MAES EMLYN HOUSING, RHYL
DESIGN AND ACCESS STATEMENT

DECEMBER 2023

DRAFT ISSUE FOR PRE-APPLICATION CONSULTATION

DOCUMENT ISSUE RECORD

Please ensure when referencing this document that you are using the most recent Issue in accordance with the table below and ensure previous issues of this document are destroyed or marked as Superseded

Issue	Date	Description of Amendment	By	Checked
1	03.03.23	Issued for pre-application consultation	KM	MG
2	15.11.23	Updated for pre-application consultation	KM	DM
3	04.12.23	Updated to reflect latest landscape plan. Issued for pre-application consultation.	KM	DM
4	14.05.24	Updated in line with client comments.	KM	AC
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CONTENTS

Site location - GOOGLE imagery

a. Project Summary

Site Location
The site is located in Rhyl, a coastal town on the north Wales coastline, west of Prestatyn and east of Colwyn Bay. Rhyl sits at the northern tip of the Denbighshire County administrative boundary. The site is located approximately 5 miles north of the A55 North Wales Express way which links towns across North Wales, east to Chester and wider motorway networks beyond. The southern extent of the site is bound by the main rail line running to Rhyl Station approximately half a mile away, connecting towns along the coast with links back to key rail networks.

The site is located to the east of the Rhyl Conservation Area. Rhyl falls within the LDP North Wales Coast Strategic Regeneration Area. The development strategy for the area under policy PSE 1 is to 'exploit development opportunities' to created a viable future for the communities within the areas. This includes diversifying the housing stock in order to tackle chronic housing conditions such as the proliferation of Homes in Multiple Occupation, and by providing new family housing.

The site currently houses 59 flats that were used as sheltered accommodation for older people, these have been vacant since August 2021.

Proposal
This application is for full planning permission for the demolition of the existing buildings on site and the erection of 35no. new dwellings across a mix of 1-2 bedroom apartments and 2-3 bedroom houses. The proposals include public open spaces and both informal and equipped play areas suitable for families. This proposal will allow much needed housing to be provided on a disused brownfield site with excellent links to public transport networks and town centre facilities

The new dwellings will be designed and built to meet Welsh Government Design Quality Requirements and to Passivhaus Low Energy standard to provide contemporary, efficient and adaptable homes to meet the changing needs of residents.

View of the site entrance - GOOGLE imagery

View of the existing buildings - GOOGLE imagery

Design vision - view into site from the site entrance - existing mature trees creating a framework for the development and sense of place

Design vision - view of the proposal from Parc Esmor - a gateway building and visual street line from Parc Esmor

b. The Brief and Vision

Project Brief
The proposed mix of 1-2 bedroom walk-up apartments and 2-3 bedroom houses will allow suitable accommodation to be provided for individuals through to families at varying stages of life.

The proposals include for 18no. 1 bedroom (2 person) apartments and 3no. 2 bedrooms (4 person) apartments all of which exceed the minimum space standards set out in WDQR. All ground floor apartments are designed to meet AD Part M Category 3 for wheelchair accessible dwellings. These requirements incorporate the standards previously set out in Lifetime Homes to enable housing designers to provide accessible dwellings that can adapt to the changing needs of residents.

There are 10no. two bedroom houses and 4no. three bedroom houses arranged as either 2 storey semi-detached or terraced units. These will again exceed minimum spaces standards set out in WDQR and will be designed to meet AD Part M Category 2 for adaptable dwellings.

Design Standards
As outlined above the scheme is designed to meet design standards for housing and in accordance with TAN 10, TAN 12 Design and SPG notes of residential development, including notes 01 and 25. The site design has also taken into account guidance in SPGs for parking requirements and recreational public open space. The proposals will be constructed in line with the latest Building Regulation Approved Documents, British Standards and industry best practice.

Sustainability
The brief has included for designing to a Passivhaus Low Energy standard or ethos from the outset. Whilst the aim is not to achieve certification, the principles have been incorporated into the design from building fabric to M&E strategy. The principles allow for minimal heating and energy usage long term by improving energy performance through careful selection of materials, construction details and services.

Design Vision
The proposals aim to provide housing that is sustainably forward thinking and uses considered design and detailing to elevate and make the most of simple materials to provide contemporary housing that aesthetically reflects and enhances the surroundings.

The site layout has been designed to retain many of the existing mature trees on site, using their positions as focal points for public open spaces that form the framework for the site. Incorporating the site into the surrounding residential areas has also informed the layout, with elevation frontages continuing the visual line from Parc Esmor and focal three storey apartment buildings providing a gateway into the site that is visible from Highfield Park / Churton Road and Parc Esmor.

Sustainable urban drainage solutions have been incorporated into the scheme, using SUDs filter beds within the landscape design.


Housing on Highfield Park


Housing on Highfield Park


Brickwrok details on Highfield Park


Housing on Y Gorlan


Housing on Parc Esmor


Housing on Parc Esmor

c. Site and Context Analysis

The site is 0.8731ha and is located in an established residential area. To the north is Y Gorlan, Highfield Park and Churton Road and to the east is Parc Esmor. To the south lies the north-Wales coast rail line. Rhyl town centre is approximately 10 minutes walk to the west of the site. The current buildings on site were developed in the 1970's to provide sheltered housing. The 59 flats are provided across two buildings with a central parking area splitting the site into two distinct zones.

Local Context Character
The images to the left illustrate the local vernacular character and materials. The western end of Highfield Park is characterised by semi-detached 2-3 storey housing with bay windows, typical of a Victorian coastal town. During the 19th and early 20th centuries, Rhyl boasted a brickmaking industry with several clay pits on the edge of the town. Many of the late Victorian to Edwardian buildings in Rhyl will have used locally made red bricks. Simple red brick façades use brick detailing, including projecting details, dentil courses, soldier courses and horizontal banding to provide decorative interest. Contemporary housing around the site provides a varied material palette from red brick and buff brick to white painted smooth render and pebbledash. Housing varies in height from single storey to predominantly two storey, with some 2.5 storey. Roof finishes to the historical context are predominantly Welsh slate, with contemporary developments using a variety of concrete and clay tiles in a brown or grey colour.

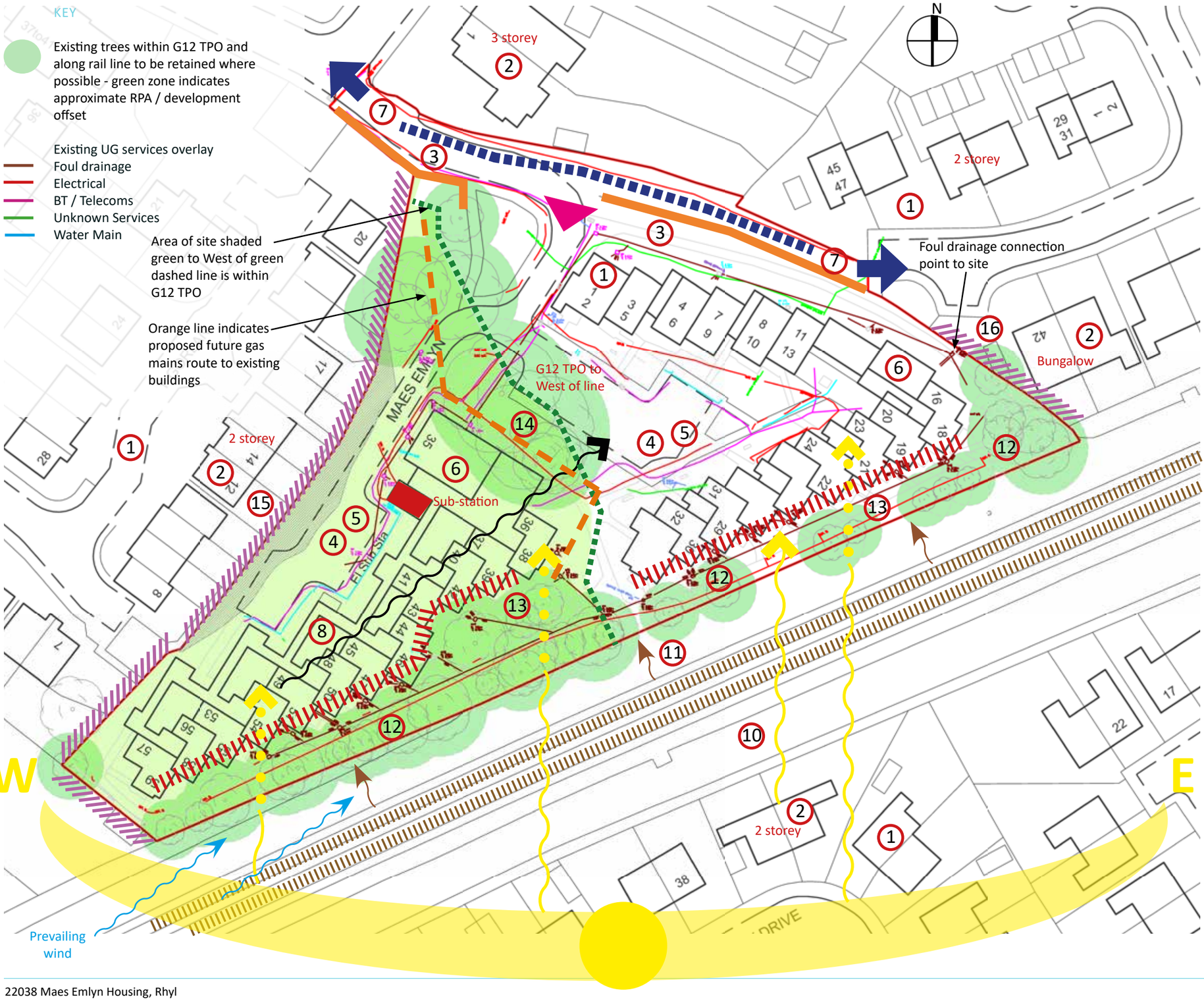
Archaeology and Built-heritage
Prior to construction of the current flats, the site is clear of building features other than a building structure and track ways visible on the 1st edition mapping that appear to be associated with the 'Claremont' Victorian hydro facility (NPRN 407247) to the west of the proposed site. It is considered that these features are unlikely to have survived during construction of the flats in the 1970's. As such there are unlikely to be archaeological implications to the proposals.

Landscape
The existing site is relatively level with a gentle slope of approximately 1.1m south west - north east. There are few landscape features to the site given the previous development, other than existing tree planting to the southern boundary, a select number of trees to the centre / entrance of the site and existing hedge planting to the northern boundary. The western half of the site falls within the G12 TPO grouping. An arboricultural survey and report are included within the planning application.

Biodiversity
The existing habitats within the the site have varying levels of potential for protected species including amphibians, reptiles, bats and nesting birds. PRA's were carried out on the buildings for bats, which had low-negligible suitability. No rare, semi-rare or notable habitats were present within the surveyed area, and no habitats are considered to be Habitats of Principal Biological Importance on Section 7 of the Environment (Wales) Act, 2016, important habitats based on the guidelines from the Institute of Ecology and Environmental Management (IEEM 2006) or Priority Habitats on the former national biodiversity Action Plan (UK BAP 2007) or local Biodiversity Action Plan (BAP). A full ecological report is included within the planning application.

Flooding
A flood risk assessment has been undertaken and is submitted as part of the application. This has identified no significant flood risk to the site within the event criteria.

Noise
The site is within a residential area so excessive noise sources are minimal. The proposals will not generate a higher level of noise than surrounding development. The rail line to the south of the site will provide a source of temporary peaks in noise which has been taken into account during the design process. The existing mature trees to the boundary will provide some existing acoustic amd visual screening and will be retained where feasible.



PROPOSAL

Development of existing Maes Emlyn housing site to provide housing in a mixture of 1-3 bed properties following the ethos of Passivhaus design.

SITE AREA: 0.8731 ha

S: Strengths W: Weaknesses O: Opportunities T: Threats

1 Within an established residential area and community. Site previously developed for Local Authority housing. **S**

2 Variety of residential property heights and materials within surrounding area. **S/0**

3 Existing low level stone wall alongside footpath to entrance / northern boundary of site. Added amenity value and opportunity for establishing site character. **S/O**

4 Site benefits from existing utility connections. **S**

5 Existing underground services may restrict opportunities for development or require additional cost to relocate. **W/T**

6 Existing buildings require demolition - additional cost and potential for ACMs on site. **W**

7 Site benefits from existing highway and footpath connections. Access road to adoptable standards. **S**

8 Site is gently sloping varying approximately 1.1m across the site. **S**

9 Site does not sit within an area of flood risk. **S**

10 Existing train line running along southern boundary - Opportunity to maximise heat and daylight gains from south due to significant offset to nearest built structures. **S/O**

11 Site is located adjacent to train line generating noise and vibration. **W**

12 Existing mature tree planting to southern boundary to be retained - Important to amenity of existing setting, with western half of planting falling within TPO G12. Visually and acoustically screens train line and provides habitat. Provides some shelter from prevailing SW winds. **S/O**

13 Tree shade may reduce access to solar heat gains along southern boundary. This alongside restricted development within RPAs requires development offset from site boundary. **W/T**

14 Existing tree planting to centre of site within TPO G12 to be retained. Visual benefit to site setting / threat to developable area. **S/T**

15 Variety of boundary treatments along existing residential development boundary including tree / hedge planting along northern boundary. **W/O**

Planning Policy Referenced

Adopted Local Development Plan 2006-2021 including but not limited to the following key policies:

Policy PSE 1 North Wales Coast Strategic Regeneration Area

Policy RD1 - sustainable development and good standard design

Policy RD5 - The Welsh Language and the social and cultural fabric of communities

Policy BSC11 - recreation and open space

Policy VOE6 - Water Management

Policy VOE 10 - renewable energy technologies

Policy ASA3 - Parking Standards

Supplementary Planning Guidance (SPG) including:

SPG Residential Development,
Note 1 Residential Space Standards (WDQR now supercedes these),
Note 25 Residential Design Guide
Note 8 Access For All
SPG Recreational Public Open Space
SPG Parking Standards
SPG for Planning and the Welsh Language
SPG Planning for Community Safety
SPG Renewable Energy
SPG Trees and Landscaping

Planning Policy Wales (PWW)

PPW Technical Advice Notes including:
TAN 10 - Tree Preservation Orders
TAN 11 - Noise
TAN12 - Design
TAN 15 - Development and Flood Risk
TAN 18 - Transport
TAN 20 - Planning and Welsh Language

Other Relevant Policy and Guidance Notes Referenced

Welsh Development Quality Requirements for housing associations and local authorities: 2021 (WDQR)

Building Regulations Approved Documents

Secured by Design Guidance

Planning Context Analysis

Local Development Plan
The site falls within the LDP North Wales Coast Strategic Regeneration Area. The site itself does not have a designated future use and does not lie within a designated development boundary. The development strategy for the wider area under policy PSE 1 for the regeneration area is to 'exploit development opportunities' to created a viable future for the communities within the areas. This includes diversifying the housing stock in order to tackle chronic housing conditions such as the proliferation of Homes in Multiple Occupation, and by providing new family housing. In this area the council will support proposals which provide new family residential accommodation and address existing problems of deprivation in a manner which is consistent with the principles of sustainable development.

As outlined in the project summary the scheme is designed to meet design standards for housing and in accordance with TAN 12 Design and SPG notes of residential development, including note 01 regarding space standards and note 25 design guide.

The site design has taken into account guidance in SPGs for parking requirements and recreational public open space for the informal and equipped children's play area provision on site.

SPG - Recreational Public Open Space
The threshold for on-site provision of children's equipped and informal space is 30 dwellings. The proposals provide 35no. dwellings on this site. As such the scheme has been designed to provide approximately 240sqm of equipped naturalistic play space at the centre of the site with and approximately 1000sqm informal open space adjacent to the entrance to the site, along the existing stone wall boundary and behind the central apartment benefiting from a southerly aspect and the established trees along the rail line. Further pockets of informal green space that can be used recreationally bring the total open POS provision to 1500sqm.

SPG - Parking Standards
The proposals follow the recommendations of the parking standards SPG. Providing 1no. parking bay per bedroom, with 1no. visitor space per 5 dwellings.

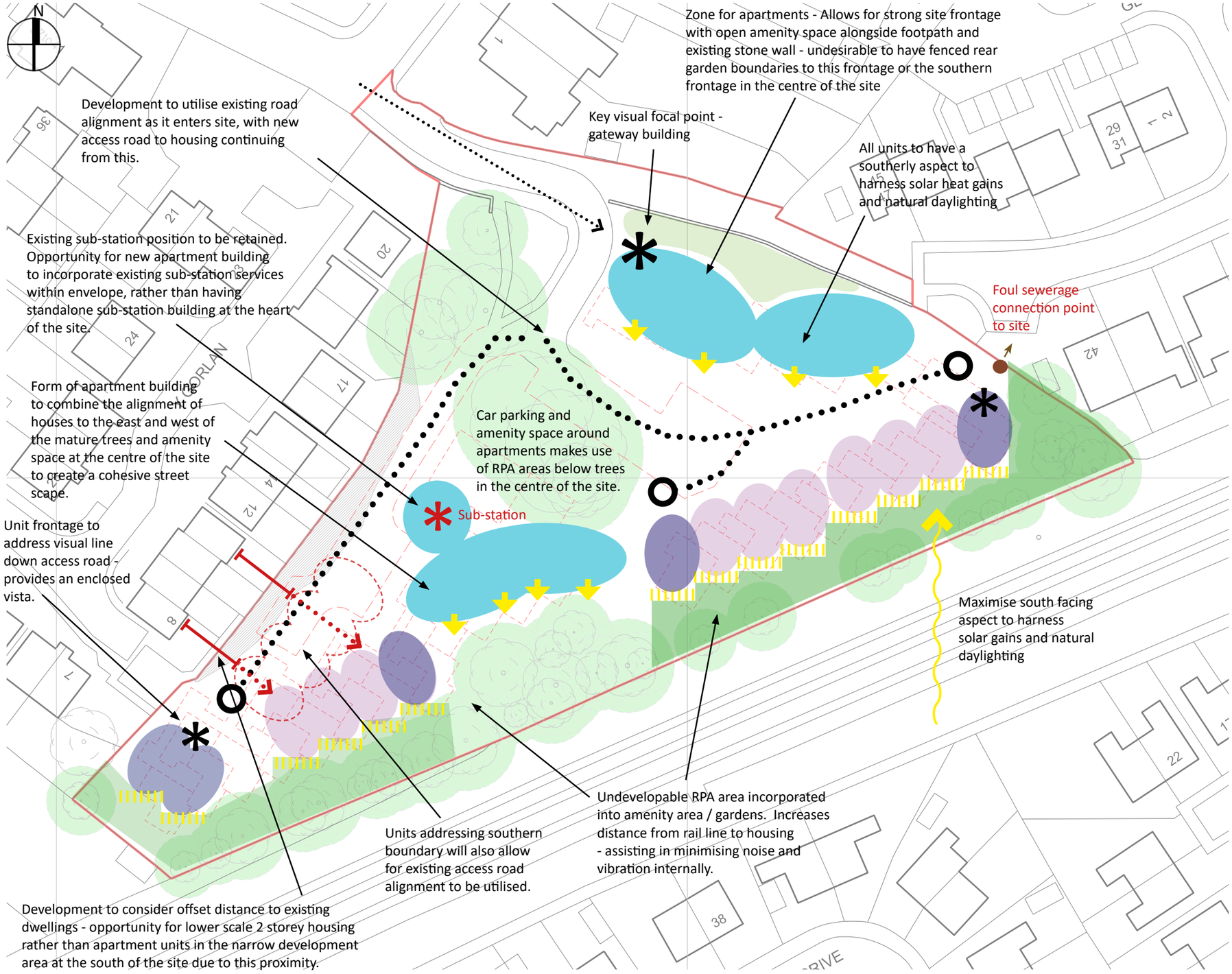
Other Policy and Guidance
The scheme design process has also referenced guidance in WDQR, Building Regulations Approved Documents and Secured by Design. WDQR space standards supercede those within the LDP SPG for residential development and space standards.

d. Interpretation

Following initial site analysis and identification of strengths, weaknesses, opportunities and threats, site zoning layouts were explored to identify developable areas that respond to the constraints of the site. Following reviews with the client team, option 1 was selected to be developed further as it was considered to provide the best response to the physical site constraints.

The following pages show these initial zoning concepts.

DEVELOPMENT ZONING ANALYSIS - OPPORTUNITIES AND CONSTRAINTS OPTION 1



KEY

Existing trees within G12 TPO and along rail line to be retained - green zone indicates approximate RPA / development offset

Existing roadway / existing buildings

Area of existing foliage planting within TPO area - assess requirement to retain

Possible location for 1 Bedroom Apartments - This option could accommodate approximately;
24no. if all buildings 3 storey
32no. if all buildings 4 storey

Possible location for 2 Bedroom Houses - This option shows approximately 9no.

Possible location for 3 Bedroom Houses - This option shows approximately 5no.

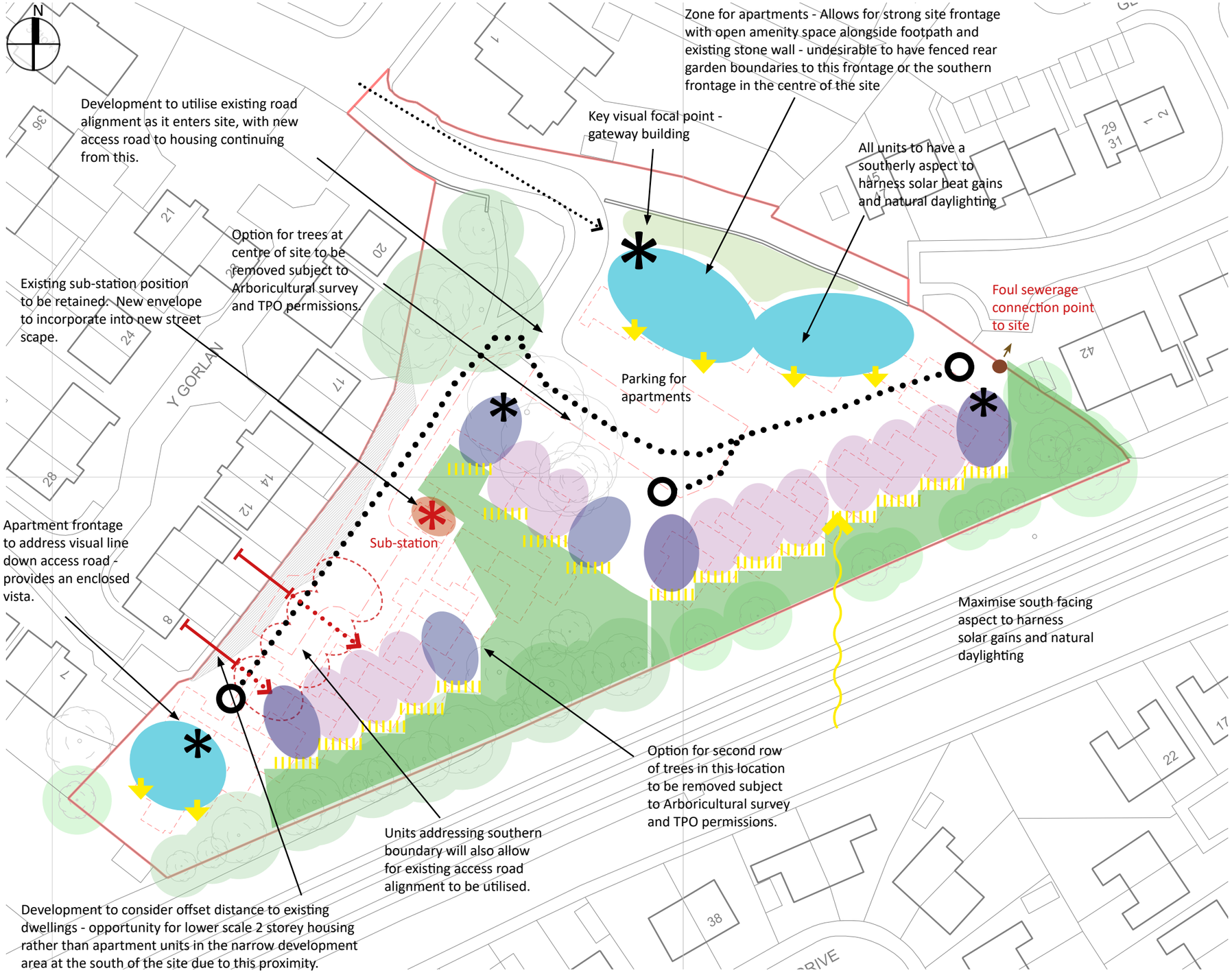
Approximate total units - 38no. minimum, 46no. maximum

Total car parking requirement based on guidance; 65no.- 75no. depending on total 1 bedroom apartments. This allows for 1no. visitor space per 5 units.

Larger building 3-4 storey will provide a gateway building to the site. This area also offers larger offsets to adjacent existing residential unit, suiting a larger scale development.

East side of the site - closer proximity to existing dwellings on Y Gorlan. May be more suited to smaller scale 2-3 storey housing and apartments to minimise overlooking / overshadowing of neighbouring property. Additionally, larger trees within this zone can be incorporated into garden / amenity areas, thus making use of the area unsuitable for built development.

DEVELOPMENT ZONING ANALYSIS - OPPORTUNITIES AND CONSTRAINTS OPTION 2



KEY

- Existing trees within G12 TPO and along rail line to be retained - green zone indicates approximate RPA / development offset
- Existing roadway / existing buildings
- Area of existing foliage planting within TPO area - assess requirement to retain
- Possible location for 1 Bedroom Apartments - This option could accommodate approximately;
  18no. if all buildings 3 storey
  24no. if all buildings 4 storey
- Possible location for 2 Bedroom Houses - This option shows approximately 11no.
- Possible location for 3 Bedroom Houses - This option shows approximately 6no.

Approximate total units - 35no. minimum, 41no. maximum

Total car parking requirement based on guidance; 65no.- 73no. depending on total 1 bedroom apartments. This allows for 1no. visitor space per 5 units.

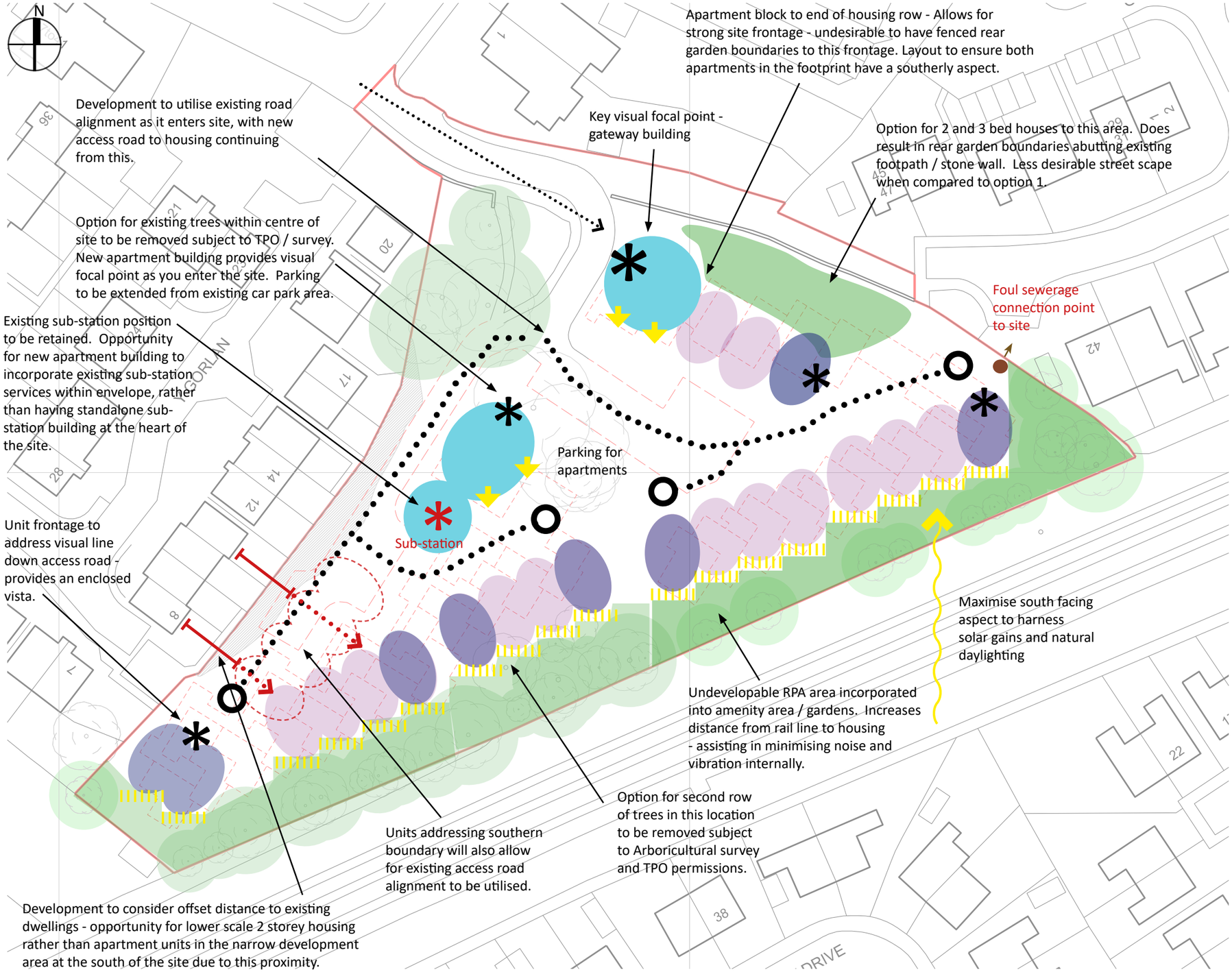
Larger building 3-4 storey will provide a gateway building to the site. This area also offers larger offsets to adjacent existing residential unit, suiting a larger scale development.

The larger trees in the centre of the site and a second row of trees to the southern boundary are removed (subject to TPO permissions). This allows for the addition of 2 and 3 bedroom houses at the centre of the site.

A small apartment building (2 units per storey) at the southern end of the site will provide some 1 bedroom units.

In this option the sub-station will be standalone within a new envelope to reflect the development materials.

DEVELOPMENT ZONING ANALYSIS - OPPORTUNITIES AND CONSTRAINTS OPTION 3



KEY

Existing trees within G12 TPO and along rail line to be retained - green zone indicates approximate RPA / development offset

Existing roadway / existing buildings

Area of existing foliage planting within TPO area - assess requirement to retain

Possible location for 1 Bedroom Apartments - This option could accommodate approximately;
12no. if all buildings 3 storey
16no. if all buildings 4 storey

Possible location for 2 Bedroom Houses - This option shows approximately 13no.

Possible location for 3 Bedroom Houses - This option shows approximately 8no.

Approximate total units - 33no. minimum, 37no. maximum

Total car parking requirement based on guidance; 69no.- 74no. depending on total 1 bedroom apartments. This allows for 1no. visitor space per 5 units.

This option looks to increased the number of 2 and 3 bedroom houses to the eastern half of the site. A small apartment building (2 units per storey) will bookend the houses to provide a focal building at the entrance to the site. This option will result in rear garden boundaries to the existing footpath, which may be undesirable visually and in terms of security.

In this option the larger trees in the centre of the site and a second row of trees to the southern boundary are removed (subject to TPO permissions). This allows for the addition of 2 and 3 bedroom houses. A smaller apartment building (2 units per storey) is then proposed for the 'centre' of the site which will incorporate the sub-station.

Site Development Draft 1

Site Development Draft 2

e. Design Development

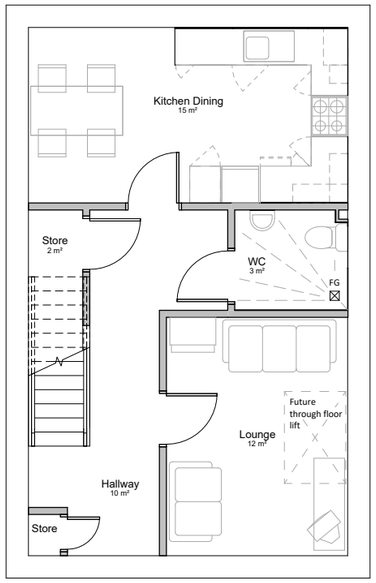
Site Layout
Following site zoning and confirmation of the brief in terms of quantity and mix of dwellings the initial concept was developed. The initial drafts of the layout can be seen adjacent.

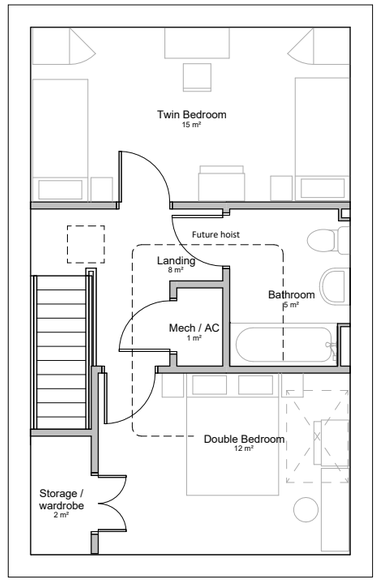
- This scheme provided 35 units with a similar mix of dwellings as the final proposals.
- Units are orientated to provide a southerly aspect whilst aligning with the existing rail line boundary. Units are offset from the site boundary to allow for retention of existing mature trees and to provide south facing rear gardens.
- The existing access road is retained, with existing tree planting forming a natural location of POS.
- Units are aligned to continue the visual line from Parc Esmor into the site.
- Units to the west of the site are positioned and orientated to provide visual 'bookends' to the access road.
- The apartment building at the site entrance is 'cranked' in alignment to address the existing stone wall as visual approach from Churton Road and Parc Esmor.
- The initial proposal was to incorporate the existing sub-station into the new apartment building envelope.

Following client and design team reviews, the layout was developed to separate the sub-station from the new apartment building.

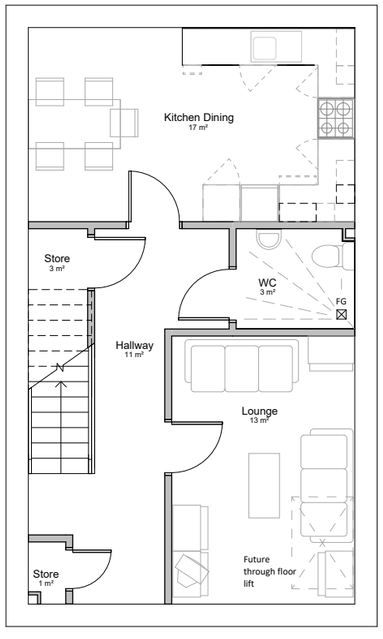
Design reviews with the Landscape Designer and Highways Engineer helped to develop the site details further, including the shared surface strategy to access routes inside the site and the details of the public recreational space.

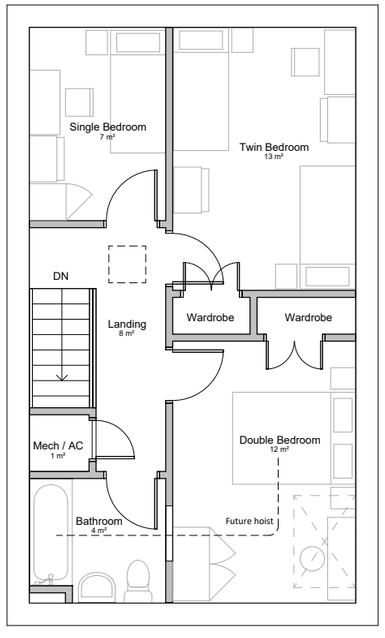
To include a summary of pre-application consultation responses and the impact on design.





2 Bed House Type - Iteration 1





3 Bed House Type - Iteration 1

Front - North
1 : 50

Rear - South
1 : 50

e. Design Development

House Types
Both 2 bed and 3 bed house types are designed to meet WDQR and AD Part M Category 2 which incorporates adaptability of the dwelling for future accessibility improvements. These design aspects include, future stair lifts, through floor lifts, hoists and adaptation of ground floor WCs to provide shower rooms. They also set space standards for habitable rooms and expected furniture requirements and movement zones. The layouts aim to be simple and space efficient, providing living spaces to both front and rear façades, with rear garden access from the dining kitchen. This also allows for maximised solar gains to the south facing aspect with glazed doors and large windows to the kitchen.

Once initial layouts were reviewed with the client, the designs were tested with thermal modelling and Passivhaus planning software to confirm window proportions and construction build-ups. The designs have also been evaluated in terms of life cycle assessments at stages 2 and 3.

Following design team input, layouts were refined to incorporate larger mechanical cupboards central to the plan at first floor that house all services and MVHR systems for the dwelling.

Client review refined the plan further by relocating the ground floor WC to under the stair to minimise corridor length and increase the living room area. This also creates a direct access between the two main living areas.

Historic red brickwork details on Highfield Park

Contemporary precedent of brickwork detailing - horizontal bands and recessed panels

Contemporary precedent of brickwork detailing - Individual projecting bricks to create textural panel

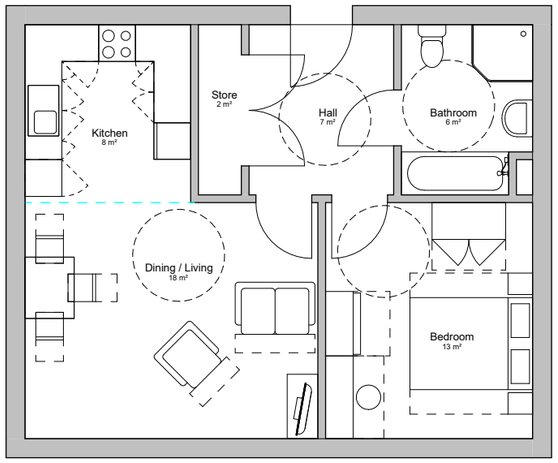
Contemporary precedent of brickwork detailing - solider course in matching brickwork

Contemporary precedent of brickwork detailing - textural pattern panels

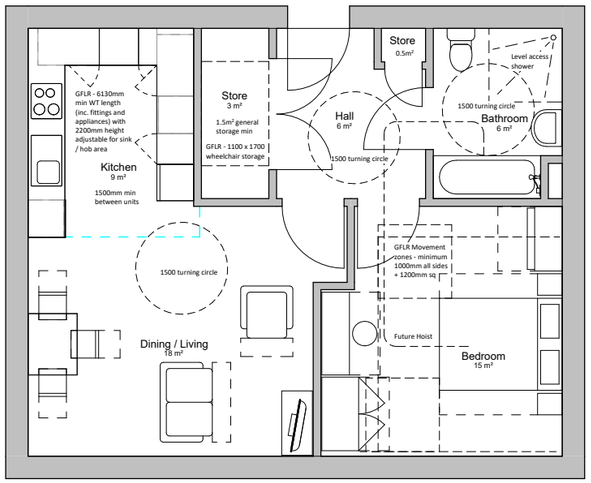
e. Design Development

Materials
From the early concept stage the proposal has been to use a red brick to reflect the historic context of Rhyl. Previous iterations included for a select number of dwellings in a textural multi toned buff brick to reference context on Parc Esmor.

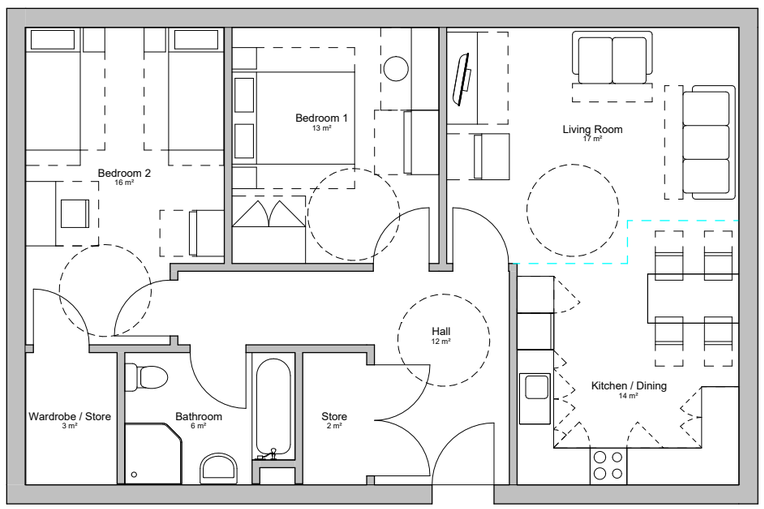
Brickwork detailing will be employed to add visual interest and elevate the design whilst keeping the material palette simple. Initial iterations included for vertical stacks of horizontal brick banding as well as projecting brick detailing at window head height. This was later simplified to flush soldier coursing in matching brick with projecting brick detailing vertically between windows at ground and first floor. The simple use of a single material with varying depths and textural pattern will give a modern edge to the design, whilst clearly referencing the decorative brick laying seen in the local vernacular. Recessed apertures that stack from ground to first floor allow for a rationalisation of proportions while the first floor window size can vary and move within the aperture.



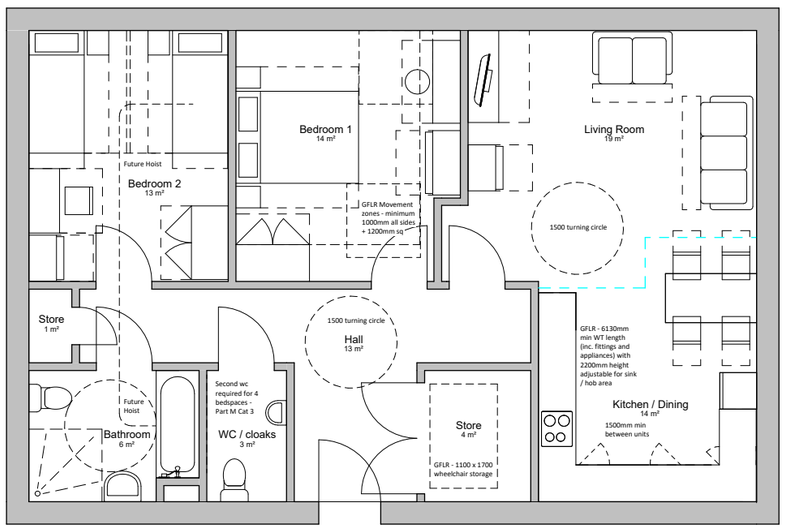
1 Bed Apartment - Iteration 1 - to AD Part M Category 2



1 Bed Apartment - Iteration 2 - to AD Part M Category 3



2 Bed Apartment - Iteration 1 - to AD Part M Category 2



2 Bed Apartment - Iteration 2 - to AD Part M Category 3

e. Design Development

Apartment Type Layouts
The initial brief was for all apartment types to be designed to WDQR and AD Part M Category 2. Following client reviews it was agreed to incorporate the requirements of category 3 - wheelchair accessible dwellings into all ground floor apartments.

As with the house types, design team input, Passivhaus assessment, thermal modelling and life cycle assessment has informed the design development of the apartment buildings.

The apartment buildings are designed to allow for stacking of unit types to simplify design and construction processes. The use of repetition could also assist with future maintenance.

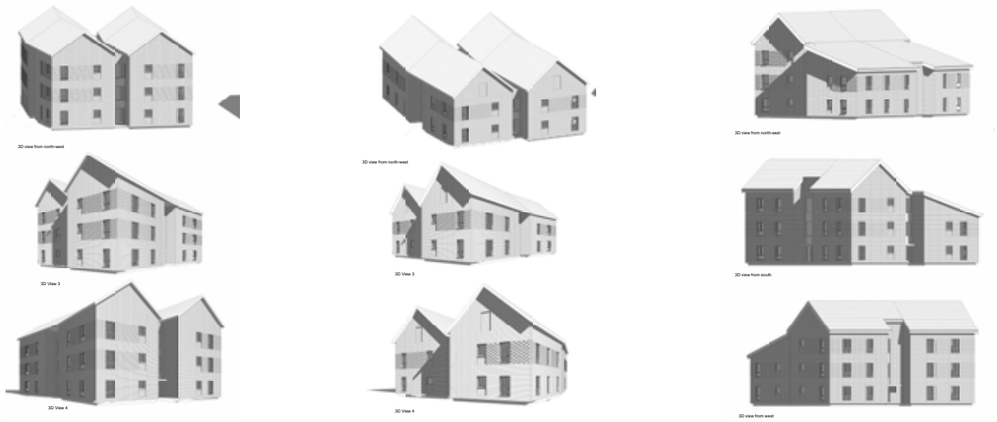
e. Design Development

Apartment Elevations
The initial designs for the apartments included flat roofs to provide a variety of forms across the site. Following client review a pitched roof solution was agreed as the preference and various massing options were explored with the team.

It was considered that a pitched roof form to the apartments as well as the houses would bolster the sites response to the context.

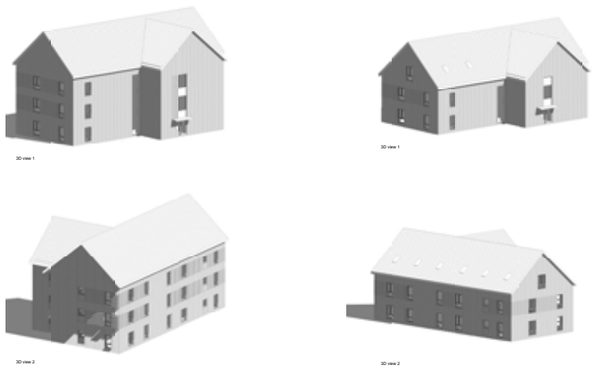
To include a summary of pre-application consultation responses and the impact on design.

Initial flat roof option for apartment block 1

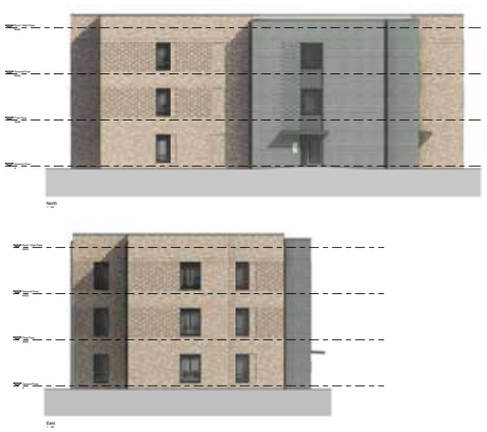


Various iterations explored for pitched roof options - apartment block 1

Exploring material options for apartment block 1



Various iterations explored for pitched roof options - apartment block 2



Initial flat roof option for apartment block 2

Selected form and elevational design for apartment block 1

View of the proposals looking west from Parc Esmor

f. The Proposal

Planning Policy Wales and TAN 12 in particular set out key objectives of good design. PPW defines design as “the relationship between all elements of the natural and built environment. To create sustainable development, design must go beyond aesthetics and include the social, environmental and economic aspects of the development, including its construction, operation and management, and its relationship to its surroundings.”

The following pages explain the principles of the proposal in terms of character, inclusive design, access, community safety and environmental sustainability.

i. Character

Place-making
An aim of the scheme design is to create a distinctive development that gives a strong sense of place within the site, whilst respecting and referencing the adjacent context. Selective use of materials, repetition of architectural detailing, provision of activated and inviting open spaces at the heart of the site all contribute to creating a sense of belonging. As previously noted, apartment building 1 at the entrance to the site has been designed to crank in footprint to address the approach to the site from Churton Road, guiding the eye into the development. The form also addresses the existing footpath to Parc Esmor, creating an active frontage and feature building as you enter or pass the site, with proposed planting improving the street-scape along this passing route.

Within the site, all dwellings address the street frontage, with shared green spaces and shared surface access routes aiming to create a pleasant residential space to inhabit rather than a vehicle dominated through route.

Retention of mature trees on site helps to create a backdrop to the southerly aspect of the site, with key trees that are focal points in the current site creating a framework for the public open spaces.

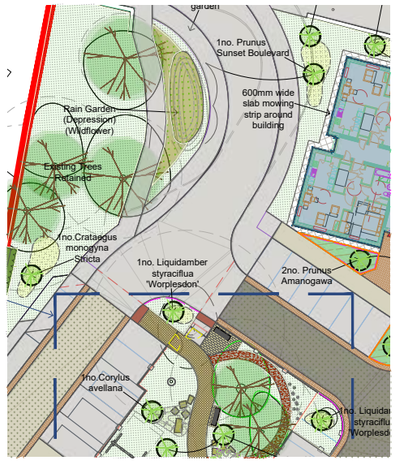
The scheme has been designed to respond to the scale of properties in adjacent developments and the larger late 19th / early 20th century semi-detached coastal town vernacular. The site layout is designed to respect the adjacency to existing dwellings, with overlooking distances achieved in line with local SPGs, ensuring no unacceptable overlooking occurs. Additionally, new hedgerow planting along the northern boundary will provide screening that is currently provided by Hawthorn.

New open space with equipped and informal children's play areas will be available for resident and wider public use. This will open up the site to the surrounding neighbourhood, where previously the nature of the sheltered housing on site precluded this.

Amount and density
The proposals provide 18no. 1 bedroom dwellings, 13no. 2 bedroom dwellings and 4no. 3 bedroom dwellings. This equates to 40dph.

PPW recognises that land is a finite resource and advocates the efficient use of land in particular. To make the best use of land available for residential development SPG on Residential development requires a density of 35 dwellings per hectare in line with policy RD1.

Creating POS at the heart of the site



Creating linked POS with informal and equipped play

The density achieved is slightly higher than neighbouring streets which are predominantly characterised by semi-detached houses. It is the provision of walk-up apartments on this scheme that increases the density.

The unit mix from 1 bedroom apartments to 3 bedroom (5 person) houses provides a varied portfolio of accommodation to meet the changing needs of the local community.

Streets
A strong street hierarchy has been implemented to increase the sense of place on site, reduce the speed of vehicles and visually reduce the dominance of the car, prioritising pedestrian movement.

The existing access road into the site will be realigned as it turns south to improve visibility and ease of movement. This will be retained as a tarmacadam road 5.5m wide with a 2m foot-way either side. Once beyond the first apartment building, the access splits to provide routes to the east and west sides of the site. At the split, the access routes will change to shared surfaces in a tegular paving with a 4.8m central route and 600mm wide strips either side for service runs. Private and visitor parking bays will be accessed from the shared surface, with the majority perpendicular to the property frontage. Foot-ways along the property frontages will connect throughout the site and where specifically designated as footpaths these will be 2m width. This hierarchy of street and reduction in vehicular dominance as you enter further into the site will assist in creating an active street-scape that residents can enjoy.

Spaces and public realm
The heart of the site is formed around three connecting green spaces that can be enjoyed by both residents of the site and neighbouring areas beyond. Footpaths into the site from Churton Road wind through existing mature tree planting and informal open grass areas, this connects via footpaths to the central open space hinged around the existing mature trees and overlooked by the new apartment buildings. This central space will be secured by hoop fencing to provide safe play for children. Play equipment will be provided in traditional form and through the creation of small landforms to aid naturalistic play. This landscape lead approach to the POS will also provide a visually appealing outlook for residents on site. This POS will link to a third key area along the southern boundary, again overlooked by apartment dwellings and benefiting from existing tree planting and an open southerly aspect.

The landscape design also aims to improve the current POS around the footpath / cycle route along the north-eastern boundary of the site.

i. Character

Mix of uses & tenure
The scheme will enable much needed housing to be provided with dwelling types, sizes and tenures to suit current and expected future needs of the community. There is a weighting towards 1 and 2 bedroom dwellings as this has been indicated as the current key requirement.

Scale
The scheme design has taken account of adjacent dwelling scale and character. The majority of neighbouring properties are semi-detached or terraced, with a mix of heights from single to 2.5 / 3 storey.

On site houses are arrange in 4 semi-detached blocks and two small terraces of three units each. The two apartment buildings are separated on site to provide a visual mix of 2 and 3 storey as you move around the site. However, the two larger 3 storey apartment buildings are located facing the heart of the site to add an appropriate scale to the backdrop of this wider open space.

Two bed house types are 5.8m wide x 10.1m long and 5.8m in height to the eaves. Three bed house types are 5.9m wide x 11.5m long and 5.8m in height to the eaves.

All house types will have a 35 degree roof pitch, with a 40 degree pitch employed on the apartments to add visual interest.

Apartment building 2 (central to the site) is 25.5m wide x 15.2m deep x 9.05m height to the eaves.

Apartment building 1 is 26.7m in length in total x a maximum of 18.8m in width x 9.05m height to the eaves.

The units have been designed to be efficient in footprint whilst accommodating spatial requirements of WDQR, AD Part M and mechanical equipment and building fabric thickness to suit a Passivhaus scheme.

There are no directly facing properties on site or directly facing neighbouring properties. However angled front to front and front to back distances have been maximised as far as possible to afford privacy.

Heritage and Detail Design
Whilst the site itself has been identified as having little heritage value in itself, the surrounding historical vernacular of Highfield Park as an example has informed the design on site.

Street Section through to adjacent development on Y Gorlan

Phase 2 - Strong character through materials, scale, form and detailing

Phase 1 - strong character through materials, scale, form and detailing

Phase 1 visual showing materials, scale and streetscape

Material selection references the traditional local red brick, brickwork detailing and slate roof colours, with the site aesthetic aiming to bolster the nearby historic character through a contemporary interpretation.

Detail Design
As outlined previously the material concept is to use a simple palette whilst employing detailing of texture and pattern to elevate the materials.

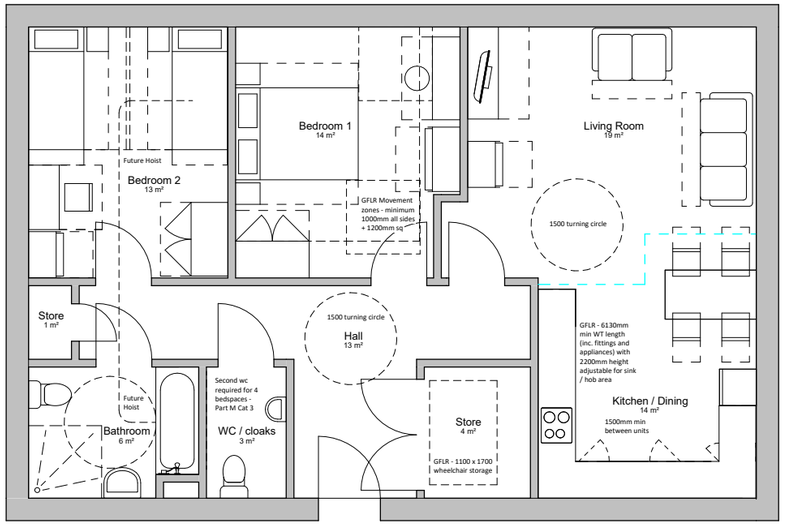
Projecting brickwork in staggered courses is employed on the house types to continue a line between ground floor and first floor apertures. This vertical element helps to visually narrow and heighten the shorter and wider form of the house types. Proportion is also simplified by using recessed brickwork panels that 'stack' above the ground floor aperture widths. This allows for smaller windows in bedrooms for privacy, whilst continuing the visual proportion of the larger ground floor window / door up the elevation.

Soldier courses in matching brickwork are also employed to add a subtle visual break at the first floor window head.

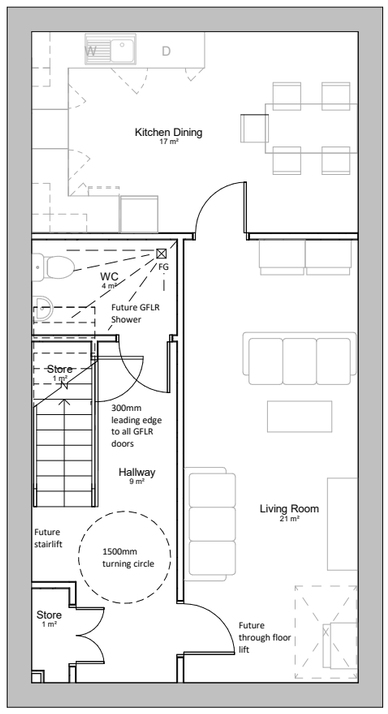
A similar projecting brickwork is pattern is used on the apartment blocks, however in this instance a horizontal band is emphasised between windows of the same floor level. This is to visually widen and shorten the taller apartment buildings. Recessed brickwork panels are also employed in the apartments to maintain aperture proportions where smaller windows are required.

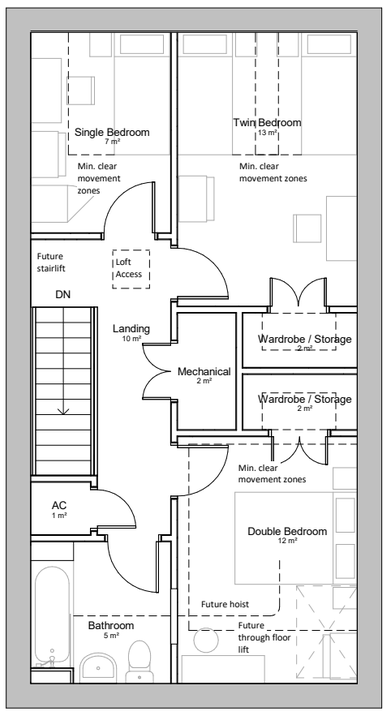
Windows and doors will be aluminium PPC frames to minimise maintenance requirements long term, with glazed units specified to maximise thermal performance.

The dwellings will be constructed using highly insulated timber frame structures. This strategy allows for far higher thermal performance in a thinner overall wall build-up than traditional masonry cavity walls. The use of timber within the structure reduces the use of concrete blocks and assists in achieving a lower carbon footprint within the overall life cycle assessment.



2 Bed Apartment - Iteration 2 - to AD Part M Category 3





3 Bed House to AD Part M Category 2

ii. Access

Inclusive design
Design that is inclusive and provides flexibility for future requirements has been critical from briefing stage. All housing units are designed to AD Part M Category 2 for adaptable dwellings. This ensures the inclusion of design flexibility within and surrounding the dwellings to allow for easy modification and installation to meet future needs of residents. These include provision of ground floor WCs that can be adapted to provide ground floor shower rooms, ground floor bed spaces, through floor lifts, stair lifts and hoists. All of the habitable rooms are designed with recommended movement zones around furniture to allow for wheelchair accessible dwellings.

Apartments at ground floor have been designed to provide dwellings to full AD Part M Category 3 wheelchair accessible standards. This will provide 7no. dwellings that are fully accessible upon completion.

Within the dwellings, height of fittings and switches will be considered in line with AD Part M to ease accessibility for all. Light Reflectance Value (LRV) contrasts will be considered during the selection of interior materials to improve navigation of the home for those with reduced sight.

Site access and access to the dwelling
The relatively level topography of the site assists in providing external and individual dwelling access that is convenient for all users. Maximum gradients will be adhered to, in order to provide level or gently sloping access around the site and level access to principle entrances of the home from parking spaces. All entrance thresholds will be designed to meet relevant AD Part M requirements.

All vehicular routes within the site will be designed to adoptable standards. The access routes to the east and west ends of the site include turning heads that have been tracked using software to confirm their suitability for refuse and emergency vehicles as well as the largest delivery vehicles expected on site. All dwelling frontages will be accessible to emergency vehicles with fire tenders having access to within 45m of all dwelling areas.

Paving surfaces to footpaths and shared routes will have a level finish to avoid trip hazards. Where main footpaths into the site cross vehicular routes, textured blister paving in contrasting colours will be used.

Parking
Local SPG Parking Standards have been followed, with 1 parking space per bedroom and 1 visitor space per 5no. dwellings. All housing units are provided with a minimum of two parking spaces, one of which is designed to allow for future provision of a fully accessible bay. All ground floor category 3 apartment units have an accessible standard parking bay.

Parking bays are provided at 2.6m wide x 4.8m long as standard, with accessible bays of 3.6m width x 6m length.

EV charging points will be provided to 1no. space per house with future provision made in the form of ducting for 1no. EV point per apartment bay and visitor bay.

iii. Movement

Public transport to site
The site is located within 10 minutes walk of Rhyl town centre and is well served by existing public transport. Rhyl train station is approximately 0.5 miles to the west of the site. Existing bus routes run near to the site, with 3 stops within a 5 minute walk of the site and more than 10 services running to these stops.

Movement on site
The proposals include for ample parking to each dwelling in line with the SPG. All parking is to building frontages or the side of the property and is overlooked by the dwelling or adjacent neighbours. All roadways on site will be to adoptable standards, including for street lighting to current highway standards to increase visibility and safety on site. The proposals include for alterations to the existing access road as it curves into the site from the Churton Road / Highfield Park junction. The existing roadway as it turns south is narrow and the proposed improvements will widen the roadway and straighten the bend to improve visibility and passing distances.

Whilst maximum parking recommendations are met on site, other modes of transport such as walking and cycling are promoted. Road design on site has been considered to reduce vehicle speeds and dominance of the car through shared surfaces that increase priority of the pedestrian and improve the walking experience. Design principles set out in Manual for Streets promote the use of shared surface solutions within a residential setting. Access routes within the site will be 6m wide consisting of a 4.8m central zone and 600mm wide service strips either side. Tegular paving in contrasting colours will provide a softer appearance and aid in reducing vehicle speeds when compared to traditional tarmacadam road and pedestrian footpath solutions. 2m wide footpaths to the main site access provide safe and convenient access from the site to existing public footpaths. A footpath connection between the shared access route to the east of the site and the footpath along Parc Esmor is proposed to increase permeability of the development for pedestrians.

Cycle storage has been included, with space for a 2 bike shed to each rear garden and communal covered cycle shelters to each apartment building, allowing 1 space per unit.

Landscaping
The tapering geometry of the site and need to provide vehicular access to all dwellings has resulted in a significant street frontage throughout the site. Small pockets of green space and plentiful tree planting to frontages aim to soften the street, which could be an understandably hard landscape. Manual for Streets states that *"The propensity to walk is influenced not only by distance, but also by the quality of the walking experience. This will depend on how stimulating and attractive the environment is, together with how safe and secure people feel within it."* The aim of the landscape design and overall site layout is to create visually and physically interconnecting green spaces that improve the environment for pedestrians and encourage pausing and interaction on site.

iv. Environmental Sustainability

Passivhaus Design
The dwellings will be designed and constructed to a Passivhaus Low Energy standard, following the ethos of Passivhaus strategies rather than aiming for full certification. These design principles have been implemented from the briefing stage, with engagement of a Passivhaus specialist consultant. Design principles considered from concept stage include unit orientation to maximise solar heat gains, window proportions to maximise daylighting and balance heat losses and gains and fabric build-up and detailed design to minimise thermal loss. The key aim being to create a high performing building that is energy efficient, comfortable and affordable throughout its life. This aim to reduce energy consumption and therefore carbon footprint, includes specifying and sourcing materials that have a reduced footprint.

The following five principles apply to the construction of Passivhaus buildings

Thermal Insulation

The building components of the exterior thermal envelope of the building must be well insulated. In a cool-temperate climate such as the UK this typically requires a U-value of 0.15W/(m2K) or lower.

High Performance Windows

Glazing components must be very high performing with insulated frames, low-e glazings filled with argon or krypton and carefully considered installation details.

Mechanical Heat Recovery Ventilation

An efficient mechanical heat recovery ventilation (MHRV) system is key to providing good indoor air quality and saving energy. The MHRV should be capable of transferring at least 75% of the heat from the exhaust air to the fresh incoming air, thus reducing heating requirements in cooler months.

Airtightness

The airtightness of the external thermal envelope is a key element in minimising heat loss, ensuring efficient operation of the MHRV.

Removal of **Thermal bridges**

Careful attention must be given to all edges, junctions, connections and penetrations to avoid thermal bridges in the building envelope where possible.

Energy and Services Strategy

External Service Proposals
All houses will be provided with a dedicated electric vehicle charging point. In addition all apartment and visitor car parking bays will be provided with passive ducting to support the future expansion of electric vehicle charging provision across the site. A substation is located on the site which forms part of an existing structure and options are being explored for a new substation to be constructed to enable electrical supplies to be provided to new dwellings Consultation is ongoing with the energy network provider.

Energy Strategy
Part L Volume 1 2021 regulations will apply to each dwelling. In addition each dwelling will be designed to achieve the Passivhaus Low Energy Building standard criteria and also achieve an EPC A rating.

Dwelling M&E Service Strategy
To meet the ambitious energy targets set each dwelling will be designed to generate domestic hot water via air source heat pump technology and include a photovoltaic array at roof level to generate on-site renewable electricity. Space heating will be provided by electric panel heaters as heat losses are predicted to be low as a result of achieving the Passivhaus Low Energy Building standard. To achieve the Passivhaus criteria and provide a balanced mechanical comfort ventilation system each dwelling will be designed to include a whole house mechanical ventilation with heat recovery system. The mechanical ventilation with heat recovery systems will also aid in mitigating any noise generated by the nearby railway line. Each dwelling will be designed with a residential sprinkler system to meet the national fire suppression regulations.

Landscape plan

iv. Environmental Sustainability

Landscape and Habitat
Working with the existing landscape of the site and improving the POS has been critical to the project from zoning principles. The sites landscape variety and biodiversity is limited other than the existing mature tree planting along the southern boundary and within the centre of the site. The site development framework was designed to work with existing trees to create linked POS at the heart of the site. Landscape Designers and Ecologists have been engaged from the project outset to integrate opportunities for landscape and biodiversity improvement. A hard and soft landscaping scheme has been prepared and submitted as part of this application. Additionally, an ecology survey and report has been prepared and submitted alongside the application. It is concluded in the report that the proposed works will not impact any of the surrounding habitats. If reasonable avoidance measures are followed, there will be no disturbance to protected species, during and after the works. These measures include lighting, pre-works checks and measures if animals are found within the work areas. It is recommended that at least six external bat boxes and bird boxes are are erected. Bat boxes are to be on the south facing elevations of the new properties along the southern edge of the site, allowing for connectivity along the treeline. Bird boxes are to be mounted onto the new buildings towards the north of the site, on northern, eastern and western elevations, at least 3m off the ground and away from any doors or windows.

Rear gardens will be managed by residents as will smaller areas of planting to frontages. Arrangements for the management of larger areas of POS will be put in place by the developer.

Water and Waste Management
Sustainable Urban Drainage Systems have been integrated into the landscape design in the form of rain gardens or SUDs filter strips. These will be in the form of hollows within grassland areas of the POS. Water table heights on site have limited the potential for soak away solutions to surface water drainage, therefore eventual discharge to mains sewers once run-off has been managed by SUDs will be required.

Within dwellings, water saving devices such as WRAS approved low flow taps and dual flush WC's will be specified.

Measures have been considered during design and will be undertaken during construction to minimise waste material. These can include simple strategies such as designing to standard material dimensions, designing in repetition of layout and detailing to speed up processes and reuse of existing site materials including soils.

The site layout and dwelling positioning has taken into account waste storage and collection. Housing will have space within rear gardens for bin storage with sufficient width to external routes at the side of properties to allow for delivery of bins to the street frontage for waste collection. This strategy avoids storage of bins on the street frontage between collection times. Apartment buildings will have communal external bin stores that are covered and secured. Doors will be provided at ground floor to provide direct access from the building to the stores to minimise carry distances from the dwelling. All access routes on site are designed with turning heads for refuse vehicles to minimise reversing distances.

Site plan extract showing open frontages and surveillance of the street with secure rear gardens

v. Community Safety

Secured by Design Principles and Surveillance of streets
The proposed design incorporates the principles of Secured by Design in order to design out opportunity for crime and to make a secure and safe community. Design to Secured by Design Principles gold standard is additionally a requirement of WDQR for developments fully under the control of a housing provider.

All streets run to the frontage of properties, with no roadways running behind buildings, This ensures that streets are naturally well surveilled by residents. The orientation and layout of apartment building 1 improves the natural surveillance of the existing public footpath / cycleway that connects Churton Road to Parc Esmor, thus making it a safer route for neighbouring residents.

Public Open Space on site, particularly the children's equipped play area has been designed into the heart of the layout. As such units are orientated to wrap around and overlook these areas, helping to provide a secure and safe feeling environment for families and individuals. POS to the southern boundary is overlooked by apartment building 2, whilst providing a quieter green space utilising the southerly aspect.

Parking is provided off road to the unit frontages in most cases with some parking to the side of larger houses.

Secured by Design Principles extend to the dwellings themselves, with all external windows and doors designed to meet PAS 24:2016. External materials have been selected for robustness and textural patterning in brickwork has been proposed from higher levels only to design out climbing aids. Buildings will also be designed and constructed in line with AD Part Q security - dwellings.

Street Lighting
All roadways on site will be to adoptable standards, including for street lighting to current adoptable highway standards to increase visibility and safety on site. External lighting will also be included on apartment buildings to light external entrances and pathways around the buildings.

Wayfinding
The site is relatively small in scale, with visual lines down street frontages back to the site entrance. As such the site is considered to be easily navigable with an open feel.

Security of boundaries
Front gardens will remain open, without fencing in order to maximise natural surveillance of the street frontage and parking areas from within properties. Rear gardens will be enclosed by timber close boarded / feather lap fencing to 1.8m height. Secure pedestrian gates will provide access between frontages and rear gardens.

The southern boundary of the site runs along the rail line. As such, the existing metal safety fencing along this boundary will be retained, with garden fences built to the site side, offset by 600mm to provide an accessible maintenance gap. This space will be accessed via lockable gates from the communal open spaces adjacent to the apartment units. Fencing to the southern boundary with line of sight to the rail line will be acoustic tongue and groove timber panel a minimum of 2m in height and with a surface mass of at least 10kg/m2 to achieve noise mitigation requirements.

The northern boundary consists of existing timber fences to neighbouring properties, these will be retained, with replacement hedgerow planting on the site side to provide softer screening. The eastern boundaries of the site are open, with a low stone feature wall demarcating the site from the adjacent public footpath / cycleway.