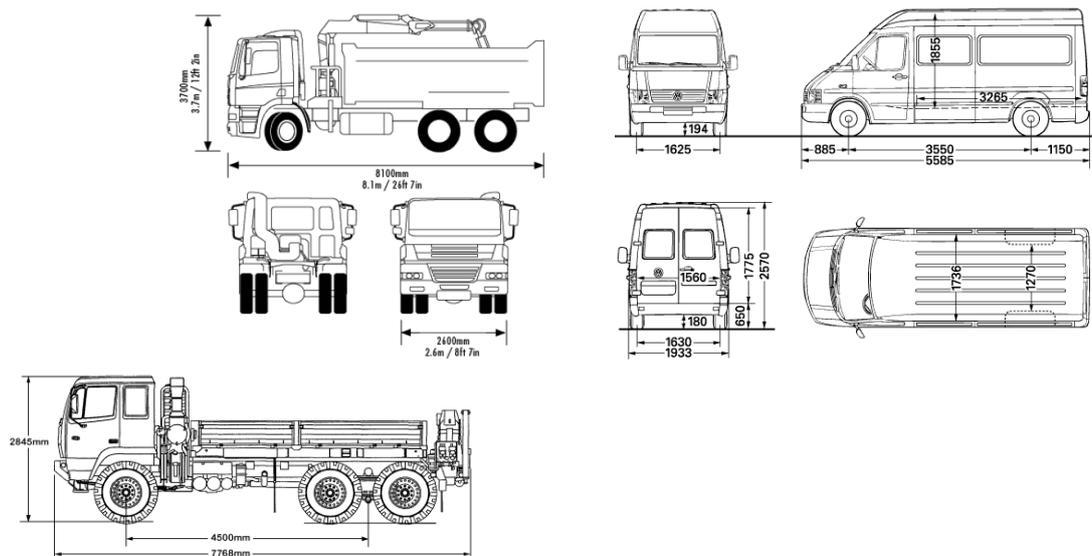
4.5.3 Where feasible, the contractor will seek to minimise deliveries during the weekday peak hours (08:00 – 09:00 and 17:00 – 18:00).

Vehicle Size

4.5.4 It is likely that the majority of vehicles accessing the site will be 6 wheel grab lorries (8.1m), rigid delivery vehicles (7.8m), 6 wheel concrete pump lorries (7.7m) and delivery vans (5.6m). As such it is envisaged that all vehicles accessing the site for purposes of construction will be less than 10m in length.

4.5.5 The dimensions are outlined in Figure 6 below.

Figure 6 Vehicle Types and Dimensions



4.6 Non-Road Mobile Machinery

4.6.1 The following non-road mobile machinery is likely to be used on site;

- Breaker
- Dumper trucks
- Tower / Mobile Cranes
- Excavators
- Compacter / Rollers
- Drills / Cutters
- Piling Rig
- Fork Lift Truck

4.7 Vehicle Dwell Times

- 4.7.1 Delivery vehicles are unlikely to attend the site for longer than 30 minutes and will be encouraged to turn off their engines while idling to reduce CO₂ emissions.

4.8 Control of Deliveries

- 4.8.1 All deliveries should be controlled by a strict delivery booking system which will distribute deliveries across the week and across working hours. Deliveries should not be accepted outside of their designated time-slot, and such deliveries will be asked to re-book, unless there is capacity to accommodate within the specified loading area.

- 4.8.2 On a weekly basis the Site Manager should evaluate details of the daily profile of deliveries proposed for the upcoming week. Hauliers will be required to contact the site on a daily basis and indicate their delivery schedule for the following day. The proposed deliveries will be checked against the weekly delivery schedule. This will be overseen by the Site Manager to ensure that HGV deliveries are scheduled, ensuring that there is always space at the site to accommodate the necessary plant and deliveries.

- 4.8.3 When planning deliveries the following will be considered:

- All deliveries to the site should be restricted to the timings set out within this document;
- Deliveries will be permitted only in the specified loading area on site; and
- Material storage areas will be prepared on-site in advance of deliveries to minimise loading and unloading times.

- 4.8.4 It is anticipated that all deliveries to the site will be organised to take place between the hours of 07:00 – 18:00, Monday to Friday and 08:00 – 14:00 Saturday (subject to confirmation / approval from DCC). Where feasible the contractor will seek to minimise deliveries during the weekday peak hours (08:00 – 09:00 and 17:00 – 18:00).

- 4.8.5 Sufficient time will be given between deliveries to allow for any delays as a result of the delivery vehicle getting stuck in traffic or the loading / unloading taking longer than expected and to avoid any vehicles waiting on the surrounding highway network.

- 4.8.6 The following measures will be implemented to reduce the number of vehicle movements to the site;

- ‘Backloading’ vehicle operation, where site delivery vehicles are utilised to remove waste materials from the site as part of the same trip, where possible; and
- Practical re-use of any aggregates on site and recycling of material, where possible.

- 4.8.7 With proper planning and an efficient delivery schedule, unnecessary vehicle trips to the site will be kept to a minimum.

4.9 Construction Personnel

- 4.9.1 The application has yet to receive planning and therefore elements such as agreeing the number of construction workers on site is still unknown. However, the contractor, where feasible, will seek to recruit construction workers from the local area. This will help maximise the potential for construction workers to travel to the site via sustainable means.
- 4.9.2 As such it is likely that the construction workforce will reside in the Dublin area and therefore, in most instances, the majority of construction staff will have the opportunity to arrive at the site via public transport, bicycle or via foot.
- 4.9.3 There will be parking (in the form of a temporary car park), for cars and vans on site.

5. CONSTRUCTION TRAFFIC MITIGATION

5.1 General

5.1.1 This section of the Construction Management Plan sets out the mitigation measures that could be employed during construction to minimise the impact of construction traffic on the local residents, businesses and the local highway network.

5.2 Construction Manager

5.2.1 There will be a designated Site Manager to deal with any complaints and enquiries from the general public and any other interested parties. Any changes to the designated Site Manager will be notified to Dublin City Council (DCC). The details of the Site Manager (including a 24 hour phone number) will be provided to DCC prior to activities beginning on-site. The Site Manager's details will also be advertised at the site entrance.

5.2.2 The Site Manager for the project will undertake the transport co-ordination role for the site. In this respect, their main responsibilities should include:

- Managing the implementation of the Construction Management Plan;
- Vehicle scheduling;
- Informing local residents, and DCC of the commencement of construction works;
- Informing local residents and DCC of any major or noise intensive works associated with the construction of the site to avoid / minimise disruption;
- Checking for scheduled road works, special events and incidents on <https://www.rte.ie/traffic/> websites;
- Handling any complaints; and
- Acting as a point of contact for employees, contractors DCC and the general public.

5.2.3 The Site Manager should be responsible for keeping neighbours within the sites vicinity informed of the construction progress. In this respect, the Site Manager should ensure that there is adequate liaison between the following key stakeholders throughout the construction period:

- The Contractor;
- The Developer;
- Site neighbours;
- Dublin City Council; and
- Other local stakeholders such as emergency services or local transport providers.

5.2.4 Regular review meetings and telecommunication should be held between the Site Manager and local authority. It is envisaged that update meetings / telecommunication should be held on an ad-hoc basis with an update provided to Dublin City Council approximately every 6 weeks. Furthermore, the Site Manager should provide any monitoring data, delivery schedules, complaints or breaches of agreements to the LA if requested.

5.3 Subcontractors

5.3.1 Individual subcontractors involved in activities such as waste removal should be required to incorporate the relevant requirements from the CTMP into their activities as well as statutory requirements. Any potential sub-contractors will be required to show how they will comply with the CTMP and how targets will be achieved and impacts minimised.

5.4 Good Neighbours Policy

- 5.4.1 The contractor will strive to be 'Good Neighbours', with systems employed to ensure local issues are understood. As part of this the contractor could sign up to the Considerate Constructor Scheme (CCS).
- 5.4.2 Communication with local residents and businesses will begin prior to commencement of construction and will be provided with information on the planned construction including times and contact details by a senior manager based on site.
- 5.4.3 An induction specific to the development site will be provided to all personnel before construction commences. This will incorporate health and safety, on-site construction works and issues and sensitivities in the context of the surrounding community.

5.5 Dust and Dirt Control

- 5.5.1 The control of dust and dirt is a prime concern for all construction projects, particularly during periods of dry and windy weather. Best practice guidance 'Dust and Air Mitigation Measures' guidance provided by the Institute for Air Quality Management will be utilised to control dust.
- 5.5.2 Mud and debris on the road is regarded as one of the main environmental nuisances and safety problems arising from construction sites. All HGVs removing spoil from the site will be fully sheeted to minimise the risk of any mud over spilling onto the highway.
- 5.5.3 Further to this, all skips and storage area for cement, sand and fine aggregates will be sheeted/covered when not in use. All HGVs serving the site will be required to ensure that their wheels have been cleared of mud and debris, with wheel washing facilities provided on site. Similarly, provision will be made for cleaning of the road whenever required.
- 5.5.4 Pavements and carriageway fronting the access used for the construction will be swept daily, and the need for this will be continuously monitored throughout the day, in light of site operations and weather conditions. Goods, waste material and wheelbarrows will be secured and covered prior to being transported to and from the site to prevent the escape of debris and dust.
- 5.5.5 The contractor will ensure that the area around the site including the public highway is regularly and adequately swept to prevent any accumulation of dust and dirt.
- 5.5.6 The Site Manager will undertake daily inspections of the site and the roads surrounding the site to ensure that dust control measures are complied with. The Site Manager will record and respond to all dust and air quality pollutant emissions complaints and will maintain a log of any complaints and any action taken to resolve the issues.
- 5.5.7 The frequency of site inspections will increase when activities with a high potential to produce dust are being carried out as well as during periods of prolonged dry or windy conditions.

5.6 Fuel Consumption / Emissions

- 5.6.1 The contractor will strive to procure local contractors for the project, thereby minimising transport costs and impact on the local environment. The use of the booking system for deliveries will also help to ensure that the construction site is serviced in an efficient manner which will help to minimise the number of vehicle movements that would be generated.
- 5.6.2 A further measure that will be employed is encouraging all delivery vehicles to switch off engines as they are waiting at the site, thereby preventing unnecessarily idling vehicles.

5.7 Mud on Roads

- 5.7.1 A wheel cleaning procedure will be used in order to mitigate the amount of mud that could potentially be deposited on the highways by vehicles exiting the site. An area close to the site exit will be utilised for wheel washing prior to vehicles leaving site. A power washer will be used to wash off any mud from the vehicles wheels, with excess mud/slurry being collected and disposed of.
- 5.7.2 The wheel wash station will remain on site until the development is complete. The proposed wheel cleaning procedure will consist of:
- Before leaving the site, vehicles will be inspected for any heavy deposit left on wheels. If present, these will be removed manually.
 - Following inspection, all wheels are to be washed down using a high pressure jet wash until clear of all deposits.
 - Vehicles will be permitted to leave site following approval of the site manager/site representative that the above steps have been completed to a satisfactory standard.
- 5.7.3 The site will be kept as free of mud as is practical during ground working operations. Machine and wagon trafficking around the site will be kept to a minimum in order to reduce the effects of rain on 'broken' ground.
- 5.7.4 The construction site access into the site will be secured. The site will be secured whenever construction personnel are not present. Site contact details and out of hours emergency contact details will also be prominently displayed on site hoardings. Daily inspections will be undertaken in the vicinity of the site and on footways to check for potential hazards (including blocked footways and the build-up of rubbish).

5.8 Pedestrian Safety Measures

- 5.8.1 Pedestrian safety throughout the construction programme will be paramount. To ensure pedestrian safety during loading and unloading activity, a Banksman / traffic marshal should be present to minimise the likelihood of conflict with pedestrians. Warning signage will be provided locally to the site to ensure that vehicles, pedestrian and cyclists are aware that construction activity is taking place. The site will be properly secured, helping to ensure that pedestrians and the general public cannot access the construction site unauthorised.

5.9 Other

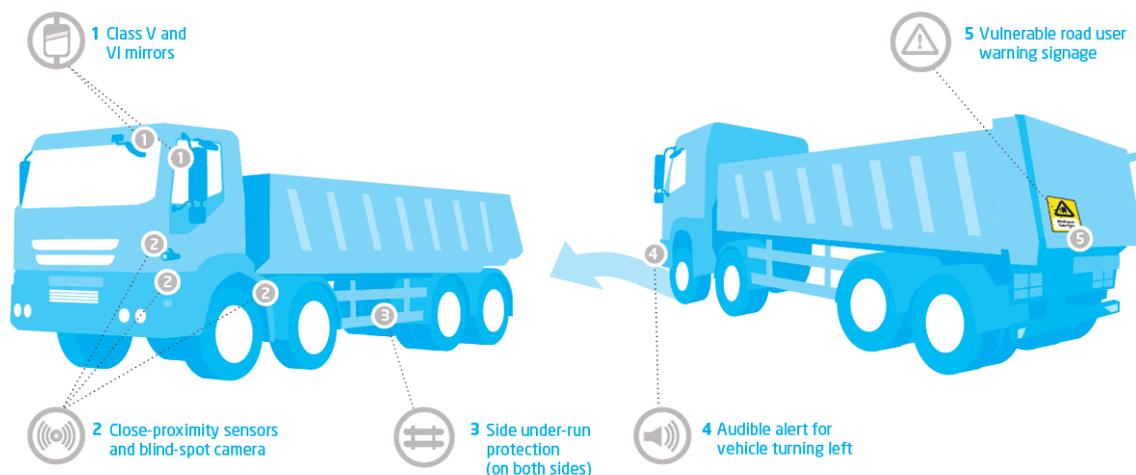
5.9.1 Site contact details and out of hours emergency contact details will also be prominently displayed on site hoardings. Daily inspections should be undertaken in the vicinity of the site and on footways to check for potential hazards (including blocked footways and the build-up of rubbish).

5.9.2 Heavy goods vehicles associated with the construction of the development must:

- Have Side Guards fitted, unless it can be demonstrated to the reasonable satisfaction of the Employer, that the Lorry will not perform the function for which it was built, if Side Guards are fitted;
- Have a close proximity warning system fitted comprising of a front mounted, rear facing CCTV camera (or Fresnel Lens where this provides a reliable alternative), a Close Proximity Sensor, an in-cab warning device (visual or audible) and an external warning device to make the road user in close proximity aware of the driver's planned manoeuvre;
- Have a Class VI Mirror; and
- Bear prominent signage on the rear of the vehicle to warn cyclists of the dangers of passing the vehicle on the inside.

5.9.3 The Site Manager should ensure that all contractors and fleet operators at the site sign with vehicles over 3.5 tonnes will be required to have the vulnerable road user safety kit fitted, as outlined in Figure 7.

Figure 7 Safety Measures



5.9.4 The Site Manager should undertake checks of vehicles accessing the site. In the event that a vehicle arrives at the site and is not fitted with the above safety kit then the vehicle may be refused entry and a non-conformance report completed.

5.9.5 The Site Manager / Contractor should ensure that all contractors and fleet operators accessing the site have received the correct level of training and have had driver license checks.

5.10 Engagement with Local Residents and Sensitive Sites

- 5.10.1 The client, or client representative, will liaise with all neighbouring residents and businesses to ensure they are aware of the construction programme and the development proposals. Communication with local residents and businesses will begin prior to commencement of construction. The appointed Main Contractor will be required to follow best practice 'Considerate Constructor' guidelines and should appoint a Community Liaison Officer (CLO).
- 5.10.2 The CLO will initially host and attend regular community meetings. Following the initial meetings, the CLO will compile a list of stakeholders in the area. These stakeholders will be kept informed of progress and planned works on the site through the publication and distribution of a progress newsletters which should include details of updates to the construction programme.
- 5.10.3 Adjacent residents and businesses will be provided with information on the planned construction including times and contact details by the CLO. They will be given the contact details of the developer and will be invited to raise any issues during the construction works. Additionally, the contractor's contact details will be provided on the outside of the site perimeter.
- 5.10.4 An induction specific to the development site will be provided to all personnel before construction commences. This will incorporate health and safety; on-site construction works and issues and sensitivities in the context of the surrounding community particularly in relation to local schools.

5.11 Construction Travel Plan

- 5.11.1 The contractor will be encouraged as part of the contract to introduce a Travel Plan for its staff to limit the number of private car trips to the site. The Travel Plan will form part of the final Construction Management Plan and will be agreed with DCC prior to works beginning on site.
- 5.11.2 There is good accessibility between the site and public transport links which serve the area as detailed earlier in Section 2. The Cork Street Quality Bus Corridor and Red Line Luas are all within walking distance of the site. The contractor will issue an information leaflet to all staff as part of their induction on site highlighting these services.
- 5.11.3 The construction site will provide facilities to encourage sustainable travel such as drying area, storage facilities and secure bike parking. The number of onsite car parking spaces will also be limited and predominantly intended for visitors to the site. Where staff are required to travel to site by car, they will be encouraged to do so outside the peak traffic hours.

5.12 Construction Traffic Management Plan Monitoring

- 5.12.1 The CTMP will be regularly reviewed and monitored, with feedback provided to DCC where necessary.

6. SUMMARY AND CONCLUSION

- 6.1.1 SYSTRA Ltd has been commissioned by U and I (White Heather) Ltd (the applicant) to produce an outline Construction Traffic Management Plan (CTMP) to detail the construction processes for the proposed redevelopment at the former White Heather Industrial, South Circular Road, Dublin 8 and an industrial building at 12a St James's Terrace.
- 6.1.2 The 1.535ha site is bounded by the Grand Canal to the south; Our Lady of Dolours Church and residential dwellings on the South Circular Road to the north; Priestfield Cottages to the east; and residential dwellings at St James's Terrace to the west.

6.2 Summary

- 6.2.1 The development proposals comprise 335 no. residential units and associated amenities. The entrance to the scheme will be via the existing junction at the South Circular Road, which will be reconfigured and upgraded.
- 6.2.2 The application is yet to be determined, on that basis, all exacting details on how construction will be progressed are as yet unknown. Notwithstanding the contractor (when instructed) will adhere to all the principles of construction set out within this plan.
- 6.2.3 Information regarding the timescales of construction will be communicated to Dublin City Council before construction commences. Any significant changes in the build program will be communicated to DCC also.
- 6.2.4 All construction traffic accessing the site will be routed via the South Circular Road. Vehicles will then be met by a banksman before being directed into a dedicated unloading area, vehicles will then load / unload before exiting the site via the same route. Use of the agreed vehicle routes will be communicated to all individuals associated with the works.
- 6.2.5 All construction vehicles accessing the site should book in advance with the Site Manager who will keep a record of the schedule and all deliveries. A Banksman will be on hand to oversee any manoeuvring that does need to occur as well as the loading / unloading of deliveries. The Banksman will also ensure that, appropriate pedestrian and road safety information is relayed to local users and vehicle checks are made.
- 6.2.6 The construction process will be managed by the designated Site Manager. Any changes to the designated Site Manager will be notified to Dublin City Council. Their responsibilities will include acting as a point of contact for the local authority, stakeholders and members of the public. Further to this they will also be responsible for delivery scheduling, construction route compliance and managing other contractors employed on-site.

6.3 Conclusion

- 6.3.1 Overall it is considered that the measures and control processes outlined in this Construction Traffic Management Plan are appropriate to overcome the identified constraints associated with the site.

SYSTRA provides advice on transport, to central, regional and local government, agencies, developers, operators and financiers.

A diverse group of results-oriented people, we are part of a strong team of professionals worldwide. Through client business planning, customer research and strategy development we create solutions that work for real people in the real world.

For more information visit www.systra.co.uk

Birmingham – Alpha Tower

8th Floor, Crowne Plaza, Suffolk Street,
Birmingham, B1 1TT
T: +44 (0)121 393 4841

Birmingham – Edmund Gardens

1 Edmund Gardens, 121 Edmund Street,
Birmingham B3 2HJ
T: +44 (0)121 393 4841

Dublin

2nd Floor, Riverview House, 21-23 City Quay
Dublin 2, Ireland
T: +353 (0) 1 566 2028

Edinburgh – Thistle Street

Prospect House, 5 Thistle Street, Edinburgh EH2 1DF
United Kingdom
T: +44 (0)131 460 1847

Glasgow – St Vincent St

Seventh Floor, 124 St Vincent Street
Glasgow G2 5HF United Kingdom
T: +44 (0)141 468 4205

Glasgow – West George St

250 West George Street, Glasgow, G2 4QY
T: +44 (0)141 468 4205

Leeds

100 Wellington Street, Leeds, LS1 1BA
T: +44 (0)113 360 4842

London

3rd Floor, 5 Old Bailey, London EC4M 7BA United Kingdom
T: +44 (0)20 3855 0079

Manchester – 16th Floor, City Tower

16th Floor, City Tower, Piccadilly Plaza
Manchester M1 4BT United Kingdom
T: +44 (0)161 504 5026

Newcastle

Floor B, South Corridor, Milburn House, Dean Street, Newcastle, NE1
1LE
United Kingdom
T: +44 (0)191 249 3816

Perth

13 Rose Terrace, Perth PH1 5HA
T: +44 (0)131 460 1847

Woking

Dukes Court, Duke Street
Woking, Surrey GU21 5BH United Kingdom
T: +44 (0)1483 357705

Other locations:

France:

Bordeaux, Lille, Lyon, Marseille, Paris

Northern Europe:

Astana, Copenhagen, Kiev, London, Moscow, Riga, Wroclaw

Southern Europe & Mediterranean: Algiers, Baku, Bucharest,

Madrid, Rabat, Rome, Sofia, Tunis

Middle East:

Cairo, Dubai, Riyadh

Asia Pacific:

Bangkok, Beijing, Brisbane, Delhi, Hanoi, Hong Kong, Manila,
Seoul, Shanghai, Singapore, Shenzhen, Taipei

Africa:

Abidjan, Douala, Johannesburg, Kinshasa, Libreville, Nairobi

Latin America:

Lima, Mexico, Rio de Janeiro, Santiago, São Paulo

North America:

Little Falls, Los Angeles, Montreal, New-York, Philadelphia,
Washington

The SYSTRA logo is displayed in a bold, red, sans-serif font. The letters are thick and blocky, with a slight shadow effect. The 'S' and 'Y' are particularly prominent, with the 'S' having a curved top and the 'Y' having a sharp point. The 'R' and 'T' are also thick and blocky, and the 'A' is a simple, wide letter. The overall appearance is modern and professional.