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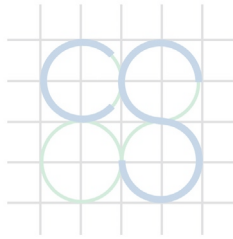
**Outline Construction Management Plan
Strategic Housing Development (SHD)
Former O'Devaney Gardens Site,
Dublin 7**

Client: Bartra ODG Limited

Job No. B089

May 2021





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OUTLINE CONSTRUCTION MANAGEMENT PLAN

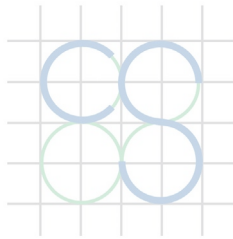
STRATEGIC HOUSING DEVELOPMENT (SHD), FORMER O'DEVANEY GARDENS SITE, DUBLIN 7

CONTENTS

1.0	INTRODUCTION	1
2.0	SITE LOCATION	3
3.0	PROJECT DESCRIPTION	5
4.0	SITE MANAGEMENT	8
5.0	ENVIRONMENTAL MANAGEMENT	17
6.0	WASTE MANAGEMENT	25
7.0	TRAFFIC MANAGEMENT	26
8.0	COMPOUND FACILITIES / PARKING	29
9.0	PROVISIONS FOR CONSTRUCTION	31
10.0	CONCLUSION	37

Appendix A: Indicative Site Set-Up

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1.0 INTRODUCTION

Cronin & Sutton Consulting Engineers (CS Consulting) have been commissioned by Bartra ODG Limited to prepare an Outline Construction Management Plan (OCMP) for a proposed residential development at O'Devaney Gardens, Dublin 7.

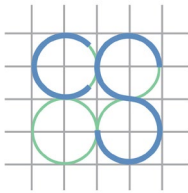
The aim of this OCMP is to address issues that can arise during construction including noise and vibration, traffic management, working hours, pollution control, dust control, road cleaning, compound / public health facilities and staff parking, all associated with the construction works. This plan will be updated by the contractor and agreed with Dublin City Council (DCC) in advance of the construction phase.

This Outline Construction Management Plan (OCMP) has been prepared to give an overview of the processes to be employed during construction of this project. Prior to the on-site activities commencing, this plan will be revised by the appointed lead contractor and expanded to produce a Detailed Construction Management Plan, which shall incorporate:

- Operational Health & Safety (OH&S) Management Plan;
- Environmental Management Plan, including Waste Management Plan;
- Pedestrian and Traffic Management Plan.

The Construction Management Plan will be integrated into and implemented throughout the construction phases of the project to ensure the following:

- All site activities are effectively managed to minimise the generation of waste and to maximise the opportunities for on-site reuse and recycling of waste materials.



- All waste materials generated by site activities, that cannot be reused on site, are removed from site by appropriately permitted waste haulage contractors and that all wastes are disposed of at approved waste licensed/permitted facilities in compliance with the Waste Management Acts 1996 to 2005;
- Any environmental impacts (noise, vibration, dust, water) of project construction work activities on receptors and properties located adjacent to the project work areas, and on the local receiving environment, are managed and controlled.

2.0 SITE LOCATION

The proposed development is located in Stoneybatter at the former O Devaney Gardens public housing complex in Dublin 7. The site sits within the established communities of Arbour Hill and nestled between the Phoenix Park to the west and the Quays to the south. The site is located in the administrative jurisdiction of Dublin City Council (DCC) and has a total area of approximately 5.2 ha.

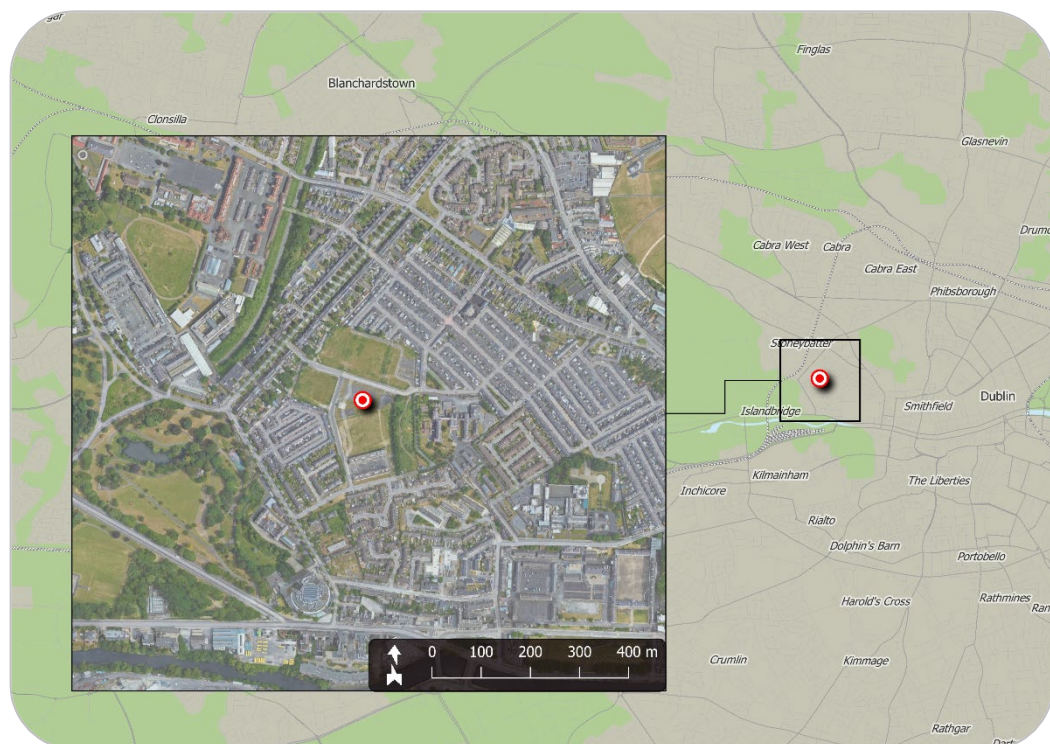


Figure 1 – Location of proposed development site
(map data & imagery: EPA, OSM Contributors, Google)

The location of the proposed development site is shown in Figure 1 above; the indicative extents of the development site, as well as relevant elements of the surrounding road network, are shown in more detail in Figure 2.

The site is bounded to the west by a residential development currently ongoing by DCC, to the north by the North Circular Road, to the east by St. Bricin's Military Hospital and to the south by Mountpelier Gardens

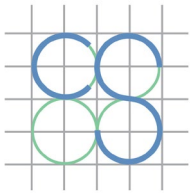


Figure 2 – Site extents and environs

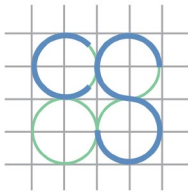
The subject lands were previously occupied by the O Devaney Gardens public housing development of 13 apartment blocks. The Site has since been vacated and demolished with the removal of all of the above ground structures. The site currently stands in a brown field condition with some infrastructure from the previous development currently still in place.

3.0 PROJECT DESCRIPTION

The proposed Strategic Housing Development comprises the following elements of relevance to the present Traffic and Transport Assessment:

- 43no. dwelling houses (including 20no. duplex units);
- 1,004no. apartments;
- crèche with gross floor area of 489m²;
- community space with gross floor area of 157m²;
- convenience retail units with total gross floor area of 1,393m²; and
- café unit with gross floor area of 155m².

The subject development's internal road network shall tie into the existing surrounding road network at the existing O'Devaney Gardens / North Circular Road junction (north of the development site), the repositioned O'Devaney Gardens / Montpellier Gardens junction (south of the development site), and the existing connection between O'Devaney Gardens and Thor Park (east of the development site). Provision is also made for pedestrian and cyclist connectivity onto Ross Street and onto Ashford Cottages, at the development site's northern boundary. The development includes 273no. car parking spaces, 3no. crèche set-down



spaces, 2,000no. bicycle parking spaces, and 11no. motorcycle parking spaces.

A detailed description of the proposed development is provided in the Site Notice.

3.1 Construction Phasing

The construction of the project is planned to take between three and five years to complete. The current indicative phasing suggests that the project will be split into three phases with the accompanying infrastructure and green spaces being handed over with each phase, as it is constructed (see figure 3 below for the construction phasing).

As part of the site development works, there are service diversions necessary to the utilities serving the DCC Phase 1A Development to the north-west, which is currently under construction (See location – Figure 3). As part of these works a new foul & storm line and watermain shall be constructed along with a new roadway which will run from north to south of the site. In addition, an existing attenuation tank shall be relocated, and also a new ESB substation constructed. These diversion and service construction shall form part of the Phase 1 works. Any necessary temporary pumping provisions shall be provided to ensure no interruption of supply or service to the DCC Development, currently under construction.

The phasing noted is indicative, and the final phasing, and associated Construction Traffic Management Plans shall be appointed by the appointed Contractor, and submitted to DCC for approval, prior to commencement.

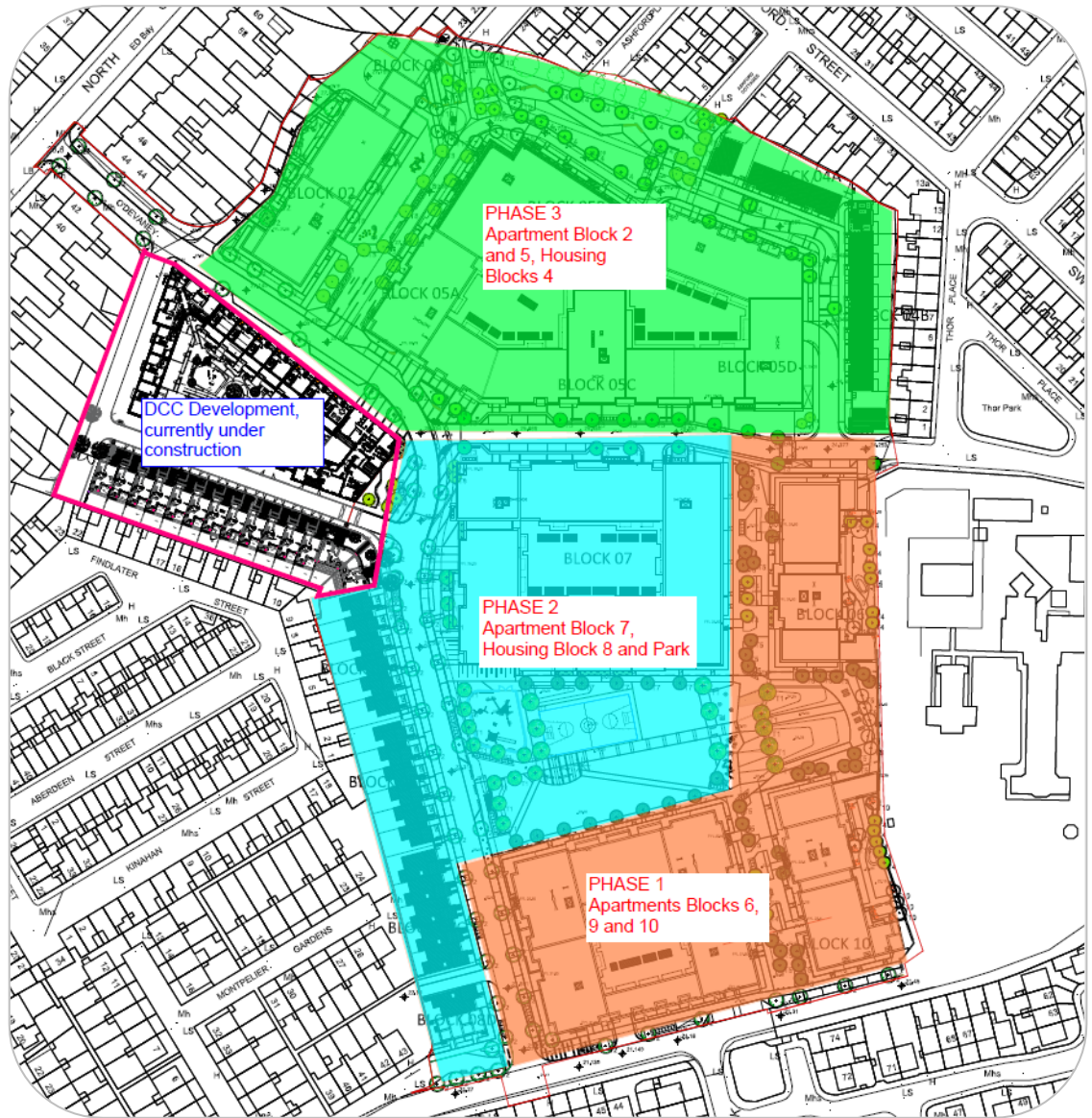
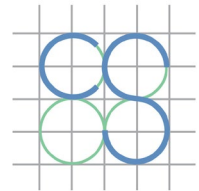
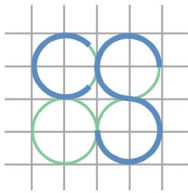


Figure 3 – Indicative Construction Phasing Diagram



4.0 SITE MANAGEMENT

4.1 Site Establishment

The contractor shall provide all necessary accommodation, material handling and secure storage for their operations.

The facilities to be provided and maintained by the contractor shall include:

- construction plant;
- hoisting equipment and cranes;
- scaffolding, platforms, access ladders, barriers, handrails;
- barricades and hoardings;
- temporary driveways, road crossovers and construction zone;
- 24/7 emergency vehicle access to site during working hours;
- on-site hardstand areas for vehicle loading and unloading;
- storage sheds and compounds;
- rubbish sorting areas;
- site amenities with all required equipment and facilities;
- construction worker accommodation;
- first aid facilities;
- site administration accommodation.

Construction plant and site amenities shall comply with the requirements of all relevant authorities and be wholly contained within the hoarded site. All

construction plant and equipment will be progressively removed when no longer required.

First Aid facilities for the use of all construction staff in the form of a fully provisioned first aid area within the site office with lifesaving and safety equipment as required by relevant statutes, authorities and awards will be maintained at all times by the contractor.

The contractor shall obtain all required permits, pay the applicable fees and comply with all conditions.

4.2 Hoarding and Fences

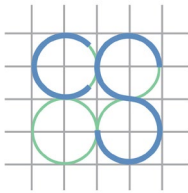
Prevention of unauthorised access to the site is a very high priority and will be vigorously managed throughout the construction period. When the contractor is appointed, the site shall be secured with site palisade fencing until a hoarding is erected in accordance with the final Construction Management Plan. Any hoardings and signboards to the perimeter of the site will comply with the requirements of the relevant authorities and the relevant Health and Safety Acts; such as IS EN 1995 Eurocode 5 and "*Hoarding – A guide to Good Practice*" (TWf2012: 01, August 2020).

The Contractor shall be required to erect a single project signboard to the hoarding at the main entrance points to identify the site.

4.3 Services Relocations and Temporary Protection of Public Domain

Prior to any works commencing on site, detailed dilapidation reports shall be carried out to properties and buildings adjoining the site.

Further dilapidation reports shall be carried out for footpaths, kerbs, road pavements and utility infrastructure features of the main access routes in the immediate vicinity to the site.



The Contractor shall provide protection to existing surrounding building elements potentially impacted by the works. Protection will be in the form of screened hoardings, scaffolding and fencing, taped drop sheets and the like, all installed prior to commencement of the demolition works.

The type of required hoardings, scaffolding and fencing will vary over the duration of the works, depending on how the site activities potentially impact on the adjoining public domain and neighbourhood.

"Dial-before-you-dig" enquiries and detailed services location investigations shall be carried out to identify any need for temporary protection of elements of existing utility infrastructure that are not to be diverted as part of the works.

All temporary protection is to be installed and maintained during the duration of the works until they are no longer required.

4.4 Major Plant and Equipment

Plant and equipment used during the entire works are:

- articulated and rigid trucks;
- Pilling-rigs, bulldozers, excavators, backhoes, with ancillary equipment (rock hammers or saws);
- Tower cranes/mobile cranes;
- concrete delivery trucks;
- concrete pumps;
- man, and material hoists;
- scissor, boom and fork lifts.

All plant and equipment will be operated by experienced and qualified personnel with the appropriate registrations.

4.5 Vehicular Access to Site

The indicative phasing noted in Figure 3 shall be serviced via the existing vehicular access points to the site at the North Circular Road, Montpelier Gardens and Thor Place. The primary access points shall be determined by the Contractor in their **Construction Traffic Management Plan (CTMP)** and will depend on the phase of construction. Heavy vehicle movements shall be limited to access/egress from North Circular Road and Montpelier Gardens only. Fulltime Traffic Management Operatives shall be located at all vehicle access points during the construction works.

The following are some measures that will be implemented to accommodate smooth traffic flows.

- Entrance will be wide enough to ensure two rigid body vehicles can pass each other, i.e. one can enter while another waits to leave
- Entrance gate will be set back a minimum of 18m from the road edge to ensure all vehicles leave the road before stopping
- Appropriate sight lines will be provided by placing the hoarding well enough back from the kerb edge.
- Advanced warning provided to all users on the road and directional signage for site traffic.

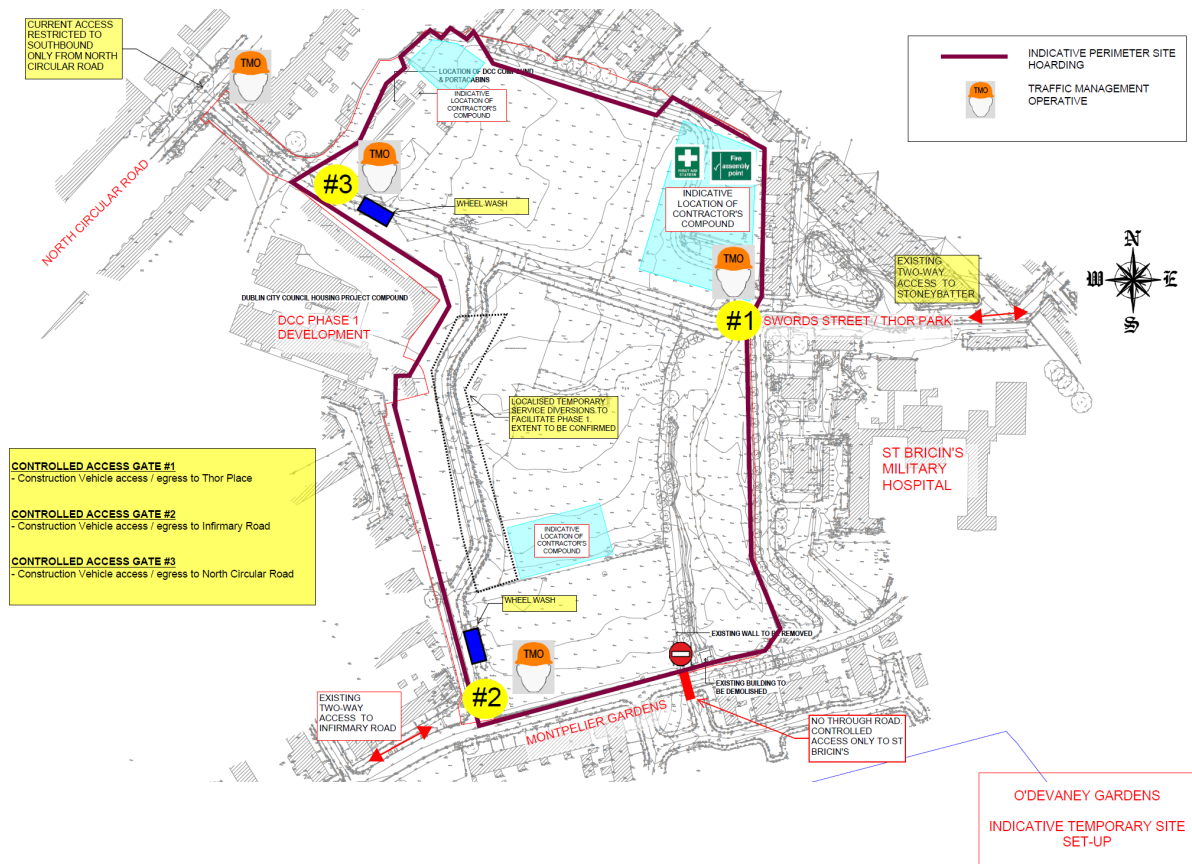
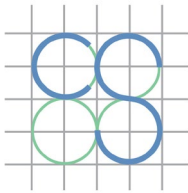


Figure 4 – Indicative Site Set-Up (See Appendix A)

Detailed measures shall be developed further as part of the CTMP developed by the Contractor in consultation with the Design Team and DCC prior to commencement of works.

The principal objective of the CTMP is to ensure that the impacts of all building activities generated during the construction of the proposed development upon both the public (off-site) and internal (on-site) workers environments, are fully considered and proactively managed / programmed respecting key stakeholders requirements thereby ensuring that both the public's and construction workers safety is maintained at all times, disruptions minimised and undertaken within a controlled hazard free

/ minimised environment. It is noted that the impact of the construction works will be temporary in nature.

The CTMP shall be prepared in accordance with the principles outlined below and shall always comply with the requirements of:

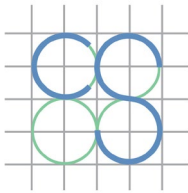
- Chapter 8 of the Department of the Environment Traffic Signs Manual, current edition, published by The Stationery Office, and available from the Government Publications Office, Sun Alliance House, Molesworth Street, Dublin 2;
- Guidance for the Control and Management of Traffic at Road Works (June 2010) prepared by the Local Government Management Services Board; and
- Any additional requirements detailed in the Design Manual for Roads and Bridges & Design Manual for Urban Roads & Streets (DMURS).

In order to ensure satisfactory operation of the construction stage the following is proposed:

- Provision of sufficient on-site parking and compounding to ensure no potential overflow onto the local network.

As referenced previously, site offices and compound shall be located within the green space area of the centre of the site. The site will be able to accommodate employee and visitor parking throughout the construction period with construction of temporary hardstanding areas.

Finally, truck wheel washes will be installed at construction entrances and any specific recommendations regarding construction traffic management made by the Local Authority will be adhered to (see Figure 4).



The following mitigation measures shall be incorporated into the CTMP:

- During the pre-construction phase, the site will be securely fenced off from adjacent properties, public footpaths and roads.
- The surrounding road network will be signed to define the access and egress routes for the development.
- The traffic generated by the construction phase of the development will be strictly controlled in order to minimise the impact of this traffic on the surrounding road network.
- All road works will be adequately signposted and enclosed to ensure the safety of all road users and construction personnel.
- All employees and visitors vehicle parking demands will be accommodated on-site.
- A programme of street cleaning if/when required.
- Any associated directional signage.
- Any proposals to facilitate the delivery of abnormal loads to the site.
- Measures to obviate queuing of construction traffic on the adjoining road network.

4.6 Site Security

Access to site shall be controlled by means of an electronic access control system and camera remote monitoring system for out of hours use. During working hours, a gateman shall control traffic movements and deliveries.

All personnel working on site shall be required to have a valid Safe Pass card.

4.7 Material Hoisting & Movement Throughout the Site

Tower cranes will be needed for the apartment block construction works on site. All lifting activities will have to be coordinated on site by the appointed person on site. All lifts will have to have a proper lift plan in place prior to commencement. No loads will be lifted over the public domain or adjacent properties.

Hoists and teleporters will also be used within the site and around its perimeter as required during the project, to facilitate material and waste movements into and out of the site.

4.8 Deliveries & Storage Facilities

All deliveries to site shall be scheduled to ensure their timely arrival and avoid the need for storing large quantities of materials on site. Deliveries shall be scheduled outside of rush hour traffic to avoid disturbance to pedestrian and vehicular traffic in the vicinity of the site.

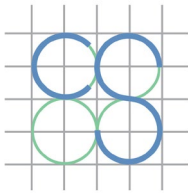
4.9 Site Accommodation

On-site facilities shall include:

- a materials and equipment storage area;
- a site office, and;
- staff welfare facilities (e.g. toilets, drying room, canteen, etc.).

Electricity will be provided to the site via national grid.

Water supply to the site during construction works will be provided by means of a temporary connection to a public watermain. Similarly, a temporary connection for foul water drainage will be made to the public network.



4.10 Site Parking

Vehicle parking for construction personnel shall be accommodated within the development site. To the extent possible, personnel will also be encouraged to use public transport, and information on local transportation will be published on site.

4.11 Site Working Hours

Subject to the agreement of the Planning Authority, the following site operation hours are proposed:

- Monday to Friday: 07:00 to 19:00
- Saturdays: 08:00 to 14:00
- Sundays & Bank Holidays: Works not permitted

It may be necessary for some construction operations to be undertaken outside these times, for example: service diversions and connections; concrete finishing and fit-out works; etc. There may also be occasions where it is necessary to make certain deliveries outside these times, for example, where large loads are limited to road usage outside peak times.

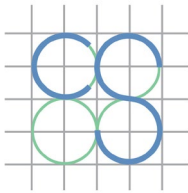
5.0 ENVIRONMENTAL MANAGEMENT

The contractor will establish guidelines and controls for all activities that may impact on the surrounding environment for the duration of the works, including; air, water, land, natural resources, flora, fauna, humans, and their interrelation.

The project is to be developed to enable to all personnel with the means to understand their responsibilities and to meet the contractor's statutory, contractual and procedural obligations relating to environmental management.

For each activity, the environmental aspects and associated actual and potential impacts are to be identified as they relate to the following environmental elements:

- emissions to air;
- releases to water;
- releases to land;
- use of raw materials & natural resources;
- use of energy;
- waste and by-products;
- community & neighbours;
- flora and fauna;
- heritage & cultural.



5.1 Materials and Decontamination

Excavation works will each address the requirements of this investigation report and verify the treatment and removal of all materials and contamination encountered during the works.

5.2 Storm Water and Waste Management

Storm water and wastewater management will be constructed as per the details submitted with this planning application. The purpose of these procedures is to ensure that storm water and wastewater runoff is managed and that there is no off-site environment impact caused by overland storm water flows.

The project environmental management plan will be developed in detail to include:

- silt control on the roads;
- discharge water from dewatering systems;
- diversion of clean water;
- treatment and disposal of wastewater from general clean-up of tools and equipment;
- spills control;
- a buffer zone of at least 20m separating working machinery from watercourses;
- a prohibition on machinery entering watercourses;
- refuelling of machinery off-site or at a designated bunded refuelling area and;

- silt trapping and oil interception (to be considered where surface water runoff could enter watercourses).

5.3 Noise

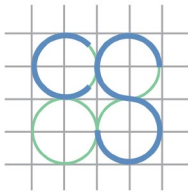
During the construction works the Contactor shall comply with:

- The Environmental Impact Assessment Report (EiAR) accompanying this planning application.
- Safety, Health and Welfare at Work (General Application) Regulations 2007, Part 5 Noise and Vibration.

A noise limit of 70 dB(A) $L_{Aeq, 1hr}$ shall be applied when measured at any noise sensitive receptor.

BS5228-1:2009+A1:2014 recommends that, for soundly constructed residential property and similar structures that are generally in good repair, a threshold for minor or cosmetic (i.e. non-structural) damage should be taken as a peak component particle velocity (in frequency range of predominant pulse) of 15mm/s at 4Hz increasing to 20mm/s at 15Hz and 50mm/s at 40Hz and above. Below these values, minor damage is unlikely. Where continuous vibration is such as to give rise to dynamic magnification due to resonance, the guide values will need to be reduced by up to 50%. BS 5228-2:2009+A1:2014 also comments that important buildings which are difficult to repair might require special consideration on a case-by-case basis.

All works on site shall comply with BS5228-1:2009+A1:2014 Part1 Noise & Part 2 Vibration which gives detailed guidance on the control of noise and vibration from construction activities. In general, the contractor shall implement the following mitigation measures during the proposed infrastructure works:



Noise Control & Mitigation Measures

A site representative responsible for matters relating to noise and vibration will be appointed prior to construction on site.

A noise and vibration monitoring specialist will be appointed to carry out independent monitoring of noise and vibration during critical periods at sensitive locations for comparison with limits and background levels. It is proposed that noise and vibration levels be maintained below those outlined above as part of these infrastructure works.

A noise liaison officer should be appointed and charged with the responsibility of keeping people informed of progress and by setting down procedures for dealing with complaints.

- No plant used on-site will be permitted to cause an ongoing public nuisance due to noise;
- The best means practicable will be implemented, including proper maintenance of plant, to minimise the noise produced by on-site operations;
- All vehicles and mechanical plant will be fitted with effective exhaust silencers and maintained in good working order for the duration of the contract;
- Compressors will be attenuated models fitted with properly lined and sealed acoustic covers which will be kept closed whenever the machines are in use and all ancillary pneumatic tools shall be fitted with suitable silencers;
- Machinery that is used intermittently will be shut down or throttled back to a minimum during periods when not in use;

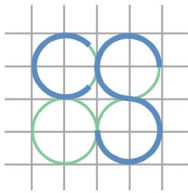
- During construction, the appointed Contractor will manage the works to comply with noise limits outlined in BS 5228-1:2009+A1 2014, Part 1 – Noise;
- All items of plant will be subject to regular maintenance. Such maintenance can prevent unnecessary increases in plant noise and can serve to prolong the effectiveness of noise control measures;
- Limiting the hours during which Site activities which are likely to create high levels of noise or vibration are permitted; and
- Monitoring levels of noise and vibration during critical periods and at sensitive locations.

Furthermore, a variety of practicable noise control measures will be employed. These may include:

- Selection of plant with low inherent potential for generation of noise and/or vibration;
- Erection of good quality site hoarding to the site perimeters which will act as a noise barrier to general construction activity at ground level;
- Erection of noise screens as necessary around items such as generators or high duty compressors; and
- Situate any noisy plant as far away from sensitive properties as permitted by site constraints.

Vibration Control & Mitigation Measures

The following specific vibration mitigation and control measures shall be considered during the construction phase:



- Breaking out concrete elements using low vibration tools;
- Choosing alternative, lower-impact equipment or methods wherever possible;
- Scheduling the use of vibration-causing equipment, such as jackhammers, at the least sensitive time of day;
- Routing, operating or locating high vibration sources as far away from sensitive areas as possible;
- Sequencing operations so that vibration causing activities do not occur simultaneously;
- Isolating the equipment causing the vibration on resilient mounts;
- Keeping equipment well maintained;
- Confining vibration-generating operations to the least vibration-sensitive part of the day which could be when the background disturbance is highest.

5.4 Air Quality Monitoring

An air quality monitoring (Air Quality and Dust monitoring) specialist will be appointed to carry out independent monitoring during critical periods at sensitive locations for comparison with limits and background levels.

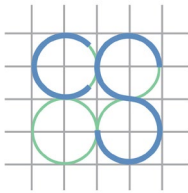
Dust deposition and Particulate Matter as PM₁₀ and PM_{2.5} shall be monitored at site boundaries in proximity to sensitive receptors

5.5 Air Quality Control and Mitigation Measures

The Contractor will ensure that all construction vehicles that exit the site onto the public roads will not transport dust and dirt to pollute the external

roadways. This will be achieved through a combination of the following measures:

- Hard surface roads will be swept to remove mud and aggregate materials from their surface while any unsurfaced roads will be restricted to essential site traffic.
- Any road that has the potential to give rise to fugitive dust must be regularly watered, as appropriate, during dry and/or windy conditions.
- Vehicles exiting the site shall make use of a wheel wash facility where appropriate, prior to entering onto public roads.
- Vehicles using site roads will have their speed restricted, and this speed restriction must be enforced rigidly. On any unsurfaced site road, this will be 20kph, and on hard surfaced roads as site management dictates.
- Vehicles delivering material with dust potential (soil, aggregates) will be enclosed or covered with tarpaulin at all times to restrict the escape of dust.
- Public roads outside the site will be regularly inspected for cleanliness and cleaned as necessary.
- Material handling systems and site stockpiling of materials will be designed and laid out to minimise exposure to wind. Water misting or sprays will be used as required if particularly dusty activities are necessary during dry or windy periods.
- During movement of materials both on and off-site, trucks will be stringently covered with tarpaulin at all times. Before entrance onto



public roads, trucks will be adequately inspected to ensure no potential for dust emissions.

- Restrict un-surfaced roads to essential site traffic.
- Construction techniques shall minimise dust release into the air.

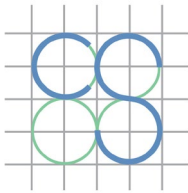
The use of appropriate water-based dust suppression systems will greatly reduce the amount of dust and windborne particulates as a result of the construction process. This system will be closely monitored by site management personnel, particularly during extended dry periods and in accordance with site management methods.

5.6 Harmful Materials

Harmful material will be stored on site for use in connection with the construction works only. These materials will be stored in controlled manner within the secure Contractor's Compound. Where on site facilities are used, there will be a bunded filling area using double bunded steel tank at a minimum.

6.0 WASTE MANAGEMENT

Please refer to the separate Site-Specific Construction and Demolition Waste Management Plan carried out by Byrne Environmental Consulting Ltd for details of waste management during the construction phases of the project.



7.0 TRAFFIC MANAGEMENT

7.1 Site Traffic, Traffic and Pedestrian Management

The anticipated truck movements from and to the site in relation to the preliminary programme for the works will be nominated in the construction methodology by the main contractor.

The construction site will be delineated by means of hoardings and lockable gates with screened fencing at the entry and exit points. The Contractor will pay particular attention to pedestrian traffic and safety at the entrances. All vehicles will enter and exit the site in a forward direction.

Pedestrians will have right of way. If required, alternate pedestrian routes around the site will be created and clearly signed. Depending on the progress of the works and temporary constraints imposed by the construction methodology, the location of access and exit points to the site could vary.

7.2 Minimization of Construction Vehicle Movements

Construction-related vehicle movements will be minimized through:

- consolidation of delivery loads to/from the site and scheduling of large deliveries to occur outside of peak periods;
- use of precast/prefabricated materials where possible;
- reuse of 'cut' material generated by the construction works on site where possible, through various accommodation works;
- provision of adequate storage space on site;
- development of a strategy to minimise construction material quantities as much as possible and;

- promotion of public transport use by construction personnel, in order to minimise staff vehicle movements.

The following headings identify the measures that will be encouraged.

7.2.1 Cycling

Cycle parking spaces will be provided on the site for construction personnel. In addition, lockers will be provided to allow cyclists to store their cycling clothes.

7.2.2 Car Sharing

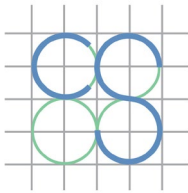
Car sharing among construction personnel will be encouraged, especially from areas where construction personnel could be clustered. The contractor shall aim to organize shifts in accordance with personnel origins, hence enabling higher levels of car sharing. Such a measure offers a significant opportunity to reduce the proportion of construction personnel driving to the site and will minimise the potential traffic impact on the surrounding road network.

7.2.3 Public Transport

Construction personnel will be encouraged to use public transport as means to travel to and from the site. An information leaflet shall be provided to all personnel as part of their induction on site, highlighting the location of the various public transport services in the vicinity of the construction site.

7.3 Public Roads

A Visual Condition Survey (VCS) will be carried out of all surrounding streets prior to any site works commencing. The contractor will liaise with the Transportation and Infrastructure department of DCC to agree any changes to load restrictions and construction access routes for the site.



Measures will be put in place as required to facilitate construction traffic whilst simultaneously protecting the built environment.

The following measures will be taken to ensure that the site, public roads and surroundings are kept clean and tidy:

- a regular program of site tidying will be established to ensure a safe and orderly site;
- scaffolding will have debris netting attached to prevent materials and equipment being scattered by the wind;
- food waste will be strictly controlled on all parts of the site;
- mud spillages on roads and footpaths outside the site will be cleaned regularly and will not be allowed to accumulate;
- wheel wash facilities will be provided for vehicles exiting the site and;
- in the event of any fugitive solid waste escaping the site, it will be collected immediately and removed.

8.0 COMPOUND FACILITIES / PARKING

The construction compound for the infrastructure works shall be entirely within the site boundary, although in some instances located outside the phase being constructed. Please see attached Figure 4 which identifies indicative site compounds associated with the various phases. The compound shall be constructed using a clean permeable stone finish and will be enclosed with security fencing. Site accommodation to be provided will include suitable washing / dry room facilities for construction staff, canteen, sanitary facilities, first aid room, office accommodation etc. Access to the compound will be security controlled and all site visitors will be required to sign in on arrival and sign out on departure.

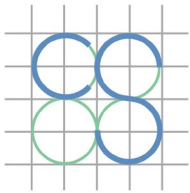
A permeable hardstand area will be provided for staff parking and these areas will be separate from designated machinery / plant parking.

A material storage zone will also be provided in the compound area. This storage zone will include material recycling areas and facilities. A series of 'way finding' signage will be provided to route staff / deliveries into the site and to designated compound / construction areas.

On completion of the works all construction materials, debris, temporary hardstands etc. from the site compound will be removed off site and the site compound area reinstated in full on completion of the works.

8.1 Coronavirus Policy

COVID-19 is an infectious disease caused by coronavirus that can affect an individual's lungs and airways and is potentially fatal. It has been declared a pandemic by the World Health Organisation (WHO). The appointed contractor shall incorporate site specific protection measures within their Construction Stage Safety & Health Plan. This shall include measures outlined in the Construction Industry Federation (CIF) document,



Construction Sector C-19 Pandemic Standard Operating Procedures, such as displayed poster style information from the WHO, hand sanitizing units and regular cleaning etc.

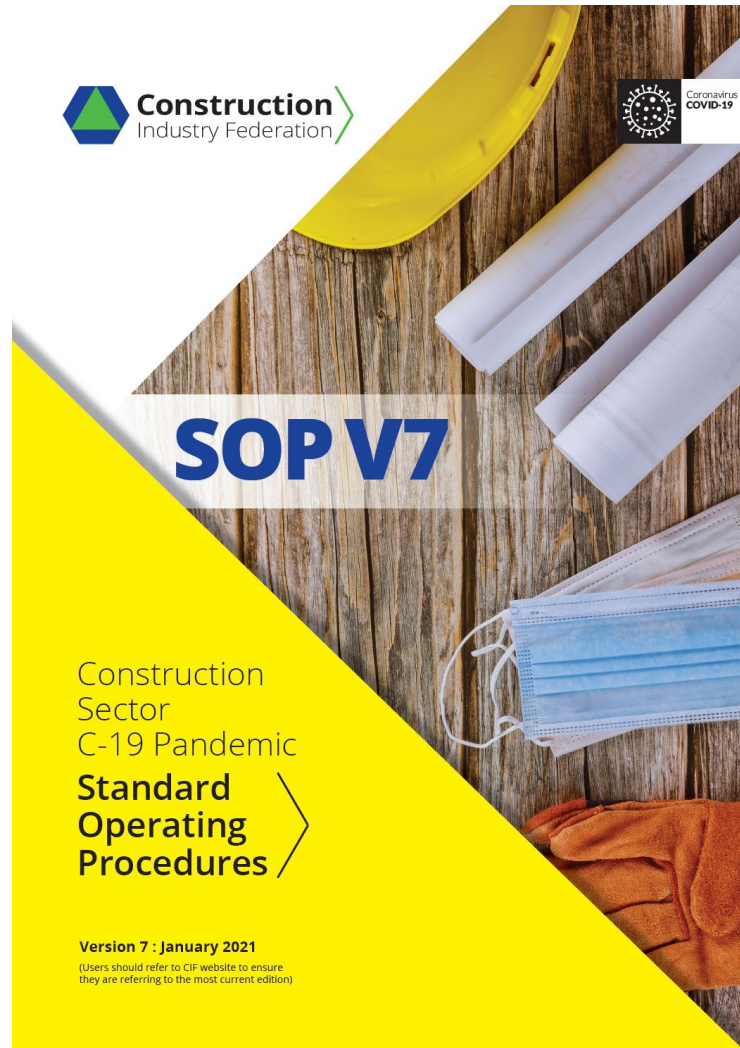


Figure 5: Construction Sector C-19 Pandemic Standard Operating Procedures (Published by CIF)

9.0 PROVISIONS FOR CONSTRUCTION

9.1 Hoarding, Set-up of Site & Access/Egress Points

The site area will be enclosed with hoarding details of which are to be agreed with DCC as previously mentioned. Hoarding panels shall be maintained and kept clean for the duration of the project. This shall involve erecting the hoarding around the proposed site perimeter in line with the finished development description.

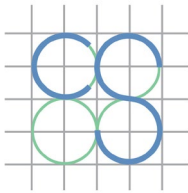
9.2 Removal of Services

Prior to site clearance, a utility survey will be carried out by the contractor to identify existing services. All services on site will be disconnected, diverted or removed as agreed with service providers. As noted, any necessary temporary diversions required to maintain a service to the DCC Development (under construction) shall be agreed with DCC prior to carrying out the works.

9.3 Invasive Species Treatment

DCC have engaged a specialist, Envirco, to carry out a Japanese Knotweed survey and associated treatment to localized areas of the site. Prior to commencement of any earthworks, an updated inspection shall be carried out in accordance with the guidance outlined in the Wildlife Act 1976 and 2000 and further regulated through the European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011).

Should the survey identify any areas of Japanese Knotweed infestation, a Treatment Plan shall be developed in accordance with published guidelines (namely, *The Environment Agency, Managing Knotweed on Development Sites, Knotweed Code of Practice, 2013*).



For the subject site, it would be proposed to utilise controlled excavation with off-site disposal (“*dig and dump*”) to eradicate any identified areas of Japanese Knotweed. Each identified stand of Japanese knotweed shall be excavated under the supervision of a specialist invasive species contractor, whereby all viable knotweed material (crown, stem, rhizome) and contaminated soil will be removed from the site and disposed of at a previously identified licensed landfill facility. All necessary protection measures shall be implemented to prevent the spread of the knotweed, such as thorough cleaning of machinery, good hygiene amongst operatives etc.

Following removal of the material, a monitoring programme shall be maintained to check any re-growth.

9.4 Site Clearance

The existing land previously had a development and the site could contain existing services and hazards.

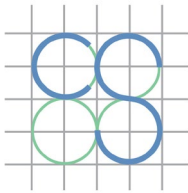
- The following is a high-level method statement for the demolition/break up of existing hardstanding;
- Establish a site set-up and welfare facilities;
- Carry out an invasive species survey using a qualified and approved surveyor (see above);
- Carry out a detailed services survey of the site to identify all buried services, determine what services are live, redundant and potentially serve neighbouring properties. To be performed before any ground break up is performed on site;
- Carry out any necessary services diversions and decommissioning works.

Breaking ground will only take place following a full survey. Any materials identified as being hazardous will be removed and disposed of in strict accordance with the applicable legislation. All services will be disconnected and removed. Any existing slabs or hardstanding and concrete foundations will be broken by excavators. All reinforced concrete will be partially processed on site to separate the steel from the concrete. All materials will either be fully separated on site and disposed of to the applicable landfills / processing facility or failing that material will be sent to a processing facility for separation. Relevant certification and documentation confirming the final separation and most environmentally friendly disposal will be available.

9.5 Excavation

The proposed site levels are determined by a combination of factors such as tie-ins with existing roads, existing topography, TGD Part M compliant access to ground floor levels etc. The profiling of the site to accommodate the proposed site levels, and the absence of any raised landscaping features, will result in a surplus of "cut" material which will be exported off site to suitably licensed landfill facilities.

The Contractor must prepare a Construction Waste Management Plan in accordance with the "*Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects*" (Department of Environment, Heritage and Local Government, 2006) and ensure that all material is disposed of at an appropriately licensed land fill site. The Contractor must also outline detailed proposals within the Construction Management Plan to accommodate construction traffic.



9.6 Foundation Works

It is likely that piling shall be required for the substructure of the apartment blocks. The excavation and preparation of the foundation works will generate spoil that must be disposed of at an appropriate licensed land fill site. The concrete operations associated with the foundation will require concrete deliveries to site. The frequency of construction movements to site shall be outlined by the Contractor in their CTMP.

9.7 Superstructure

The construction of the superstructure will involve complex sequencing of activities and various construction methodologies could be adopted to deliver the Contract. As noted the construction methodology and therefore the programme of the construction activities will be dictated by the Contractor.

The following are potential options for the superstructure design:

9.7.1 Apartment Blocks

- RC Column & Flat Slab
- RC/Masonry Cross Wall & Precast Slab
- Precast Concrete Twin Wall & Precast Slab

9.7.2 House Construction

- Timber Frame Erection
- Traditional Masonry Construction

The following outlines a general construction sequence for the superstructure:

9.7.3 Building Structure:

- Construction of the foundations/substructure.
- Construction of rising elements to 1st floor and 1st floor slabs.
- Similar sequence of construction of rising elements and floor slabs.
- Note allowance for service construction concurrently or before superstructure.

9.7.4 Envelope / Cladding:

- Envelope works will follow in a sequential manner.

9.7.5 Mechanical & Electrical fit-out:

- First fix will commence at each level behind structure.
- This will be followed by the second fix and the final connections.

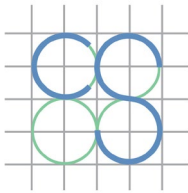
9.7.6 Fit-out:

- Initial installation of any stud work when cladding is complete and floor is weather tight.
- Installation of equipment and associated connection to services.
- Completion of finishes.

9.7.7 Commissioning:

- The final commissioning period will commence during fit-out.

The above is an indicative construction sequence. The final sequence shall be dictated by the Contractor. The Contractor must issue a detailed



construction programme as part of their Construction Management Plan outlining the various stages prior to commencement of works.

9.8 Erection and operation of cranes

Three or four tower cranes will be temporarily erected in each phase to accommodate the construction works for the distribution of reinforcing steel, concrete skips, concrete formwork element and general building materials. The Contractor will need to obtain all necessary licences from the Local Authority. A “mast climber” will be installed at some local areas to facilitate façade features. The mast climber is essentially a climbing platform that allows the user to safely access any level without the requirement for a full scaffold tower.

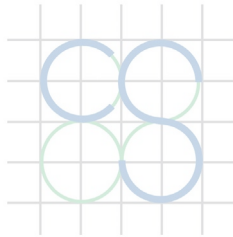
10.0 CONCLUSION

This Outline Construction Management Plan (OCMP) has been prepared for a proposed residential development at O'Devaney Gardens, Dublin 7 to give an overview of the processes to be employed during construction of this project.

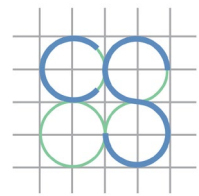
The aim of this OCMP is to address the following issues that can arise during construction;

- Construction Phasing and Site Management;
- Environmental Management, including Noise and Vibration mitigation measures;
- Traffic management and the detail to be provided in the Contractor's CTMP;
- Working hours;
- Pollution control;
- Dust control;
- Road cleaning;
- Compound / public health facilities, including COVID-19 Protection Measures, and staff parking
- Indicative construction methodology

This plan will be revised by the appointed lead contractor and expanded to produce a Detailed Construction Management Plan which will be agreed with Dublin City Council (DCC) in advance of the construction phase.



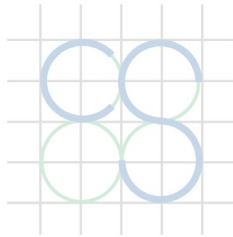
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Appendix A

Indicative Site Set-Up



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