

**Rathgowan, Mullingar Housing  
Development, Co. Westmeath**

**Outline Construction Management Plan**

**June 2022**

## Document Control

Document Number 202215-PUNCH-XX-XX-RP-C-0005

Status	Revision	Description	Date	Prepared	Checked	Approved
-	PL0	Planning Issue	18/10/2021	J.P. Murray	P. Casey	P. Casey
A0	C01	Stage 3 SHD	23/06/2022	J.P. Murray	P. Casey	P. Casey

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## 1 Introduction

The purpose of this document is to briefly outline the general activities required for the construction of the proposed Rathgowan Strategic Housing Development (SHD) on a site located on the outskirts of Mullingar, Co. Westmeath.

A Main Contractor has not yet been appointed to carry out the proposed works. Once appointed, it will be the responsibility of the Main Contractor to prepare and submit a detailed construction management plan for the Client's submission to the local authority for approval. The construction management plan will be a live document that will be updated throughout the project lifecycle by the Main Contractor as required.

Regardless of the form of contract, the Contractor will be contractually bound by any conditions arising from the site constraints identified and specified, all Statutory Regulations governing the works, and any additional measures or modifications that may be imposed on the proposed development by the local authority or An Bord Pleanála.

## 2 Description of the Works

DSPL Limited intends to apply to An Bord Pleanála for permission for a strategic housing development on a site area of 6.37Ha located at Rathgowan, Mullingar, Co. Westmeath. The site is located north and east of existing housing at Ardilaun Heights and Rathgowan Wood, north-west of the R394, which is known as the Mullingar Western Relief Road and south of the R393 Ashe Road, all in the townland of Rathgowan or Farranshock.

The proposed development will consist of 212 no. dwellings and a creche. The residential dwellings are comprised of 107 no. 2 & 3 storey houses, 86 no. 2 & 3 bed duplex units in 8 no. 3 storey blocks and 19 no. 1 & 2 bed apartments accommodated 1 no. 4 storey building which also accommodates a crèche at ground floor level (430sq.m), with associated outdoor play area. The proposed houses consist of 31 no. 2 bed, 70 no. 3 bed and 6 no. 4 bed detached, semi-detached and terraced houses.

The proposed development provides for all associated site development works, relocation of existing underground surface water attenuation tank, car parking, bin & bicycle storage, public and communal open spaces, hard & soft landscaping and boundary treatments, underground utilities, substation and public lighting. Vehicular access to the development will be off the R394, via Rathgowan Park with pedestrian & cyclist access also proposed onto the R393 Ashe Road to the north.

The proposed works are outlined in a series of architectural drawings prepared by BKD Architects and engineering drawings prepared by PUNCH and supplied as part of the planning documentation.

Please refer to Figure 1 for the location of the proposed development.

## 3 Indicative Construction Programme

It is estimated that the construction programme for the works associated with the proposed works will last 24 months from the date of commencement. This estimation is based on the typical construction programmes for other similar developments that are currently underway. It is envisaged that construction of the proposed building and external works will be carried out over a single phase. The Main Contractor will be required to prepare a detailed construction programme as part of their tender proposal.

## 4 Site Set-Up and Security

The Main Contractor will be required to submit a site layout plan that will detail the proposed location of the site compound. The Contractor will ensure that the site compound will be serviced as required

and will be secured with appropriate fencing/hoarding. The site compound will be used as the primary location for the storage of materials, plant and equipment, site offices and worker welfare facilities. As Project Supervisor Construction Stage (PSCS), the Contractor will be responsible for site security and they are to ensure that the site and site compound are adequately secured at all times.

As with the other construction activities that are being carried out within the Westmeath County Council local authority area, activities associated with the construction compounds will be subject to restrictions to the nature and timing of operations so that they do not cause undue disturbance to neighbouring areas and communities.

The site layout plan will also include the site perimeter and the proposed detail with regards the hoarding and gate system.

## **5 Site Access**

There is one existing access route onto the site from Rathgowan Park to the south. This serves the existing Rathgowan Wood & Rathgowan Park buildings adjacent to the site. The proposed scheme will integrate the site into the surrounding footpath networks providing construction and operational vehicle access and convenient pedestrians/cyclist routes linking the site with Rathgowan Wood, Rathgowan Park and the surrounding area.

Construction related traffic will enter the site via the existing roundabout on R394 and proceed onto the Rathgowan Park entry road to the development location. Refer to Section 7 and Figure 1 below for illustration.

## **6 Material Storage and Delivery**

The Contractor will ensure that the delivery of materials is coordinated to minimise impacts to adjacent properties. The Contractor will ensure that all materials are adequately stored and secured in their site compound.

For more details please refer to the 'Outline Resource and Waste Management Plan' prepared and included in the planning submission.

The Contractor will ensure the roads adjacent to the site are kept clean and free of debris.

## **7 Traffic Management Plan**

The Contractor will be required to prepare and submit a detailed traffic management plan as part of their tender submission. Once appointed, the preferred Contractor will further develop the traffic management plan as required for the developer to submit to the local authority for approval in advance of works commencing onsite. The Contractor will ensure that advanced warning signs are erected on approaches to the site as required by the PSCS. The Contractor will use a competent sign provider and all signage that meets the requirements of the Safety, Health & Welfare at Work (General Applications) Regulations 2007 and Chapter 8 Traffic Signs Manual. Any proposed temporary road markings must also confirm to the requirements of Chapter 8 of the Traffic Signs Manual.

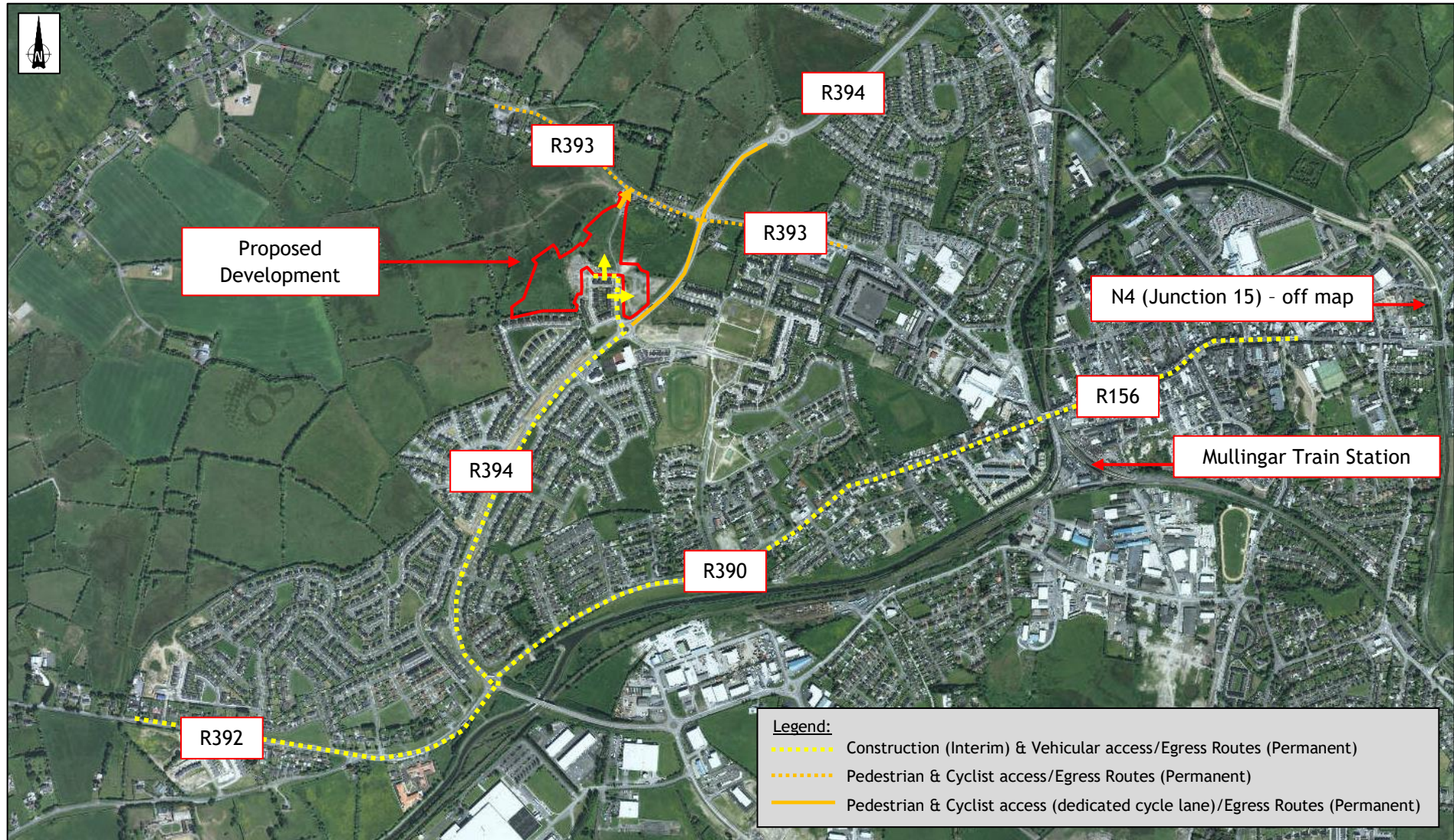


Figure 1: Proposed Primary Route To/From Site (© myplan.ie)

The Main Contractor will be responsible for all site access and works activity and must ensure the continued operation of the surrounding local road network as a result of its construction traffic.

The management of construction traffic on the public and private road networks in and around the proposed development is a critical part of the overall project and must be actively managed by the Contractor.

The Contractor must submit a Construction Traffic Management Plan to the Local Authority for approval. Haulage vehicle movements should be fully coordinated to comply with the requirements of the agreed plan:

- Construction vehicles must not stop or park along the routes at any time;
- Haulage vehicles must not travel in convoys greater than two vehicles at any time;
- Site entrance to remain free of parked or stationary vehicles at all times;
- All loading of demolition material will occur within the site boundary;
- All off-loading of deliveries will take place within the site, remote from the public road and will access via the agreed construction access point.

The site is located in a suburban area where the road and junction space is shared with public road users and construction traffic associated with other nearby developments. Therefore, the flow of construction traffic will need to be marshalled and controlled to ensure that potential conflicts are avoided as much as possible.

There are no proposals to introduce temporary road closures or temporary traffic light signals to facilitate construction of the proposed development. There are also no proposals to amend the existing local access arrangements to the surrounding areas.

For more details please refer to the ‘Outline Resource and Waste Management Plan’ prepared and included in the planning submission.

## 8 Potential Interface with Other Projects

In the case that other developments are being constructed simultaneous to the proposed development, the appointed Contractor must co-ordinate with all other Contractors to ensure a smooth interface between projects that results in the construction projects having a minimal effect on nearby residents.

It is currently anticipated that 1 no. other major development may be constructed in proximity to the proposed Rathgowan development. Figure 2 provides details of the nature of the development and Figure 3 shows an extract from the planning database map showing their location. The potential site (both applications relate to the same site boundary) are located at the junction of the R393 and R394, approximately 200m from the proposed site.

Planning Application No	Description	Planning Status
2197	Residential development comprising of the construction of 98 no. residential units, 1 no. childcare facility.  Access will be via the existing entrance on the R394(C-Link) to the north of the site. This development will form part of a larger two phase development at this location.	New application  (application received 26/02/21)

<p>21139</p>	<p>Residential development comprising of the construction of 83 no. residential units, 1 no pumping station.</p> <p>Access will be via the existing entrance on the R394 (C-Link) to the north of the site. This development will form part of a larger two phase development at this location.</p>	<p>Further information (application received 23/03/21)</p>
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Figure 2: Potential Interface with Other Projects - Planning details (Ref: Westmeath Planning Applications)

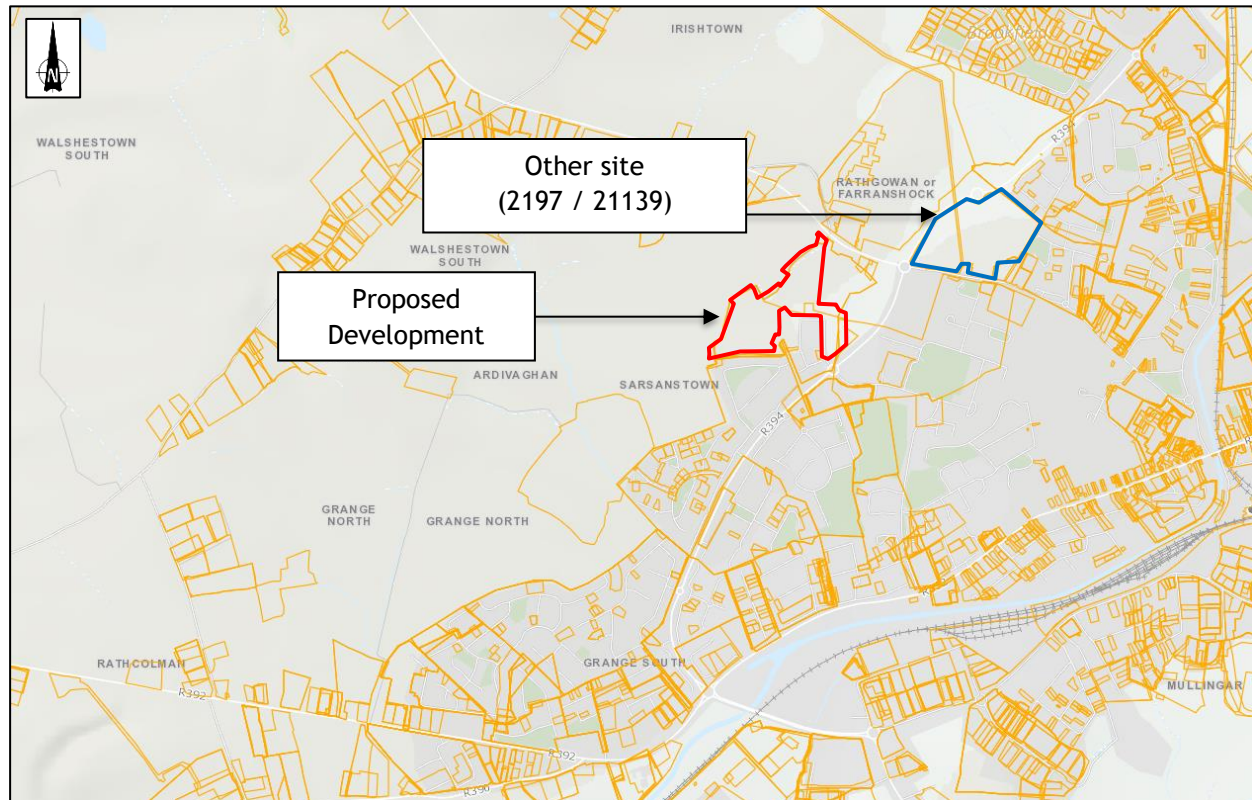


Figure 3: Potential Interface with Other Projects - Location in relation to proposed site (Ref: Westmeath Planning Applications)

There may be a number of PSCS's operating in the urban locality at any one time on individual sites. It will be responsibility of the appointed Contractor as PSCS to ensure that delivery and haul routes, site access and egress points and potential crossing points associated with the site are fully coordinated and agreed with other Contractors in advance of the works commencing.



## 9 General Construction Approach

### 9.1 Construction Working Space

Construction working space will be set out in the detailed construction management plan at compliance stage.

Construction access routes, haul routes and delivery routes to the site are to be agreed with the Engineer/Employer's Representative in advance of works commencing onsite.

Any road closures required will be submitted and approved in advance with the local authority. It is the responsibility of the Main Contractor to prepare and submit the road closure application to the local authority in advance of works commencing onsite.

### 9.2 Outline Phasing Strategy

It is currently envisaged that the proposed development will be completed in 4no. phases as detailed below. For further details relating to the works, please refer to the more detailed planning drawings (architectural, engineering, landscape, etc.) including the specific outline phasing proposals prepared by BKD Architects.

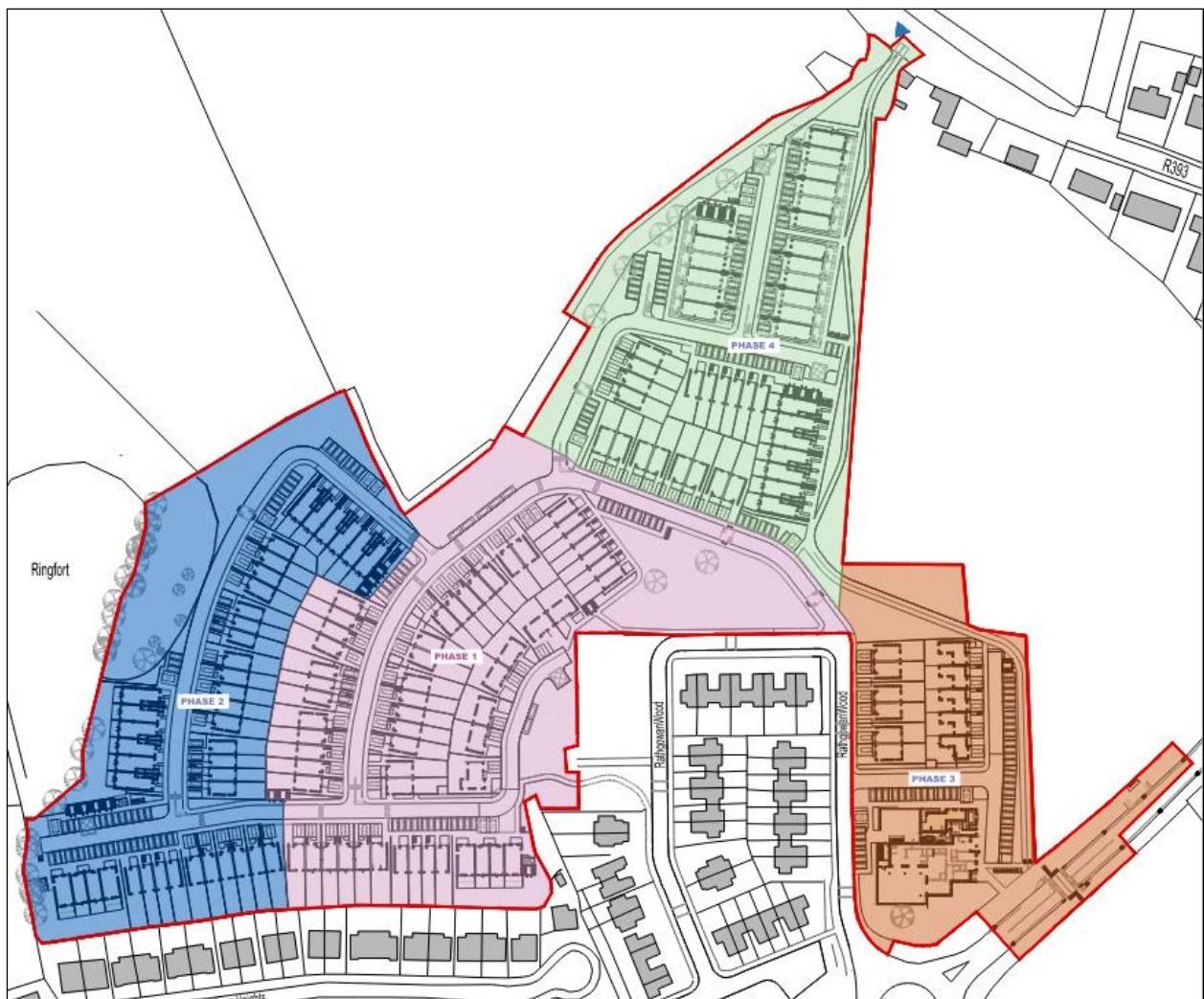


Figure 4: Proposed Site Layout Construction Phases (Extract: BKD Drawing 6253-P-003)

The various phases will follow a similar pattern of staged construction:

1. Establish secure site perimeter (fencing/hoarding) and establishment of the construction compound(s).
2. Construction of access road and connections from the Rathgowan Park entry road to the Rathgowan development entrance.
3. Construction of associated services along the access road to enable connection to relevant service tie-in locations (to be progressed in tandem with Item 1). Please note that the associated downstream drainage infrastructure network will need to be established throughout the Phase 3 extents to facilitate development of Phases 1 and 2.
4. Topsoil removal and stockpiling as required throughout development lands.
5. Site regrading throughout development extents to establish construction levels and introduce berms.
6. Completion of internal construction access routes (temporary surfacing) throughout the development interior and completion of associated service routes and ancillary works.
7. Establish proposed and future potential access routes to adjoining lands as required.
8. Installation of drainage/SuDS elements throughout the site.
9. Construction of residential units in defined sequence.
10. Completion of internal road network to permanent status, including associated private realm SuDS measures.
11. Delivery of landscaping and parks/recreation elements throughout the development phase extents.

### 9.3 Outline Works Description

The construction works will involve an indicative sequence of works, as described in short below. The Contractor will outline works which impact public spaces within the Construction Management Plan that shall be subject to submission and agreement with Westmeath County Council.

#### 9.3.1 Hoarding, Site Set-up and Formation of Site Access/Egress

The site area will be enclosed with hoarding details of which are to be agreed with Westmeath County Council. Hoarding panels will be maintained and kept clean for the duration of the works. This will involve erecting hoarding around the proposed site perimeter in line with the finished development extents.

The available site footprint will enable the Contractor to set up the site compound within the site boundary.

The Contractor will be responsible for the security of the site. The Contractor will be required to:

- Operate a Site Induction Process for all site staff;
- Ensure all site staff shall have current 'Safe Pass' cards and appropriate PPE;
- Install adequate site hoarding to the site boundary;
- Maintain site security at all times;
- Install access security in the form of turn-styles and gates for staff;
- Separate public pedestrian access from construction vehicular traffic;

#### 9.3.2 Site Clearance and Demolition

The location is a greenfield site and will require minimal site clearance beyond topsoil removal and some tree removal.

It is noted that the proposed development consists of the construction of residential housing and the associated site landscaping and ancillary development.

### 9.3.3 Construction Sequence of Development

The construction of all superstructure will follow completion of all RC substructure elements. The subsequent superstructure will consist of precast concrete slabs and loadbearing masonry walls on RC pads and strip footings.

The construction methodology and programme of these activities will be dictated by the Contractor.

#### Site Grading

A geotechnical report prepared by IGSL Ltd. (March 2005) indicates variations in sub soil type across the site with upper deposits of topsoil, soft peats and silts underlain predominantly by deposits of firm to stiff gravelly clays / gravelly silts but with some loose to medium dense sandy gravels also encountered in places beneath the upper soils.

The predominant soils in the area consist of Gravelly Clay and Silt, with some instances of Gravel. The Gravelly Clay and Silt is typically encountered at depths ranging from 0.2m to 2.5m bgl.

The Contractor must prepare a Construction and Demolition 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.

#### Construction Sequence of Superstructure

The construction of the various superstructures will involve complex sequencing of activities and various construction methodologies could be adopted to deliver the Contract. The nature of the buildings throughout the development, the column grids and economic factors, among other issues, would suggest that the buildings will be constructed utilising reinforced concrete frames.

As noted, the construction methodology and therefore the programme of the construction activities will be dictated by the Contractor.

#### Building Structures:

- Construction of the foundations - RC pads and strip footings.
- Construction of rising elements - Loadbearing masonry walls
- Construction of floor slabs - Precast concrete

#### Envelope / Cladding:

- Commencement of envelope works when structure has been constructed
- The structural blockwork will also act as the envelope for the structure, and cladding will follow completion of the blockwork.

#### Mechanical & Electrical Fit-Out:

- First fix will commence from ground floor level upwards;
- This will be followed by the second fix and final connections.

#### Fit-Out:

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

#### Commissioning:

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

The above represents a high-level indicative construction sequence only. The actual sequence will be dictated by the Contractor. The Contractor will issue a detailed construction programme outlining the various stages prior to commencement of works.

It is envisaged a crane will be temporarily erected to accommodate the lifting of precast elements and associated construction works for the distribution of building materials and plant in relation to the apartment block construction. The Contractor is required to obtain all necessary licences from Westmeath County Council.

## **10 Waste Management Plan**

The Main Contractor will be required to prepare a detailed waste management plan for the project. This will be included in the overall construction management plan that will be submitted to the local authority.

For more details please refer to the 'Outline Resource and Waste Management Plan' prepared and included in the planning submission.

## **11 Communications and Local Stakeholder Management**

The Contractor will, as required, liaise with owners of the local properties in advance of works commencing onsite. The Contractor will use a competent sign provider and all signage used will meet the requirements of the Safety, Health & Welfare at Work (General Applications) Regulations 2007 and Chapter 8 Traffic Signs Manual.

## **12 Arboriculture Impact and Tree Protection Strategy**

The overall objectives are to retain the maximum number of good quality trees whilst also achieving densities of housing compliant with current standards and planning recommendations. Proposed new tree planting is contained within the Landscape drawings by Ronan MacDiarmada & Associates Ltd, submitted as part of the planning package. These plantings will provide a new generation of trees which have the potential to develop and add to the existing tree cover on the site.

A Tree Protection Strategy is provided as part of the arboricultural element of the submission with the aim of ensuring retained trees and hedgerows are maintained for the duration of the construction stage of the development free of negative construction related impacts.

A Site Arborist shall be appointed prior to the commencement of site construction works and will be responsible for the setting up and monitoring of tree protection, liaising with local authority tree / planning officers and providing feedback and advice to the design construction teams on issues relevant to trees. The Site Arborist shall be retained for the duration of construction works and should be appointed to carry out a post-construction tree survey/assessment.

## **13 Construction Noise, Dust and Vibration**

The Main Contractor will be required to monitor noise, dust and vibration as will be outlined in the planning conditions. The Contractor will establish baselines for noise, dust and vibration in advance of works commencing onsite. As part of their detailed construction management plan, the Contractor will be required to clearly indicate how they plan on monitoring noise, dust and vibration throughout the course of the project. The Contractor will also be required to clearly outline the mitigation measures they plan on putting in place to ensure any breaches in the baselines are mitigated.

For more details please refer to the 'Outline Resource and Waste Management Plan' prepared and included in the planning submission.

## **14 Working Hours**

The proposed hours of work on site will be 07:00 hrs to 19:00 hrs Monday to Friday and 08:00 hrs to 16:30 hrs Saturday unless otherwise specified by planning conditions. It is anticipated that construction working hours will be stipulated in the planning conditions attached to the planning grant. Any working hours outside the normal construction working hours will be agreed with Westmeath County Council. The planning of such works will take consideration of sensitive receptors, in particular any nearby businesses.

For more details please refer to the 'Outline Resource and Waste Management Plan' prepared and included in the planning submission.

## **15 Lighting**

There are no proposals to alter the existing lighting arrangements in the area. It is not envisaged that any existing public lighting will need to be disconnected as a result of the proposed works. Appropriate lighting will be provided as necessary at construction compounds. All lighting will be installed so as to minimise light spillage from the site.

## **16 Construction Employment**

Construction employment numbers will vary depending on the construction stage of the project and the actual approach adopted by the Contractor. However, it is anticipated that at the peak of construction there may be a workforce of approximately 50 people employed.