The Works

Llangollen Road, Acrefair

Design and Access Statement

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Introduction

This Design and Access Statement has been prepared by Munro Associates Ltd. on behalf of ClwydAlyn, in support of their Outline Planning Application for an affordable residential development on the land of the former Air Products Site, Llangollen Road, Acrefair.

The proposal is to create up to 159 affordable dwellings on 7.17 Ha/17.72 acres of land. The aim is to create a quality, sustainable and desirable place to live that is shaped by the distinct character of the site and the village of Acrefair.

The brownfield site is situated in a sustainable location with good access to transport routes, employment opportunities, established residential neighbourhoods, and community amenities, services and public open spaces.

This statement considers the site and its context, explains the evolution of design ideas and proposals, and sets out a masterplan that will be used for the consideration of future Reserved Matters or Detailed Planning Applications.

Vision

ClwydAlyn's vision for all development's is to deliver high quality affordable homes for local people which will achieve a high level of energy efficiency at a minimum level of EPC Grade 'A', be designed to provide good 'Open space requirements', 'Clean & quiet environment', suitable mix of accommodation to meet 'Local Housing & Planning Strategies', use all renewable energy sources available, use new and innovative methods of construction, provide unity with the environment and ecology, meet all requirements of legislative statutes set by the Welsh Government such as Planning, Planning Guidance for Wales, Building Control, Design Quality Requirements, Life Time Homes, RNIB Guidance, Design Council for Wales, SAB/SUDS, Future Generations Act, Building for Life 12, SBD Gold Standard, and provide equality to all residents, protection to the Welsh Language, and provide local employment, training, apprenticeships and job opportunities within the area of the project.

Brief

The development should meet all the attributes highlighted within the Vision, and have the following highlighted qualities:

Standards. To meet and exceed the standards described in the 'Development Mission Statement'. Homes should be designed to meet local housing need, which address residents' expectations – attractive, practical layouts, safe & secure, quiet and good value in terms of running costs, and meet EPC 'A' Grade efficiency.

Design. Homes must be designed from the outset to help residents to integrate with their local Community. The success of the design depends on the way the new housing sits with the existing homes and buildings in the vicinity. The new housing should enhance the whole neighbourhood.

Buildings and developments should be designed to sit well in their locations, contributing positively to the quality of the local environment and comprise good neighbourhood architecture using durable materials which weather well.

Tenure mix. Due to the scale of this proposed development and to create a new sense of place we consider this development an opportunity to work in Partnership with another RSL to provide a mixed tenure development, tenures to be consider Social, Intermediate and Market housing (RTO, Market Rent /Market Sale).

Sustainable. Homes must be durable, robust, efficient to manage and demonstrate exceptional environmental performance of all new developments, including designing energy-efficient developments using long lasting building materials and reducing water consumption.

Inclusive. The site and the buildings need to be easily accessed from the street, highly legible and readily accessible to everyone regardless of their age, size, ability or disability.

Flexible and adaptable Homes need to be flexible and adaptable to meet the changing needs of the households who live in them, including the elderly and the vulnerable.

Quality All schemes should be best practice exemplars of high-quality housing design and meet attributes noted within the Development Mission Statement.

Comfort Appropriate levels of comfort as delivered by air quality, temperature control and reduced noise levels.

Function The new homes must respond to residents' needs and provide a robust, easily maintained environment.

Maintenance Ease of cleaning and maintenance and replacement of plant and building fabric elements is a key requirement so that the building quality can be sustained easily and at a relatively low cost.

Economic Life cycle costing should form the basis of decision-making on costs and specification.

Enduring New housing developments should provide good long-term assets for ClwydAlyn. A minimum 60-year life is required for the structure of all the new dwellings. Individual components will have different life spans, and this must be agreed with ClwydAlyn in advance of the design.

Cost effective Minimal service charges will be required, so design will need to consider carefully the cost of lifts, plant, etc.

Consensus building The process of developing all projects will require consultation with a range of stakeholders including adjoining owners, local residents, community groups, Council members and so on. The development must be capable of making a social and economic contribution in construction phase, and beyond.

Neighbourhood All new developments should make a positive contribution to the local environment.

Public amenity space Public amenity space should be provided wherever possible, catering for all ages, including the young and the elderly for play and relaxation.

The street Layout and design of streets should promote active uses, where people feel safe and secure, and where they can meet and engage with neighbours.

Parking The car parking should be well integrated and situated so it supports the street scene and does not dominate it.

Cycle parking Bicycle and motor bike parking must be considered in all developments, alongside car parking. Safe and secure bicycle parking is essential for all developments.

Front gardens, boundary treatments and gates It is important to have a distinction between the public domain of the street and the semi-public domain of the front of a dwelling in the form of a front garden area.

Inside the home Our new homes should be places that our residents are proud and happy to live in. The layout needs to be simple and logical, easy to understand from the outset, with plenty of natural light and some sunlight penetration for physical well-being. There should be a convenient relationship between rooms.

Environmental Impact Our developments must be designed to keep environmental impact to the minimum and strive to provide a positive impact in designing extremely efficient homes, providing natural water retention systems, providing wildlife areas or corridors, use of natural lighting and natural shading where required.

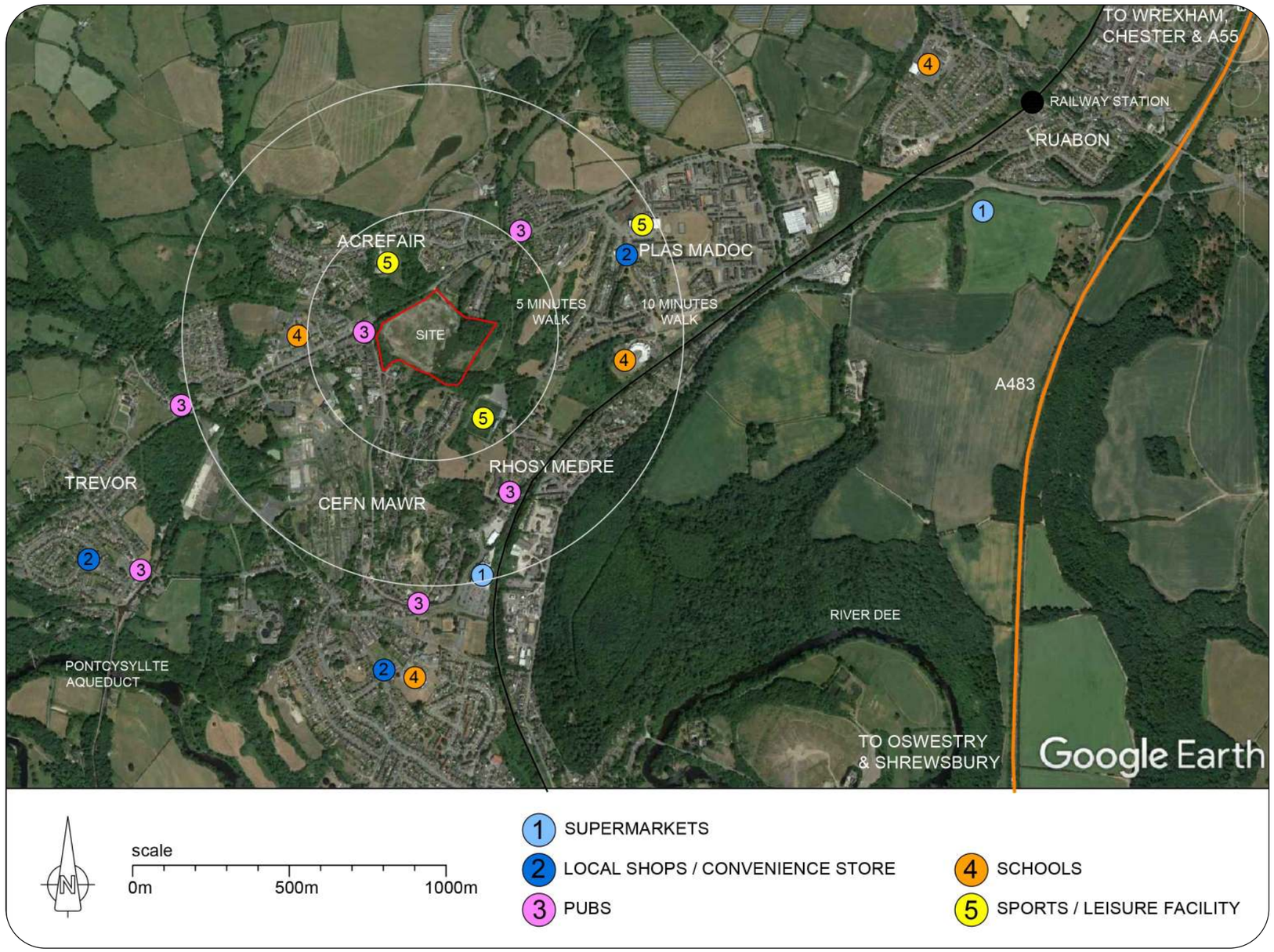


Site Location

The site is the location of the former air products factory (demolished in 2010) located off the A539 Llangollen Road in Acrefair.

The site is within a residential area and close to the centre of the village at the junction with King Street.

Site Location Plan



Neighbourhood Structure

The village of Acrefair is linked to the surrounding settlements of Plas Madoc, Rhosymedre, Cefn Mawr and Trevor, a group of traditional industrially focused villages. Now predominantly residential, the site is within 10 minutes' walk of a variety of essential facilities and services and 1.6 miles from the railway station at Ruabon.

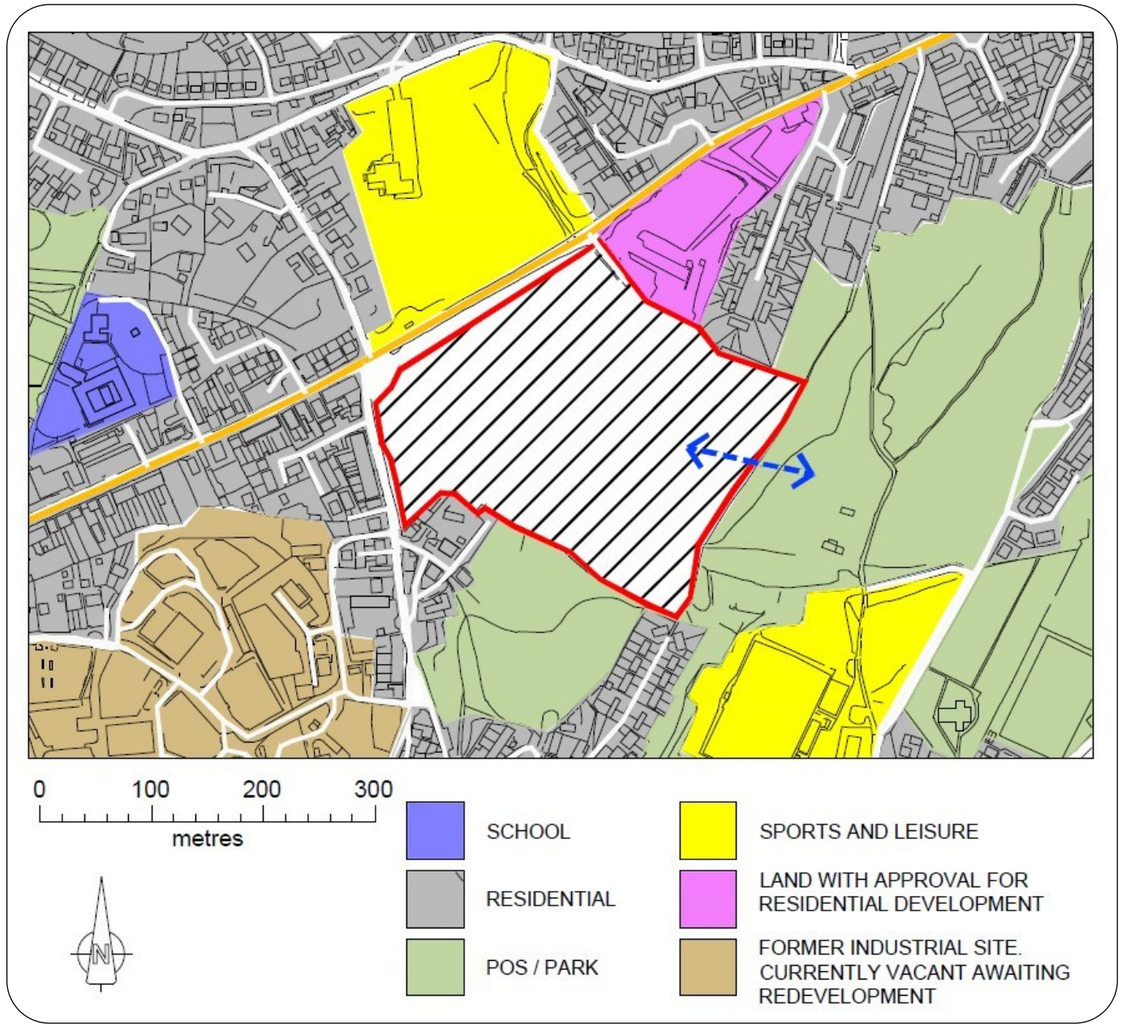
Neighbourhood Structure

Surrounding Land Use

The surrounding land use is predominantly residential, with the addition of local small businesses providing retail stores, services and licenced premises in close proximity to the site.

Ysgol Acrefair is the nearest primary school situated on Llangollen Road, just 5 minutes' walk of the site.

Extensive areas of public open space wrap around the southern and eastern boundaries of the site and provides pedestrian links to surroundings streets further afield. There is the opportunity to extend these links into the application site to make use of the POS and to further increase the permeability of the area.



Surrounding Land Use

Adjacent to the site on Llangollen Road, Gower Homes has recently gained Planning Approval for X open market dwellings on a small site that was also previously part of the Air Products site. The layout of the approved scheme generally fronts onto Llangollen Road with the addition of a few dwellings that will back onto ClwydAlyns site. The approved layout is thoughtfully designed and will not result in overlooking the site or impact in any other adverse way.



Site Plan of proposed residential development on adjacent site



Planning Context

The site previously had the benefit of Outline Planning approval for residential development (232 dwellings) and new access. (Application Ref: CEF P/2016/0505 dated 05/03/2018). The Outline approval has now expired. The drawing opposite indicates the indicative site layout drawing that supported the application.

Indictive Site Layout by Nichol Thomas Architects from 2018



Topography

1. Views into the site are restricted by the topography. The site entrance off Llangollen Road provides one of the few glimpses into the site.

2. Tree lined steep embankments. The site is separated from Llangollen Road and Kings Street by steep embankments up to 10 metres high. This will reduce the options for providing a positive / active street scene along these boundaries.

3. The site is dominated by a large and generally flat plateau where factory buildings once stood.

4. Large stone retaining wall surviving from the sites past use as an iron works. Potential to incorporate this historic feature into the development to provide a reminder of the site's history.

5. Sloping site at a gradient of approximately 1 in 8. It will be problematic to develop this part of the site and fully comply with the requirements of Lifetime Homes by providing a level approach, parking areas and access. This will require cut & fill of the site and careful placement of buildings.

6. A deep, steep sided railway cutting, heavily wooded. Unsuitable for development but potential for interesting POS feature.

7. A Public footpath and extensive area of POS adjacent to the site. Potential for linking into the site.

8. View into and across the site from the public footpath. Potential to retain this view with careful placement of buildings and appropriate boundary treatment.



View into site from Llangollen Road



The Plateau with steep slope beyond



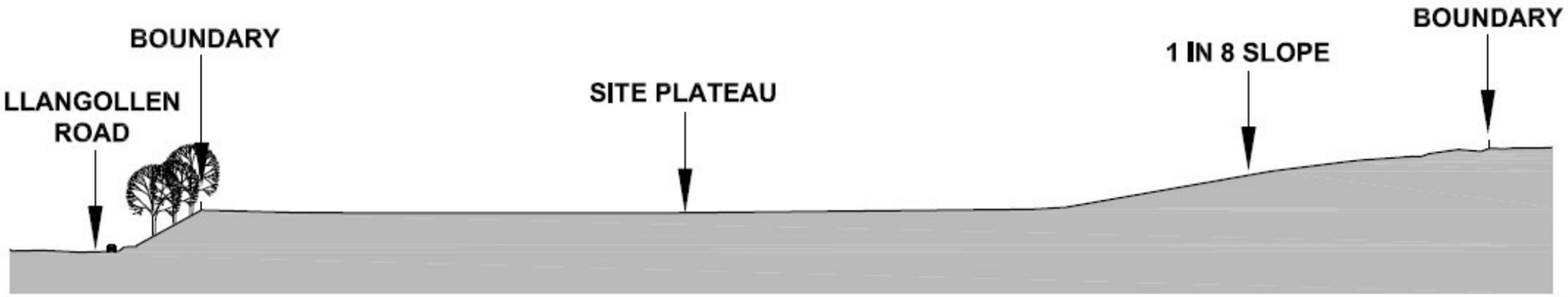
Historic stone retaining wall



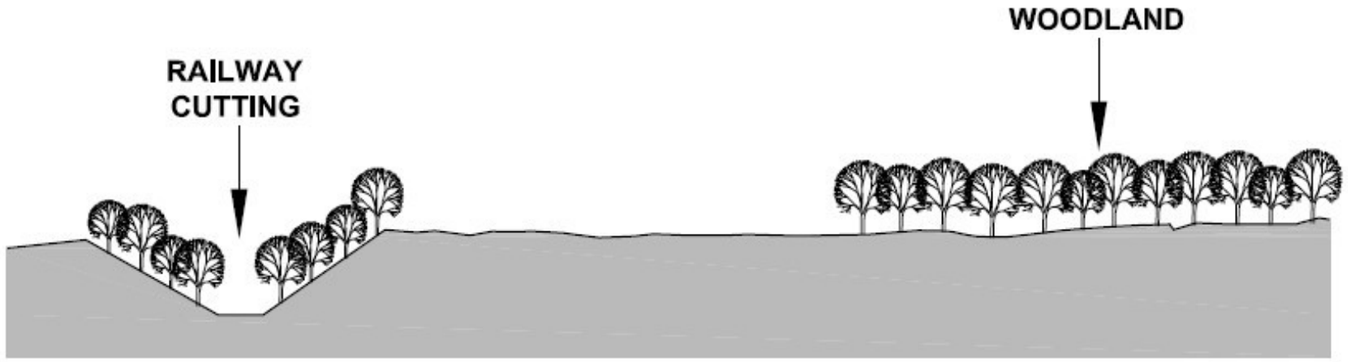
View across site from footpath



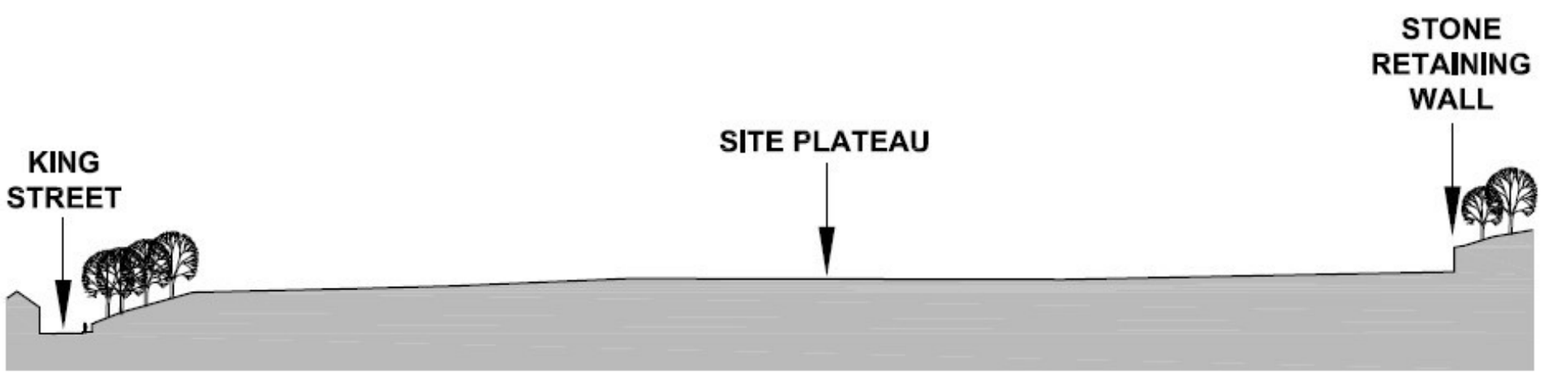
Former railway cutting



SECTION A



SECTION B



SECTION C

0 50 100

scale in metres

Topography

Site cross-sections illustrate the significant level change between the site and the adjacent roads along Llangollen Road and King Street. The tree lined embankment serves to completely separate the site from surrounding developments.

Also, Section A indicates the 1in8 gradient of the sloping part of the site.

Refer to the previous page for the location of the cross-section cut lines.

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Green Infrastructure

The site is surrounded by mature trees and woodland to many of the boundaries. These are significant visual and ecological features in the landscape and should be retained and protected wherever possible.

9. The north-western and western site boundaries are tree lined embankments sloping down to Llangollen Road and King Street. These trees are significant features to the street scenes and serve to screen the site from view. Many of the trees are outside of the applicant's ownership. The Arboricultural Impact Assessment recommends these groups of trees are provided with a buffer zone of 10 metres to the nearest dwelling, but will not present a problem of overshading due to the site's orientation. Refer to the AIA by Shields Arboricultural Consultancy for further details.

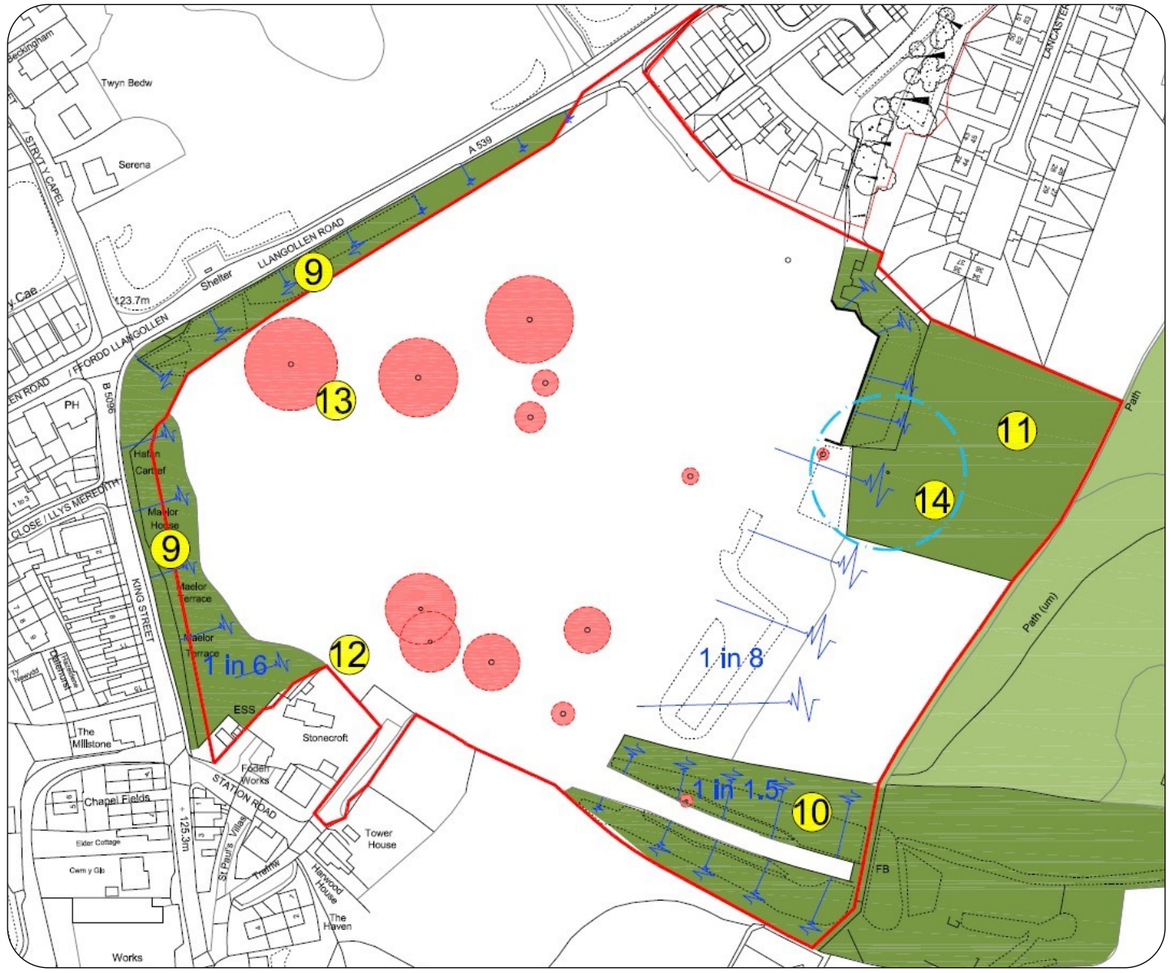
10. To the south of the site, the railway cutting is heavily wooded and is linked to wider woodland that extends beyond the site to the southeast. The AIA recommends a buffer zone of 15 metres to the nearest dwelling due to the risk of overshading dwellings to the north of this feature.

11. An established broad-leaved woodland (approx. 2 acres) is located within the northeast extents of the site. The woodland contains ruins of the site's industrial past although difficult to see due to the dense foliage. The woodland is a very prominent feature on the landscape and dominates the skyline from its elevated position above the site plateau. The AIA recommends a 15-metre buffer zone due to the potential for overshading to the south. The woodland is an asset to the site and has the potential to provide POS if correctly managed and made accessible to the public by linking the development or the adjacent footpath.

Blue Infrastructure

The site does not contain rivers, streams or watercourses and there is no risk of fluvial flooding on site. The site is unsuitable for infiltration, yet it is envisaged that sustainable drainage principles will be applied, with rain gardens being incorporated into both housing layouts and the highway drainage wherever practical to encourage disposal by evotranspiration. Please refer to the Drainage Strategy by Caulmert for further details.

12. Both foul and surface water drainage connections from the site have been investigated, traced and proven to discharge towards Station Road. Surface water drainage from the site will be directed to this location and will influence the layout of surface attenuation features.



Ground Conditions

Site investigation works identified the location of historic mineshafts and shallow mine-workings below the site. These have been remediated by capping some of the mineshafts, and pumping cement grout into boreholes to stabilize **the** ground. Despite this, the mineshafts still have a theoretical collapse radius which must remain as no build zones.

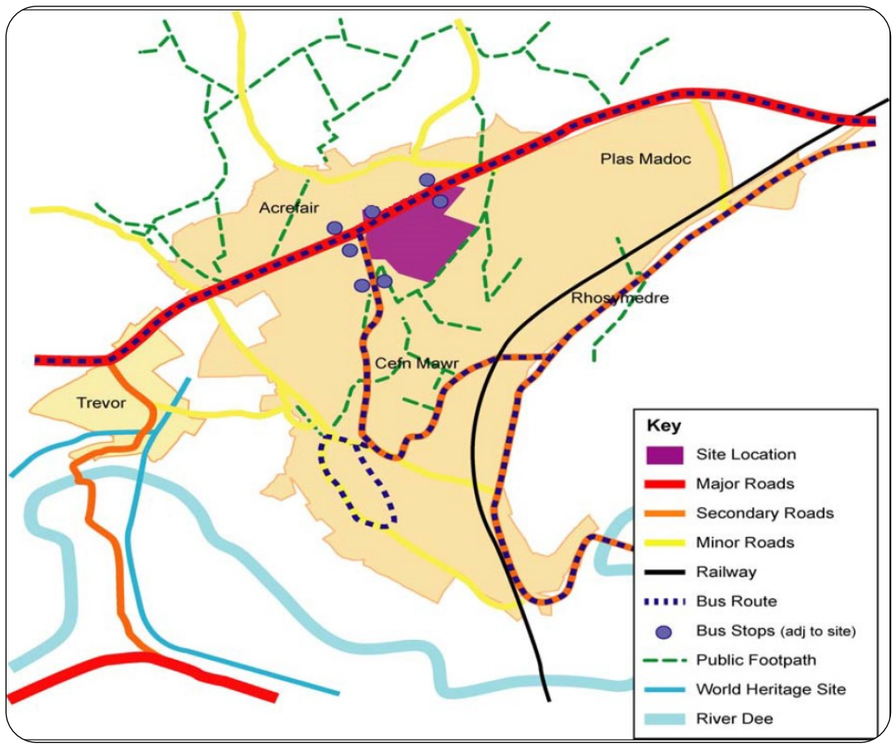
13. Location of mine shafts and collapse radius. Constraints to development due to no build zones.

Ecology

The site consists of predominately bare ground with fragments of vegetation along the peripheries.

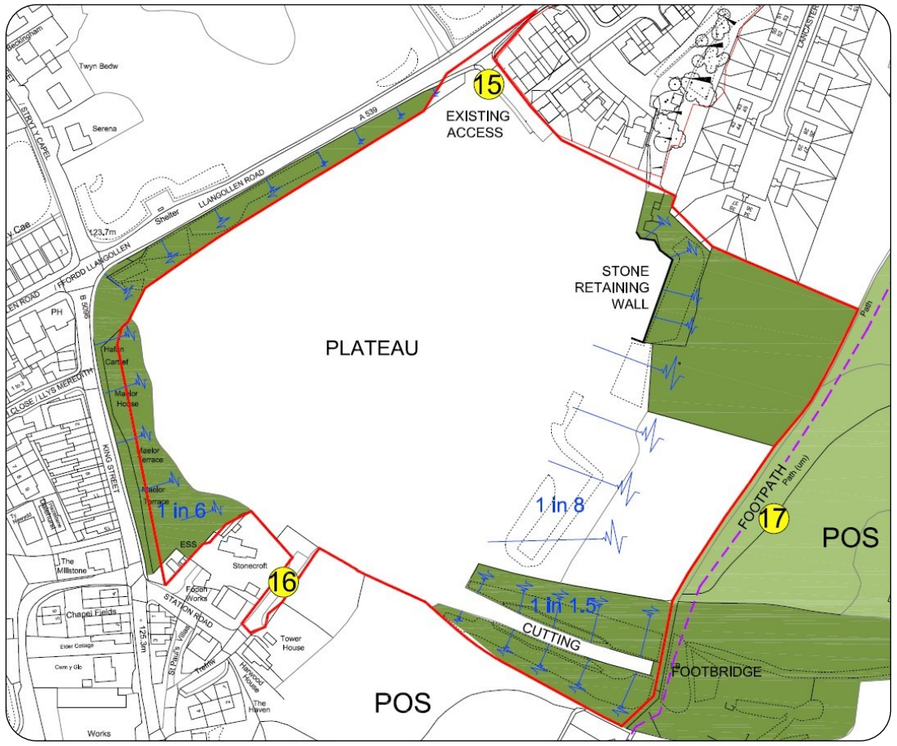
Deciduous woodland is present along the boundaries of the site. The trees have suitability for roosting and foraging bats, as well as high value for hedgehogs.

14. Badger setts are present in the woodland at the location indicated, and will be retained. No construction activities should be proposed within 30 metres of the setts. Refer to separate Ecological Impact Assessment by Arbtech for further details.



Road Hierarchy

- The site is well connected to the major road network and public transport routes with a number of bus stops adjacent to the site.
- The site is 1.6miles from the railway station at Ruabon.
- A public footpath runs along the south-eastern site boundary and could be connected into the site.
- Sustainable location justifies a flexible transport strategy and a reduced reliance on cars may result in a reduced parking provision.

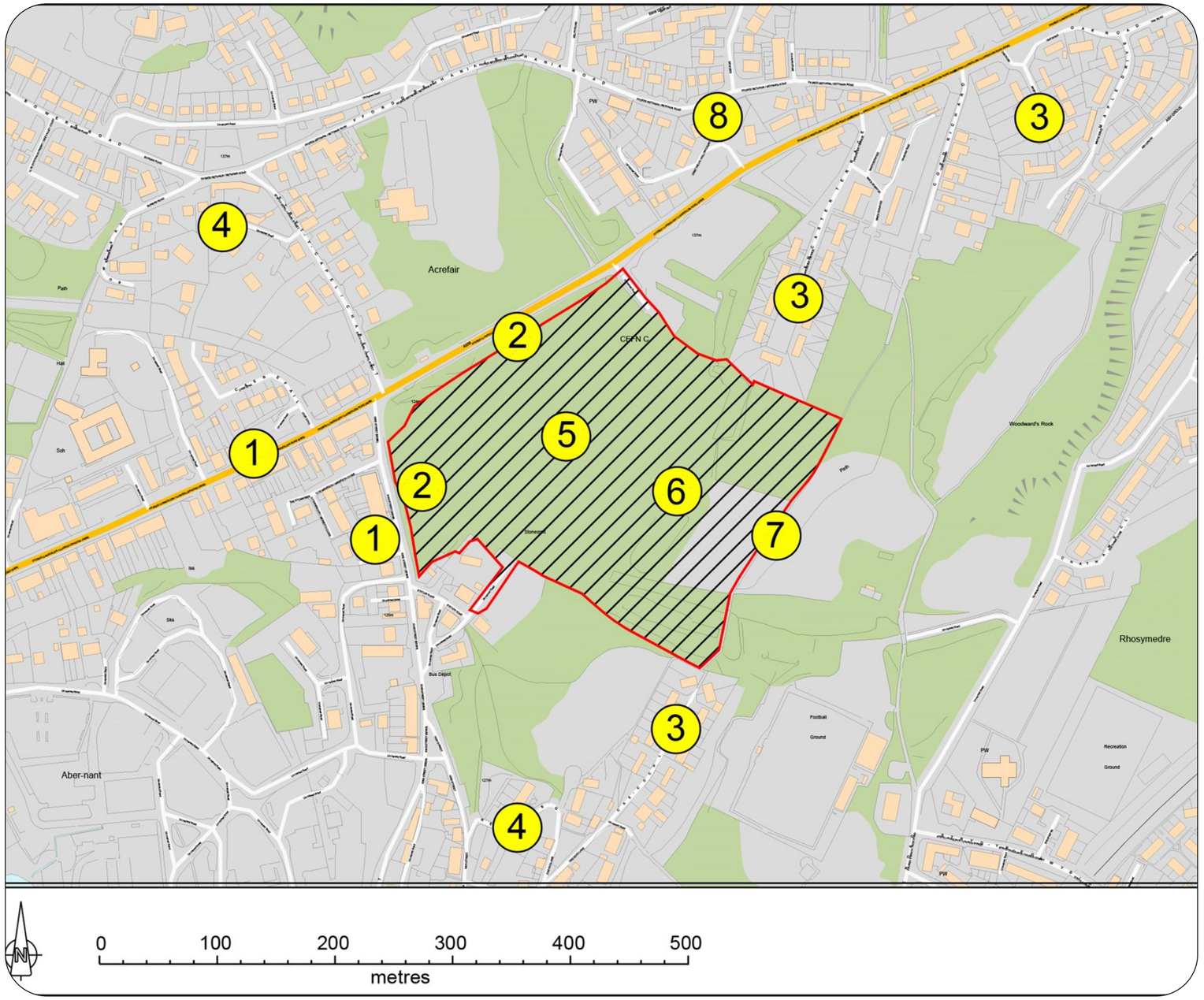


Site Access

15. Existing site access is the only option for linking onto the main Llangollen Road. Topography and surrounding land prevent other options. Access to be upgraded to improve visibility.

16. Option for secondary/emergency access from Station Road. Limited due to narrow width of Station Road.

17. Potential link to the public footpath network to the east of the site.



Urban Form

1. Historic centre of Acrefair. Linear residential and small commercial development built along Llangollen Road and King Street.

2. Not possible to emulate linear development along Llangollen Road or King Street due to the topography. Development here will be inward facing, creating a stand alone development. The scale of the buildings along these elevated boundaries must be appropriate so as not to be overbearing.

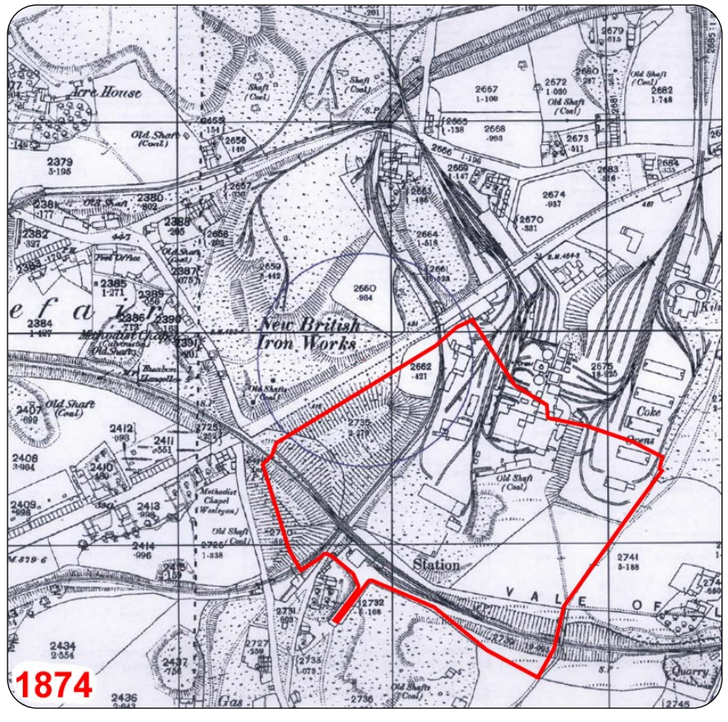
3. Groups of post-war housing surround the site. No particular pattern of development.

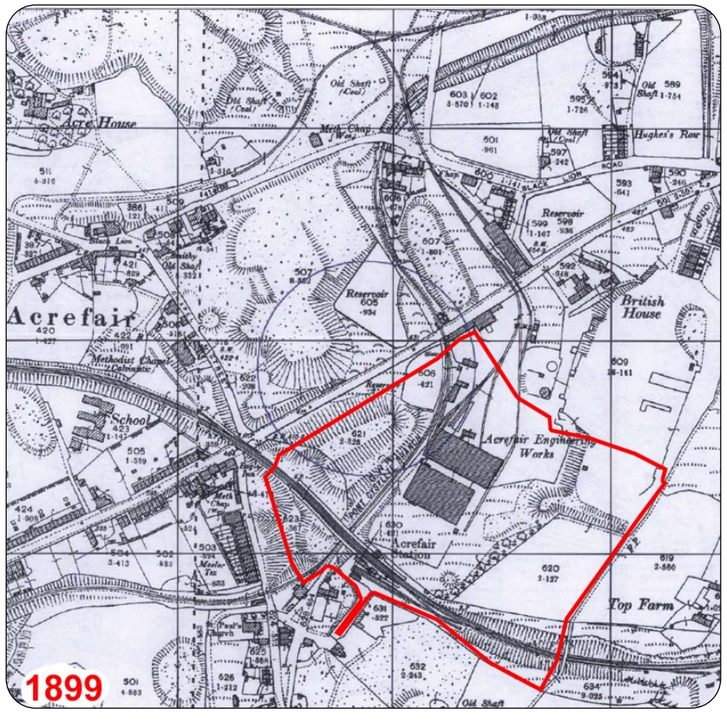
4. Piecemeal development, following the contours of the valley.

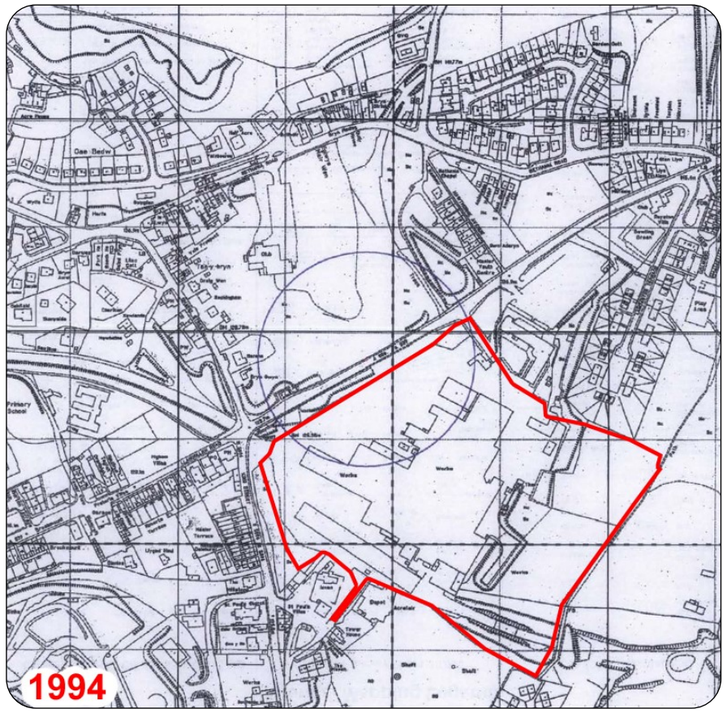
5. The site is not overlooked by existing dwellings.

6. Houses to be orientated parallel with site contours.

7. Opportunity for development to overlook the POS and be linked to it.







Site History

Historically, the site was mined for coal and was occupied by an iron works from at least the early 1800s until the end of the 19th Century, with a tramline crossing the site and a railway line being present across the western boundary. The site was redeveloped overtime as engineering works, most recently to produce air compression equipment.

The maps from 1874, 1899 and the most recent from 1994 indicate the historical features that can still be identified on site. The deep cutting at the southern corner was part of the railway, complete with station, whilst the stone retaining walls appear to be supporting the coke ovens, remnants of which are present within the woodland area. Both features appear on the 1874 map.

The road layout surrounding the site was present in 1874, with Llangollen Road and King Street visible, along with the change in level created by the on site land fill.

The existing form of the site has clearly been created by the historic uses, resulting in raised site levels of made ground that separates the site from the surrounding roads and leaving a large plateau where the factory buildings once stood. The site doesn't relate to other existing patterns of development within Acrefair. Post war housing was built to the north and south of the site but do not relate to it and are screened by the established woodland.













Post-war development, recently refurbished



Building scale and character. 1800's — post war

Examples of older properties in Acrefair. Two-storey Victorian housing dominates the street scenes along Llangollen Road, Kings Street and the surrounding area. The terraced houses are generally built close to the road with minimal amenity space to the front. The predominant materials are Ruabon red brick with slate roofs and chimneys with decorative pots. The fenestration is generally repetitive along the terrace with a tall, slender ratio to windows. Architectural details include feature gables, dressed stone heads and cills, corbelled eaves, and contrasting brick string courses.

A number of post-war developments surround the site. The example pictured is a two-storey maisonette scheme that has been recently refurbished and re-clad in brick and render (and presumably externally insulated) with concrete interlocking roof tiles. The architectural style is typical of the era and does not pick up on the older architectural detailing.







Victorian detailing. Stone heads and cills, contrasting brick banding and corbelled eaves

Building scale and character. 1960’s — present

Examples of recent developments within Acrefair. Predominantly located to the north of Llangollen Road, development has spread up the side of the valley.







Some examples emulate the historic detailing, featuring cast stone heads and cills, and make good use of contrasting brick banding and chimneys.



Developer housing. Does not seek to emulate the local vernacular



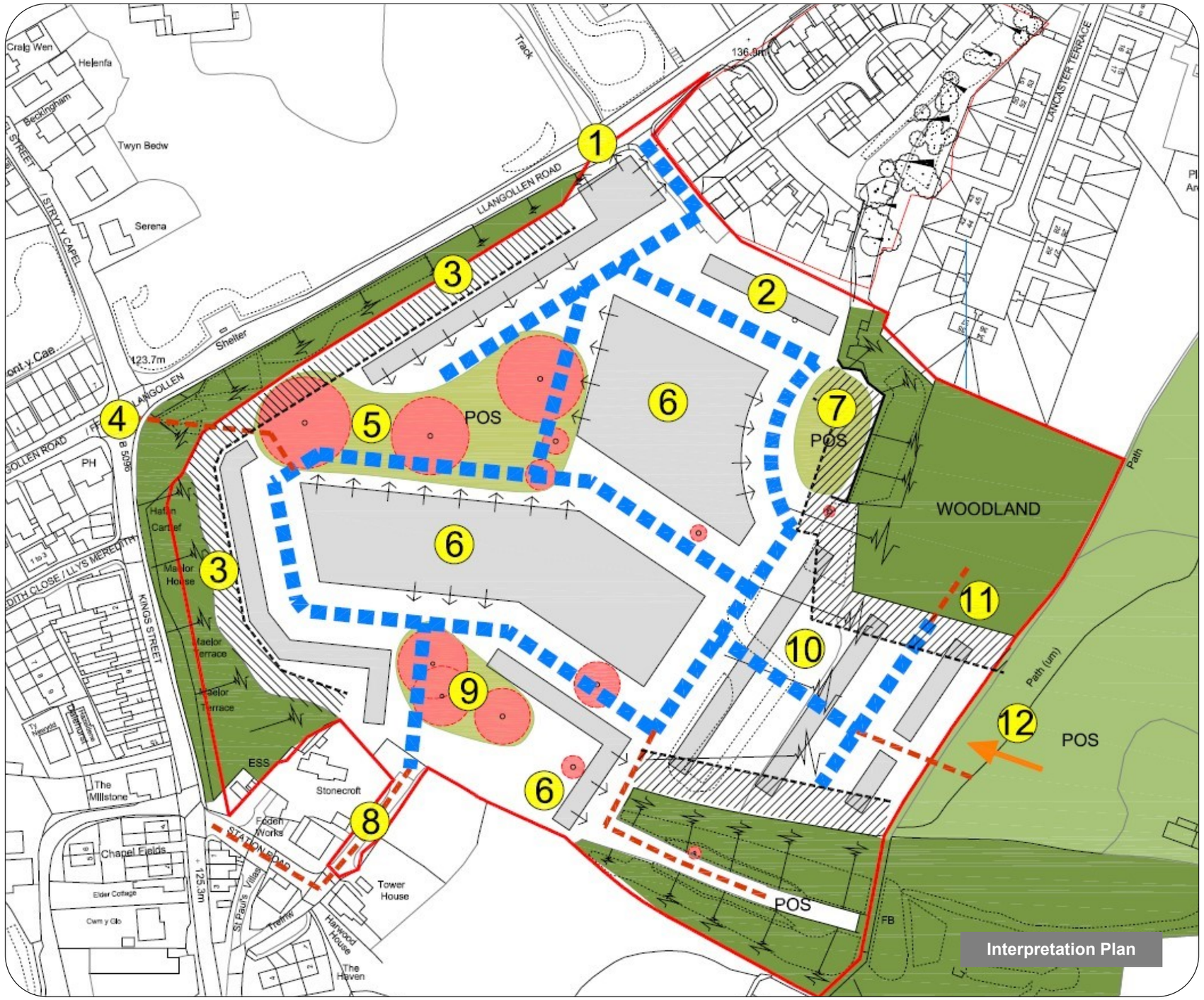






Typical 1960 / 70’s bungalows. Spacious,





Interpretation Plan

Interpretation

1. Opportunity to create a short street frontage / entrance feature onto Llangollen Road.

2. Houses to back onto Gower Homes development. Facing distance OK.

3. Dwellings cannot front onto Llangollen Road or Kings Street due to level difference. Dwellings to back onto boundary with gardens to provide buffer zone to trees.

4. Potential to link to local hub?

5. POS and roads to encompass 5no. Mine shafts.

6. Dwellings to front onto and overlook POS.

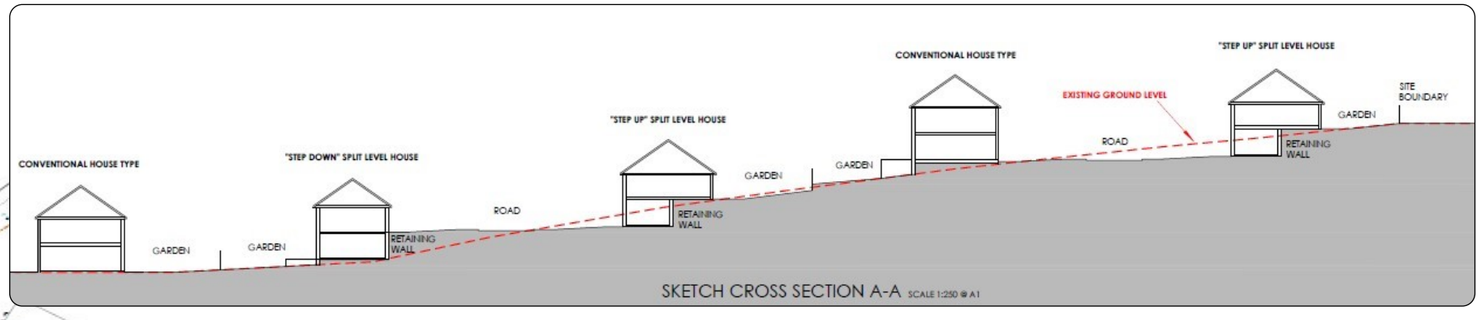
7. Historic retaining wall to be given prominence. Potential location POS to and provides buffer to woodland.

8. Potential link to Station Road and Kings Street.

9. POS and roads to encompass 3no. mine shafts.

10. Development to be parallel with contours to avoid steep gradients and help to achieve level access.

11. Links to woodland and existing POS?





17	2 BED BUNGALOWS
24	1 BED WALK UP FLATS
49	2 BED HOUSES
45	3 BED HOUSES
23	4 BED HOUSES

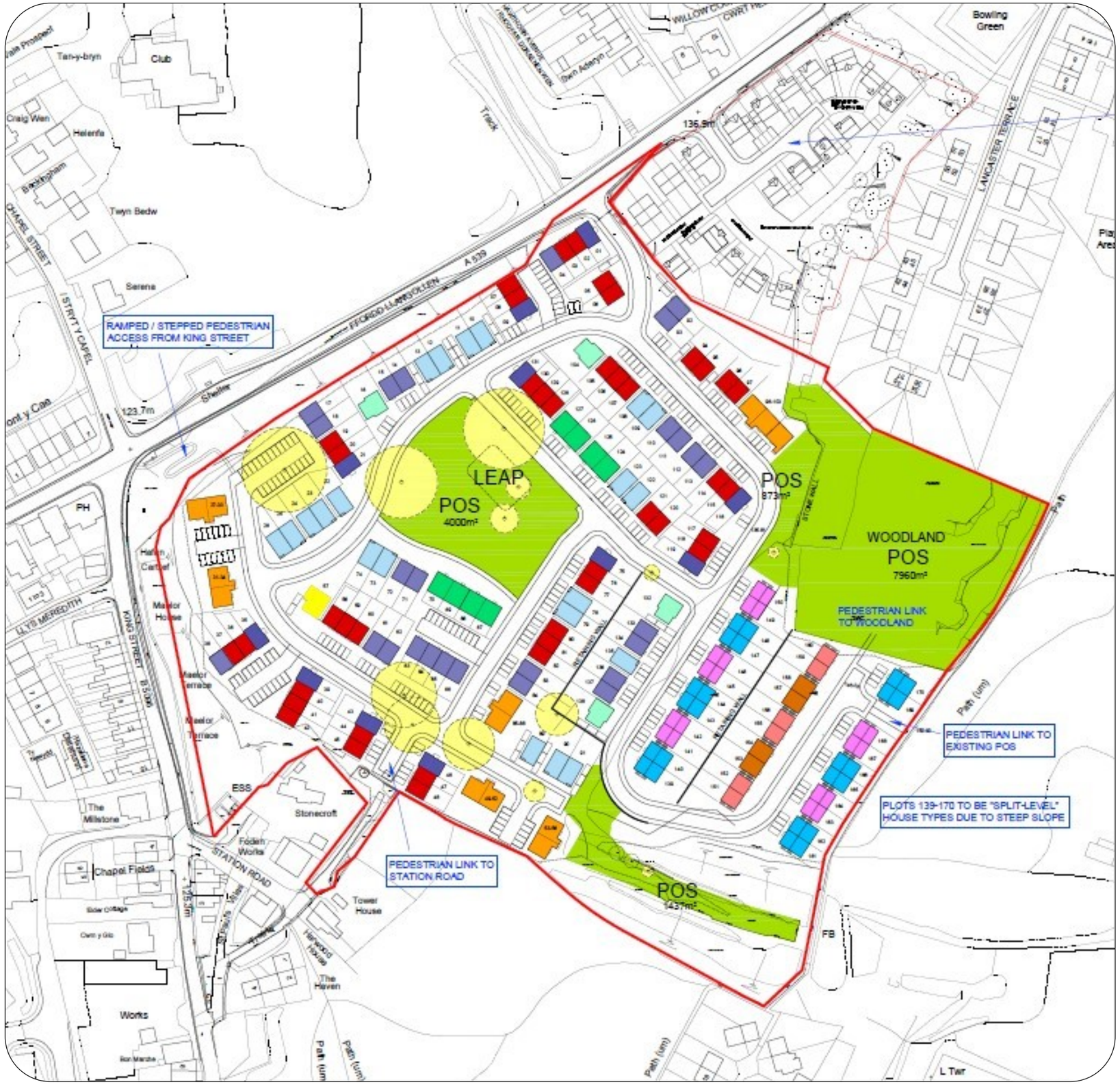
158 DWELLINGS

POS 8361m² APPROX

Design Development

First draft of the site layout indicates the initial thoughts on dealing with the constraints of the mine shafts and sloping topography.

- Centrally located POS encompasses 4 of the mine shafts and is well overlooked by a number of dwellings.
- A large shared parking area and gardens covers the largest mine shaft.
- The historic retaining wall is open to view and provides a backdrop to a small area of POS.
- Road link provided to Station Road.
- Access provided to old railway cutting as POS and overlooked by dwellings.



Design Development

A later draft of the layout sees an increase in dwelling numbers at the expense of the central POS. This transpired to not be in line with the Suds strategy and was subsequently revised.

A parking court is still proposed over the large min shaft, but is now better overlooked by houses.

This layout experimented with orientating dwellings to be perpendicular with the SW boundary to increase dwelling numbers.

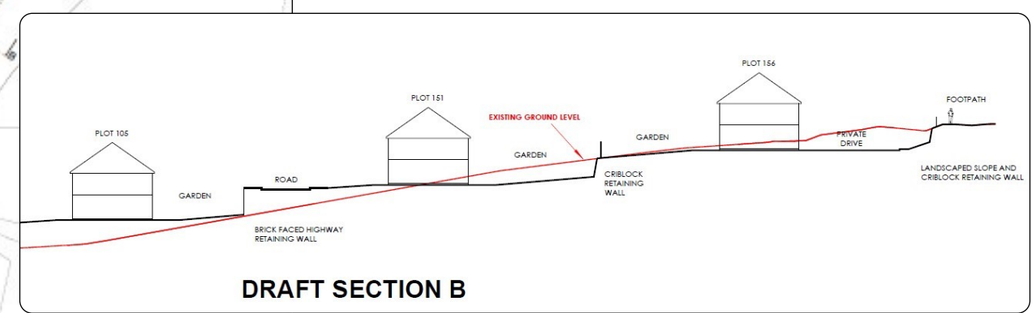
Design Development

Further development of the layout extends the central POS to link with a pedestrian route through the site and a surface water detention basin as part of the Suds strategy.

The central POS is still well overlooked by dwellings fronting onto the space and is now bordered by a section of private drive.

This layout explores the option of backing dwellings onto the historic retaining wall in orer to increase numbers of dwellings. The wall will provide the backdrop to the rear gardens.

Split-level houses replaced with standard housing and retaining walls (refer to cross section). This simplifies the build and helps to comply with the requirements of WDQR's and Lifetime Homes.



DRAFT SECTION B



PAC Proposal

A Pre-Application Consultation (PAC) exercise was undertaken during Feb-March 2023 and the proposed site layout was published for comment by Consultees.

Generally, the layout received positive feedback and the main points are summarized below:

- The site does not appear to be over developed and the large areas of green POS are welcomed.
- Pedestrian link to the public footpath along the SE boundary is welcomed, but access to this should be via an adopted road rather than a private drive.
- More bungalows should be provided.
- Parking courts should be well overlooked to provide natural surveillance and deter the risk of crime.
- Access to the site via Station Road is not desirable for local residents.



The Proposal

The proposed Outline planning application is for the erection of a residential development with all matters reserved. The proposed site layout is an indicative proposal, yet it has been developed following a thorough analysis of the site's constraints and opportunities, and is based on the applicants detailed brief and vision for the site.

The outline proposal is for 159no. dwellings, including 1 bed apartments, 2 bed bungalows, 2 bed houses, 3 bed houses and 4 bed houses. The site layout includes private gardens and parking areas for every dwelling, plus significant areas of public open space and the retention of the majority of existing trees to the boundary and woodland area within the site. The outline layout has been developed in tandem with the drainage strategy and therefore incorporates above ground SUDs features into the layout. The development will be accessed via an adopted road network, with the addition of private drives and parking courts where appropriate.



Plot 01 is a dual fronted house which faces onto Llangollen Road and provides a feature at the site entrance. Parking for plots 01-03 are located in the rear parking court to reduce visual clutter.

A pedestrian link to the “Gower Homes” site is proposed opposite plot 04.

The parking court is a shared surface and is closely overlooked by a short terrace of houses create a sense of place.



Central POS encompasses 4 mineshafts and creates a central focal point to the development, linked by footpaths.

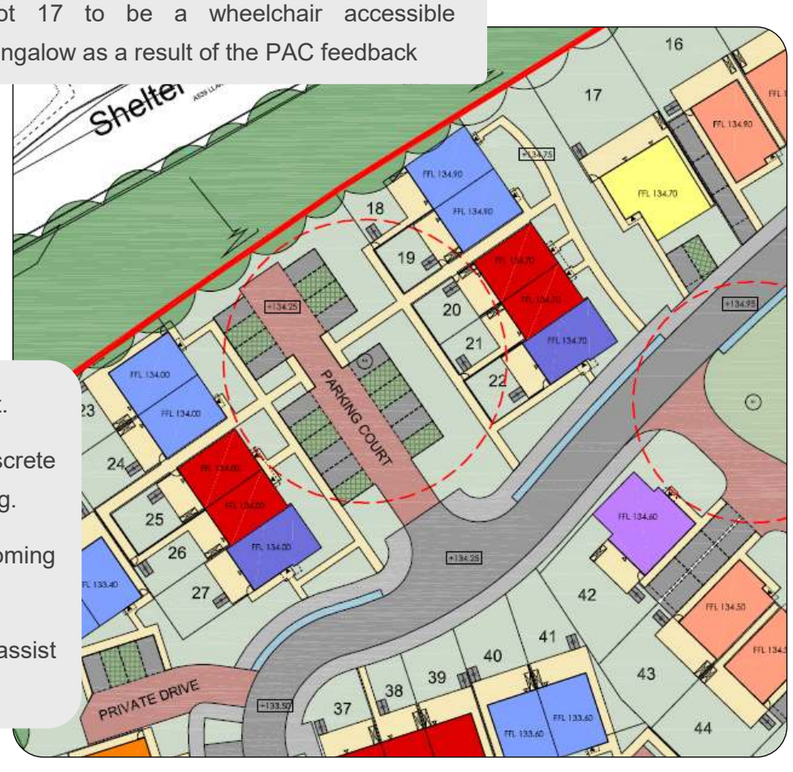
Overlooked on all sides for security and a sense of community. The area is not dominated by car parking.



A cul-de-sac reduces traffic speeds and creates a sense of community. Footpaths are diverted away from the road edge to further enhance this.

The existing stone retaining wall is to be repaired and left exposed, providing a backdrop to a private drive and parking area.

Plot 17 to be a wheelchair accessible bungalow as a result of the PAC feedback



A parking court, POS and gardens cover the largest mineshaft.

Parking surfaces to be a mix of permeable asphalt and grasscrete to provide drainage and reduce the visual impact of the parking.

Plots 18-22 front onto a pedestrian only space. A welcoming sense of place.

The spine road is edged with rain gardens where possible, to assist with surface water drainage.

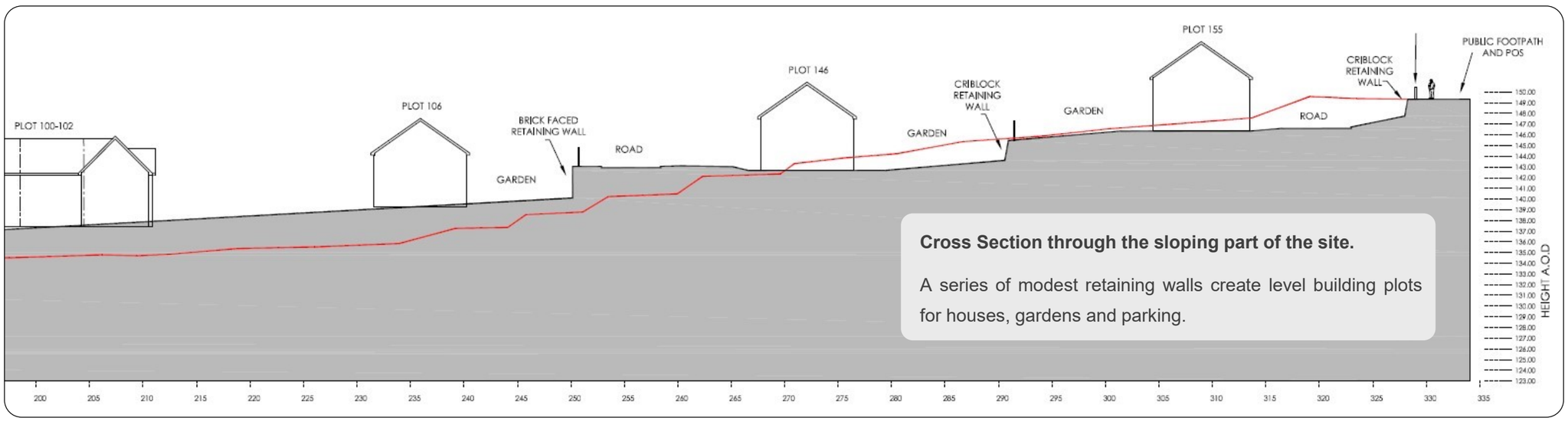


The steep sided railway cutting is to remain and be landscaped as an area of POS. Accessed via a turning head and overlooked by dwellings on two sides.

The steepest part of the site cannot easily be developed without very large engineering works and retaining walls. This space could instead be a pedestrian link with a meandering path linking to the POS.



Existing POS links into the site along the Eastern boundary. Views are maintained into and across the site from the public footpath. Plots 155-159 front onto the POS to enhance the appearance of the development along this boundary.

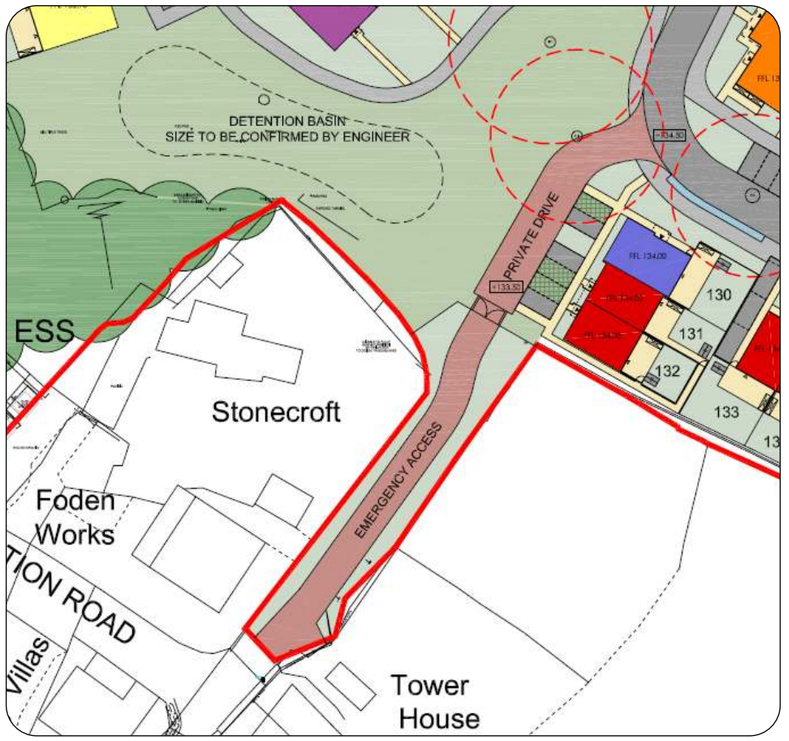


Cross Section through the sloping part of the site.

A series of modest retaining walls create level building plots for houses, gardens and parking.



Parking courts are to be well overlooked to provide natural surveillance and help to deter the risk of car crime. Plots 37-41 are redesigned following the PAC feedback and comments made by the SBD Officer.



An emergency site access route is to be provided, accessed via Station Road. The access is to be gated and used only during an emergency if the primary access is blocked.

Character

The site brownfield land, and falls within the settlement limits of Acrefair at the junction of Llangollen Road and King Street and close to the hub of the village. Despite this, we envisage that the development will have its own character and sense of place due to the unique topography and setting, which serves to separate the site, physically and visually, from the surrounding streets and buildings. The site has a back-drop of established trees to most boundaries, and a woodland that dominates the skyline to the northeast with open POS beyond. The existing woodland, railway cutting and historic stone retaining wall will be incorporated into the development and all these features will be accessible to the new residents. The unique topography of the site (i.e. the manmade plateau, the railway cutting and the steep slope) will be modified, but will still be legible following redevelopment, providing a reminder of the sites history.

The Southeast site boundary is open to the existing public space and footpath. The outline layout proposes to keep this open and provide views into and across the site, ensuring that the site is connected to the wider landscape

Layout

Dwellings generally back onto the site boundaries to provide an efficient layout and with rear gardens providing a buffer to the established boundary trees.

Dwellings are positioned to avoid the mineshaft collapse radii as indicated on the site plan. These areas can be used as roads, parking, gardens, landscaping or POS.

A terrace of 3 dwellings fronts onto Llangollen Road at the site entrance. This is the only opportunity to provide a street frontage onto this road and create a landmark feature to signify the entrance to the site. The end dwelling (plot 1) is double fronted to further enhance the entrance street scene.

The centrally located POS encompasses 4no. mineshafts and is well located to provide a focal point to the whole site. Surrounding dwellings face onto the POS to provide a sense of enclosure and provide natural surveillance.

Plots 42-46 look onto the POS and are served via a private drive. These plots have the benefit of side parking to remove cars from the frontage and prevent cars from dominating the scene and POS.

The POS links to footpaths that access all part of the site. The POS also links through to the Southwest part of the site to the location of the surface water detention basin. This is a pedestrian only route which is overlooked by the bungalows (plots 47-52) and provides a corridor for linking the SuDs drainage from the site to the detention basin. The basin in located adjacent to the connection point of the existing surface water sewer from the site.

Dwellings back onto the Gower Homes site and are sufficiently spaced to avoid a problem of overlooking from either side. The end house (plot 53) is double fronted, and faces onto the site entrance to provide interest and to terminate the view.

A cul-de-sac terminates with a turning head adjacent to the existing stone retaining wall. The road provides views of the old wall which will provide a backdrop to a short private drive and parking area. Early versions of the site layout showed this road as a route into the site, but the applicant thought it best to revise this detail to reduce the amount of road and reduce traffic speed.

The sloping part of the site has a gradient of approximately 1 in 8, and therefore requires cut and fill engineering works to re-grade the slope prior to development. The layout proposes to “step” the slope to create level development plots parallel with the contours. The “steps” will be formed using retaining walls of a modest height, and battered slopes were possible. The re-graded slope extends further out towards the middle of the site, and at this point the proposed road will slope up at a maximum gradient of 1 in 15. The road meanders up the site to reach the top most plots adjacent to the public footpath.

The layout provides appropriate separation distances between dwellings in order to reduce direct facing to habitable rooms and to protect amenity gardens spaces. Facing distances are a minimum of 22m between habitable rooms, and a minimum of 13m looking onto a blank wall. On the sloping part of the site the facing distances are increased by 1m for every 0.5m difference in height, in accordance with the guidance containing in LPG 21, resulting in a facing distance of 28m.

The existing railway cutting is not appropriate for redevelopment and will be used as an area of POS, overlooked by the nearest dwellings and accessed via road and footpath.

The site layout indicates the Southeast site boundary to remain open with plots 155-159 facing out of the site and accessed via a private drive. The site levels at this point will be reduced and separated from the public footpath by a retaining wall, but the views from the public footpath into and across the site will remain and provide a positive edge to the development.

Amount and Scale

The outline layout proposes 159no. dwellings and offers a varied mix of accommodation types and sizes, all with private gardens, parking and the provision of public open space. The proposed housing mix was advised by the RSL applicant, based on experience of demand and with an aim to provide choice for the widest number of people and families.

The total of 159no. dwellings has been influenced by the constraints of the site, the layout (including roads, POS and gardens) and the size and mix of dwelling types. It should be noted that a previous Outline application on this site proposed a total of 232 dwellings, but that scheme proposed smaller dwellings, significantly less POS, and did not take account of the 14 mineshafts that restrict the layout.

All proposed dwellings are 1 or 2 storeys high and are either detached, semi-detached or terraces of 3 and 4 houses. The 1 bed apartments are in a 2-storey block of 4 dwellings with private stairs. All buildings are of a residential scale that is not dissimilar to surrounding developments, and therefore appropriate for this site and setting.

The proposed dwellings are designed to comply with the requirements of Welsh Development Quality Requirements 2021 (WDQR 2021) as well as the ClwydAlyn specification. The sizes of the dwellings shown on the indicative site layout far exceed the minimum floor areas stipulated by the WDQR 2021 (Appendix B). In addition, every house has the benefit of a private rear garden with a minimum size of 50², but most being far bigger.

Appearance

The design of the proposed dwellings is yet to be determined, yet the outline site layout is based on preliminary house type designs, developed to meet the applicants requirements. The architectural style and appearance of the initial house designs are based on studies of the local vernacular and have picked up on historical materials and detailing with the addition of modern styles, materials and building technologies. The preliminary designs have considered the following elements:

- Red / Orange brick with yellow engineering brick banding.
- Brick soldier course to window cills (red or contrasting yellow brick).
- Brick plinths in a contrasting brick (engineering blues).
- Cast stone heads and cills to a minority of house types.
- Coloured fibre cement cladding.
- Coloured render.
- Windows in white or grey depending on style of house.



Appearance

Terraced housing gives the opportunity to mix traditional details with a variety of materials and features to create variety, identity, and sense of place. Coloured render and fibre-cement cladding can be used to create interest and enhance an elevation. Terraced housing is common historical feature in Acrefair and it is proposed that this efficient form of housing should be used on site where possible.









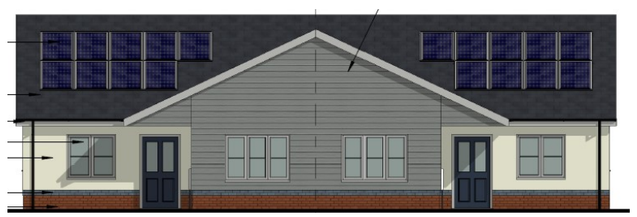




- A double-fronted house type provides a sense of quality and curb-side appeal.
- Pitched roofs with gables are the predominant style, but hipped roofs are to be used in a minority of plots to break up the roofscape and create identity.
- Bungalows can be enhanced by a projecting gable feature, and highlighted using coloured cladding.









Access and Movement

The site is well placed within the centre of Acrefair, and is served by the A539 Llangollen Road and B5096 King Street, providing links to surrounding settlements as well as a direct route to the A483 and the railway station at Ruabon.

The site is situated on a public bus route, providing public transport to Llangollen, Wrexham and beyond, with bus stops located opposite the site on Llangollen Road and King Street.

It is proposed that the main vehicle and pedestrian access will be off Llangollen Road, an adopted road with footpaths to both sides. The new access road will be constructed to an adoptable standard with footpaths to both sides and will extend throughout the site and serve every dwelling. Sections of private drives and parking courts may be used where appropriate.

The site has the potential to be accessed by pedestrians off King Street (via Station Road), however this is a narrow, non-adopted road in poor condition and requires careful consideration before providing a pedestrian route.

Pedestrian access can also be provided from the public footpath that runs adjacent to the southeast site boundary. This offers access to the exiting POS to the southeast, subject to the topography at the boundary.

Parking spaces will be provided for every dwelling, within the curtilage of the property or within close proximity. The indicative site layout indicates parking provision based on 2 spaces for 2 and 3 bed dwellings, 3 spaces for 4 bed dwellings, and 1.5 spaces for 1 bed dwellings. This is a reduced standard compared with LPG 16, but can be justified due to the site's sustainable location and the available public transport options.

Access to dwellings will be designed in compliance with the requirements of Lifetime Homes. Parking spaces will be level, the approach to the dwelling will be level or gently sloping, and level access will be provided at the threshold to every dwelling.

Community Safety

The proposed scheme is to meet with the requirements of the Welsh Governments Development Quality Requirements, and as such is required to comply with the principals of Secured by Design and be awarded the SBD Gold award. The scheme will be developed in consultation with the Police Architectural Liaison Officer to ensure that the proposals comply with the principals of Secured by Design and thereby achieving the SBD gold award.

The site layout incorporates the fundamental principles of secured by design in order to reduce crime risk.

- The layout promotes permeability and movement throughout the site whilst avoiding "short-cuts" and alleyways that could encourage crime.
- All rear and side boundaries will be enclosed with a 1.8m high fence, wall or hedge.
- Public open space is to be overlooked by dwellings and lit to SBD standards, to discourage antisocial behaviour.
- Landscaping to be designed to provide physical barriers where needed, whilst avoiding dense foliage that could provide cover and hiding places.
- Parking is located within the curtilage of the dwellings where possible, lit to SBD standards, and overlooked by windows to provide natural surveillance. Parking courts are located as close to dwellings as possible and always overlooked by windows.
- Every dwelling will have external lighting with dusk to dawn sensors (front and rear) to the SBD standard.
- The physical security of the dwellings will be to a high SBD standard. All doors and windows will be tested and certified to SBD standards for security.

Environmental Sustainability

The development site is brownfield land, having previously been used for the former Air Products Works, and prior to that, an ironworks and coal mining. The development of such sites provides the opportunity to clean up any potentially contaminated land and prevents the unnecessary development of alternative greenfield sites.

The site is in a sustainable location, close to the services and amenities in Acrefair and with good transport links providing access to pedestrians, cycles and vehicles, including the public transport network.

The site consists of predominately bare ground with vegetation and woodland along the peripheries, providing ecological and amenity value. The proposed development will retain and protect the majority of these boundary features where possible. The indicative layout demonstrates that development will be in the centre of the site, with the peripheries remaining. The bare site provides the opportunity to provide an overall biodiversity net gain. The layout has the potential to provide a good level of tree and landscape planting throughout the site.

The proposed new buildings will be designed to exceed current building regulations with regard to energy efficiency and conservation of fuel and power. The building specification is likely to include the following elements:

- Construction to adopt a fabric first approach to U-value of construction elements.
- Each dwelling to achieve an EPC A rating if possible.
- Where possible, local materials and manufacturers should be used.
- Modern Methods of Construction (MMC) to be embraced where possible. Timber frame construction is preferred.
- Buildings to be designed to achieve improved airtightness.
- All buildings to use mechanical ventilation with heat recovery (MVHR) systems where possible.
- Heating and hot water to be provide using an air source heat pump or ground source heat pump.
- Photovoltaic panels with battery storage to be used where possible.