

Residential Development
Blackrock, Dundalk, Co. Louth

Urban Design & Architectural
Statement of Consistency
May 2019

SHD Lodgement to
An Bord Pleanála





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1.Introduction

This document presents a vision for the sustainable residential development of the 13.8Ha net developable area of a 17.9Ha parcel of lands located within the townland of Haggardstown , 1.3km north of Blackrock Village Centre and approx. 3km south of the central core of Dundalk.

This document has been prepared by O'Mahony Pike Architects on behalf of Kingsbridge Consultancy Ltd as part of an Application Submission to An Bord Pleanala under the new Direct Application process for Major Housing Developments.

The proposed residential scheme comprises of 258 Houses, 225 Apartments (apt. + duplexes), childcare facility, adding to a total of 483 residential units.

In order to clearly demonstrate that best practice sustainable design strategies are being employed for this strategic site, the document follows the broad format laid down by the sustainable community development checklist outlined in the May 2009 DoEHLG document 'Urban Design- A Best Practice Guide'.

The checklist is reproduced in Section 5 for ease of reference.



SITE CONTEXT

2. Context

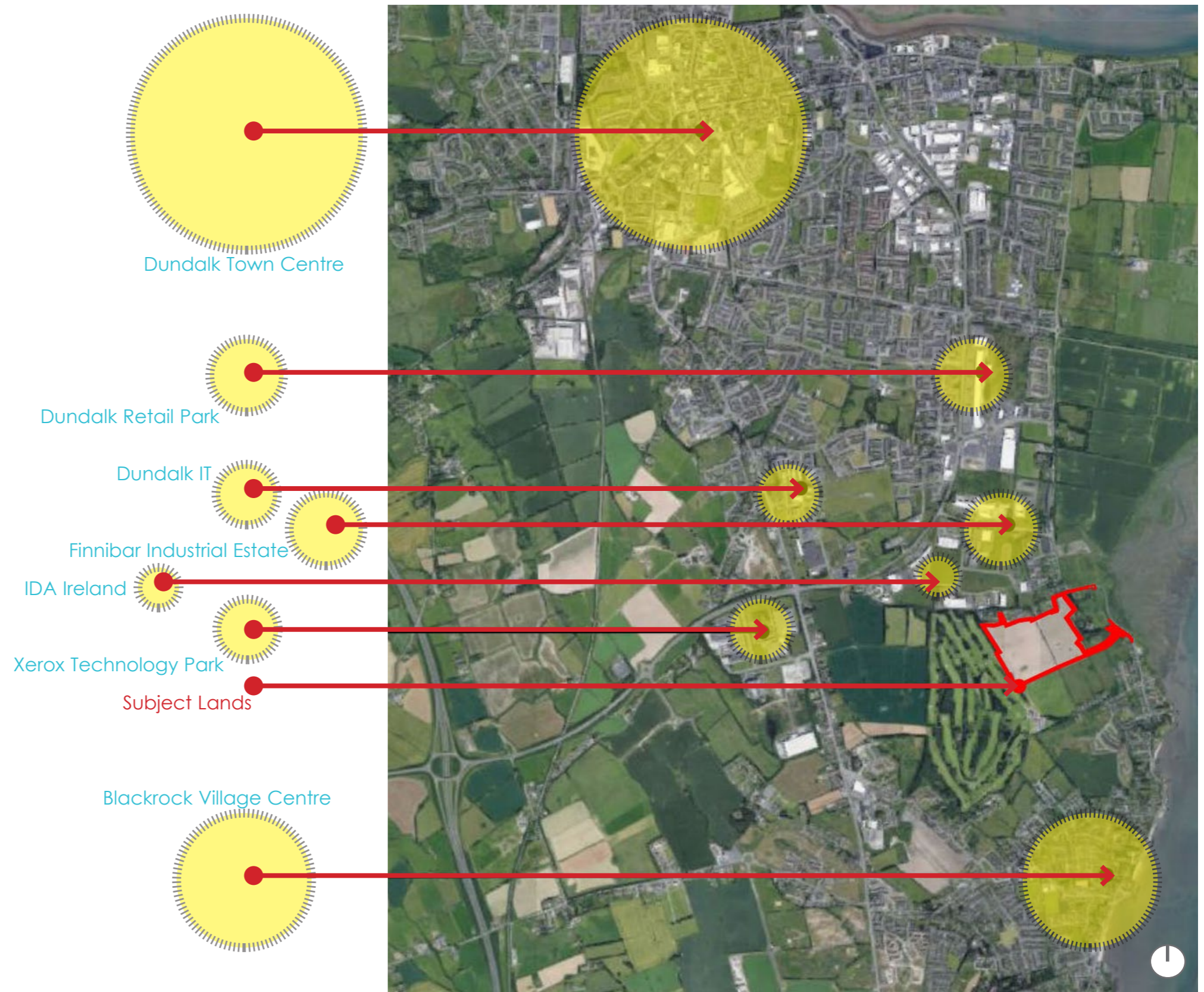
2.1 Settlement Context

The subject lands comprise of approximately 17.9Ha located off the Blackrock Road in the area of Blackrock, County Louth.

This site is located approximately 1.3 kilometres north of Blackrock Village Centre and approximately 3 kilometres to the south of the centre core of Dundalk.

The lands are strategically located within close proximity to established employment generating land uses:

- the Finnibiar Industrial Estate is on the opposite side of the Bóthar Maol, approximately 70 metres north of the subject lands;
- farther north, the Dundalk Retail Park is approximately 700 metres from the subject site;
- the Xerox Technology Park and Dundalk Logistics Park are both approximately 1 Kilometre to the west of the lands; and,
- the Dundalk Institute of Technology Campus is approximately 600 metres to the northwest.



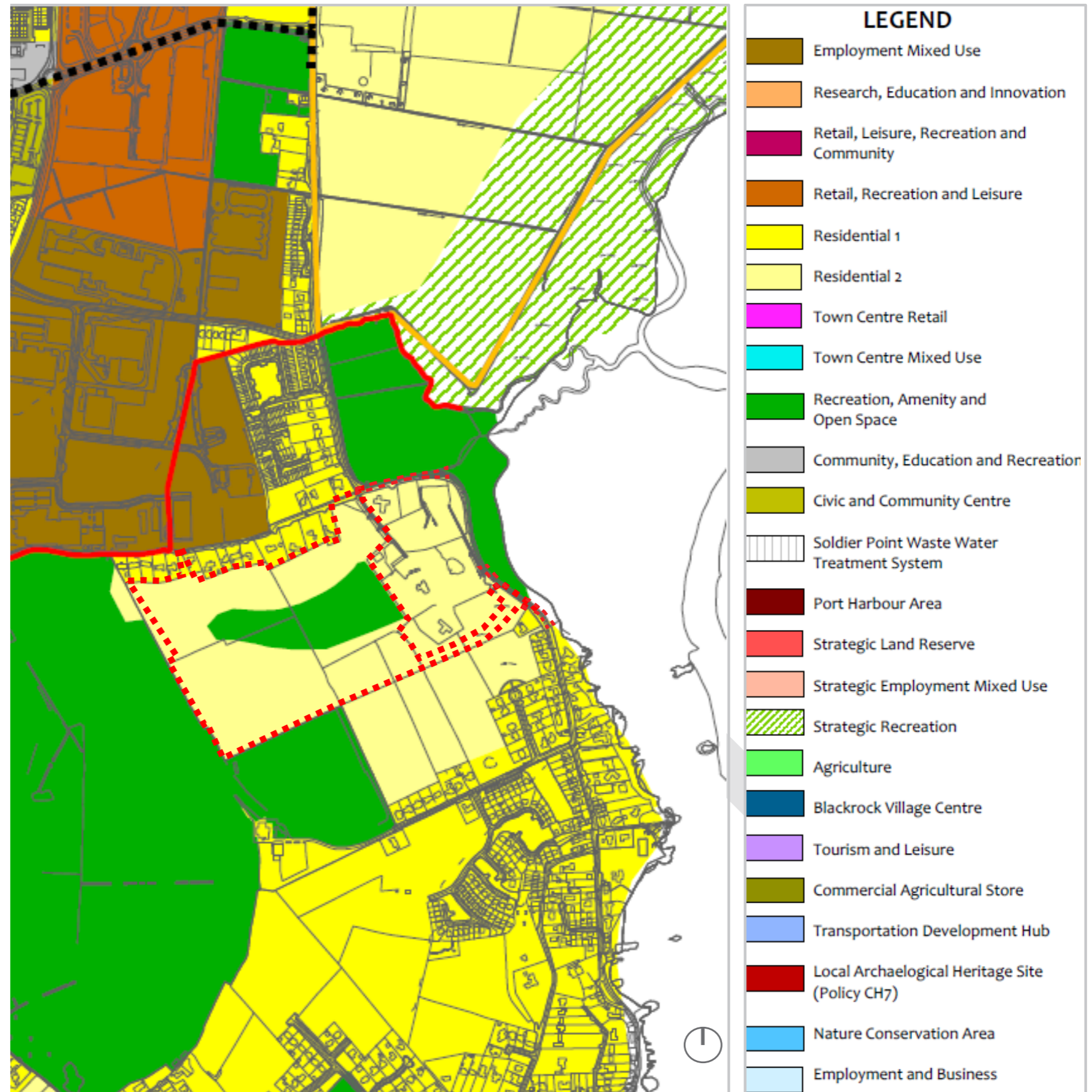
Strategic Context between two settlements

2.2 Planning Context

Under the Dundalk & Environs Development Plan 2009-2015 the area of the subject site is zoned 'Residential 2' with the objective "To provide for new residential communities and supporting community facilities subject to the availability of services" and 'Recreation, Amenity and Open Space' with the objective "To provide for the provision of public parks, open spaces, amenity and recreational facilities".

Table 2.4 'Zoning Uses' of the Plan lists those uses that are 'Permitted Uses', 'Uses Open to Consideration' and 'Not Permitted Use' under the Plan. This table lists Residential, Residential (Ancillary:), and Crèche / Childcare Facility are listed as 'Permitted Uses' on lands zoned 'Residential 2'. Allotments and Sports Facilities are 'Permitted Uses' on lands zoned 'Recreation, Amenity and Open Space'.

Of particular relevance to the framework proposed in this document is the zoned open space occupying the centre of the lands. In response to this, the framework presents a landscape led residential layout comprised of different character areas responding to open space, views and topography, and existing adjacent residential amenity.



Dundalk and Environs LandUse Plan 2009 - 2015

2.3 Site Character & Adjoining Context

The subject site is currently good quality rolling agricultural land, occupying an area of c. 179,566 sqm (17.9Ha.), generally square in plan and subdivided into a small number of relatively large field enclosures.

The Northern boundary is defined by a variety of private residential properties which front Bothar Maol, a historic route, which is only publically accessible along the eastern portion adjoining the site.

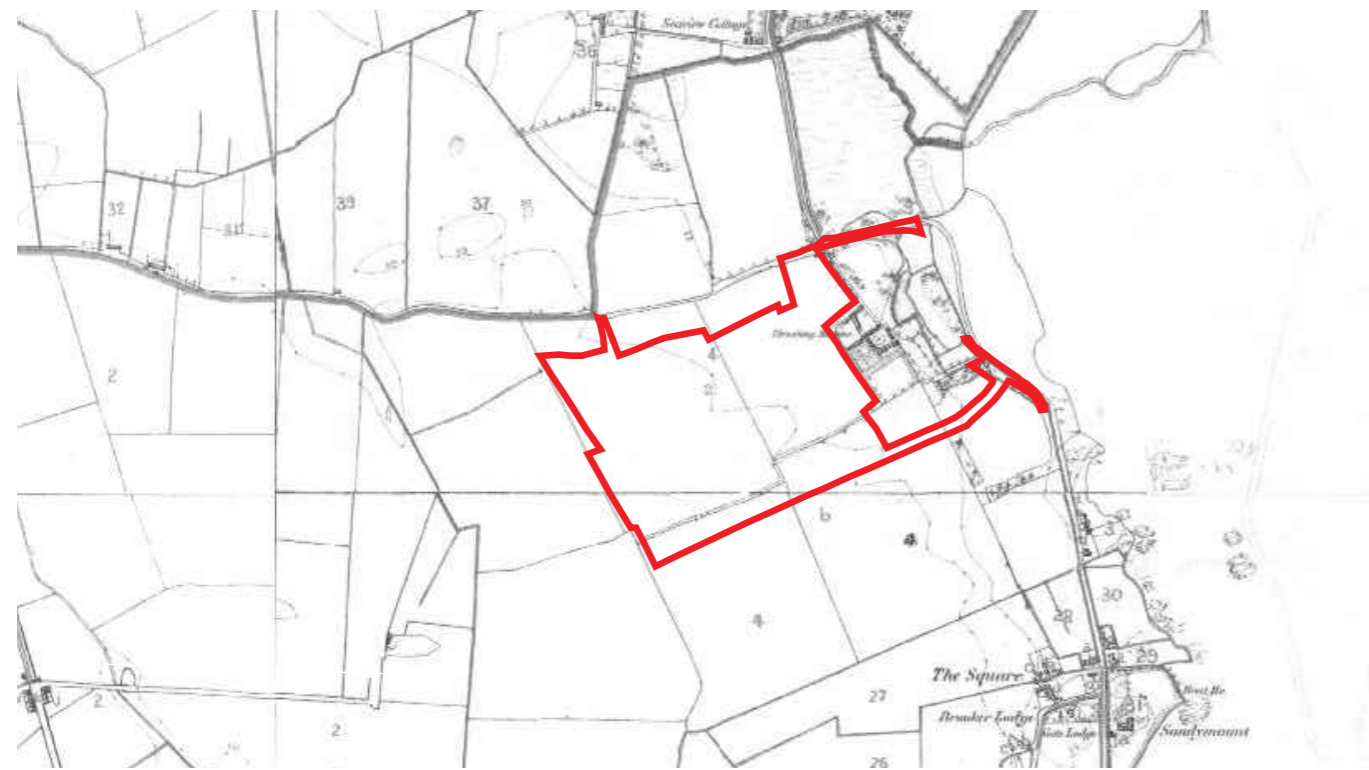
The western and part of the southern boundary of the site adjoins Dundalk Golf Course and practice range. The majority of this boundary is fenced and planted with non-native conifer.

The remainder of the southern boundary joins with lands which are currently in agricultural use, but also zoned for residential use.

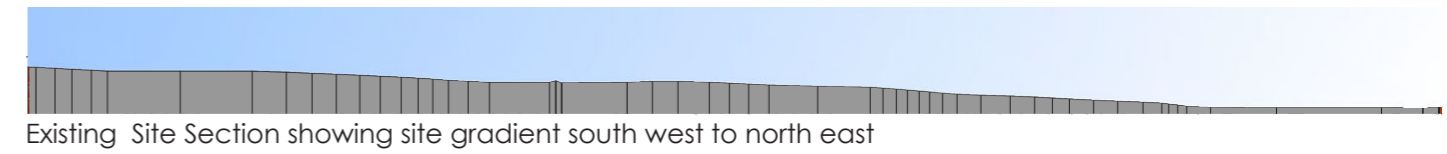
Along much of the eastern boundary (particularly to the north east) are mature hedgerows and trees which separate the site from two large sites which are privately owned residential properties.

As illustrated in the site topographical survey, the land undulates significantly, with a general rolling transition from the lowest point to the north east corner at c. 5mAOD (where it meets Bothar Maol) to a high point of 23.78mAOD to the south west (at the boundary with the golf course / practice area). Along the southern boundary the slope falls from south west, the highest point of 23.78AOD to the east (site main access entrance) at the lowest point of c. 3mAOD.

Bothar Maol's historic role as a connective lane/ road is confirmed by the 1850's historic mapping.



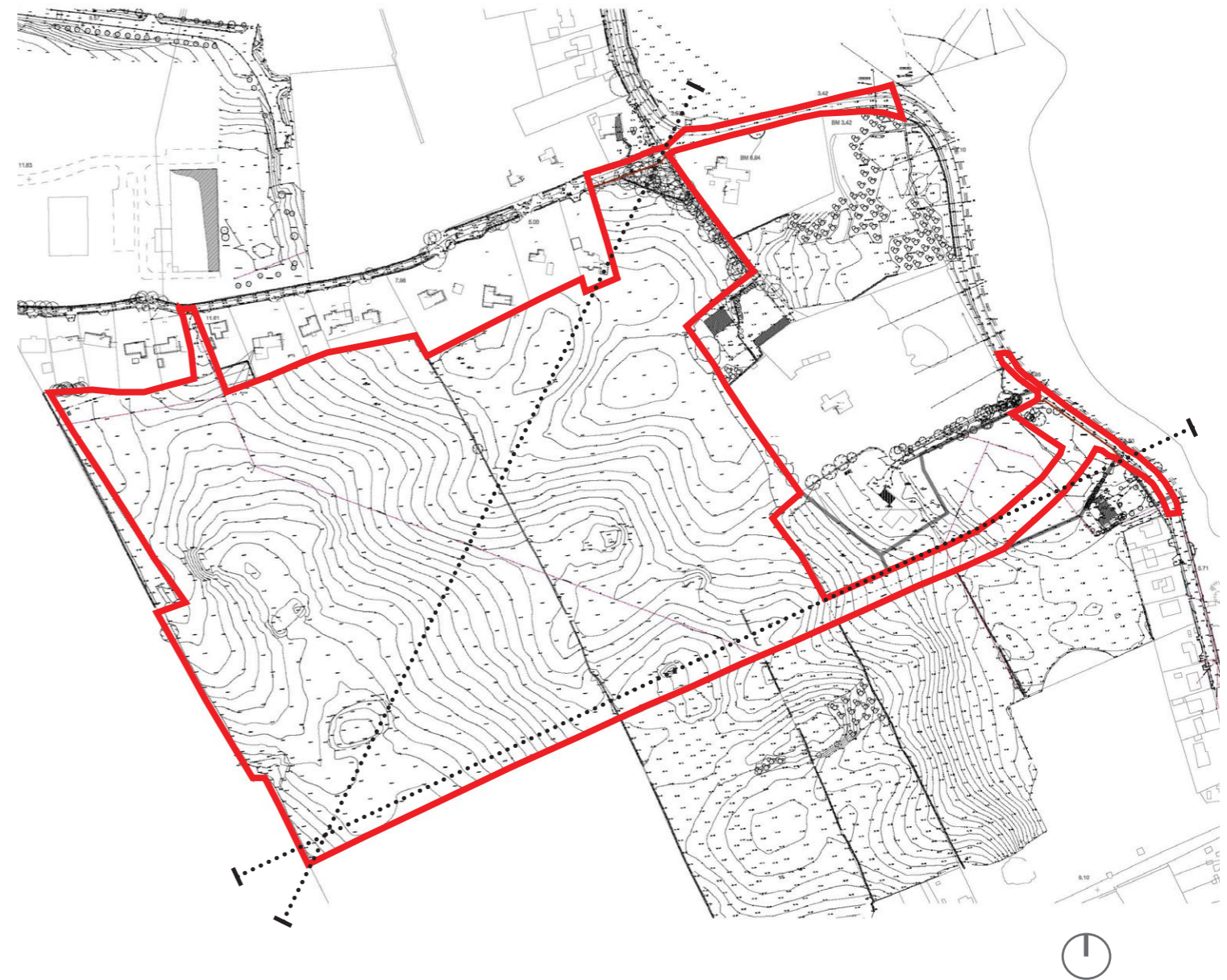
Historic Mapping: Bothar Maol 1850's



Existing Site Section showing site gradient south west to north east



Existing Site Section showing site gradient south west to east (main site access)



Topography- Good Quality, Rolling Agricultural



2.4 Outline Response to Context

Urban design principles are a contextual response to various site specific site conditions:

1. Understanding of topography, views and adjacent dwellings to form a basic organisation of built frontages versus gabling or back to back conditions;
2. Consolidation of zoned open space with existing mature trees, hedgerows and field divisions to develop a basic organisation of residential development parcels;
3. Basic urban design framework incorporates key connections to and across lands with specific reference to continued use of Bothar Maol as a connective lane in the wider context.



1. Site Response with regard to Views and Topography



2. Development Structure in Response to Existing and Required Open Space Features



3 . First Principles- Contextual Urban Design Framework / Character Areas

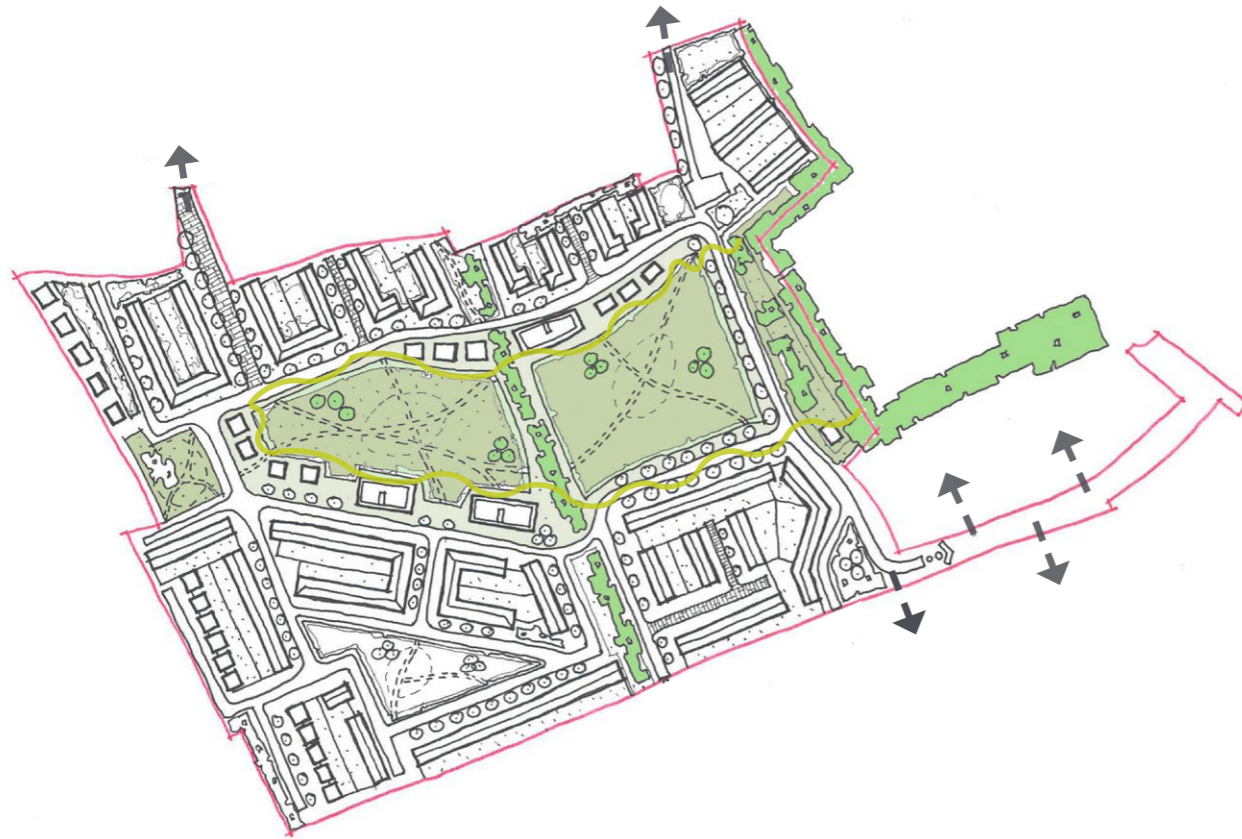


03 Concept Design Development

3. Concept Design Development

Design development prior to the iteration of the layout considered by the remainder of this document developed and refined considerations around four key themes:

1. Primary Landscape Structure
2. Secondary Landscape Structure
3. Primary Movement Strategy
4. Secondary Movement Strategies



Primary Landscape Structure: East-West Parklands

- Park developed along east-west axis of lands based on but not limited to the Zoned Open Space reservation described by the LCC Development Plan;
- East-West park incorporates retained hedgrow that informs the development of the secondary landscape structure.



Secondary Landscape Structure: North-South Link

- Secondary landscape structure develops north-south link along existing hedgerow through E-W park with southern extension to adjacent future development lands to the south;
- Secondary open space developed in south west quadrant between Character Areas 02 & 03 with north-east oriented link back to Zoned Open Space reservation described by the LCC Development Plan;
- Pocket Parks provided at Entrance and Blackrock Road link area to frame views into scheme;
- Additional north-south green links provided at connections to Bothar Maol, Blackrock Road and future development areas to south.



Primary Movement Strategy

- Primary Road Access Loop within Zoned Open Space reservation described by the LCC Development Plan.



Secondary Movement Strategies

- Secondary Road links provided to facilitate future development to the South;

3.1 Pre application consultation with ABP

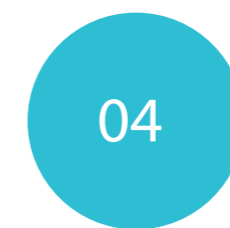
The proposed development was amended following the pre-application consultation with An Bord Pleanála (ABP-303256-18). The revisions made to the site layout in response to the Bord's opinion are as follows:

-Removal of residential Car parking from the Zoned lands zoned 'Recreation, Amenity and Open Space': In total, 137 no. residential car parking spaces have been removed from the central public open space to improve the relationship between the proposed residential elements and open space areas. Under this proposal, undercroft car parking is incorporated at Blocks A, B and F, taking advantage of the natural slope of the site. These undercroft areas are accessed from lower points off the main access routes in order to minimise environmental impact and to "anchor" those buildings into the slope.

The relocation of the surface level car parking has resulted in the reduction of 2 no. house units on the overall site, with the scheme falling from 485 no. residential units to 483 no. units. This reduction does not impact on the overall site density, which remains at 35 units per hectare.

- Omission of secondary vehicular access from Bothar Maol to the Mill End Character Area: Drawing from the comments from Louth County Council, the previously proposed secondary vehicular access from Bothar Maol at the North East of the site has been removed and it is now proposed to provide a pedestrian and cycle access at this location. The 20 no. units in the Mill End Character Area are served by the main access roads through the site but retain their distinct courtyard character through the provision of an expanded open space area.





The Masterplan

4. The Masterplan

4.1 The Masterplan Layout

The proposal consists of 483 units which contains a variety of housing typologies, high quality apartment units, duplexes, terraced, semi-detached and detached dwellings. The residential units comprise 1 & 2 bed apartments, 3 bed duplexes, 3, 4 & 5 bed houses. It is also proposed to provide extensive local amenity spaces and family orientated facilities, including playgrounds. The residential activities are further supported by a neighbourhood childcare facility.

The proposal has been developed using best practice urban design principles including permeability, legibility and connectivity.

The proposal consists of a clear and legible hierarchy of streets and spaces, accessible by all. Valuable green routes are provided for cycle and pedestrian movements from north to south and east to west connecting zoned open space parkland and various open spaces within the development and to the existing surrounding context.

The proposal provides for a broad range of accommodation within a parkland setting. The avenues and homezones deliver a discrete and sensitive parking provision with links and visual connections to the amenity spaces.

On arrival the public is presented with one main amenity space which act as a gateway into the development - the village green. The pedestrian links and cycle ways assist in the ease of movement through the development and add a sense of permeability to the scheme.

The main distributor road looping around the zoned open space it is a major feature both in how the landscape is arranged and also how the built form and streetscape is defined.

The pedestrian and cycle routes are designed so as to enhance the feeling of family orientated residential zones and a child friendly environment. Parking spaces are located undercroft, on-curtilage or are grouped in discrete zones, delineated by surface treatments and subtle landscaping which included speed reducing measures, to provide a family safe environment.



4.2 Urban Design Approach

The proposed layout provides for 483 units arranged in a series of character areas that respond to the zoned open space and the existing landscape character of the lands. Views within and from the development are framed by legible links that supervise the space and connect to the existing landscape structure. The key urban design principles informing the proposed layout are illustrated on this page, with the resulting site layout plan on the previous page.

A developable area of 13.8Ha results from the deduction of the 3.7Ha Zoned Open Space and 0.4 Ha of road works. Sustainable residential densities of 35 dwellings per hectare are achieved through the use of a variety of housing typologies including apartments, duplex, terraced, semi-detached and detached dwellings.

Location of the various housing types, and their height and massing, is responsive to topography, landscape character, the exploitation of coastal views from higher ground, and the passive supervision of the central public park.

In addition to the zoned open space, 10.2% of the developable area (1.4 Ha) is provided in a series of public open spaces organised to provide more local and intimate spaces that aid placemaking in the character areas, but are each components of a legible sequence of connections to and through the zoned open space to adjacent lands. A notable connection is made to the historic Bothar Maol lane connection.



1. Connections- Legible Road Hierarchy



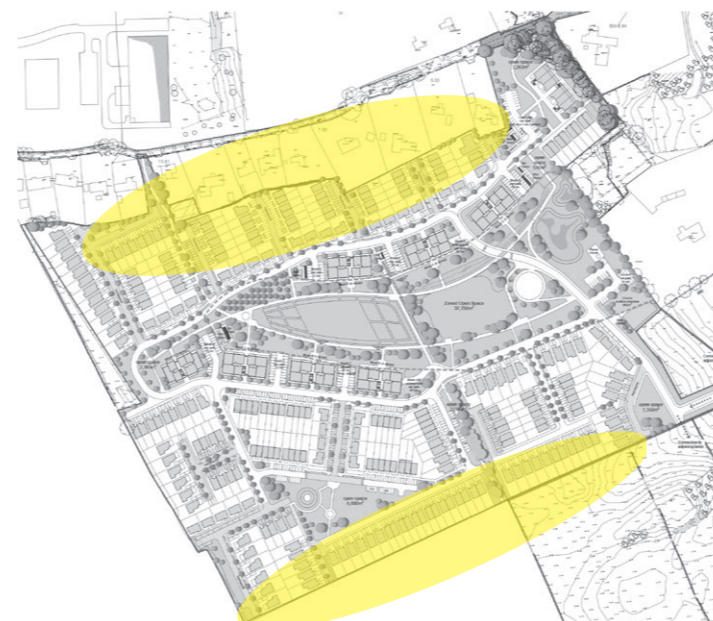
2. Zoned Open Space + Public Open Space - Green Network



3. Connections- Green Network Links for Pedestrian and Cycle



4. Bothar Maol Connections



5. Protection of Residential Amenity of Existing or Likely Future Dwellings



6. Passive surveillance to Parkland

4.3 Massing / Scale / Height Strategy

Massing, scale and height across the development are determined in response to three key factors:

- The provision of a contextually appropriate response to existing and likely future patterns of residential development adjacent to the site;
- A response to the topographic conditions of the site and the opportunity they offer to capture views;
- A response to the scale of the zoned open space.

The general height and massing of the development is set by two storey dwellings arranged in homezone character areas to the edge of the site.

To the north, these comprise a neighbourly response to existing adjacent dwellings; to the south, they anticipate likely future patterns of development of similar two storey scale.

From this contextual response, heights rise generally towards the centre of the development to provide a four storey scale around the perimeter of the zoned open space.

The change in scale serves two purposes:

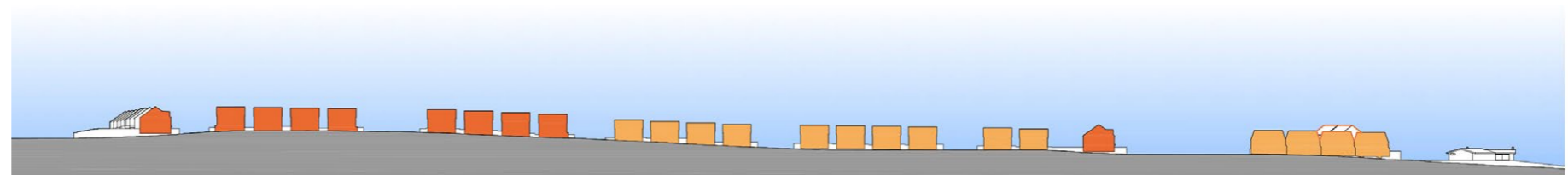
- To frame views along the open space and through the development to aid legibility and identity;
- To ensure an appropriate measure of passive supervision of the large open space from upper residential storeys in line with best practice placemaking.

At the western end of the open space, height drops to three storey to allow the view to continue beyond the parkland and to avoid a sense of over-enclosure of the space.

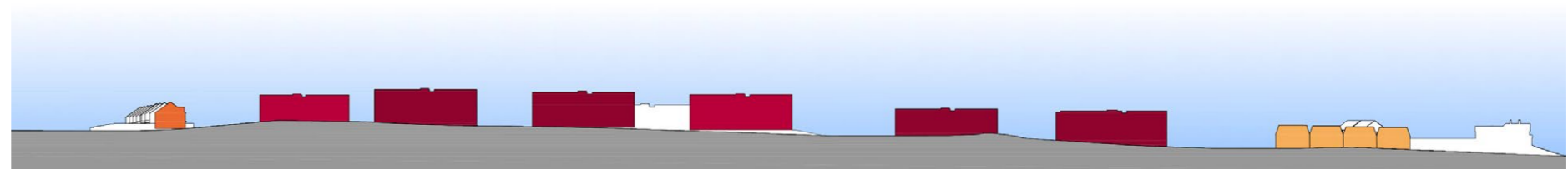
Further west, where existing site levels rise to a high point, a two-and-a-half storey is established. As a result of retained site topography, the visual sense of these dwellings is of an equal height to that of the apartments. This increased scale allows the dwellings along the western edge to capture views to the east and west across the generally lower scale of housing.



- 1 Storey - 4 bed disability bungalow
- 2 Storey - 2/3 & 4 bed house units/Childare
- 2 Storey + Attic - 5 bed house units
- 3 Storey - Block D / Duplexes
- 4 Storey - Block A/B/C/E/F/G



Site Section A-A



Site Section B-B



Site Section C-C

4.4 Character Areas

The layout proposes five landscape character areas, each responding to specific landscape, topographical and boundary considerations and mixing housing typologies within each of the character areas.

These character areas are:

1. Cooley View:

This character area forms the main 'Gateway' to the site. The vehicular access road will offer excellent views in a north easterly direction of Dundalk Bay & the Cooley Mountains beyond. A forecourt open space provides a sense of place and an entrance to the new community, framed by 2 to 2.5 storey detached family homes. The siting of dwellings along the southern edge sets up a back-to-back condition with any future residential development. Landscape is envisaged as having a wetland character.

2. Meadow & Field:

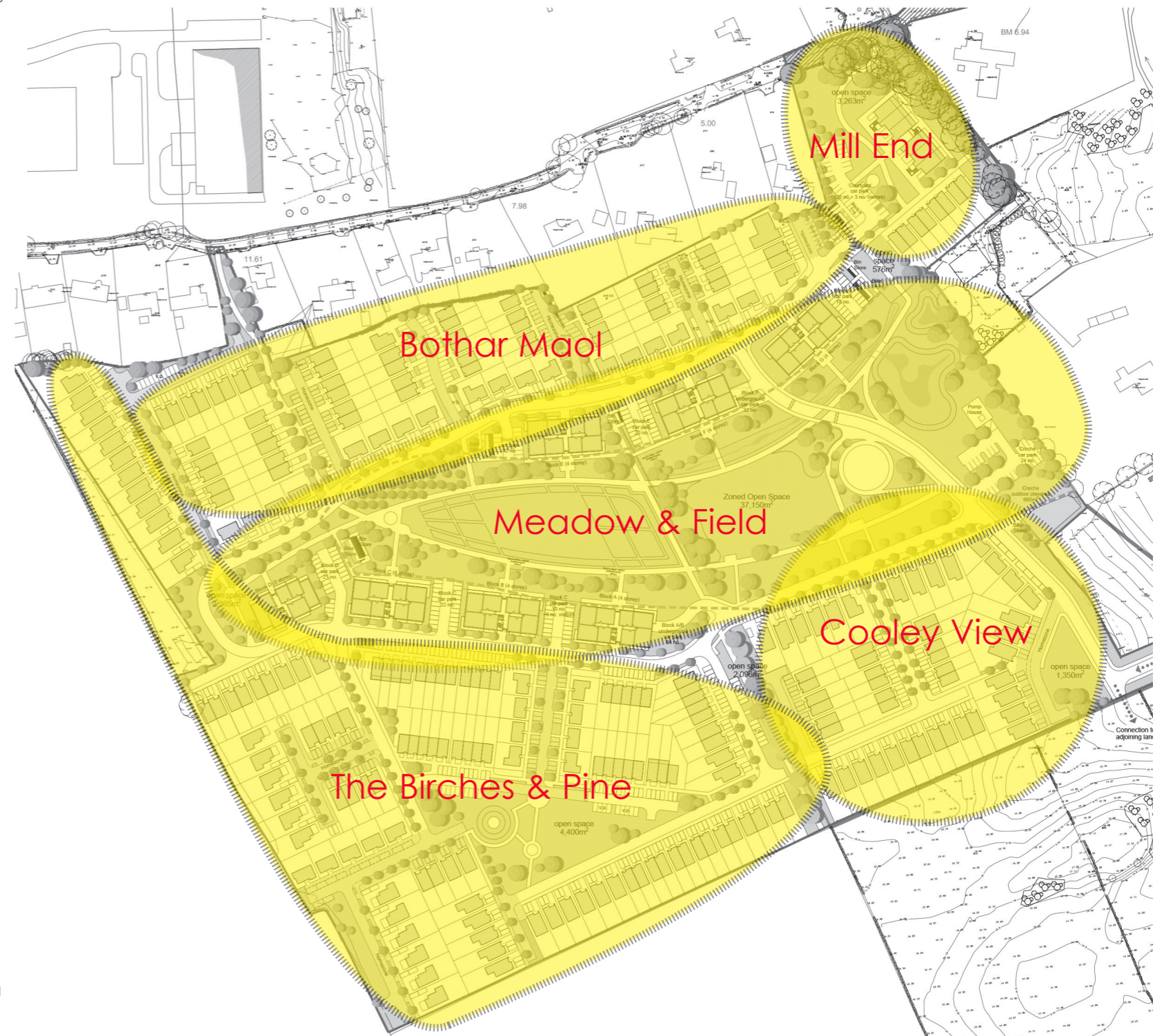
The most extensive character area within the development, occupying the core central space from which the other character areas integrate. It is formed by the zoned open space compartmentalised by the pedestrian and cycle movement network and by hedges, trees and fences into a series of smaller enclosures, with amenity/play interventions throughout the space. The edges of this character area are defined by apartment buildings, offering supervision of the open space through higher densities, open up views to the estuary to the east from higher levels, and framing the public realm when viewed from the east. This character area would maintain a structured yet natural feel - taking reference from agricultural landscape such as hedges, Louth bank walls, swales & ditches. SUDs will also play an important role in this area, directing surface water through swales and landform to the north-east and creating valuable habitat.

3. The Birches & Pine:

As the land rises subtly in the direction of the Golf Course, the site character will also change. This area will respond to the existing conifer planting associated with the Golf Course and slightly higher and drier land. The golf course edge is occupied by detached dwellings taking advantage of excellent views, vistas to the west. A triangular shaped public open space is located at the heart of the south portion of this character area. This pocket park is defined by the building form of mixed house typologies to provide more local and intimate space which aid placemaking in this character area. A simple symmetrical avenue connects in views and pathways 'The Birches & Pine' into the adjacent large central parkland of 'Meadow & Field'.

4. Bothar Maol:

This character area responds & respects the existing feel along Bothar Maol which is a well established low density suburban residential area. Acting as a landscape extension to Bothar Maol, the built form provides a series of gabled relationships to existing dwellings to the north. Small streets, homezones, each street is different in size and shape, which will add to its' individuality and sense of place. This is a reasonably sheltered part of the site and will therefore accommodate a wider variety of species including flowering trees and hedges. Strong landscape buffer between the existing properties along Bothar Maol garden boundaries would be a mixture of hedging solutions.



5. Mill End:

As the 'Cooley View', this character area will also form a 'Gateway' to the development, but of a pedestrian nature. There is valuable maturity in this area formed by mature trees and vernacular buildings on adjacent lands to the east. The built form will be an intimately scaled enclave in the form of a courtyard responding to existing mature landscape and character of the area.

Elevation Treatment - Materials:

The material treatment in each character area serve to reinforce their unique sense of identity within the site.

The principal materials of the scheme are brickwork and render. Metal cladding, glazed balustrading and small patterns of stone cladding are utilised to pick out facade details, reinforcing key design elements of the elevation.

Brick cladding for the apartment blocks in 'Meadow & Field' has been selected to give this character area a strong, consistent and coherent external identity to the building edge of the parkland - the Zoned Open Space.

The scheme contains a variety of house types and sizes, which allows for flexibility in the depth and overall shape of housing blocks, as well as variation in elevation design, proportion and language.

The elevation treatment of the houses is a contemporary response and interpretation of the suburban, vernacular residential area in the vicinity of the subject site with predominant use of rendered walls and simple pitched-roof forms.

Character areas 'Cooley View', 'The Birches & Pine' and 'Bothar Maol' are comprised mainly of houses with a render finish. Brick, stone and metal cladding details highlights the main entrances. A colour variation of material palette will be applied to each character area to give them a sense of distinctiveness.

'Mill End' consists of a small scale enclave of Duplexes and semi-D Houses defining a formal courtyard area. Picking up on the palette of vernacular buildings on adjacent lands to the east, the front elevation of the 3 storey duplexes is a mixture of brick and render. The brick base rises from the ground forming a durable plinth to allow a greater wear and tear. The rendered top half of the facade breaks the height, softening the overall proportions.

CHARACTER AREA 1 -COOLEY VIEW



House Type A

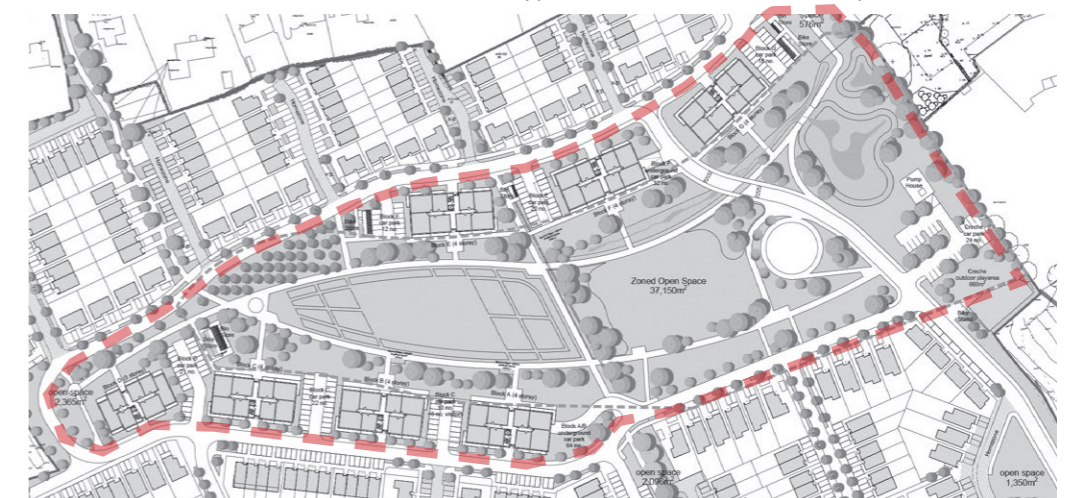
House Type D



CHARACTER AREA 2 - MEADOW & FIELD



Site Section B-B / Typical Street Elevation of Apartment Blocks



EXAMPLE MATERIAL PALETTE:



Render



Light Grey Brick



Stone

Material combination: off white Render + light grey stone or light grey brick to entrance areas.

Metal cladding to facade details: canopy, dormers etc.



Brick

Brick cladding to all apartment blocks to the building edge of the parkland



Metal Cladding

Metal cladding utilised to pick out facade details, reinforcing key design elements of the elevation.

CHARACTER AREA 3 -THE BIRCHES & PINE



House Type F



CHARACTER AREA 4 -BOTHAR MAOL



House Type C



CHARACTER AREA 5 - MILL END



Duplexes



EXAMPLE MATERIAL PALETTE:



Buff Render



Brown-Buff Brick



Metal cladding



Render



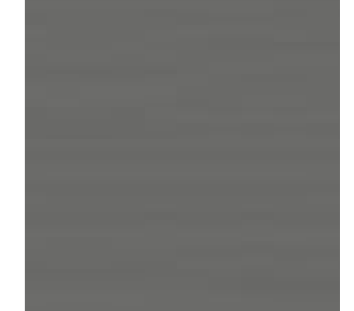
Stone



Render



Light grey Brick



Metal cladding

Material combination: buff Render + brown-buff brick to entrance areas.
Metal cladding to facade details: canopy, etc.

Material combination: off white Render + light grey stone finish to entrance areas.
Metal cladding to facade details: canopy, dormers etc.

Material combination: off white Render + light grey brick
Metal cladding to facade details: canopy, etc.

4.5 Landscape Masterplan General Arrangement



Code	Plant Name	Height	Spread	Notes
101	Yucca filifolia	1.5m	0.5m	
102	Papyrus	2.5m	1.0m	
103	Phragmites	3.0m	1.5m	
104	Scirpus	2.0m	1.0m	
105	Lythrum	1.5m	0.5m	
106	Verbena	1.0m	0.5m	
107	Salvia	1.5m	0.5m	
108	Origanum	1.0m	0.5m	
109	Thymus	1.0m	0.5m	
110	Lavandula	1.5m	0.5m	
111	Helianthus	2.0m	1.0m	
112	Helianthus	2.0m	1.0m	
113	Helianthus	2.0m	1.0m	
114	Helianthus	2.0m	1.0m	
115	Helianthus	2.0m	1.0m	
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208	Origanum	1.0m	0.5m	
209	Thymus	1.0m	0.5m	
210	Lavandula	1.5m	0.5m	
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306	Verbena	1.0m	0.5m	
307	Salvia	1.5m	0.5m	
308	Origanum	1.0m	0.5m	
309	Thymus	1.0m	0.5m	
310	Lavandula	1.5m	0.5m	
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315	Helianthus	2.0m	1.0m	
316	Helianthus	2.0m	1.0m	
317	Helianthus	2.0m	1.0m	
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407	Salvia	1.5m	0.5m	
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409	Thymus	1.0m	0.5m	
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507	Salvia	1.5m	0.5m	
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606	Verbena	1.0m	0.5m	
607	Salvia	1.5m	0.5m	
608	Origanum	1.0m	0.5m	
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617	Helianthus	2.0m	1.0m	
618	Helianthus	2.0m	1.0m	
619	Helianthus	2.0m	1.0m	
620	Helianthus	2.0m	1.0m	

Code	Plant Name	Height	Spread	Notes
701	Yucca filifolia	1.5m	0.5m	
702	Papyrus	2.5m	1.0m	
703	Phragmites	3.0m	1.5m	
704	Scirpus	2.0m	1.0m	
705	Lythrum	1.5m	0.5m	
706	Verbena	1.0m	0.5m	
707	Salvia	1.5m	0.5m	
708	Origanum	1.0m	0.5m	
709	Thymus	1.0m	0.5m	
710	Lavandula	1.5m	0.5m	
711	Helianthus	2.0m	1.0m	
712	Helianthus	2.0m	1.0m	
713	Helianthus	2.0m	1.0m	
714	Helianthus	2.0m	1.0m	
715	Helianthus	2.0m	1.0m	
716	Helianthus	2.0m	1.0m	
717	Helianthus	2.0m	1.0m	
718	Helianthus	2.0m	1.0m	
719	Helianthus	2.0m	1.0m	
720	Helianthus	2.0m	1.0m	

Code	Plant Name	Height	Spread	Notes
801	Yucca filifolia	1.5m	0.5m	
802	Papyrus	2.5m	1.0m	
803	Phragmites	3.0m	1.5m	
804	Scirpus	2.0m	1.0m	
805	Lythrum	1.5m	0.5m	
806	Verbena	1.0m	0.5m	
807	Salvia	1.5m	0.5m	
808	Origanum	1.0m	0.5m	
809	Thymus	1.0m	0.5m	
810	Lavandula	1.5m	0.5m	
811	Helianthus	2.0m	1.0m	
812	Helianthus	2.0m	1.0m	
813	Helianthus	2.0m	1.0m	
814	Helianthus	2.0m	1.0m	
815	Helianthus	2.0m	1.0m	
816	Helianthus	2.0m	1.0m	
817	Helianthus	2.0m	1.0m	
818	Helianthus	2.0m	1.0m	
819	Helianthus	2.0m	1.0m	
820	Helianthus	2.0m	1.0m	

Code	Plant Name	Height	Spread	Notes
901	Yucca filifolia	1.5m	0.5m	
902	Papyrus	2.5m	1.0m	
903	Phragmites	3.0m	1.5m	
904	Scirpus	2.0m	1.0m	
905	Lythrum	1.5m	0.5m	
906	Verbena	1.0m	0.5m	
907	Salvia	1.5m	0.5m	
908	Origanum	1.0m	0.5m	
909	Thymus	1.0m	0.5m	
910	Lavandula	1.5m	0.5m	
911	Helianthus	2.0m	1.0m	
912	Helianthus	2.0m	1.0m	
913	Helianthus	2.0m	1.0m	
914	Helianthus	2.0m	1.0m	
915	Helianthus	2.0m	1.0m	
916	Helianthus	2.0m	1.0m	
917	Helianthus	2.0m	1.0m	
918	Helianthus	2.0m	1.0m	
919	Helianthus	2.0m	1.0m	
920	Helianthus	2.0m	1.0m	

LANDSCAPE MANAGEMENT (YEAR 1-20)

GENERAL NOTES:
Following handover of planting works at the end of the agreed establishment maintenance period, all general maintenance will be undertaken according to the listed Annual Ongoing Landscape Maintenance.

EXISTING MATURE TREES:
All retained trees to be inspected annually for defects or disease and managed in accordance with best arboricultural practices current at the time of assessment and execution of remedial work.

AVENUE AND SPECIMEN TREES: (All staked trees)
Year 1-3 (Establishment)
Inspect on each maintenance visit to ensure that stakes, ties etc are in good condition and adjust as required to maintain healthy development. Carry out pruning to remove minor damage, to promote a shapely well-balanced head and crown as necessary. Where trees are in grass verges maintain a minimum diameter of one metre around the base free of weeds and take every precaution to avoid bark damage by maintenance machinery. Replace damaged or failed trees in accordance with the original planting specification.

Year 4-10
1 no. basic level inspection per annum (trees subject to cable bracing, staking or other mechanical support should be inspected twice each year). Trees in lower risk areas may be subject to longer inspection intervals by qualified arboriculturist (in spring to identify failed issues) to check physiological and biological condition. Staking/pruning of free base in April and August to control weed growth. Stakes removed at year 5 or as instructed.
Remove dead, dying or deformed branches every other year.
Prune, shape and raise crown years 5 and 10.
Replace damaged or failed trees in accordance with the original planting specification. A method statement should be prepared for these operations.

Year 11-20
1 no. basic level inspection per annum by qualified arboriculturist (in autumn to coincide with fungal huffing) to check physiological and biological condition. Professional level inspections and arboricultural works as necessary arising from basic level inspections.
Prune and remove basal growth (3 year cycle).
Prune, shape and raise crown years 15 and 20.

Year 21+
1 no. basic level inspection per annum by qualified arboriculturist (in autumn to coincide with fungal huffing) to check physiological and biological condition. Professional level inspections and arboricultural works as necessary arising from basic level inspections.
Prune and remove basal growth (3 year cycle).
Pollard and crown reduction considered at year 21 would be carried out to maintain attractive form, regular and compact crown architecture, prevent the development of heavy branches and reduce the overall requirement of the trees' roofing systems. This operation would be repeated as necessary to prevent crown interference in adjacent trees, typically every 10 years. A method statement should be prepared for these operations.

Hedge Maintenance
The hedge should ideally be planted in the autumn when the soil is warm after the summer and damp from autumn rain. Planted a double or triple row of hedges to create width. If space is restricted a single row of plants zig-zagged slightly to allow root space. Do not cut top leader growth until plants have reached 1.1m high.
Prune hedges in the autumn when there is no chance of disturbing nesting birds. It is best to prune deciduous varieties in late autumn when they are dormant. Cut back quite hard in the first couple of years so the hedge thickens up at the base.
Deciduous species are usually pruned twice annually, first in winter while dormant and again in mid-summer. If using mechanical or fuel powered tools, exercise all precautions as instructed by manufacturer. Cut hedges in on a profile (Tapered sides) heavy snowfall lying on top of a hedge can cause serious damage. Ensure snow is removed as soon as possible to reduce the uncontrolled weight. Woody cuttings can attract fungal diseases such as coral spot if they are left to decay where they fall. It is best to clear them up when you finish hedge trimming.

AMENITY GRASS: Schedule 9
The Grass Seed Mixture shall contain the following varieties in the percentages stated by weight -
• 20% Festuca Rubra (Red Fescue) (Slender creeping Red Fescue)
• 20% Festuca Rubra Comestris (Cheving Fescue)
• 15% Poa Pratensis (Smooth stalked meadow grass)
• 15% Agrostis Canadensis (Brown Cutler Ryegrass)
• 20% Lolium Perenne (Perennial Rye grass) To be one of the following dwarf cultivars - Elna, Elna, Magenta, Loreta, Barry, Lolina or Loreta.

TIMES OF YEAR FOR PLANTING
Deciduous trees and shrubs: Late October to late March.
Conifers and evergreens: September/ October or April/May.
Container grown plants: At any time if ground and weather conditions are favourable. Ensure that adequate watering and weed control is provided.
Dried bulbs, corms and tubers: September/ October.
Grass Seed: Spring - April to May or Late Summer/ August to September.

ANNUAL ONGOING LANDSCAPE MAINTENANCE
Amenity grass: 12 cuts during growing season / 2 fertiliser applications / 2 edgings with soil selective herbicide / 2 soil aeration.
Hedging: 6 weeding/ 2 firm up/ 1 fertiliser/ 1 trim shape.
Planting: 6 weeding/ 2 firm up/ 1 fertiliser/ 1 prune if directed.
Staked Trees: 6 visits for stakes, ties and firming/ 1 fertiliser/ 1 crown prune (when directed) 8 watering to field capacity/ cut stakes down to half height at end of third year or as directed.

NOTES:
- Storm bank match over all plant beds.
- Wind barrier under all proposed hedging areas finished with 50mm of mulch.
- Refer to Tree Report for all Arboricultural requirements to existing trees.
- Use Retard 1000 root barrier (or equivalent) requirements where trees are proposed within 2m of services and 5m of all wall foundations.
- Refer to MDA Landscape Specification.
- Refer to Software's Planting Drawings 18.130.200.
- Refer to Existing Tree Protection Drawing 18.130.300.
- Refer to Boundary Plan & Details 18.130.400.
- Landscape Proposals to be cross referenced with Architecture and Engineering Drawings.

P.S. Please refer to the landscape design rationale set out in the Landscape Strategy / Design code prepared by Mullin design Associates.

4.7 Existing Trees & Hedgerows

The site features many existing hedgerows, which form the boundaries between fields. Hedgerows are important habitats for wildlife, and are also part of the identity of the site.

However, as the nature of the site changes, the context for the existing hedgerows also changes.

Within the new development, different conditions will arise whereby it will sometimes be appropriate to retain hedgerows, and sometimes to remove them.

The layout recognises hedgerows as the primary land form on the site and uses them to order the development where possible.

Detailed landscape design will seek opportunity to introduce new boundary conditions between houses or development clusters, which are part of the soft, green landscape, reinforcing where appropriate the hedgerow structure. Such soft boundaries will be planted with indigenous trees and wildflowers, with a simple fence along the centreline to demarcate property boundaries.

Where an existing hedgerow runs through a proposed public open space, it is appropriate to retain the larger, good quality trees that form part of the hedgerow as focal points within the public space, and to remove the hedgerow itself. A diverse range of planting be provided to compensate for any hedgerow removal required to maintain linkages between public open spaces.

P.S. Please refer to the landscape design rationale set out in the Landscape Strategy / Design code prepared by Mullin design Associates.

The retention of a single, large tree within a public open space may be more appropriate than the retention of a hedgerow.

Ref: Adamstown, O'Mahony Pike Architects



An new embankment with wildflowers creates an attractive boundary to the street.
Reference: Waterfall, Co. Cork, O'Mahony Pike Architects



The boundary between dwellings is demarcated by a new ditch, planted with wildflowers and native shrubs.
Reference: Waterfall, Co. Cork, O'Mahony Pike Architects

4.8 Sustainable Urban Drainage

Sustainable drainage systems (SuDS) are a natural approach to managing drainage within developments. Subject to soil percolation testing, a SuDS approach is proposed for this development.

SuDS aims to deal in an integrated way with the issues of water quantity, quality and amenity. It works on the following principles:

- managing surface water run-off on-site as near to source as possible;
- slowing down run-off;
- treating it naturally; and
- releasing good quality surface water to watercourses or groundwater.

The overall objective is to return excess surface water to the natural water cycle with minimal adverse impact on people and the environment. The means by which this can be achieved can be designed as an attractive integral amenity feature within the development and can achieve significant ecological enhancement compared to conventional drainage options.

SuDS measures which is quite appropriate to the subject lands include swales, bio-retention areas, wetlands, green roofs and permeable paving.



Sketch shows swale incorporated into streetscape, with biodiverse planting



Pedestrian bridge over watercourse



Wildflower planting within swale



A curved pathway runs through a landscape of grasses and water features



A depression which can attenuate water when required

4.9 Homezones

Homezones are proposed across the character areas of Cooley View (character area 1), The Birches & Pine (character area 3) and Bothar Maol (character area 4). In the homezones, a shared surface is proposed for the carriageway and the pedestrian refuge, and priority is given to pedestrians and cyclists. Trees and other planting are incorporated so as to create an attractive streetscape.



Reference: Homezone at Somerton, Adamstown, O'Mahony Pike Architects



Reference: Grace Park Woods, Drumcondra, O'Mahony Pike Architects

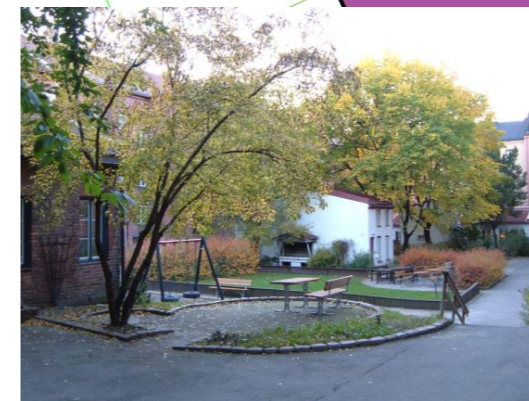


Homezones - Typical shared surface treatment:



Haggardstown, Blackrock - Landscape Strategy / Design Code,

MDA 18



Haggardstown, Blackrock - Landscape Strategy / Design Code,

MDA 18

4.10 The Layout - Housing Typologies

Carparking Provision:
 Total House units: 258 units (257+1no.DB) 518 no. spaces (2no./unit+4no.DB)
 Total GF Apart. + Duplexes: 12 units 12 no. spaces (1no./unit)
 Total apartment units: 213 units 213 no. spaces (1no./unit)
 Total visitors spaces: 57 no. spaces (1no./4 apt.)
 Total Creche spaces (staff+drop-off) 24 no. spaces
 Total carparking spaces: 824 no. spaces

Bicycle parking Provision:
 Total residents spaces (apt.) 392 no. spaces (1no./bedroom)
 Total visitors spaces (apt.) 112 no. spaces (0.5no./ apt. unit)
 Total Creche spaces 8 no. spaces
 Total bicycle spaces: 512 no. spaces



Housing mix & Typologies:

Unit Type	Description	no. of beds	area (m ²)	no. of units
HOUSES				
TA	Detached	5	196.5	22
TB	Detached	5	176.5	19
TC	Detached	4	151.8	10
TC1	Detached (corner unit)	4	153.4	7
TD	Detached	4	146	3
TE	Det/Semi-D	4	138.5	23
TF	Detached	4	137.4	7
TG	Semi-D/Det.	4	120.8	50
TH	Detached (corner unit)	3	117.3	9
TH1	Detached	3	110	9
TI	Semi-D/Ter.	3	102	37
TJ	Semi-D/Ter/D.	3	92	61
DB	Detached (disability bungalow)	4	158.5	1
APARTMENTS + DUPLEXES				
1Bed	Block A/B/C/D E/F/G	1	52/ 56	64
2Bed	Block A/B/C/D E/F/G	2	78/80/83 84/86	149
2Bed	GF Apt. below Duplexes	2	82	06
3Bed	Duplexes	3	117/118	06
Total:				483

Housing mix:
 Detached: 105 units (21.7%)
 Semi-Detached: 114 units (23.6%)
 Terraced: 39 units (8.1%)
 Duplexes: 06 units (1.3%)
 GF Apt. below Duplexes: 06 units (1.3%)
 Apartments: 213 units (44%)

Total Residential units: 483 units
 Total House units: 258 units
 Total GF Apart. + Duplexes above: 12 units
 Total apartment units: 213 units

Housing typologies:
 Total 5 bed: 41 units (8.5%)
 Total 4 bed: 101 units (20.9%)
 Total 3 bed: 116 units (24%)

Total 3 bed Duplexes: 06 units (1.3%)

2 bed GF apt below duplexes: 06 units (1.3%)

2 bed Apartments: 149 units (30.8%)
 1 bed Apartment: 64 units (13.2%)

Total Residential units: 483 units (100%)

Site area: c. 179,566m² / 17.9 Ha.
 Road works: c. 4,170m² / 0.4 Ha.
 Zoned open space: 37,150m² / 3.7 Ha.
 Developable area: c. 138,246m² / 13.8 Ha.
 Site Density: 35 units per hectare
 Public open space provided: 14,050m² / 1.4 Ha. (10.2% of developable area)

Planning
 May 2019

Site Layout Plan - Housing mix (Key Plan)
 Co. Louth

Residential Development at Blackrock Dundalk, Co. Louth

© 2019 O'Mahony Pike Architects

Proposed Site Layout Plan
 scale 1:1000 @ A1 / 1:2000 @ A3



4.11 Proposed Site Sections



Proposed Site Section A-A



Proposed Site Section B-B

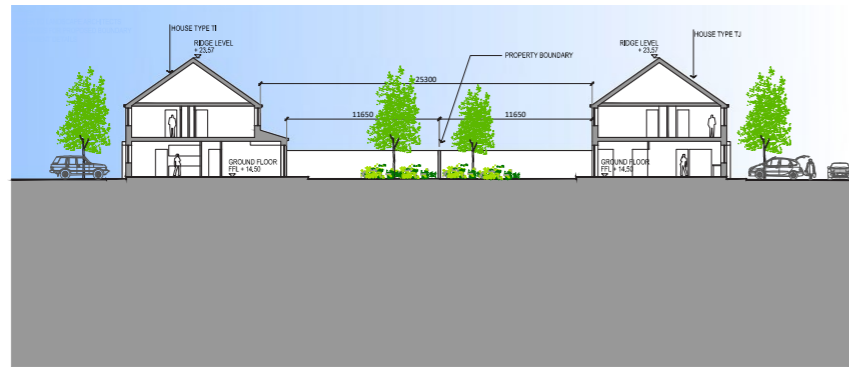


Proposed Site Section C-C



4.12 Proposed Typical Sections 1-1/2-2/8-8/9-9

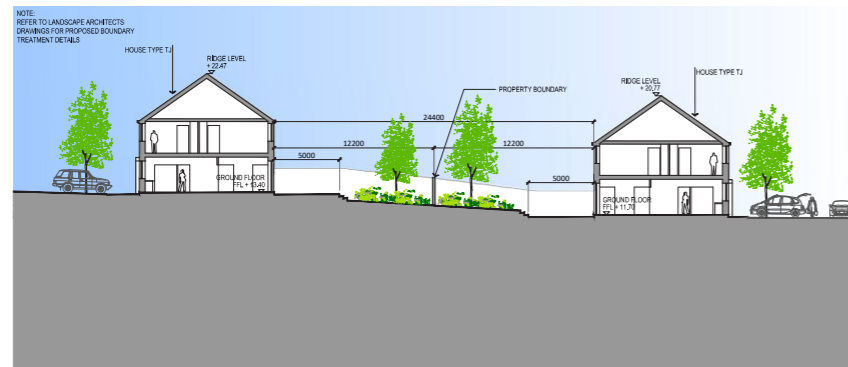
Through Rear Gardens & Site Boundary



Typical Section 1-1 (through rear gardens)



Typical Section 8-8 (through Site Boundary)



Typical Section 2-2 (through rear gardens)















Typical Section 9-9 (through Site Boundary)





Urban Design Considerations Statement of Consistency

5. Urban Design Considerations - Statement of Consistency

1. Context  Does the development respond appropriately to its specific site conditions, including the scale, form and character of the buildings and landscape within the site and around its boundaries, and the amenity of neighbouring users?
2. Connections  Does the proposal have a permeable network of streets and spaces, and a hierarchy of street typologies ? Does the proposal create links to existing movement routes, local amenities, and adjoining land parcels?
3. Inclusivity  Does the layout prioritise access for all, with a public realm based on a concept of pedestrian and cycle connectivity?
4. Variety  Does the development contain non residential uses, and if so, are they positioned as as to appropriately visible and accessible, and are compatible with neighbouring uses?
Does the development provide housing of different sizes, types and tenures?
5. Efficiency  Does the layout make efficient use of land resource by applying higher densities to locations closest to public transport, and utilise landscaped areas to provide amenity and promote biodiversity while also incorporating sustainable urban drainage systems?
6. Distinctiveness  Does the layout have recognizable features and / or distinct variations in character so as to provide visual variety and to encourage residents to develop a sense of ownership?
7. Layout  Does the layout make the most of opportunities presented by existing buildings, landform, views and features to create a sense of place, and does the layout link to movement routes and places that people will want to get to?
Does the proposal address any flooding/drainage issues in a sustainable manner?
8. Public Realm  Does the proposal provide passive supervision of all streets and public open spaces through a combination of overlooking and active frontages, and are there well designed, overlooked, alternative routes for pedestrians and cyclists, within the scheme or connecting the scheme to its neighbouring land parcels?
9. Adaptability  Do the dwellings allow for future adaptability by the residents in response to potential changing needs over their lifetime, such as attic conversions, rear extensions, and working from home?
10. Privacy and Amenity  Does each home have an attractive private amenity space, that is well orientated, and does the layout maximise the number of dual aspect units?
11. Parking  Does the proposal provide an appropriate amount of car and bicycle parking within easy access of the dwelling, and is there an element of communal or visitor parking for cars and bicycles to maximise efficiency of parking space use?
12. Detailed Design  Do the materials and external design of the buildings make a positive contribution to the locality, and does the design facilitate easy and regular maintenance of buildings and landscape?

5.1 Urban Design Considerations - Statement of Consistency

The design guide sets out a series of 12 criteria which should be used at pre-application meetings and in the assessment of planning applications. The design guide criteria provides a robust framework in which proposals for the design of residential development can be discussed at pre-application consultations and submitted to the Bord.

In this way, it is submitted that the proposed development is consistent with the provisions of the Sustainable Residential Development in Urban Areas Guidelines 2009, and the Urban Design Manual - A Best Practice Guide 2009.

The Design Team have set out below how the proposed development responds to these design criteria where they are relevant residential schemes.

1. Context: How does the development respond to its surroundings?

The Proposed development is located within the townland of Haggardstown, off the R172 coastal roadway linking the village of Blackrock to the South and the town of Dundalk to the North.

The proposal is bounded by residential dwellings to the Northern side, residential zoned lands to the Eastern side, Dundalk Golf Club to the Western side and its practice area to the South. The remainder of the southern boundary joins with lands which are currently in agricultural use, but also zoned for residential use.

The Proposed Development consists of 483 No. residential units comprising:

- 258 No. 3/4/5-bed, two/three storey houses
- 6 No. 3-bed duplex units above 6 No. 2-bed Ground Floor Level apartments
- 6 No. four storey apartment buildings: Block A/B/C/E/F/G - 32 no. units
- 1 No. three storey apartment building: Block D - 21 no. units
- 1 No. Childcare facility for 112 children

The design principles of the development are a contextual response to various site specific and site conditions:

- Understanding of topography, views and adjacent dwellings to form a basic organisation of built frontages versus gabling or back to back conditions;
- Responding to adjacent dwellings to north, we are proposing to gable-end onto the boundary to avoid overlooking;
- Rear gardens backing onto adjacent residential zoned lands to south to facilitate future similar development pattern along

same boundary; allowing for future access to zoned lands;

- Consolidation of zoned open space with existing mature trees, hedgerows and field divisions to develop a basic organisation of residential development parcels;
- Basic urban design framework incorporates key connections to and across lands with specific reference to continued use of Bothar Maol as a connective lane in the wider context.

2. Connections: How well is the new neighbourhood /site connected?

The proposed Masterplan layout will allow for extensive pedestrian permeability and connectivity throughout the site and existing surroundings. It will allow for good connection to external pedestrian facilities on the local road network. These will predominantly be provided through pedestrian and cyclist access onto both the R172 and Bothar Maol via two vehicular site entrances. A third pedestrian and cyclist only access will also be provided further west on Bothar Maol. In the first instance the proposed open space and creche facility are both within a very short walking distance of all residential units within the proposed development.

The entrance to the site will be from the R172, where there will be a new service roadway extending circa 250m in a westerly direction that will provide vehicular access to the main development area.

The proposed Site Layout Plan facilitates future pedestrian, cyclist access and vehicular access onto the zoned lands to the south.

The proposed development is well located in terms of access to local services amenities and employment opportunities and many of these are within a 2km walking distance of the site.

There are a number of schools within 5 km of the site including St. Francis National School Blackrock, Scoil Na GCreagacga Dubha Blackrock, etc. The proposed site it is also located on the door step to Dundalk Institute of Technology.

In terms of cycling, there is an extensive area within a cycling distance of 4.8km to and from the site. All of Blackrock and a significant portion of Dundalk, including the Town Centre, DKIT and local employment opportunities

to the south and east of the town, are within comfortable cycling distances from the site.

The street layout of the proposed Masterplan is designed to deliver a safe place of high functionality where the streets and open spaces can be used for social interaction / congregation and play.

The key principles that has been adopted for the street design has been the creation of a defined hierarchy which as well as establishing desirable speed limits, improves legibility through the site.

3. Inclusivity: How easily can people use and access the development?

The proposal's residential units, open spaces, entrances and carparking have all been designed to encourage access and use of the development, as per National Disability Authority's "Building for Everyone: A Universal Design Approach" and "Universal Design Guidelines for Homes in Ireland."

The proposed Masterplan layout will allow for extensive pedestrian permeability and connectivity throughout the site and existing surroundings.

The street layout of the proposed Masterplan is being developed in accordance with DMURS and thus the appropriate measures have been considered in order to facilitate an accessible, permeable, connected and socially inclusive street network for pedestrian and cyclist movement.

The central zoned open space is connected with pedestrian links to all the smaller pocket parks provided in each character area. These pocket public open spaces are organised to create more local and intimate space that aid placemaking in the character areas. All public open spaces throughout the site provides high levels of permeability for pedestrians and cyclists, encouraging connections and integrated routes.

Homezones are proposed across the character areas where carriageway and the pedestrian refuge are treated as shared surface, giving again priority to pedestrians and cyclists.

The development will provide for disabled car parking spaces as well as bicycle parking in appropriate locations. All residential units and communal areas are designed to be accessible to all.

4. Variety: How does the development promote a good mix of activities?

The proposal consists of 483 units which contains a variety of housing typologies, high quality apartment units, duplexes, terraced, semi-detached and detached dwellings. the residential units comprise 1 & 2 bed apartments, 3 bed duplexes, 3, 4 & 5 bed houses.

It is also proposed to provide extensive local amenity spaces and family orientated facilities, including playgrounds. The residential activities are further supported by a neighbourhood childcare facility.

The provided mix of housing sizes & forms covers a great range of demographics and it is appropriate for the site context:

- House units of different types, sizes and tenures could suit families with children or older residents;
- Proposed apartment units are more suited to smaller or single-person households or residents with access difficulties.

The proposed homezones are family friendly with designed and landscaped on street parking and generous back gardens. The amenity zones are readily accessible from the residential units and are linked through a network of cycle and pedestrian routes. The proposed residential mix allows for living accommodation which appeals to a broad range of people and lifestyles.

5. Efficiency: How does the development make appropriate use of resources, including land?

The development is designed to address Louth County Development Plan 2015-2021, 2007 Quality Housing for Sustainable Communities & The Sustainable Urban Housing: Design Standards for New Apartments as regards density and residential mix. The proposed site density is 35 units per hectare, site coverage is 20%, while the varied heights, rising to 4 no. storeys give a plot ratio of 0.38

In addition the development is engineered to provide residential units which achieve high standards of energy efficiency and conservation. The landscape proposals and green areas address the sites requirements for surface water retention (SuDS measures) while providing a high quality open spaces.

Particular emphasis has been placed on the orientation of the residential units with optimum east-west orientation, addressing overheating issues while exceeding natural daylight requirements. Maximising south facing gardens and minimising north facing gardens.

6. Distinctiveness: How do the proposals create a sense of place?

The layout proposes five landscape character areas, each responding to specific landscape, topographical and boundary considerations and mixing housing typologies within each of the character areas. Those areas can be developed to create village clusters with a clear identity and sense of place.

These character areas are:

1. Cooley View:

This character area forms the main 'Gateway' to the site. The vehicular access road will offer excellent views in a north easterly direction of Dundalk Bay & the Cooley Mountains beyond. A forecourt open space provides a sense of place and an entrance to the new community, framed by 2 to 2.5 storey detached family homes. The siting of dwellings along the southern edge sets up a back-to-back condition with any future residential development. Landscape is envisaged as having a wetland character.

2. Meadow & Field:

The most extensive character area within the development, occupying the core central space from which the other character areas integrate. It is formed by the zoned open space compartmentalised by the pedestrian and cycle movement network and by hedges, trees and fences into a series of smaller enclosures, with amenity/play interventions throughout the space. The edges of this character area are defined by apartment buildings, offering supervision of the open space through higher densities, open up views to the estuary to the east from higher levels, and framing the public realm when viewed from the east. This character area would maintain a structured yet natural feel - taking reference from agricultural landscape such as hedges, Louth bank walls, swales & ditches. SUDs will also play an important role in this area, directing surface water through swales and landform to the north-east and creating valuable habitat.

3. The Birches & Pine:

As the land rises subtly in the direction of the Golf Course, the site character will also change. This area will respond to the existing conifer planting associated with the Golf Course and slightly higher and drier land. The golf course edge is occupied by detached dwellings taking advantage of excellent views, vistas to the west. A triangular shaped public open space is located at the heart of the south portion of this character area. This pocket park is defined by the building form of mixed house typologies to provide more local and intimate space which aid placemaking in this character area.

A simple symmetrical avenue connects in views and pathways 'The Birches & Pine' into the adjacent large central parkland of 'Meadow & Field'.

4. Bothar Maol:

This character area responds & respects the existing feel along Bothar Maol which is a well established low density suburban residential area.

Acting as a landscape extension to Bothar Maol, the built form provides a series of gabled relationships to existing dwellings to the north. Small streets, homezones, each street is different in size and shape, which will add to its' individuality and sense of place. This is a reasonably sheltered part of the site and will therefore accommodate a wider variety of species including flowering trees and hedges. Strong landscape buffer between the existing properties along Bothar Maol garden boundaries would be a mixture of hedging solutions.

5. Mill End:

As the 'Cooley View', this character area will also form a 'Gateway' to the development, but of a pedestrian nature. There is valuable maturity in this area formed by mature trees and vernacular buildings on adjacent lands to the east. The built form will be an intimately scaled enclave in the form of a courtyard area responding to existing mature landscape and character of the area.

The material treatment in each character area serve to reinforce their unique sense of identity within the site. Please refer to pages 21,22 for Elevation Treatment description.

The proposed residential avenues and homezones are further arranged to capture views and prospects of the amenity areas and urban landscaping, giving a unique identity to the development. The route ways allow for a permeability through the site and integration of the character areas into the overall masterplan.



7. Layout: How does the proposal create people-friendly streets and spaces?

The proposal has been developed using best practice urban design principles including permeability, legibility and connectivity.

The proposal consists of a clear and legible hierarchy of streets and spaces, accessible by all. Valuable green routes are provided for cycle and pedestrian movements from north to south and east to west connecting zoned open space parkland and various open spaces within the development and to the existing surrounding context.

The proposal provides for a broad range of accommodation within a parkland setting. The avenues and homezones deliver a discrete and sensitive parking provision with links and visual connections to the amenity spaces.

On arrival the public is presented with one main amenity space which act as a gateway into the development - the village green. The pedestrian links and cycle ways assist in the ease of movement through the development and add a sense of permeability to the scheme.

The main distributor road looping around the zoned open space it is a major feature both in how the landscape is arranged and also how the built form and streetscape is defined.

The pedestrian and cycle routes are designed so as to enhance the feeling of family oriented residential zones and a child friendly environment. Parking spaces are grouped in discrete zones, delineated by surface treatments and subtle landscaping which included speed reducing measures, to provide a family safe environment.

8. Public realm: How safe, secure and enjoyable are the public areas?

The Masterplan layout has been designed to ensure all public streets and spaces are overlooked by surrounding built form to provide active frontages and passive surveillance.

Key Public Realm spaces include:

- Roads and entrances
- Large landscape spaces - zoned open space area
- Pocket open spaces
- Street frontages & homezones areas
- pedestrian and cycle routes

These spaces combine to create an integrated network of routes, views, vistas and connections both from the proposed development to the surrounding context and internally between the various character areas.

The landscape treatments are further enhanced by the landscape lighting plan which will add security and usability to the amenity zones while not impacting on the residential units.

In addition the proposal also contains a playground and a childcare facility which addresses the need for family orientated amenities.

All open spaces have been designed to be accessible. Careful consideration of the levels has been given to the overall layout and landscape design with the objective to provide universal access wherever possible.

9. Adaptability: How will the buildings cope with change?

All of the proposed apartment and housing typologies meets or exceed the minimum standards for residential unit size. The development provides a mix of 1, 2, 3, 4 and 5 bedroom units that can be easily adapted to the changing life cycles and personal needs of the owner.

Housing typologies are 3, 4 & 5 bed houses with rear garden and mostly on curtilage parking. the residential units have adequate garden provisions and have the ability to be extended in the future if required. In addition a number of the 3 & 4 be units are capable of having their attics converted.

The nature of the residential mix allows for movement between residential types as they become available; with possibility in the future of down-sizing from a house to a apartment while keeping within the residential community.

10. Privacy/amenity: How does the scheme provide a decent standard of amenity?

Each dwelling avails of usable private open space which meets or exceeds the Development Plan standards. All of the dwellings meet or exceed unit size requirements, with apartments layout maximizing the number of dual aspect units.

The orientation and layout of the masterplan has been designed to maximize the levels of solar gain and natural light available to each dwelling.

The development provides for adequate separate distances between houses and apartments. This maintains a high level of privacy and amenity obtained by residents, and reduced level of overlooking and overshadowing.

11. Parking: How will the parking be secure and attractive?

A total of 824 no. car parking spaces are proposed, including 518 no. spaces for the houses, 225 no. spaces for the apartment blocks and duplexes, 57 no. visitor's spaces and 24 no. for the childcare facility.

The majority of residential parking is accommodated on curtilage and integrated into the shared surface homezone or off street avenue parking. the residential zones are landscaped and offer an attractive and informal street scape.

The apartment car parking is accommodated partially undercroft and partially surface grouped clusters in purposely landscaped areas. Undercroft car parking is incorporated at Blocks A,B & F, taking advantage of the natural slope of the site. These undercroft areas are accessed from lower points off the main access routes in order to minimise environmental impact and to "anchor" those buildings into the slope. The combined parking solution adequately breaks down the visual impact of the car parking on the surface and enhances the quality of the Zoned Open Space around the periphery of the apartment buildings.

512 no. cycle parking spaces are provided for. The associated site and infrastructural works include foul and surface water drainage - SUDS measures, bio-retention areas, wetlands, green roofs and permeable paving - parkland open space and pocket open spaces including playgrounds and exercise units, landscaping, boundary treatment (wall, fences), internal roads, cyclepaths and footpaths.

12. Detail Design: How well thought through is the building and landscape design?

The proposed masterplan layout has been subject to a number of pre-application meetings between the design team and Local Planning Authority. A pre-application consultation with An Bord Pleanála took place on the 31st of January 2019 (ABP-303256-18) and the Bord's opinion has been incorporated into the Masterplan.

The scheme has been developed holistically, integrating disciplines of architecture, urban design and landscape architecture. Further information on the design rationale is available in the Design Statement by OMP. The landscape design rationale is set out in the Landscape Strategy / Design code prepared by Mullin Design Associates.



Detail Design: Residential Typologies

APARTMENT TYPOLOGIES

Typical Floor Plans
Block A/B/C/E/F/G

- 1 Bed Apartments
- 2 Bed Apartments

8 PER CORE TYPOLOGY / 4 STOREY

BREAKDOWN:

GIA	2,843 m2
NIA	2,391 m2
NET:GROSS	84%
No. of CORES	1 no.
DUAL ASPECT	16 units - 50 %

UNITS

1 BED	9 no. 28.2% - 56 m2
2 BED	7 no. 21.8% - 78.4 m2
2 BED	8 no. 25% - 83.3 m2
2 BED	8 no. 25% - 84 m2
TOTAL	32 no. 100%



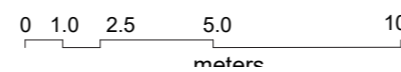
Typical Floor Plan



Typical Ground Floor Plan

APARTMENT TYPOLOGIES

TYPICAL BLOCK - (8 units per core) - Block A,B,C,E,F,G 1 : 200 @ A3



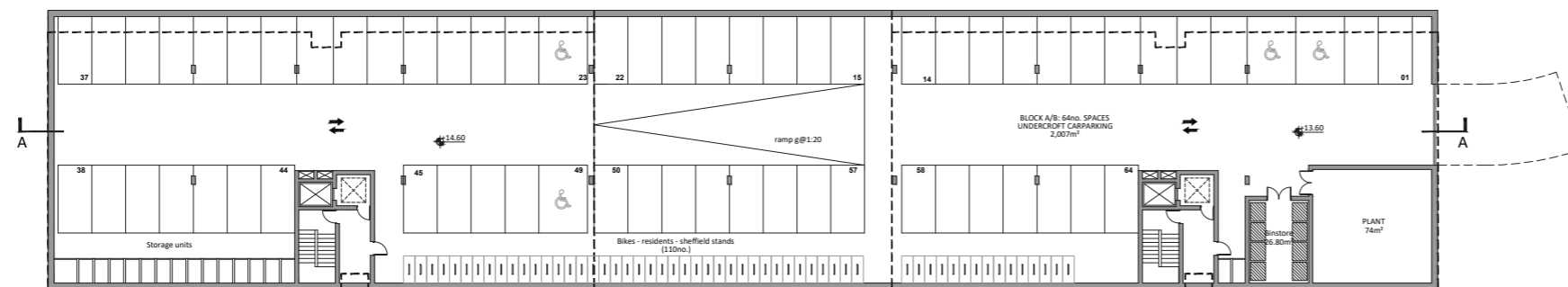
HOUSING DEVELOPMENT
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APARTMENT TYPOLOGIES
Block A/Block B
Undercroft carparking



Ground Floor Plan (Block A & Block B)



Undercroft Carparking (Block A & Block B)



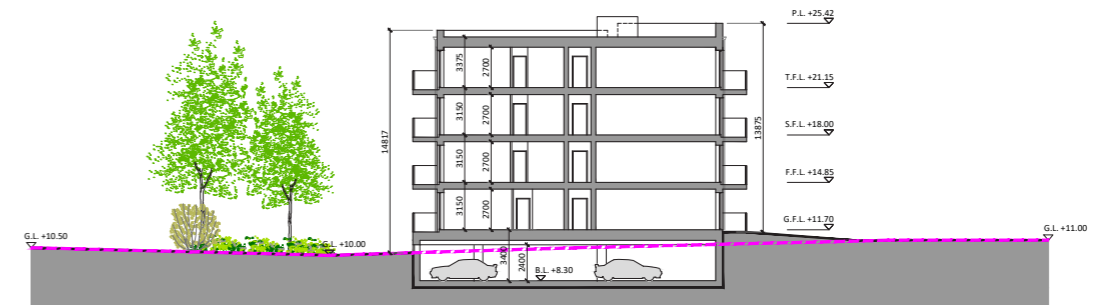
Section A-A (Block A & Block B)



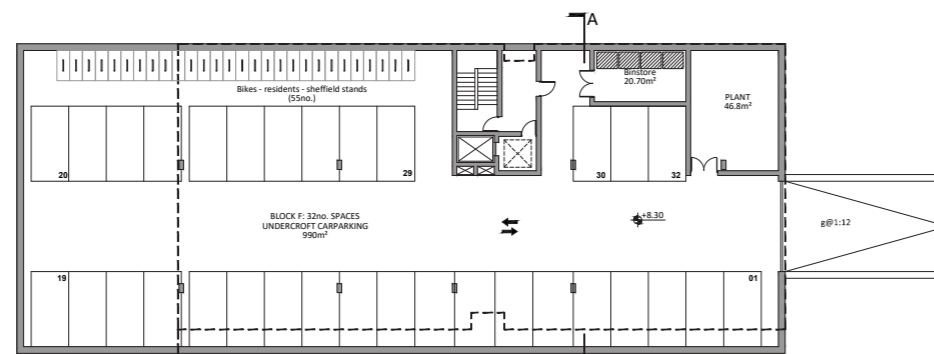
APARTMENT TYPOLOGIES
 Block F
 Undercroft carparking



Ground Floor Plan (Block F)



Section A-A (Block F)



Undercroft Carparking (Block F)



KEYPLAN

APARTMENT TYPOLOGIES

Elevations - Block A/B/C/E/F/G

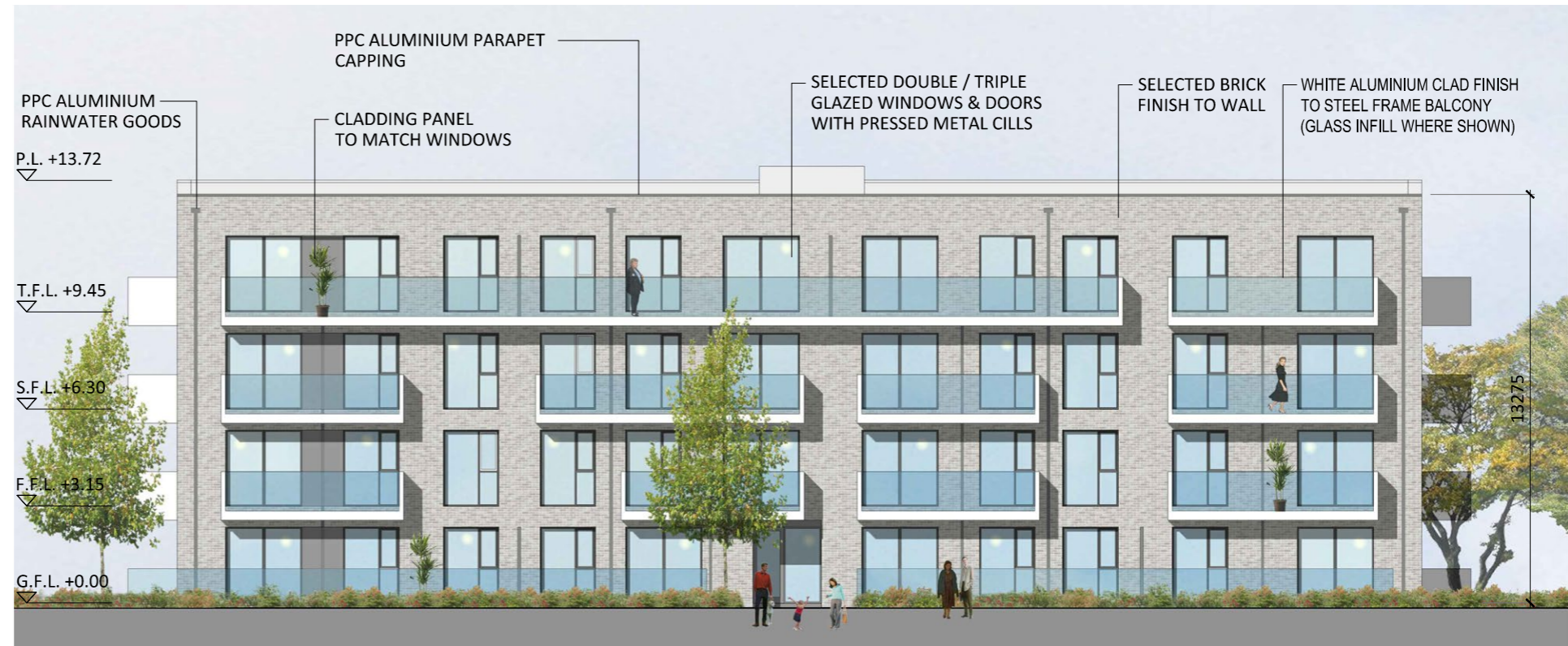
8 PER CORE TYPOLOGY / 4 STOREY

BREAKDOWN:

GIA	2,843 m2
NIA	2,391 m2
NET:GROSS	84%
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TOTAL	32 no. 100%



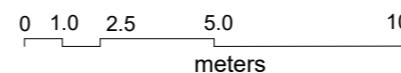
Typical Parkland Elevation



Typical Street Elevation

APARTMENT TYPOLOGIES - ELEVATIONS

TYPICAL BLOCK - (8 units per core) - Block A,B,C,E,F,G 1 : 200 @ A3



HOUSING DEVELOPMENT
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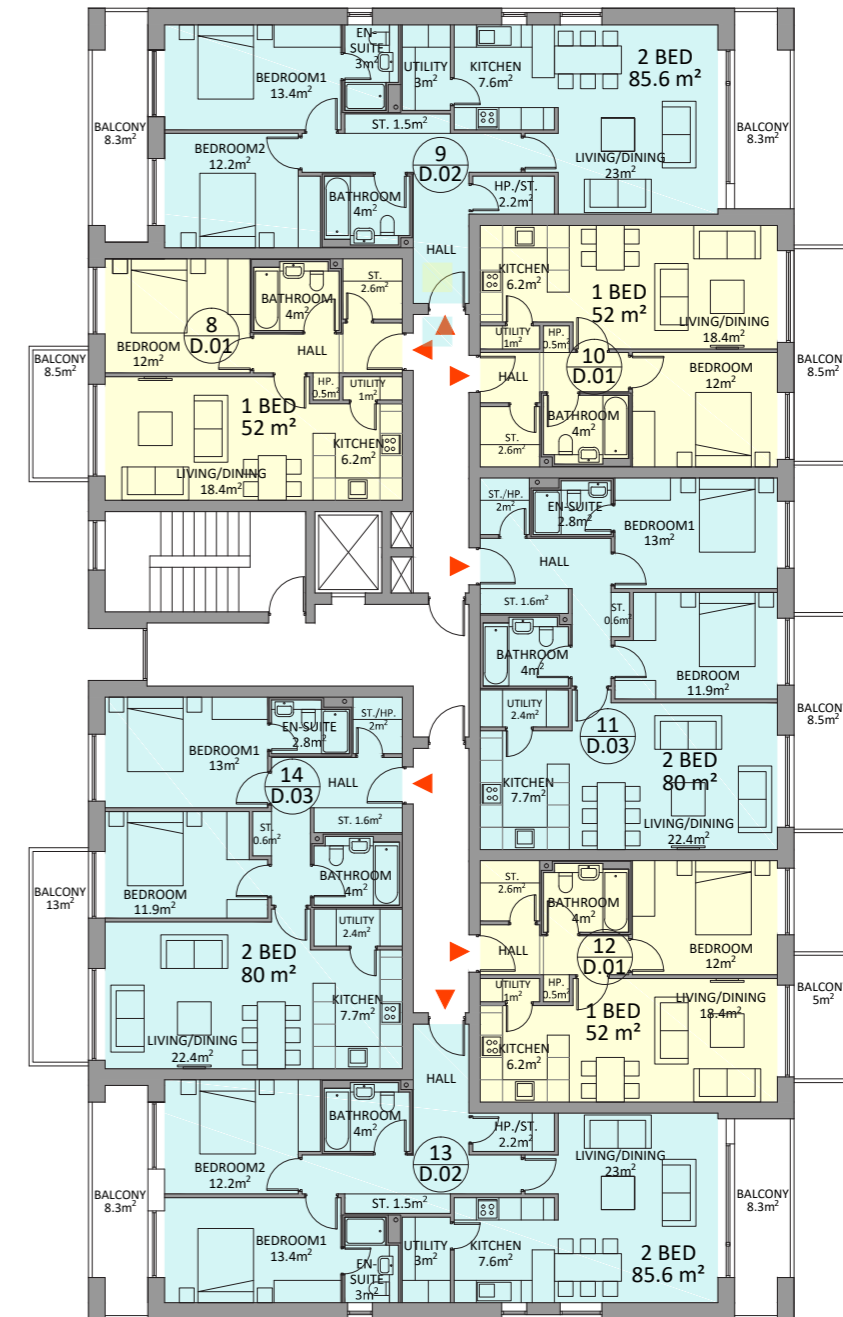
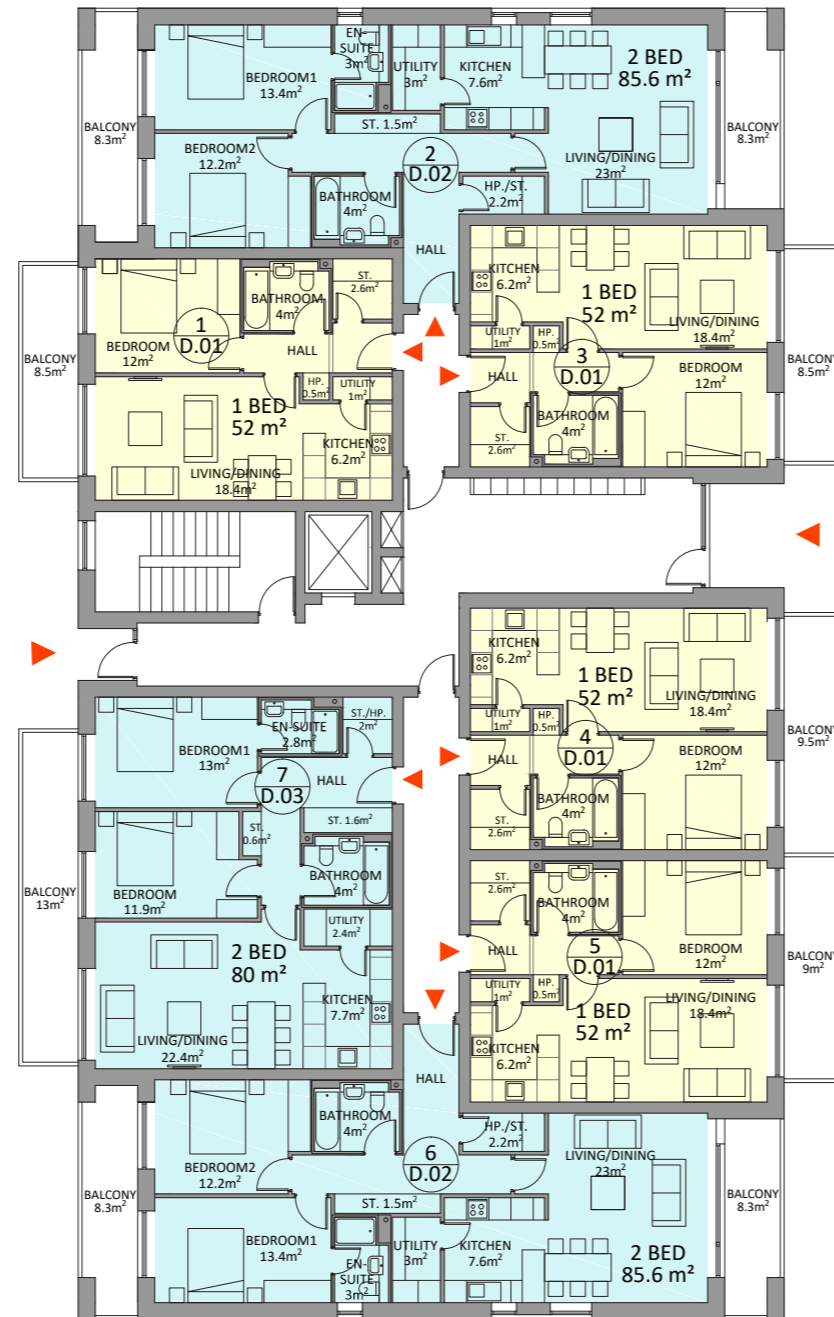
APARTMENT TYPOLOGIES Floor Plans - Block D

- 1 Bed Apartments
- 2 Bed Apartments

7 PER CORE TYPOLOGY / 3 STOREY
BREAKDOWN:

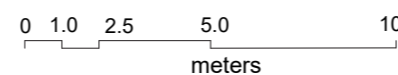
GIA	1,740 m ²
NIA	1,433.6 m ²
NET:GROSS	82.4%
No. of CORES	1 no.
DUAL ASPECT	6 units - 28.6 %

UNITS	
1 BED	10 no. 47.6% - 52 m ²
2 BED	5 no. 23.8% - 80 m ²
2 BED	6 no. 28.6% - 85.6 m ²
TOTAL	21 no. 100%



APARTMENT TYPOLOGIES
BLOCK D - (7 units per core)

1 : 200 @ A3



HOUSING DEVELOPMENT
BLACKROCK-DUNDALK, CO. LOUTH



7 PER CORE TYPOLOGY / 3 STOREY

BREAKDOWN:

GIA	1,740 m2
NIA	1,433.6 m2
NET:GROSS	82.4%
No. of CORES	1 no.
DUAL ASPECT	6 units - 28.6 %

UNITS

1 BED	10 no. 47.6% - 52 m2
2 BED	5 no. 23.8% - 80 m2
2 BED	6 no. 28.6% - 85.6 m2
TOTAL	21 no. 100%

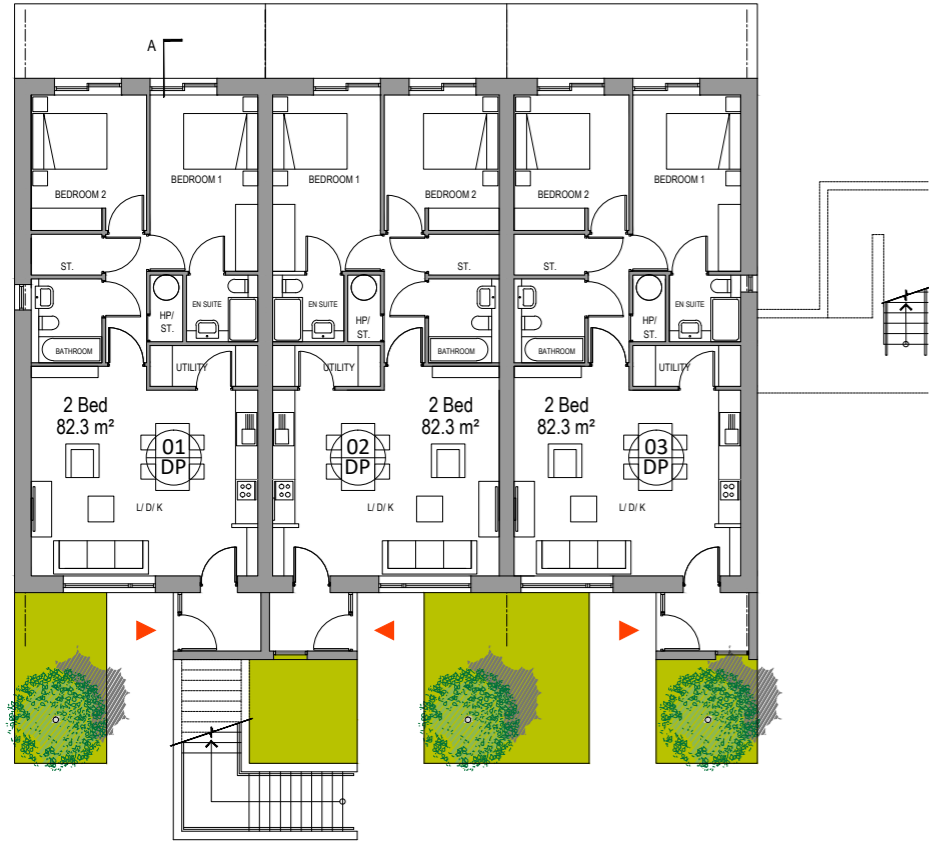


Parkland Elevation

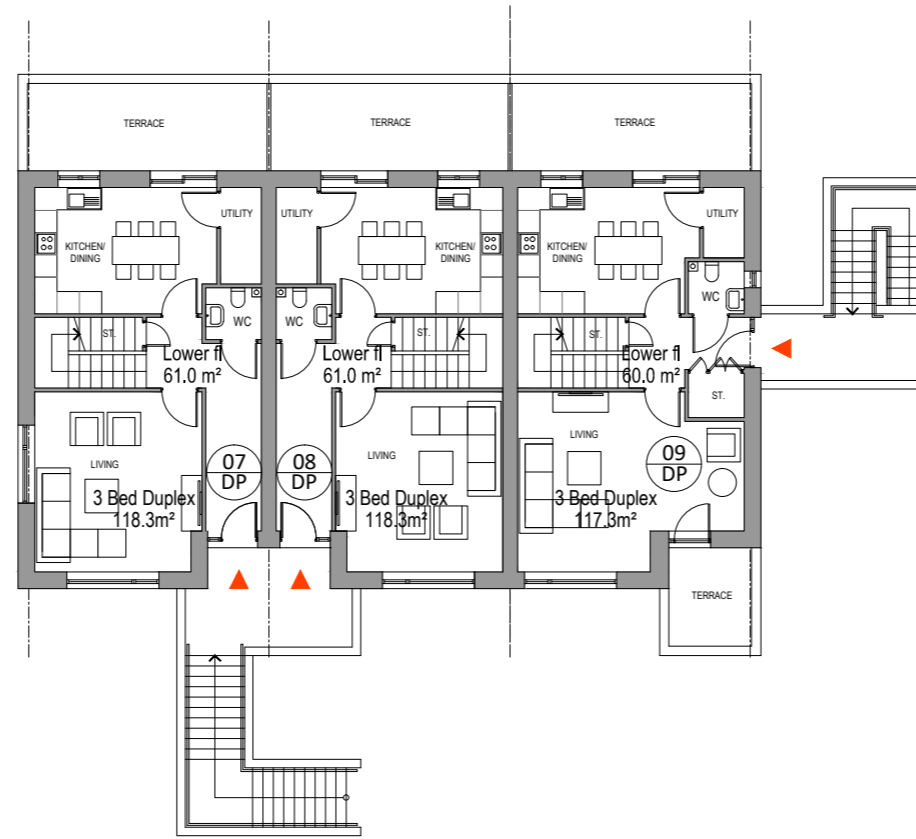


Street Elevation

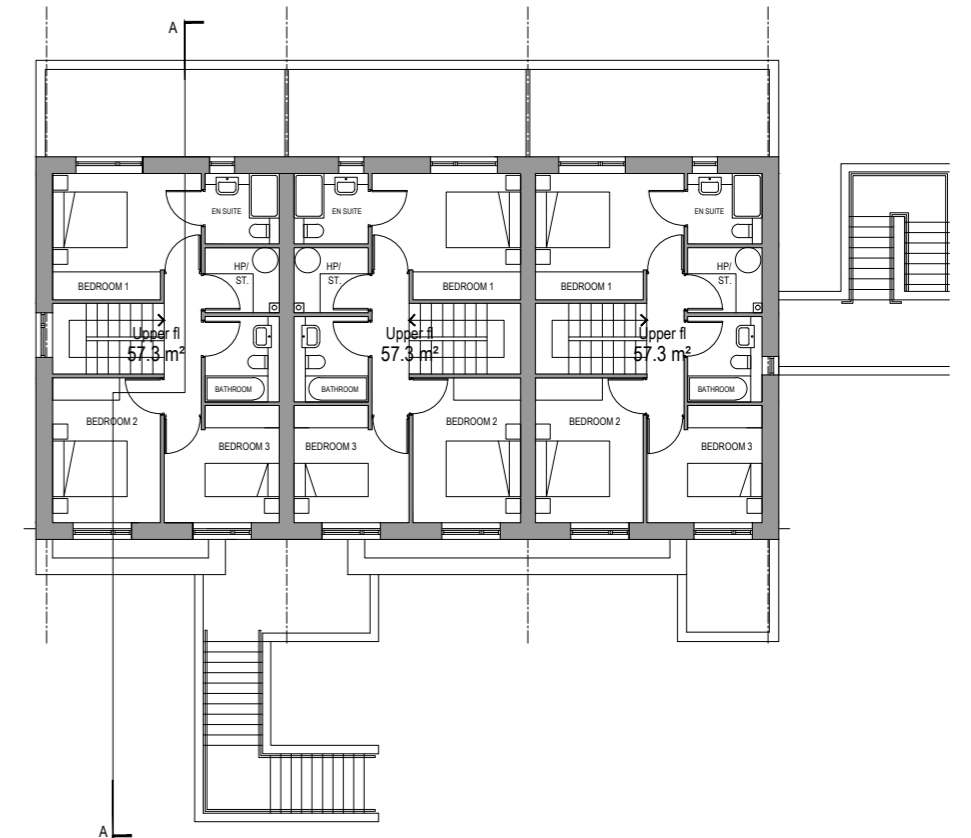
APARTMENT + DUPLEX TYPOLOGIES Floor Plans



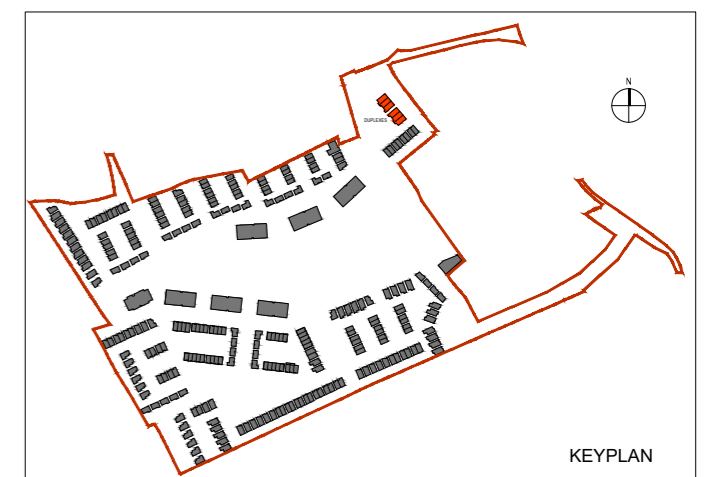
Ground floor plan - 2 Bed apartment: 82.3 m²



First floor plan- 3 Bed duplex_Lower floor: 60 m² / 61 m²
3 Bed duplex: 118.3 m² / 117.3 m²



Second floor plan - 3 Bed duplex_Upper floor: 57.3 m²

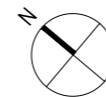
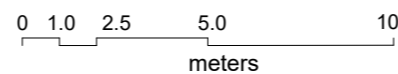


KEYPLAN

APARTMENT TYPOLOGIES

G.F. APARTMENT + DUPLEXES ABOVE

1 : 200 @ A3



HOUSING DEVELOPMENT
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o'mahony pike

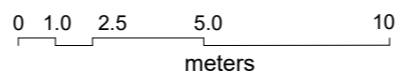
APARTMENT + DUPLEX TYPOLOGIES
Front Elevation



APARTMENT TYPOLOGIES

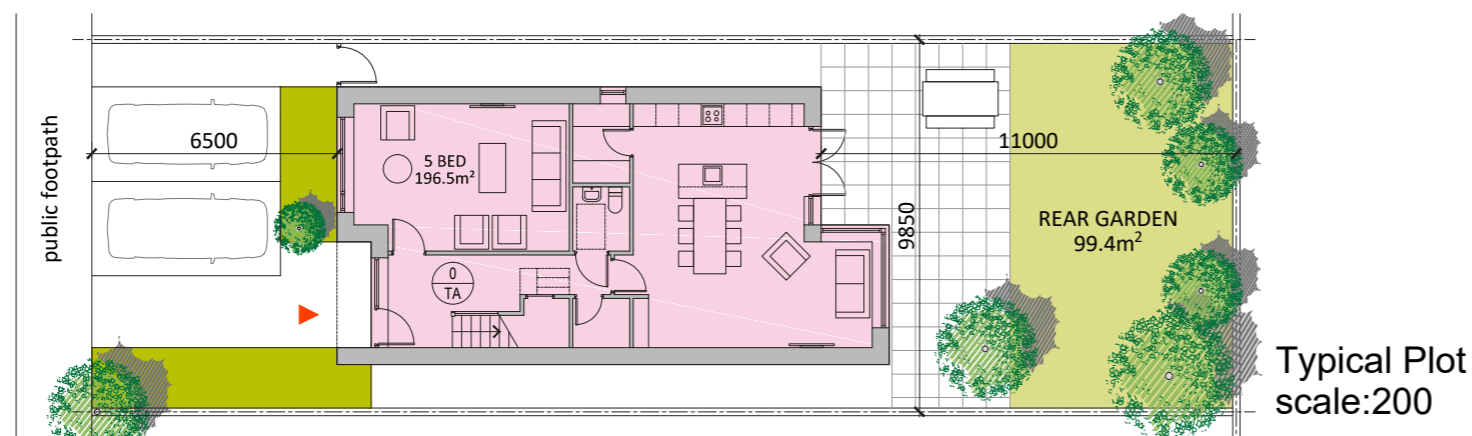
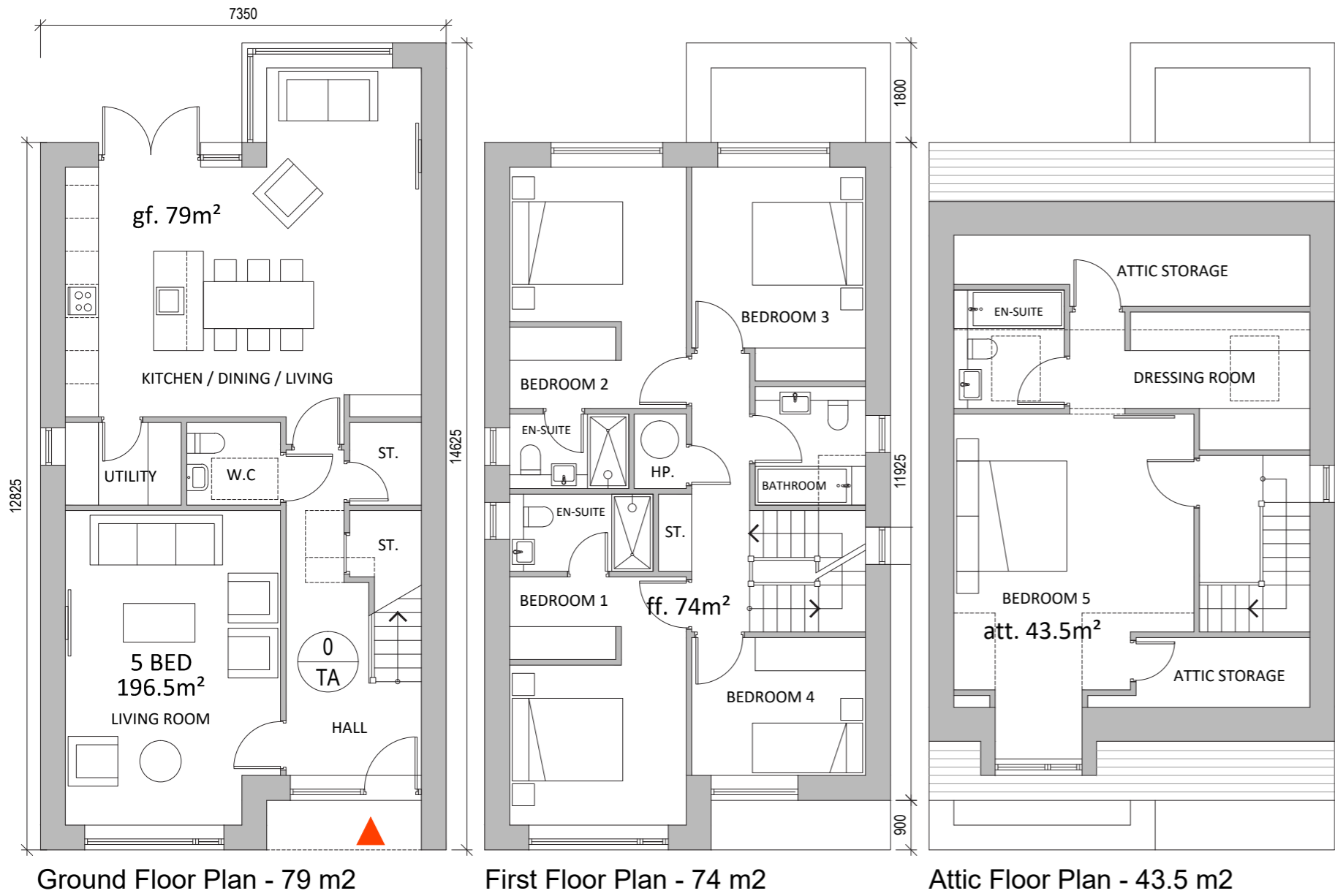
G.F. APARTMENT + DUPLEXES ABOVE

1 : 200 @ A3



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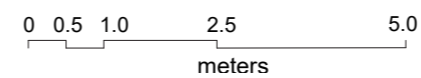




HOUSE TYPOLOGIES

HOUSE TYPE A - Detached - 22 no.5 bed units - 196.5 m²

1 : 100 @ A3

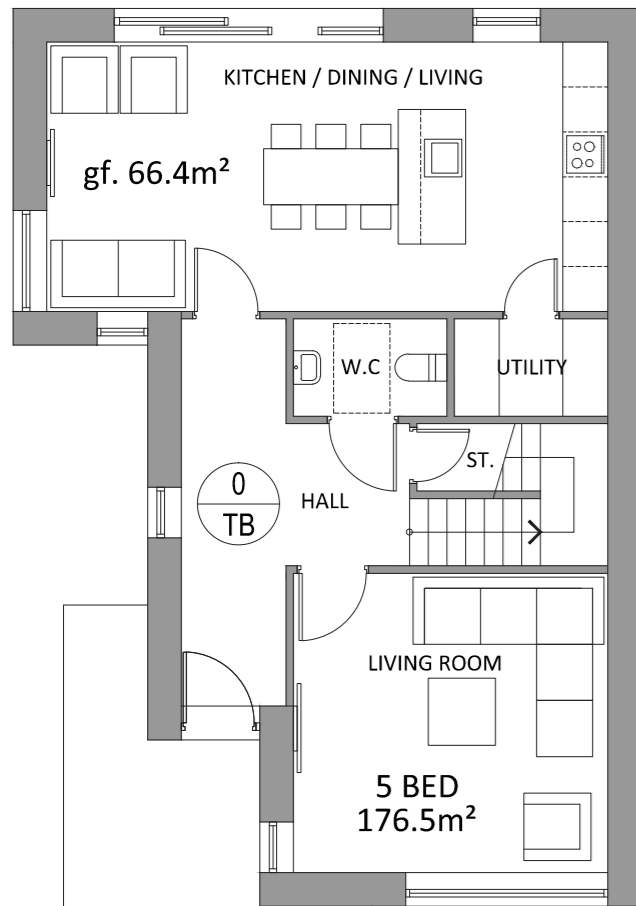


HOUSING DEVELOPMENT
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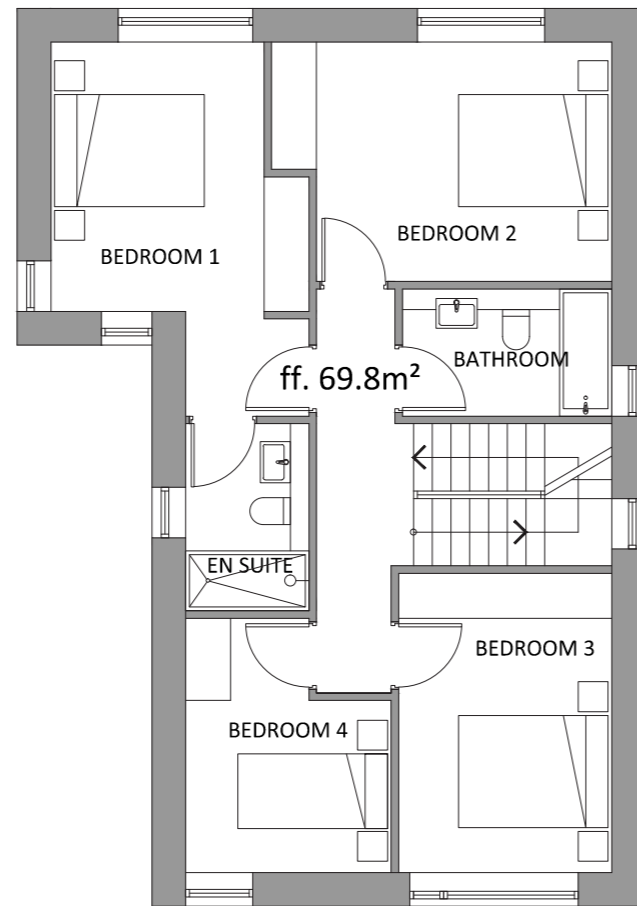


HOUSE TYPOLOGIES

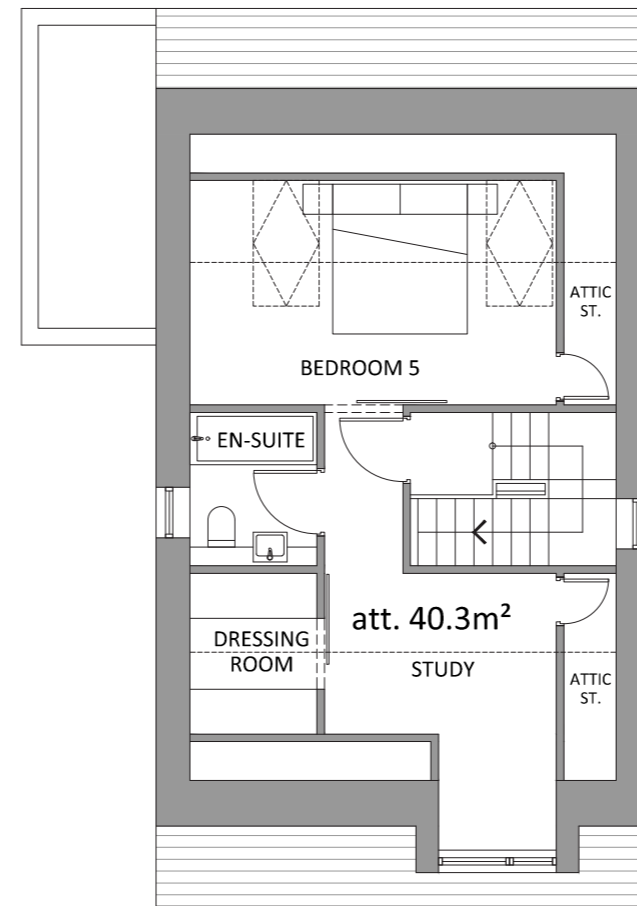
HOUSE TYPE B



Ground Floor Plan - 66.4 m²



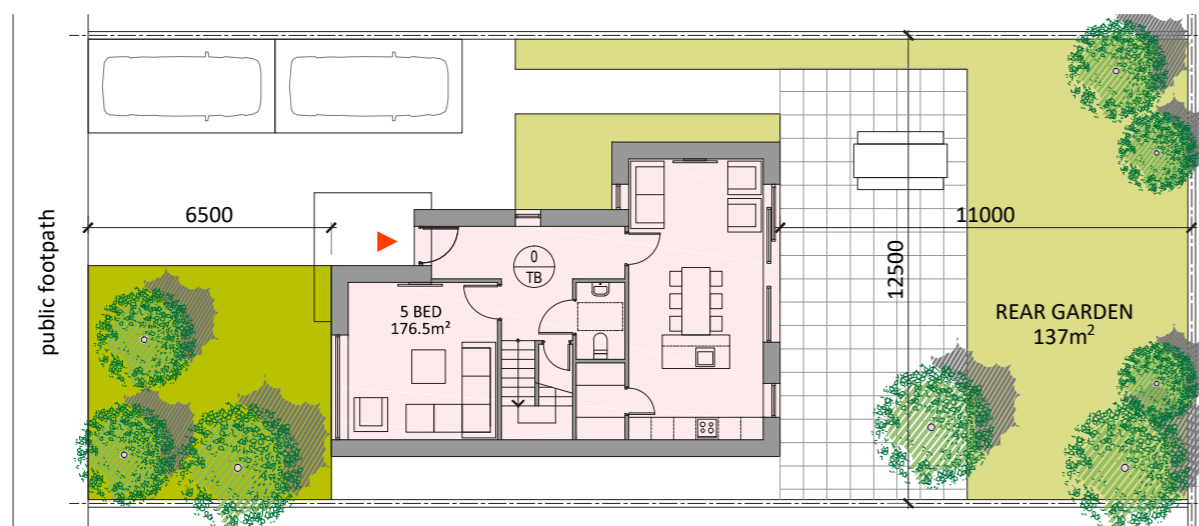
First Floor Plan - 69.8 m²



Attic Floor Plan - 40.3 m²



Front Elevation



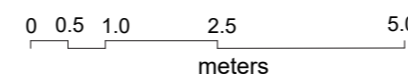
Typical Plot scale:200



HOUSE TYPOLOGIES

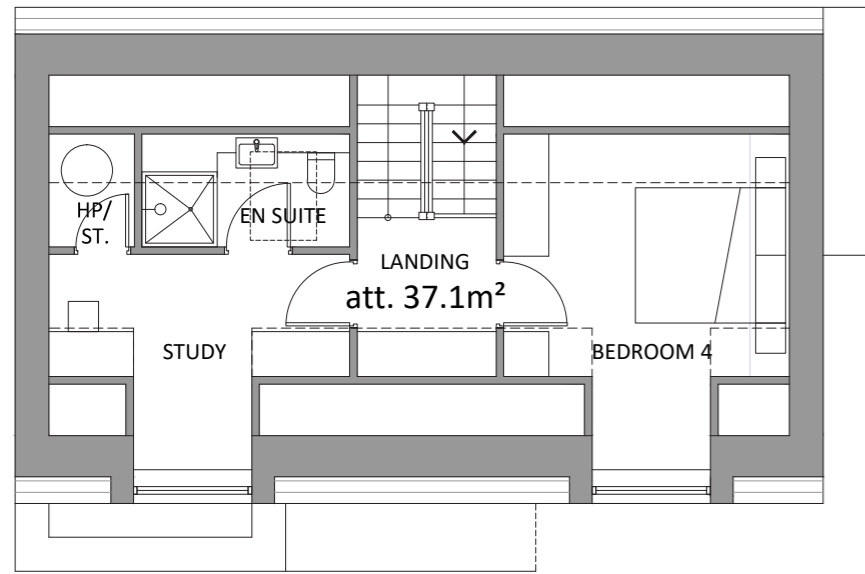
HOUSE TYPE B - Detached - 19 no.5 bed units - 176.5 m²

1 : 100 @ A3

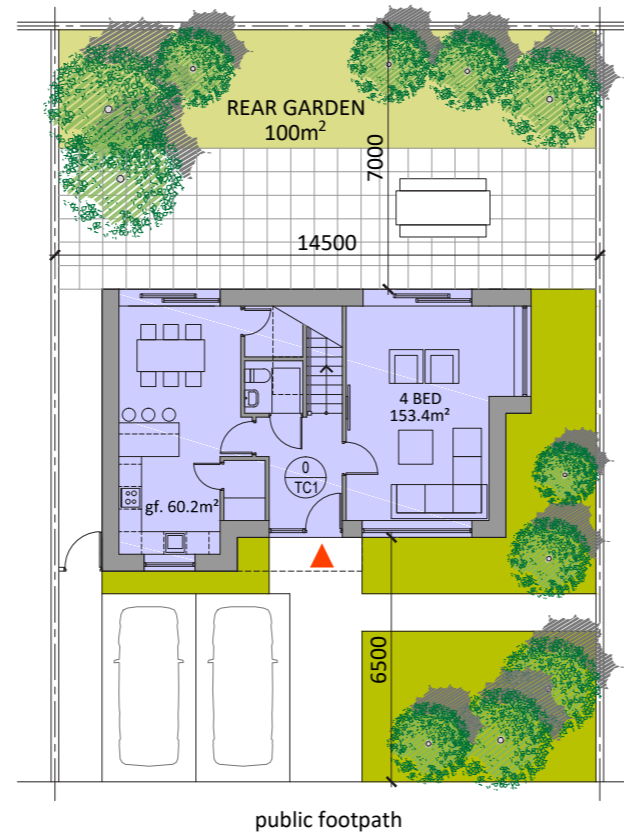


HOUSING DEVELOPMENT
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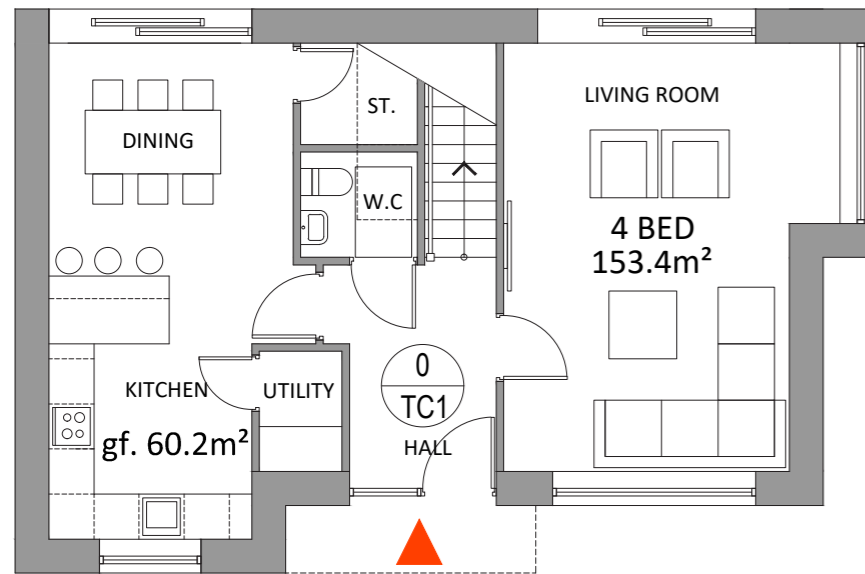
Attic Floor Plan - 37.1 m²



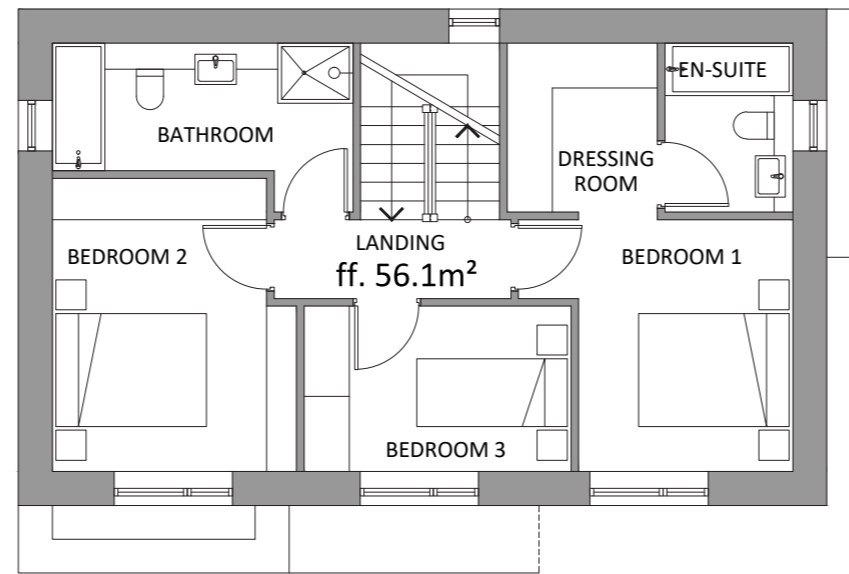
Typical Plot scale:200



Front Elevation



Ground Floor Plan - 60.2 m²



First Floor Plan - 56.1 m²

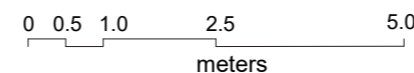


HOUSE TYPOLOGIES

HOUSE TYPE C - Detached - 10 no. 4 bed units - 151.8 m²

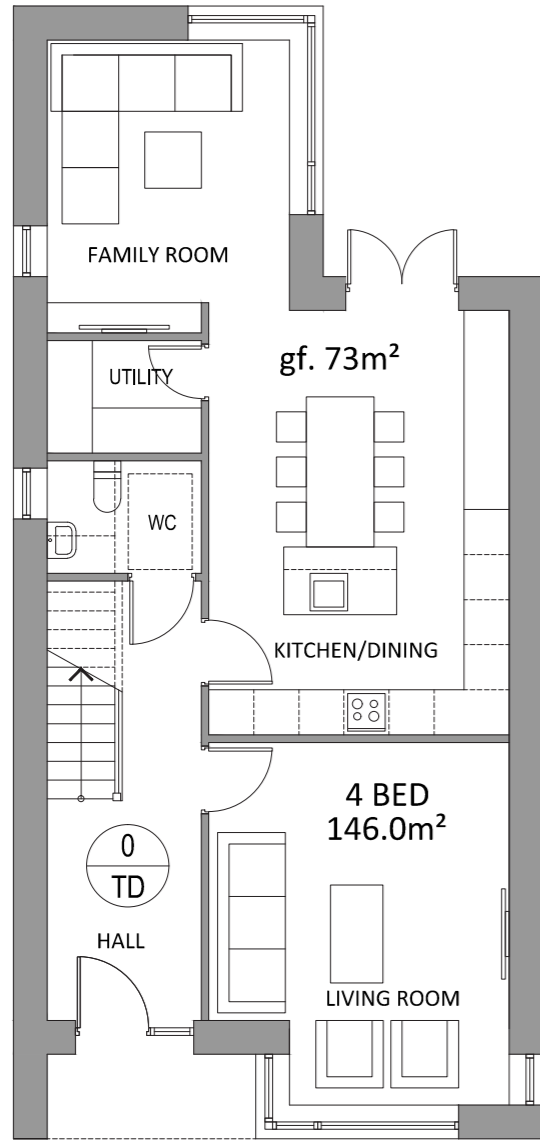
HOUSE TYPE C1 - Detached - 7 no. 4 bed units - 153.4 m²

1 : 100 @ A3

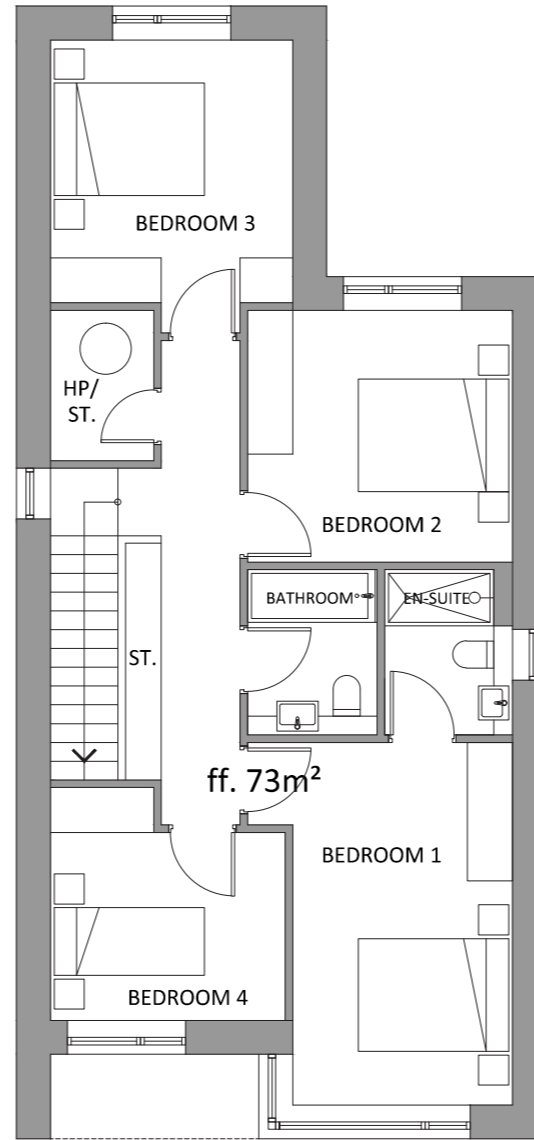


HOUSING DEVELOPMENT
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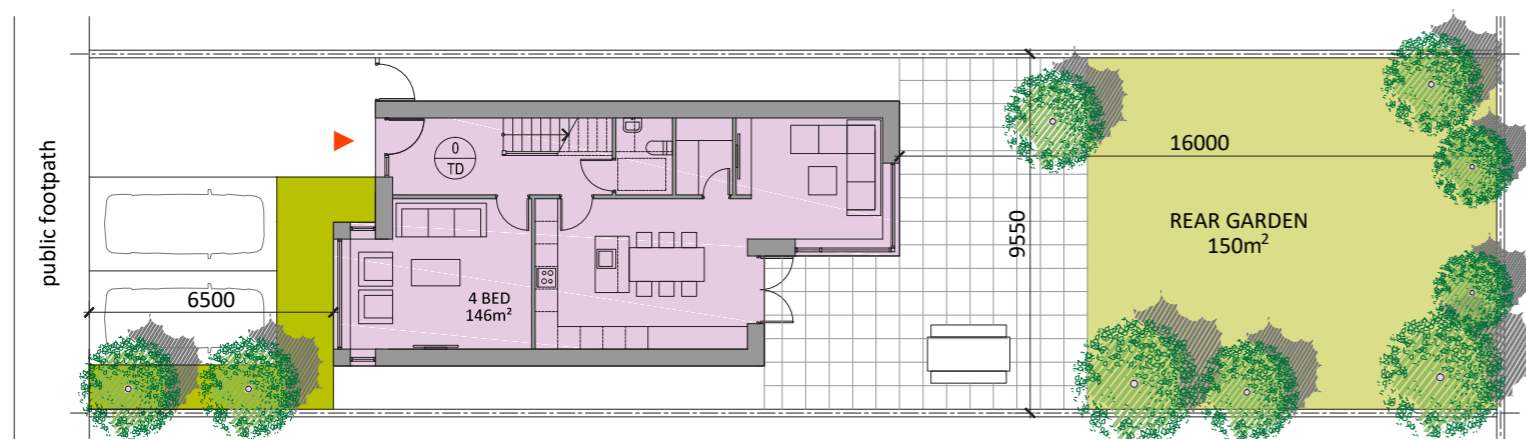
Ground Floor Plan - 73 m2



First Floor Plan - 73 m2



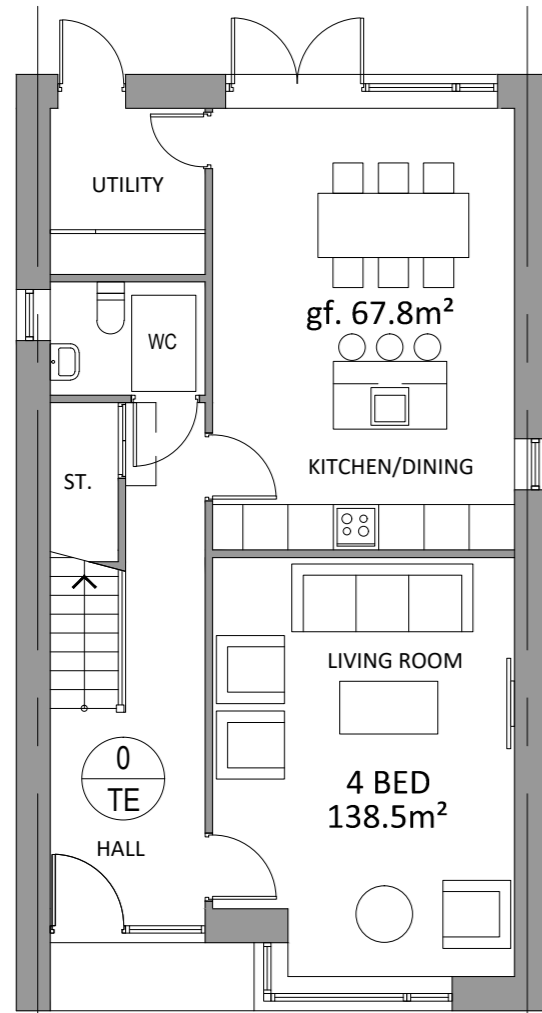
Front Elevation



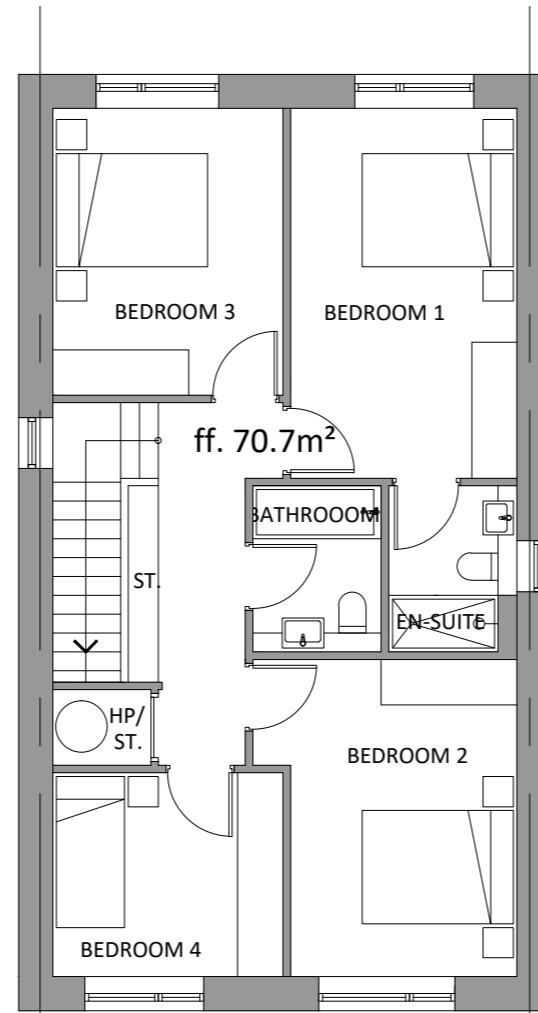
Typical Plot scale:200



KEYPLAN



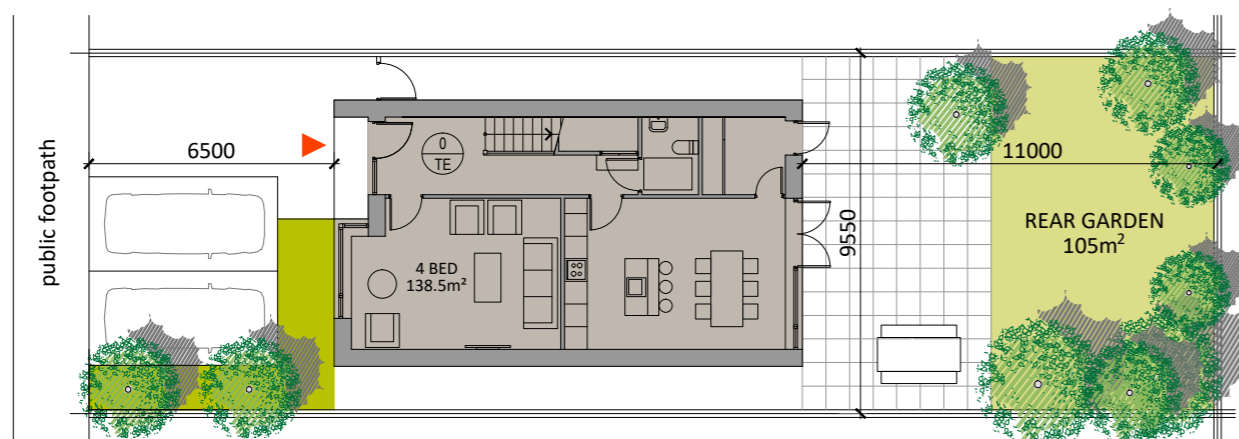
Ground Floor Plan - 69.8 m2



First Floor Plan - 68.7 m2

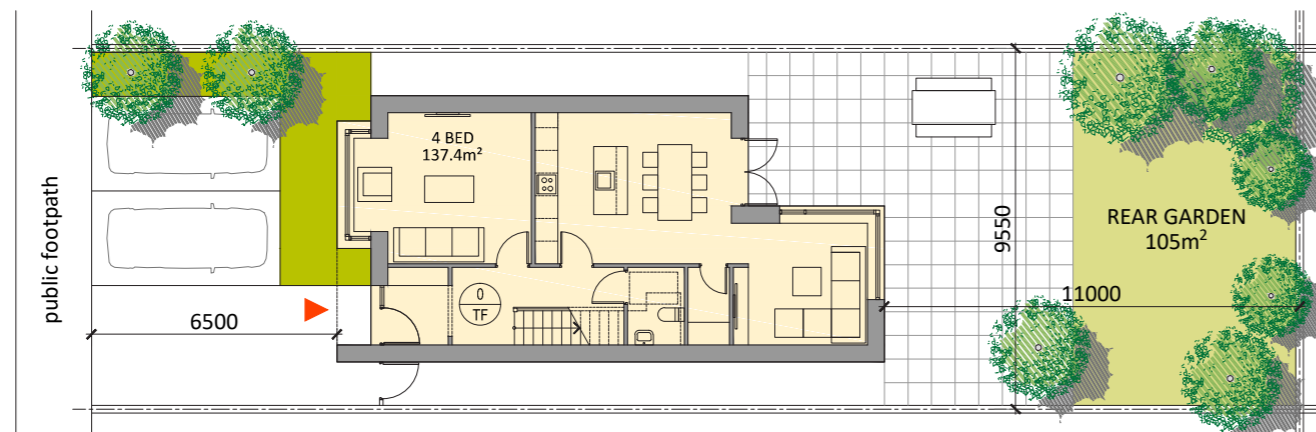
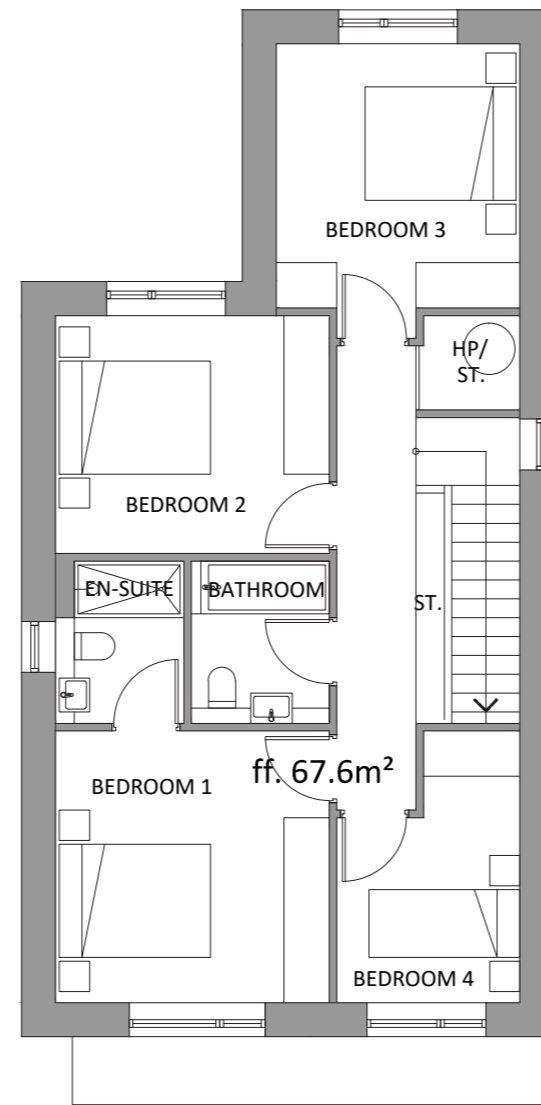
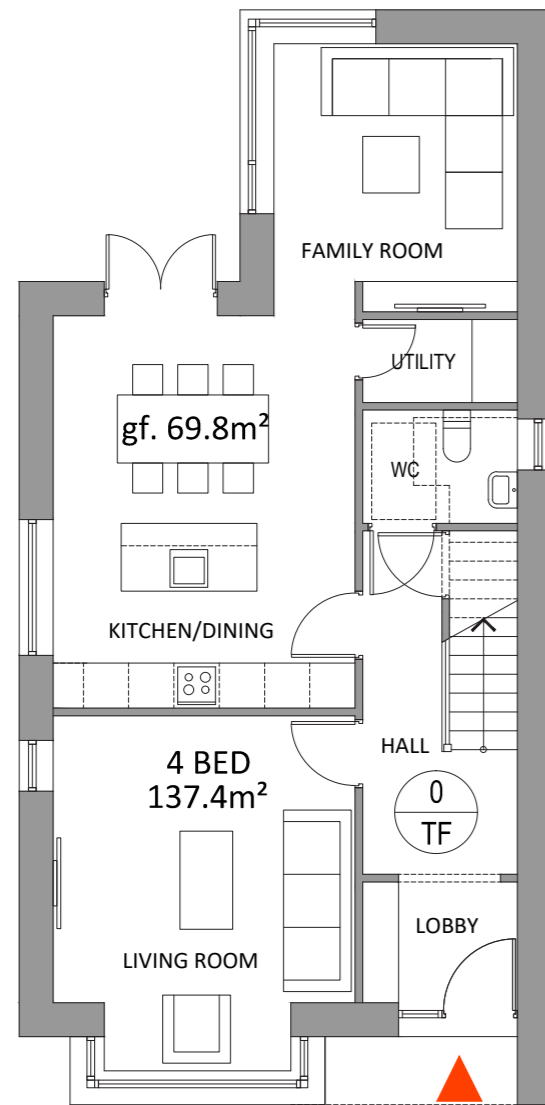


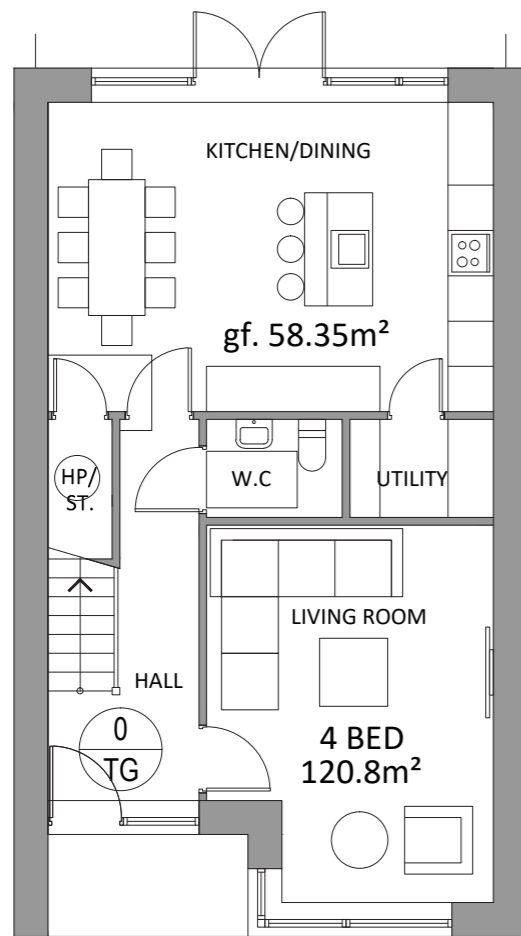
Front Elevation



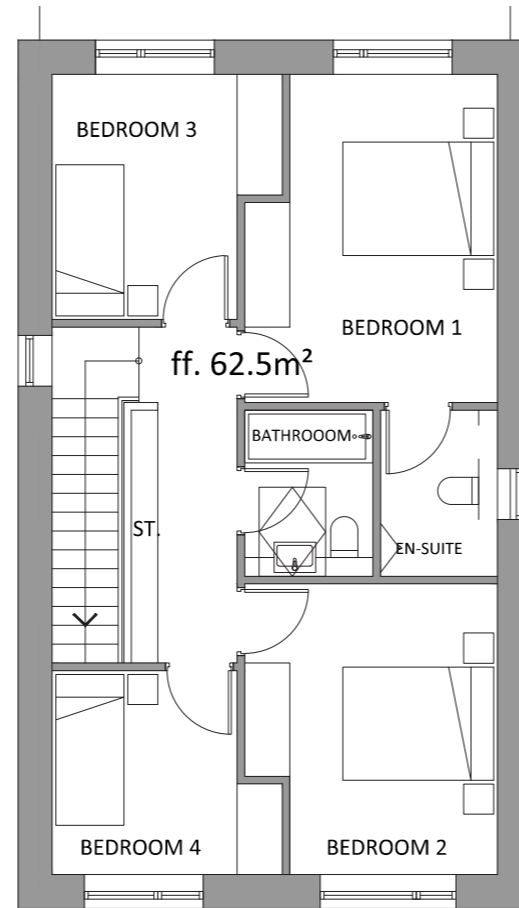
Typical Plot scale:200







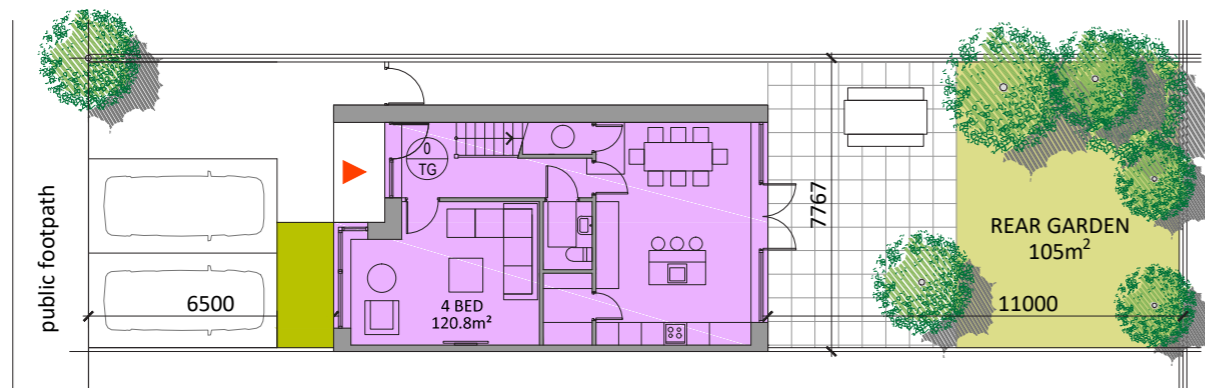
Ground Floor Plan - 58.3 m2



First Floor Plan - 62.5 m2

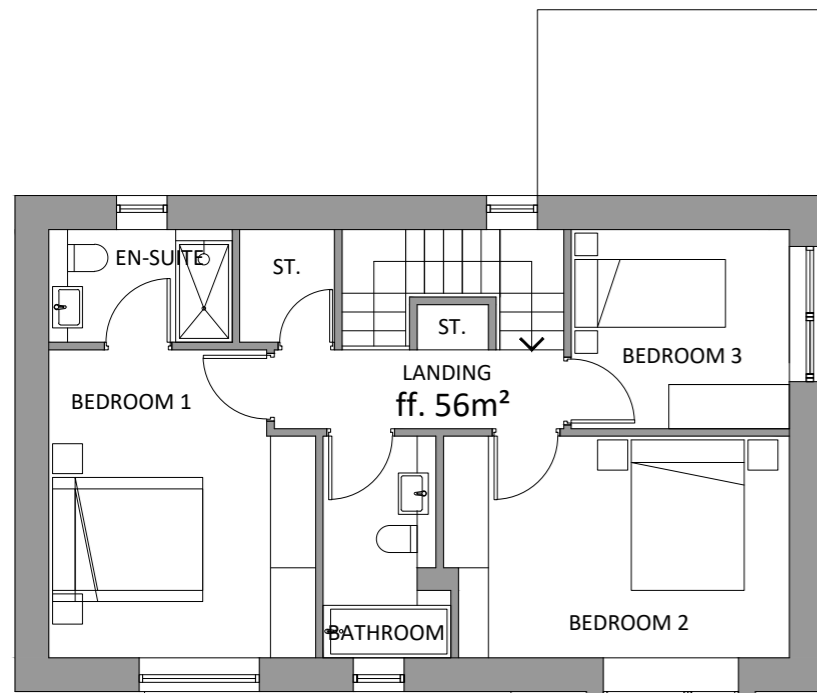


Front Elevation

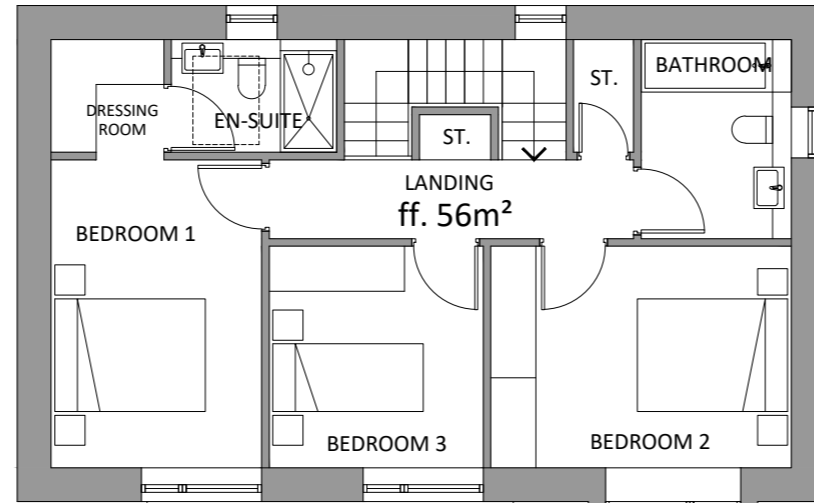


Typical Plot scale:200

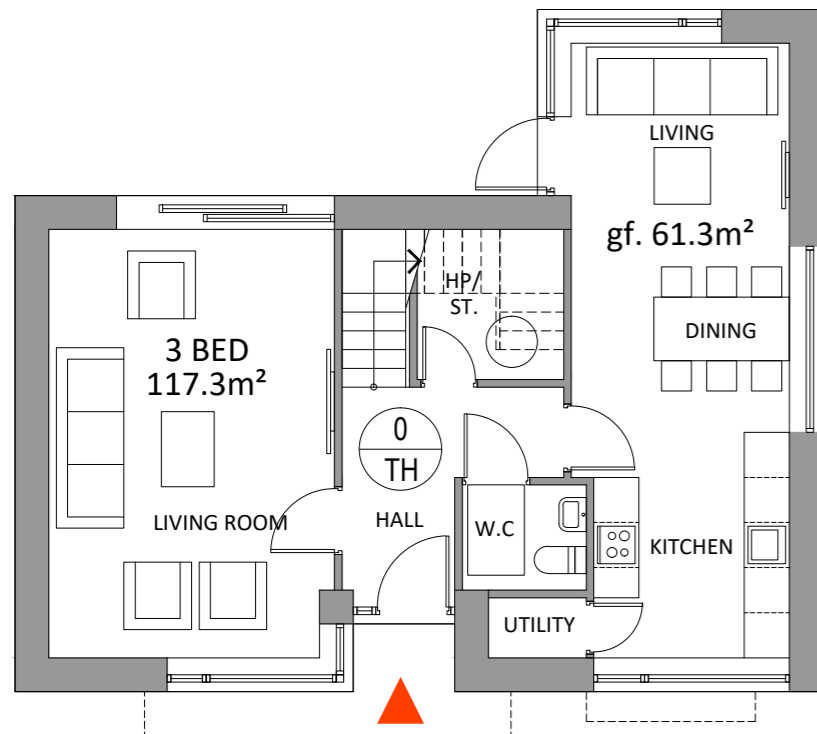




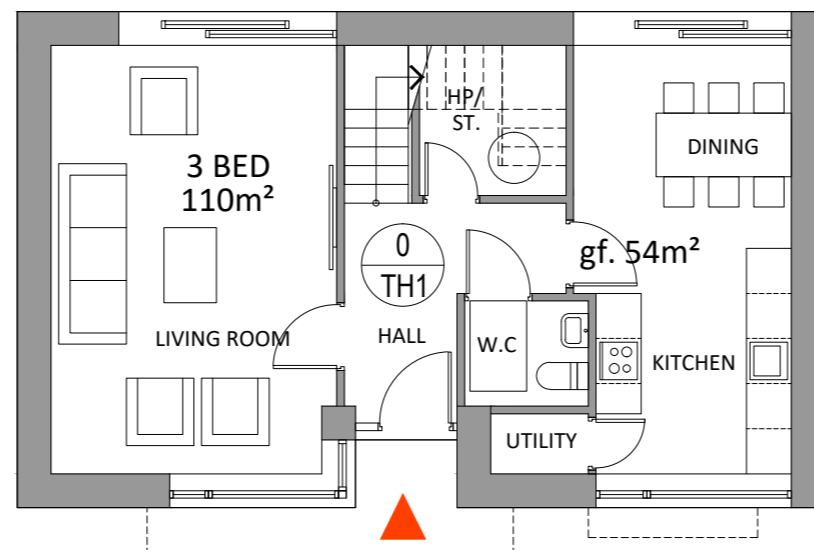
Type H - First Floor Plan - 56 m2



Type H1 - First Floor Plan - 56 m2



Type H - Ground Floor Plan - 61.3 m2



Type H1 - Ground Floor Plan - 54 m2



Front Elevation



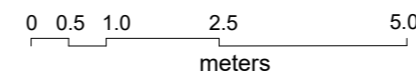
KEYPLAN

HOUSE TYPOLOGIES

HOUSE TYPE H - Detached 9 no. 3 bed units - 117.3 m2

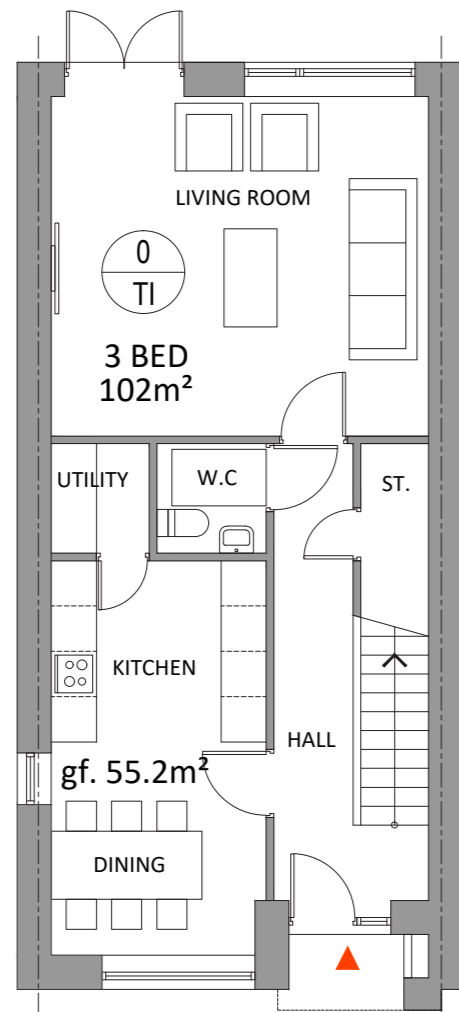
HOUSE TYPE H1 - Detached 9 no. 3 bed units - 110 m2

1 : 100 @ A3

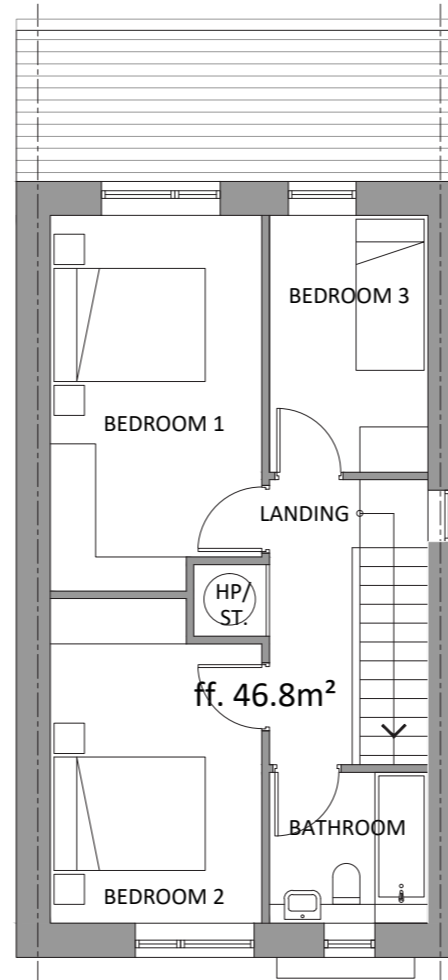


HOUSING DEVELOPMENT
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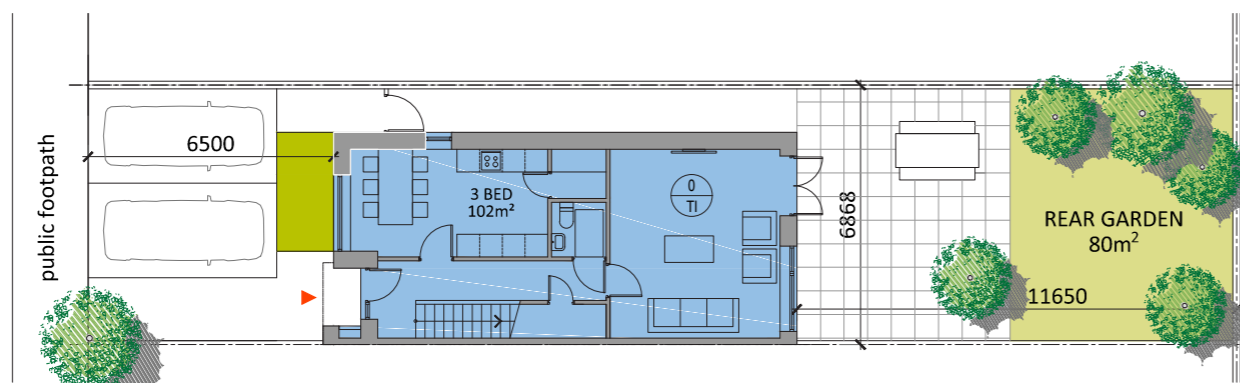
Ground Floor Plan - 55.2 m2



First Floor Plan - 46.8 m2

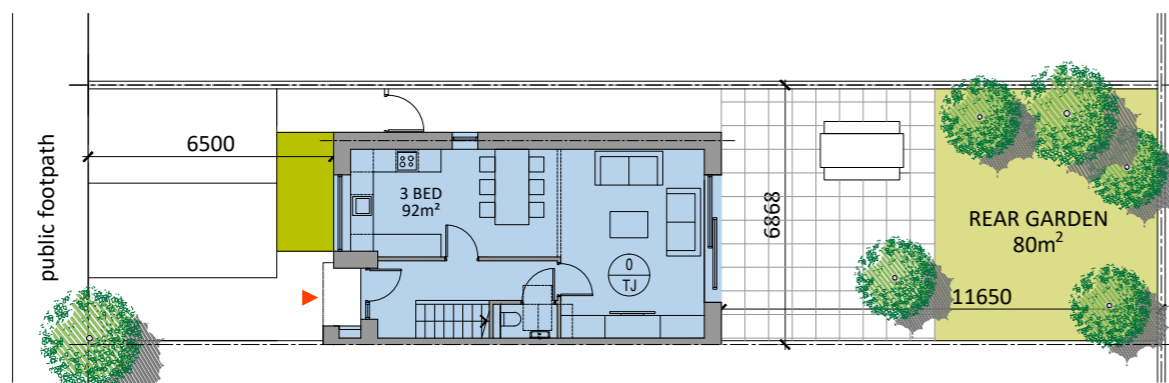
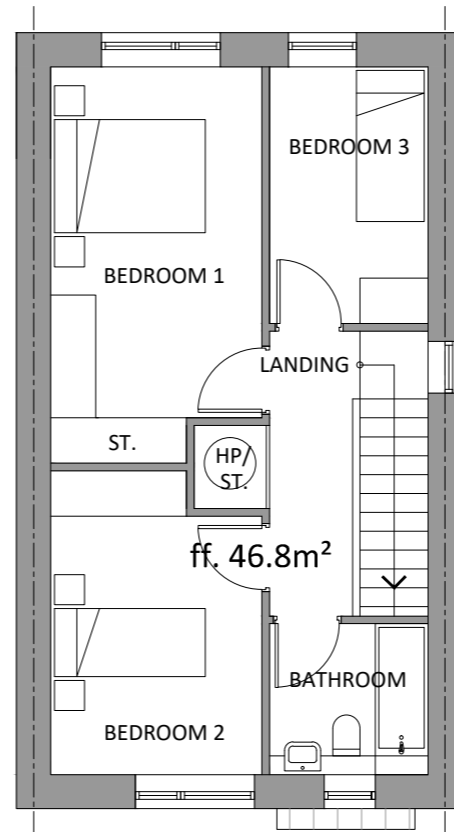
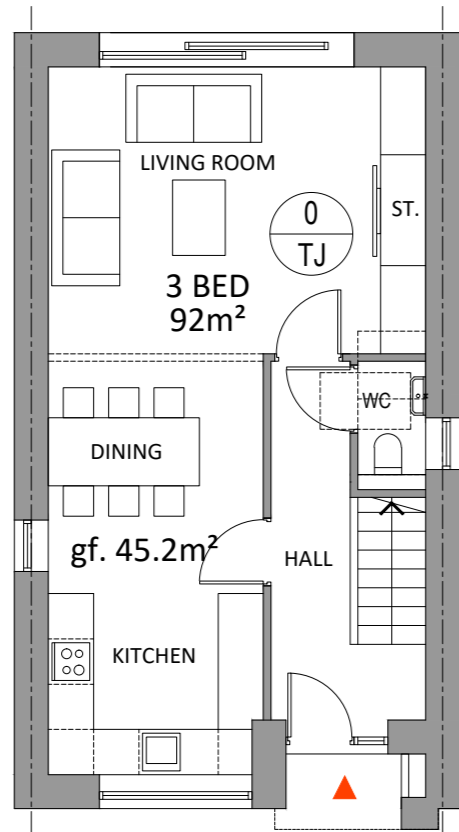


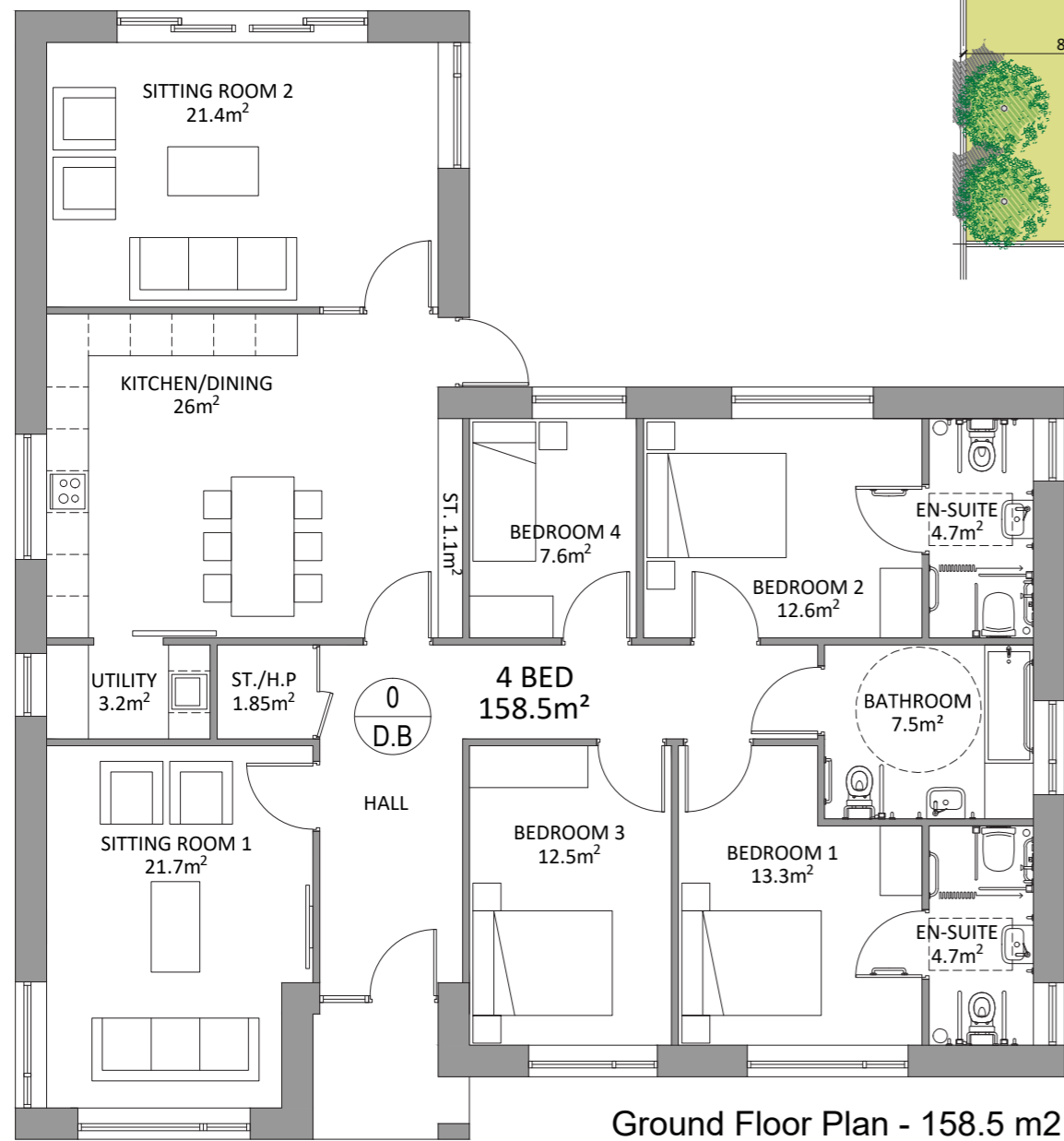
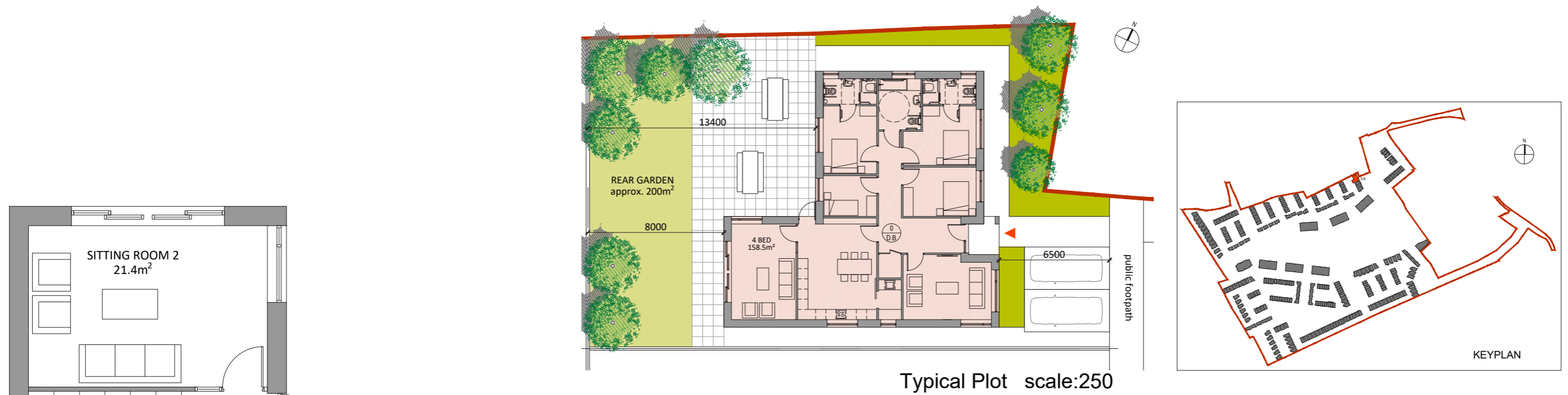
Front Elevation

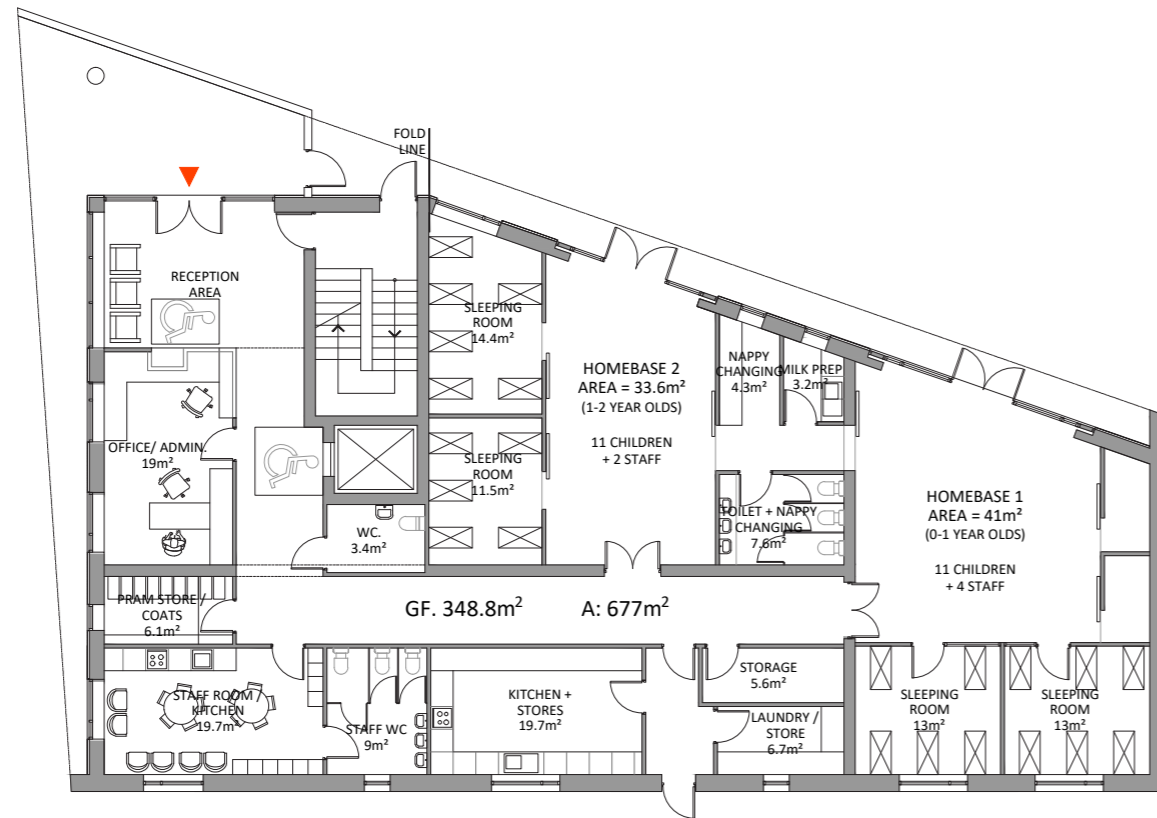


Typical Plot scale:200

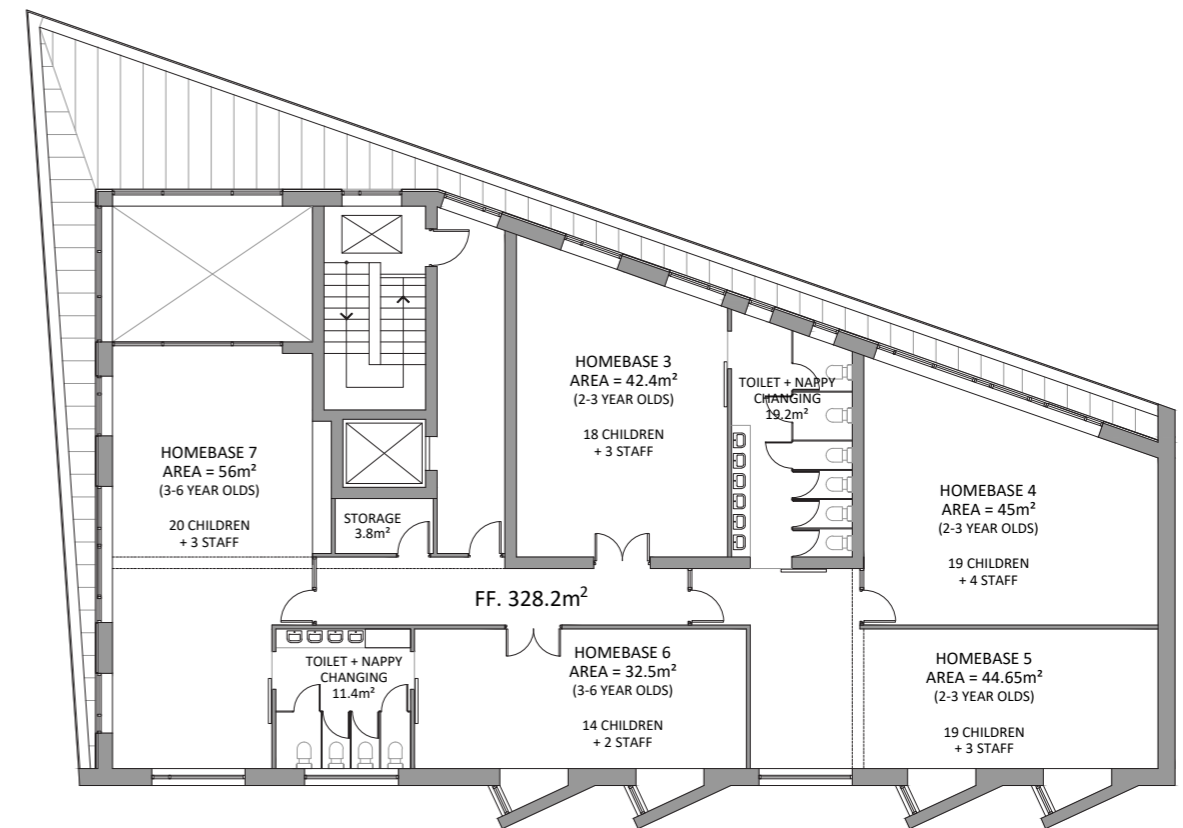




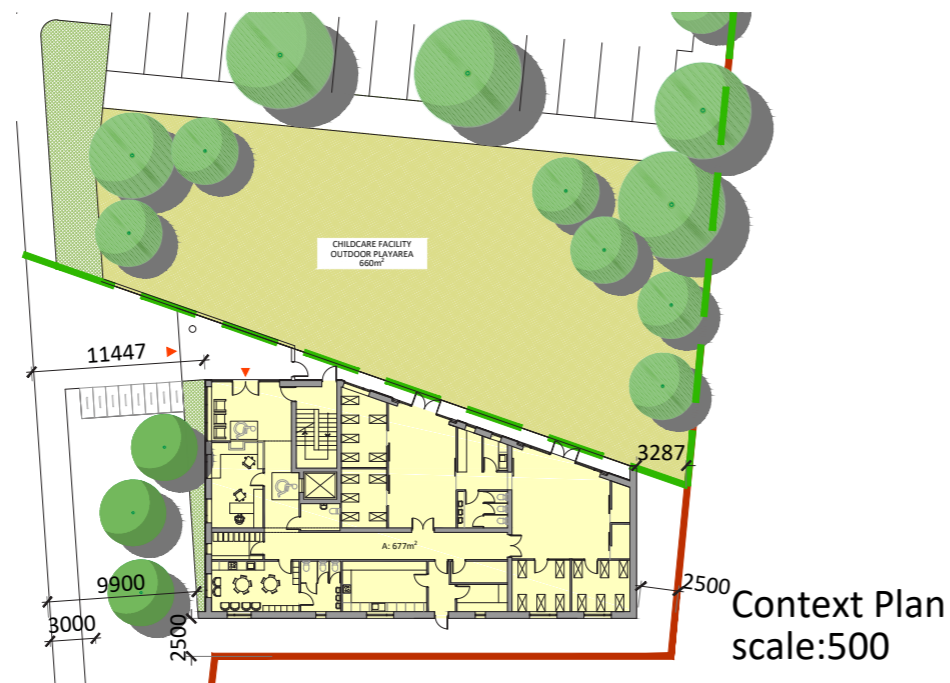




Ground Floor Plan - 348.8 m2



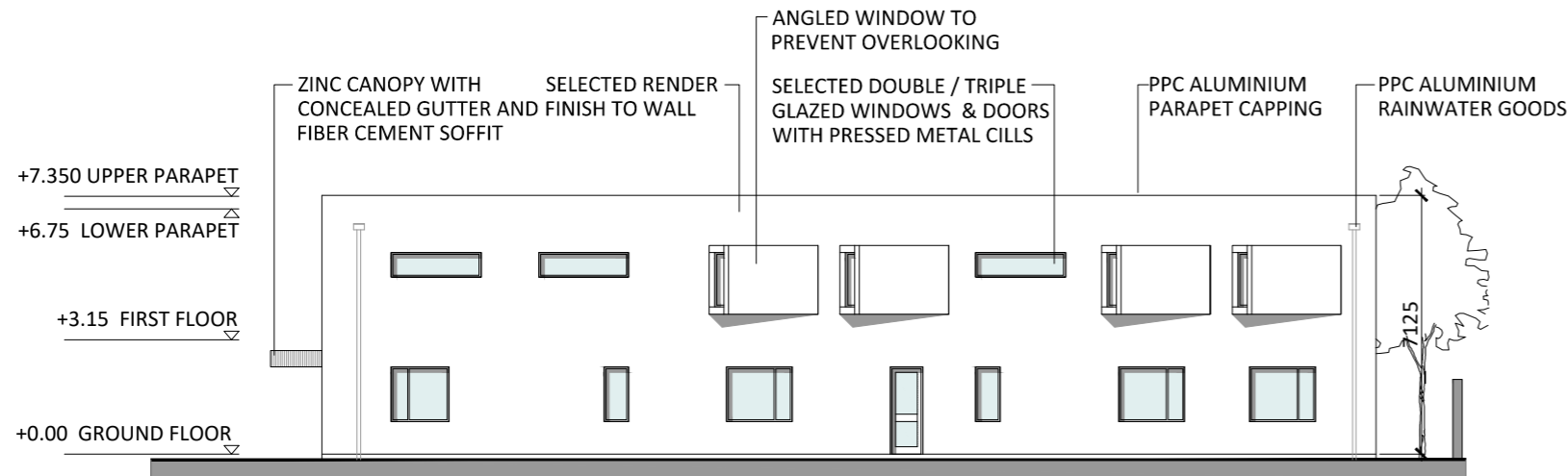
First Floor Plan - 328.2 m2



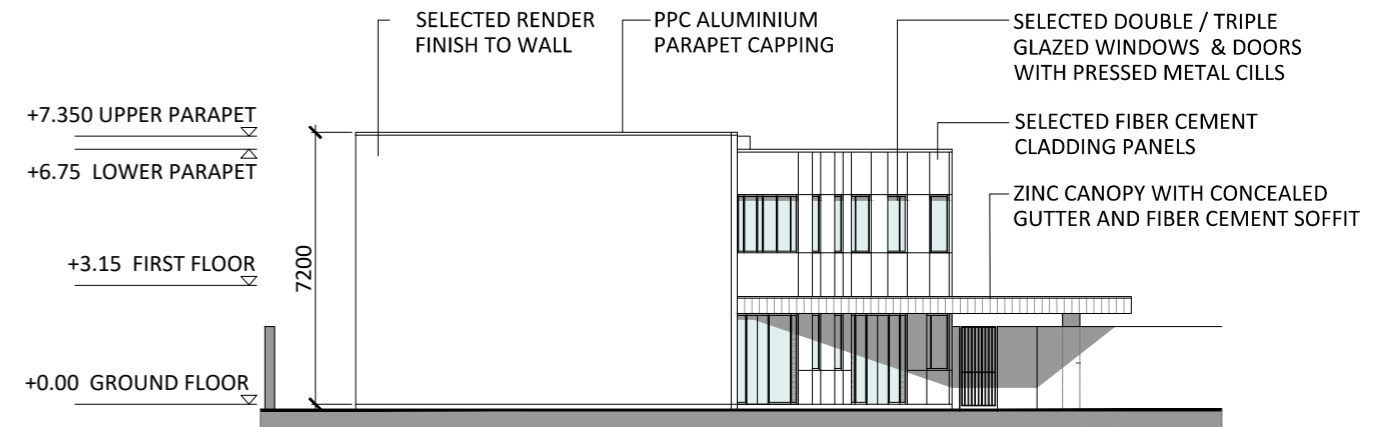
Childcare Facility - 2 Storey
Capacity: 112 children
Carparking spaces: 24 spaces (staff+drop off)
Bicycle spaces: 8 spaces
GFA: 677m²



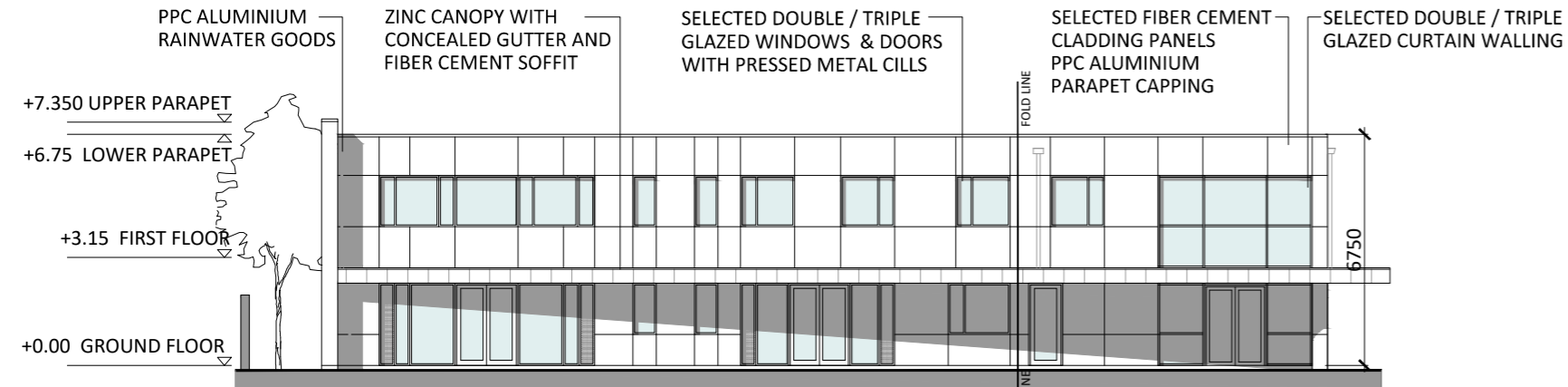
CHILDCARE FACILITY ELEVATIONS



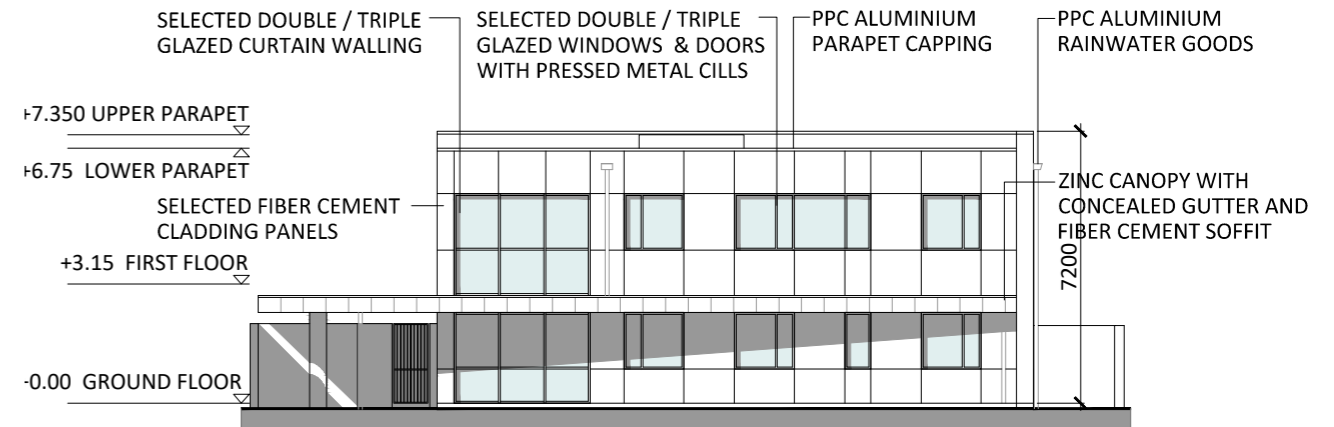
Rear Elevation
scale:200



Side Elevation
scale:200



Street Elevation
scale:200



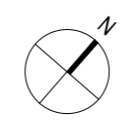
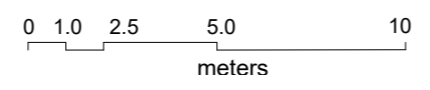
Courtyard Elevation
scale:200



Childcare Facility - 2 Storey
Capacity: 112 children
Carparking spaces: 24 spaces (staff+drop off)
Bicycle spaces: 8 spaces
GFA: 677m²

CHILDCARE FACILITY - ELEVATIONS
CAPACITY: 112 children - GFA: 677 m2

1 : 200 @ A3



HOUSING DEVELOPMENT
BLACKROCK-DUNDALK, CO. LOUTH





Detail Design: Residential Precedents

Medium Density Low Rise Housing

SCHOLARSTOWN WOOD (OMP)

Scholarstown Wood, a new development by Regency is located on the Scholarstown Road in Rathfarham, Dublin 16 and comprises a mix of 3, 4 and 5 bedroom family homes



WATERFAL (OMP)

This is envisaged as a low density, landscape-based and energy-conscious scheme which fully integrates with its rural village context, whilst fulfilling a demand for larger detached houses in close proximity to the city. The agricultural characteristics of the site, with its hedgerows, drainage channels and adjacent farmyard, suggested the use of traditional Irish field patterns as a model for subdivision of the lands. This resulted in an organic arrangement of housing clusters, generally comprising three to six dwellings, which are intended to create identifiable community groups. The layout is a modern response to the historical Cloghan settlement patterns of the past designed to respond to the unsustainable development of 1 off houses in the countryside. Clustering of volumes, which is a significant feature of settlement in the rural landscape, is also used to define space in the individual house plots, thus fragmenting the size of the large dwellings. The design of the buildings draws on the scale, form, language and materials of vernacular rural architecture. The pitched-roof forms and occasional barrel-vaulted roof are familiar in the Cork landscape. Walls are of painted render and roofs are of natural slate and metal (zinc). Dry stone walling and planted earthen bank boundaries complete the limited palette of materials and complement the existing hedgerows, which have been retained and used to define housing areas and public open space in the scheme.

Site Description: The site comprises three fields which were in agricultural use, with a gently sloping topography and triangular geometry, and field boundaries defined by hedgerows, trees and a stream. The site is located in the village of Waterfall, about 1km from Cork City boundary and within the Metropolitan Greenbelt. It is bounded by a public house and farmyard to the southwest, a recent suburban style development to the northwest, the village to the west and agricultural land to the south and east.





PELLETSTOWN (OMP)



GRIFFEEN (OMP)



KNOCKRABO (OMP)

Apartments



Mount Saint Anne's, Milltown (OMP)



Marianella, Rathgar (OMP)



Streetscape in Notre Dame, Dundrum (OMP)



Streetscape in Santa Sabina, Sutton (OMP)



Adamstown SDZ, Dublin

 mahony pike