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CAUSEWAYFIELD | SCOTLANDWELL

DESIGN AND ACCESS STATEMENT



SUMMARY

This Design & Access Statement accompanies a Planning Application for a development of housing on the southern edge of the village of Scotlandwell in Fife.

The project aims to provide a development of 22 new houses with the provision of 6 plots for affordable / custom build detached houses. This creates a layout that sits comfortably alongside the existing village.

The design of the site plan and the houses has taken its lead from the existing plans, layout and texture of buildings and intends to provide housing that is a positive benefit to the area.

The design of the development also applies the requirements of the Local Development Plan in all respects as noted in section 2.



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1

INTRODUCTION

1.0 INTRODUCTION

1.1 THE ARCHITECT - 56three

56three is a design based practice with projects covering new build, conservation and refurbishment works throughout the UK. We have an award winning team of architects, technicians and interior designers who are able to provide the full range of architectural services from feasibility through to construction.

56three work in a collaborative way with relevant stakeholders and planning authorities to embed sustainable solutions providing optimum land and building values, and to deliver the potential for long-lasting and enjoyable places in which to live, work and play.



A / Gateside House, Fife

2

CONTEXT

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2.0 CONTEXT

2.1 THE SITE

The application site extends to approximately 1.7Ha. and is located on the southern edge of the historic village of Scotlandwell. The site is bounded to the west by the B920, the portion running from Scotlandwell to Lochend Farm 1.3km to the south is known as The Causeway. To the immediate north lies the modern residential development of Friar Place.

The development site is a relatively flat square shaped field surrounded on its western, southern and eastern edges by hedgerows, and walls and fences of domestic properties to the north.

An electric power line crosses the north-western portion of the site in a east-northeasterly direction.

Wet ditches are to be found towards the southern and eastern edges of the field outwith the application site.

The site has an established allocation for a residential development consisting of 21-32 units in the recently adopted Local Development Plan (reference H54).

The site is 1.7Ha and is identified by the red line boundary on the adjacent aerial view and as confirmed on the attached Site Layout Plan.



A / Aerial View of Site

2.0 CONTEXT

2.1 THE SITE

The site sits immediately to the south of the younger housing stock in Scotlandwell. The plot sizes of the village are reasonably generous and sit happily in the open countryside.

The Lomond Hills are within a few miles to the north east and visible from the village. They are within a 'Site of Special Scientific Interest' and the surrounding landscape has been designated an 'Area of Great Landscape Value'.





The 'Scotlandwell Conservation Area' covers the northern section of the village with the newer housing forming a buffer zone between that and the site.

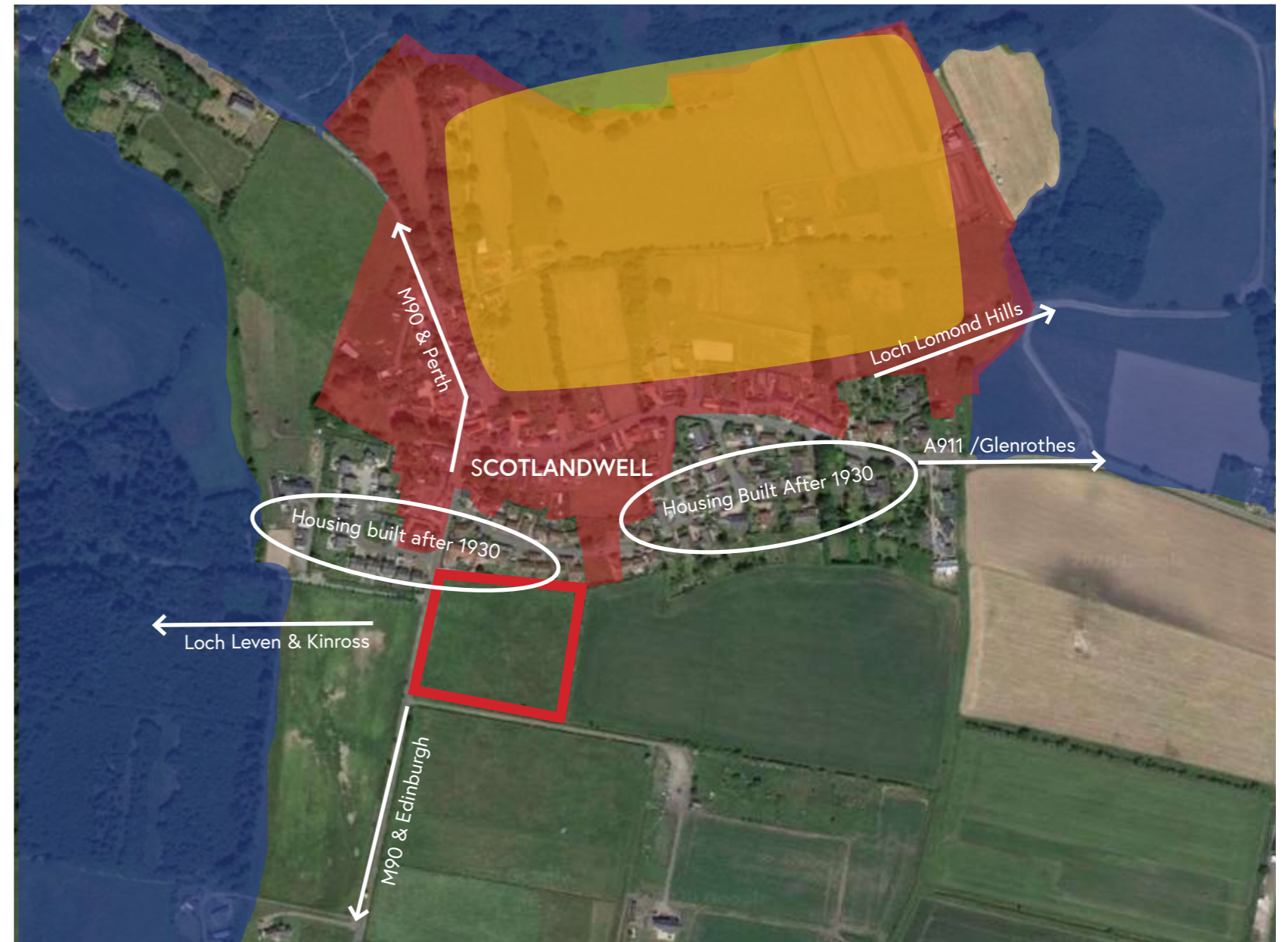
The roads through the village are not heavily trafficked but provide good links to Edinburgh, Perth and Glenrothes, with the beautiful Loch Leven and then Kinross to the west.

The landscape to the west, south and east is all relatively flat, and rises to the north east of the village.

The landscaping still shows evidence of the distinctive historic run rigg farming system to the north of the village

Key

-  Site
-  Evidence Remains of Run Rigg Farming
-  Scotlandwell Conservation Area
-  Area of Great Landscape Value



A / Aerial View of Site Highlighting Key Areas

2.0 CONTEXT

2.2 HISTORICAL ANALYSIS

Scotlandwell has seen some form of habitation since the Roman era where natural springs were to be found giving rise to it's name of Fons Scotia (Well of Scotland) The water was reputed to have healing properties. It was used in a hospital built nearby, and was reputedly visited by Scottish royalty.

The majority of the buildings on the principal road of Main Street date from the 18th & 19th century. Single storey cottages for crofters and two storey houses for those engaged in a thriving weaving industry. This lasted until the early 20th century when competition with factory looms rendered the cottage industries obsolete. The two storey arrangement would have seen loom shops on the ground floor and living accommodation on the upper, but occasionally, the entire two floors would have been given over to businesses.

The development of Scotlandwell was developed along the run-rig system of dividing land into narrow, half-acre strips of land. This, along with the topography of land creates a unique townscape which has a particular grain running from north to south.

Scotlandwell is primarily developed along two linear roads, being Main Street and Lochgelly Road which runs north to south and becomes The Causeway, and Leslie Road running east to west.

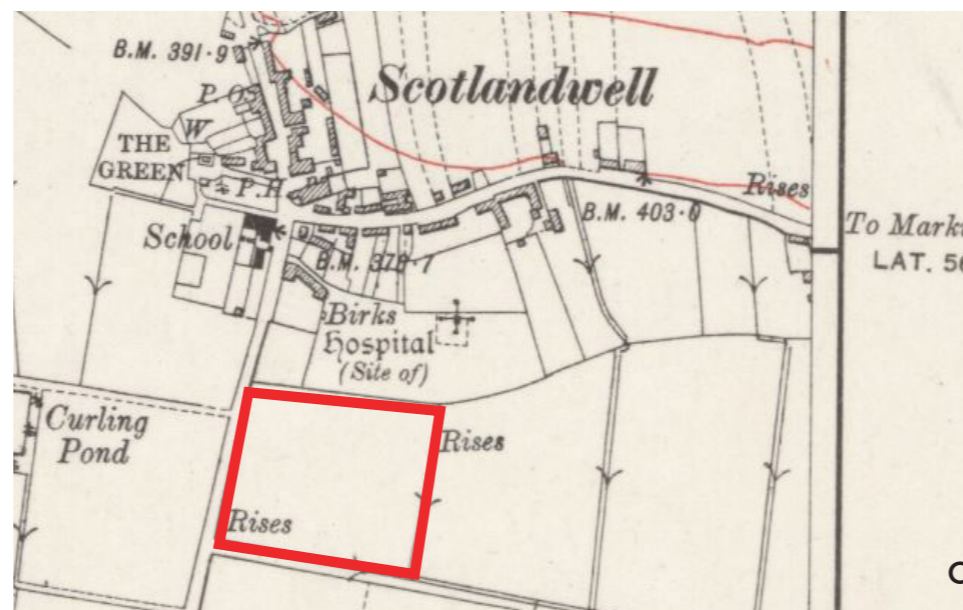
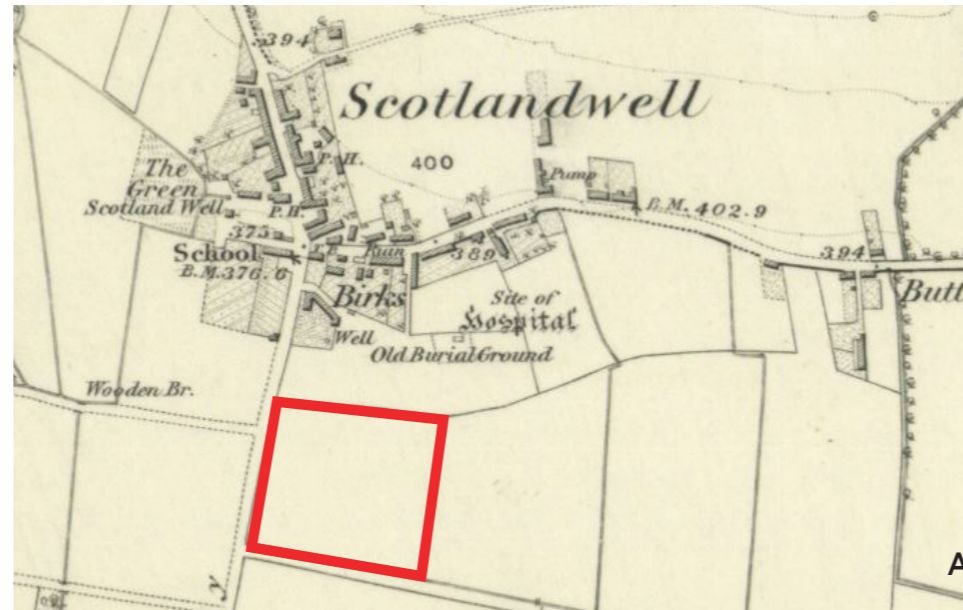
The modern developments leading from the south of Leslie Road and at the beginning of Main Street and west of The Causeway, are cul-de-sac arrangements which detract from the historical form of the village.

A / Map of 1855

B / Map of 1896

C / Map of 1920

D / Current Aerial View



2.0 CONTEXT

2.3 LOCAL DEVELOPMENT PLAN REQUIREMENTS





The proposed site has been identified by the 'Perth and Kinross Local Development Plan' as one for housing. The site is identified as H54 and capable of accommodating 21-32 homes. Site specific requirements are:

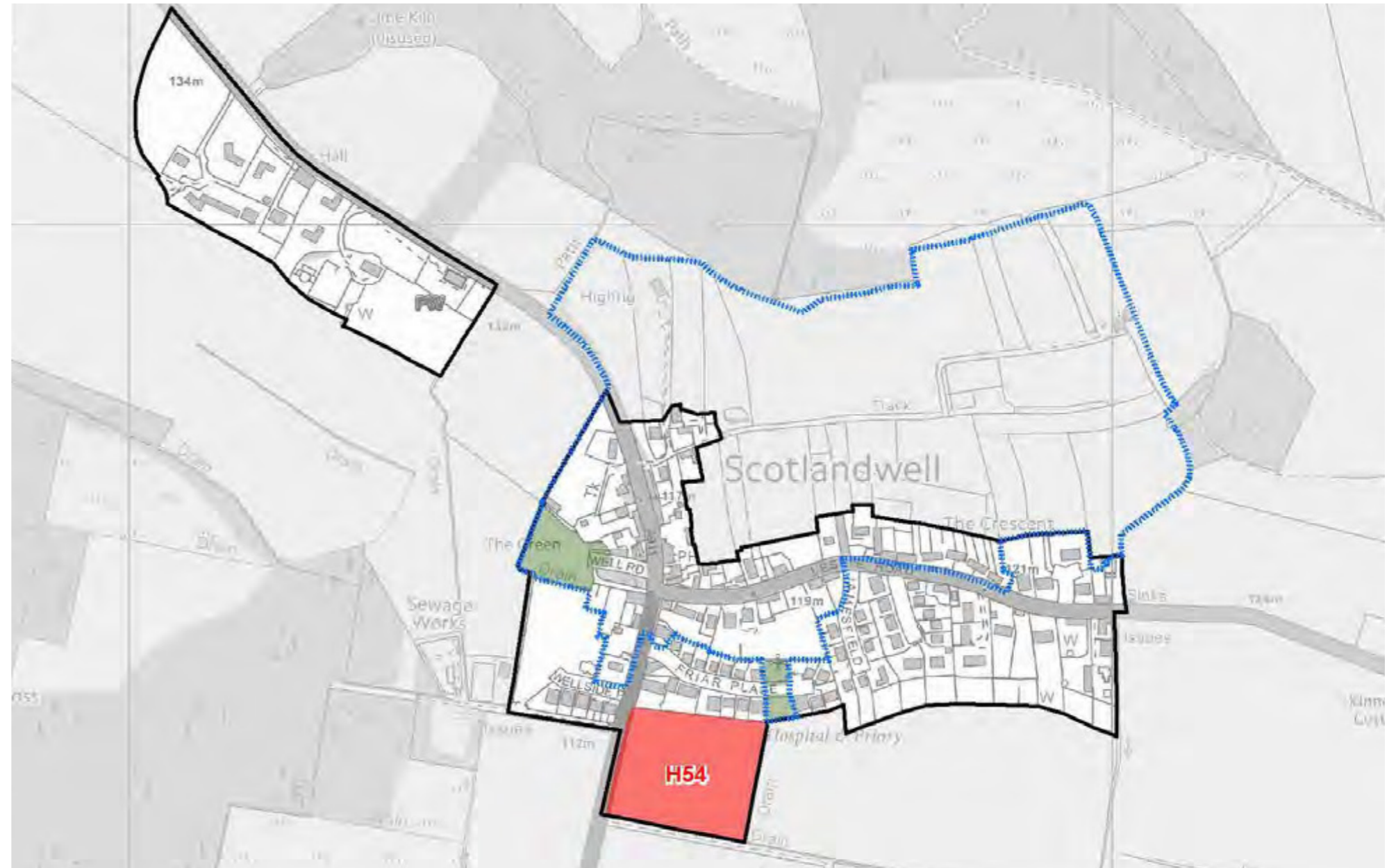
- Houses to be a maximum of one and a half storeys in height.
- Flood Risk Assessment.
- Enhanced traffic calming at village edge.
- Form access from B920, The Causeway.
- Landscape Framework.
- Feasibility study to assess the restoration of the existing culvert.
- Open watercourses retained and minimum 6m buffer strip.
- An appropriate peat survey and management plan to minimise impact and implement suitable mitigation measures.

Encouragement will be given to proposals which provide additional parking or path improvements to serve 'The Green', or improve path linkages between Scotlandwell and Kilmagadwood or to the Loch Leven Trail.

The site is also outwith the existing Conservation Area.

Key

-  Settlement Boundary
-  Conservation Area
-  Housing Proposal
-  Open Space



A / Development Plan Map

2.0 CONTEXT

2.4 PEAT ASSESSMENT

A peat survey report was carried out by SAC Consulting.

Investigation of the site showed that the vegetation is "primarily pioneer weed species indicative of a greenfield site or unmaintained agricultural field". Although the site is currently not used for farming, it shows evidence of "prior cultivation such as perimeter ditching, relatively homogeneous soil conditions in the upper horizons" with housing application records showing the site has been previously used for farmland.



The following conclusions were made:

"Comparison of results from the property to nationally available averages show a higher dry bulk density and a lower carbon content. These numbers reflect the comparison of a drained, and previously farmed peatland with natural peatlands (i.e., high water table and minimal disturbance). Significantly lowering the water table removes the buoyancy of the upper peat horizons, causing settling and compaction over time. This process, combined with historical farming activities could explain the observed increased dry bulk density and reduced carbon content through atmospheric losses. The dry bulk density of the peat on the property is still well below that of a typical mineral topsoil (1.2 to 1.4 g/cm³). The lower carbon content in the peat samples could be due, in part, to carbon loss during the drying phase of the analysis, creating a lower initial mass for combustion."

The Causeway Field meets the description of low conservation value due to decades of farming evident on site, with the subsequent land disturbance resulting in low wildlife habitat on site. Water has been drained from the site for several decades, and no longer holds a connection to Portmoak Moss.

Portmoak Moss is an area of open ground of approximately 12Ha raised bog, sitting west of the site. Much of the neighbouring raised bog has been lost due to peat cutting, afforestation and farming over the years.

Key

-  Site Boundary
-  Portmoak Moss Nature Reserve



A / Peatland Location Map in Relation to Site

Note: Information on this page has been summarised. Please refer to the Scotlandwell Peat Survey Report for complete detailed analysis and findings.

2.0 CONTEXT

2.5 ECOLOGICAL ASSESSMENT






An Ecological Assessment was carried out by Ellendale Environmental Limited, in relation to The Causeway, Scotlandwell site.

Investigations concluded that the site is "approximately one and a half hectares in size and comprises a poor semi-improved grassland field bordered by a hedge on the eastern and western boundaries, broad leaved trees to the south, and wall to the north". It is also noted that there are wet ditches on the eastern and southern boundaries which are outwith the site boundaries.

The grassland on the site is considered poor and semi-improved, where due to the isolation of the site it restricts the movement of animals in and out. Evidence of dog walking across the site further reduces the likelihood of nesting birds within the grassland. Broad leaf trees situated on the sites perimeter are "immature and are not suitable to support roosting bats". It is recommended that bat and swift boxes be integrated to the outside of at least 5/22 dwellings. It is also suggested that "hedgerows could be infilled and enhanced with native species such as hazel *Corylus avellana* and hawthorn to increase biodiversity within the site".

Overall, the site is assessed as providing low suitability to support protected species and no evidence of protected species/nesting was found during the survey.

Key

-  Semi-improved Natural Grassland
-  Hedgerow
-  Running Water
-  Hedgerow with Trees
-  Broad Leaf Tree



A / Map Highlighting Ecological Assessment Points

Note: Information on this page has been summarised. Please refer to the Ecological Assessment Report for complete detailed analysis and findings.

2.0 CONTEXT

2.6 SITE PHOTOGRAPHS



A



B



C



D

A / View from The Causeway, looking North to Scotlandwell

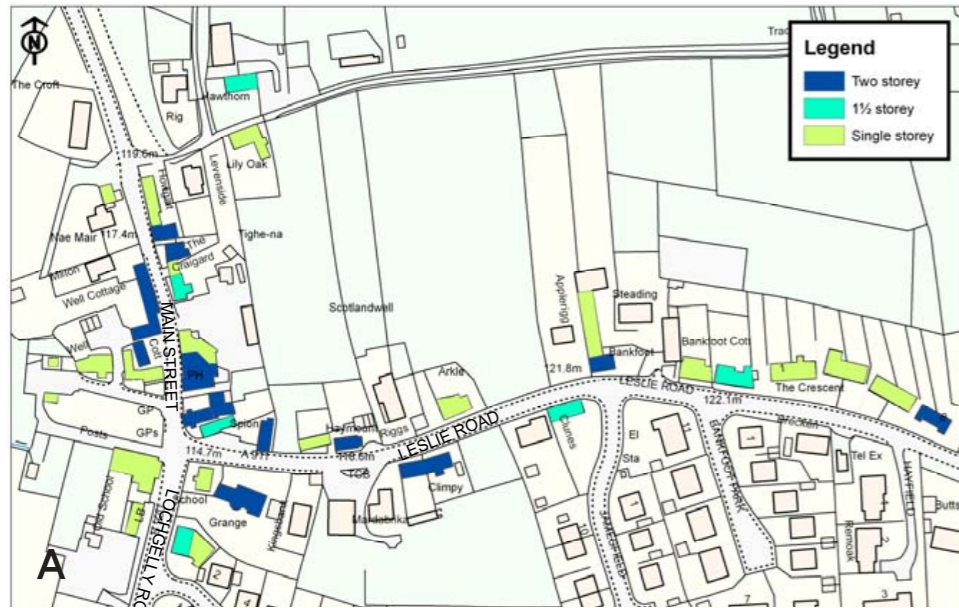
B / View from The Causeway looking South

C / View of Northern boundary of site

D / View from south looking toward the North

2.0 CONTEXT

2.7 BUILDING FORMS AND CHARACTERISTICS



In street plan image A it can be seen that most of the two storey buildings are located on or around Main Street, with image B showing a typical pre-1930's building in Scotlandwell. The majority of the remaining pre-1930's properties are single storey, with a smaller number of 1.5 storey properties.

The orientation of the historic properties (especially on Main Street) varies with some presenting the main roof line parallel to the street and others presenting the gable. Historically, the weavers cottages would have featured thatched roofs but during the 19th century, these were replaced with either red pantiles or slate.

The primary traditional building material was sandstone, with a few houses being harled. Later buildings such as those of The Crescent, have made use of buff and red brick.



A / Current OS plan indicating house storey heights

C / The Crescent along Leslie Road

E / Recent housing in Wellside Park

B / Historic house on Leslie Road

D / Housing in Jamesfield

3

PROPOSALS

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3.0 PROPOSALS

3.1 PROPOSED SITE LAYOUT

The proposed layout provides a clear hierarchy of primary and secondary access routes through the site. Access from neighbouring farmland through the site is designed to retain ease of flow for users of these spaces.

The proposed layout provides an appropriate density of plot sizes, with house types of varying sizes and form. The 16no properties will feature 4 bedrooms, home offices, and an open plan kitchen/dining with adjacent utility rooms. In total 5 houses will feature detached garages, with the remaining houses having integral garages to accommodate one car space.

There will be 6 plots for affordable / custom build detached houses, on plots 17-22.

The site will feature a SUDS drainage system with SUDS basin to encourage local biodiversity.



A / Site Plan

3.0 PROPOSALS

3.2 PROPOSED AFFORDABLE HOUSING/ CUSTOM BUILDS

The Scotlandwell proposal offers clear community benefits with an opportunity for 6 self-build plots which will allow local families to build their own homes in an adaptable and flexible way. There are associated benefits of local construction training, skills development and employment in a form which is not achievable in a mainstream housing development approach. The proposal will allow for delivery of self-build as an affordable tenure, at a discount to market rates.

Specific points to be addressed within the Design Code / Plot Passport would include:

- Service connection points
- Plot boundary treatment
- Requirement for dual frontage house-types (based on proposed location within site adjacent to public road)
- Build Zone with any minimum distances from boundaries/for private gardens
- Build height
- Maximum gross internal area
- Roof design & materials palette
- Renewable energy measures
- Access/Parking provision

The approach would deliver affordable self-built homes at below market rate. The self-build approach is supported by Perth & Kinross Council's wider support for self-build, set out within the Local Housing Strategy 2016-21 and Local Housing Strategy Progress Report 2019/20.

The approach would also address key placemaking policies at national and local level with the self-build plots being adaptable to allow families to grow and adapt space.



A / Site Plan Highlighting Affordable Housing/ Custom Build Plots



A / Affordable Housing/ Custom Build Plots

3.0 PROPOSALS

3.3 FOUL AND SURFACE WATER DRAINAGE

Existing Foul

An existing Scottish Water adopted 150mm combined sewer runs westwards along the northern boundary of the site. The foul water sewer accepts discharge from the properties on Friar Place to north of the site.

Proposed Foul Water Drainage

It is proposed that all FW drainage from the new properties shall connect to the existing Scottish Water adopted 150mm combined sewer runs along the Northern boundary of the site.

Further investigation of this sewer has revealed that a gravity connection to the sewer will be viable for plots 14-22. This will however require raising of existing ground levels within the site. Despite raising of ground levels, plots 1-13 will require to be required pumped to the sewer from an adoptable FW pumping station.

Existing Surface Water

An existing 225mm diameter Scottish Water sewer enters the development from Friar Place to the north and then runs east along the northern boundary before connecting to an existing ditch that runs parallel with the Eastern boundary of the site. There are existing ditches along South and East boundary of the site that ultimately discharge to the River Leven to the South.

Proposed Surface Water Drainage

In general terms the site has a natural fall to the towards the South East corner of the site. It is therefore proposed the surface water run-off from the developed site shall discharge to the existing ditches that run along the East and South boundaries of the site although it will be necessary to restrict the discharge to acceptable levels. It is proposed that discharge from the site be restricted to greenfield run-off equivalent of 5 l/sec/Ha.

Based upon the catchment area of 1.694Ha this would equate to an allowable discharge rate of 8.5 l/sec to the existing watercourse. A 133mm Hydrobrake Optimum has been proposed to restrict run-off to this rate. Attenuation of surface water run-off shall be provided in the form of an adoptable detention basin that will be located at the lowest point of the site at the South East corner.

The detention basin and upstream pipe network have been designed to ensure that there is no flood risk to any of the proposed new properties or existing properties within the vicinity of the site for all storm periods up to the 1:200 year return period.



A / Drainage Plan

Key

- Low Risk Surface Flooding
- Medium Risk Surface Flooding
- SUDS Pond and Foul Water Pumping Station Location

3.0 PROPOSALS

3.4 HOUSE TYPE 1A PLANS

Proposed house types include both attached and detached garaging. House type 1A shows a typical example of an attached garage.

The floor plan is laid out with principle living spaces on the ground floor, with private spaces on the upper floor.

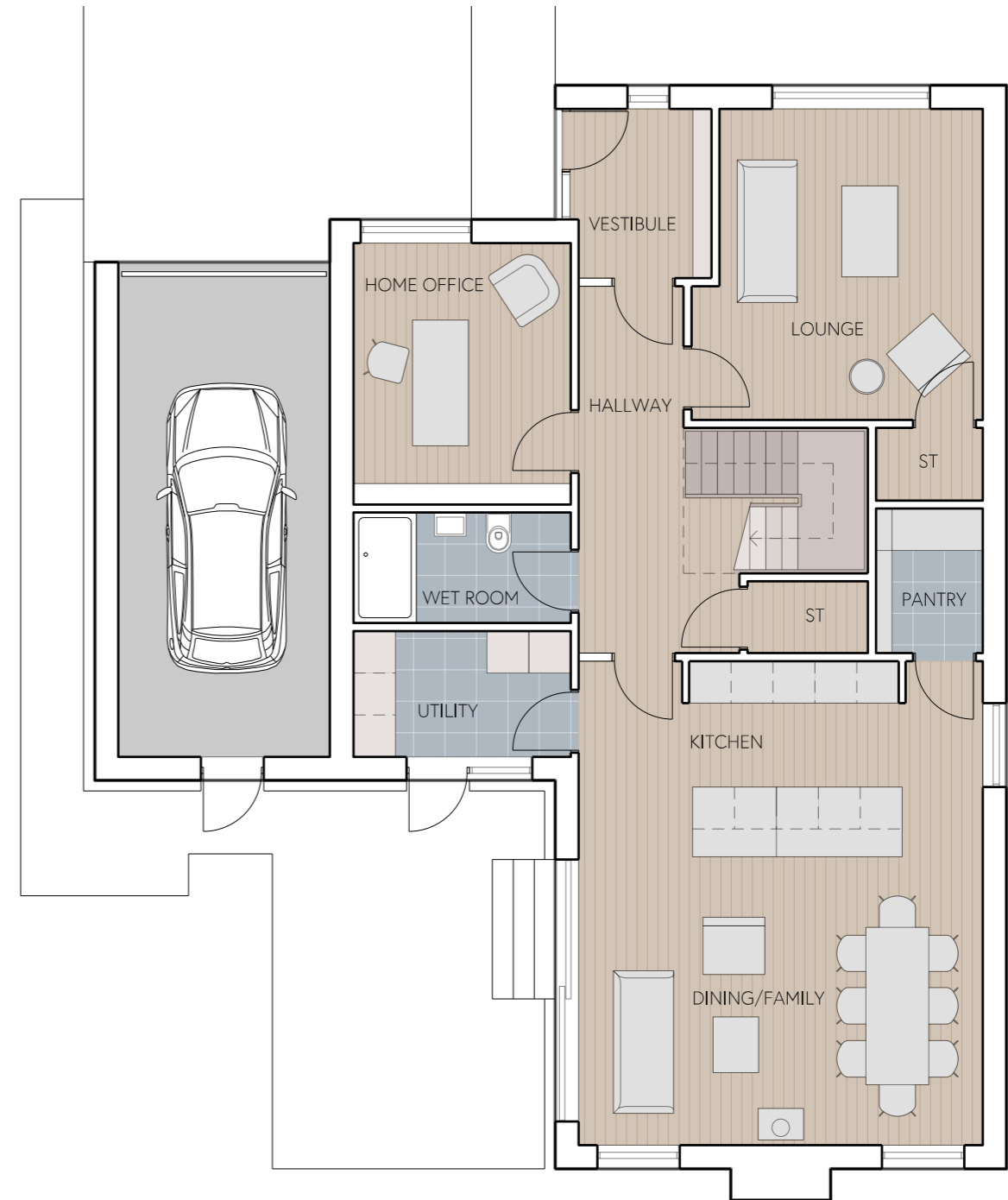
On the ground floor the following spaces are included:

- Kitchen
- Dining/Family Room
- Lounge
- Home Office
- Wet Room
- Utility
- Vestibule
- Attached Garage

On the upper floor the following spaces are included:

- Master Bedroom (with en-suite)
- Bedroom 2 (with en-suite)
- Bedroom 3
- Bedroom 4
- Bathroom

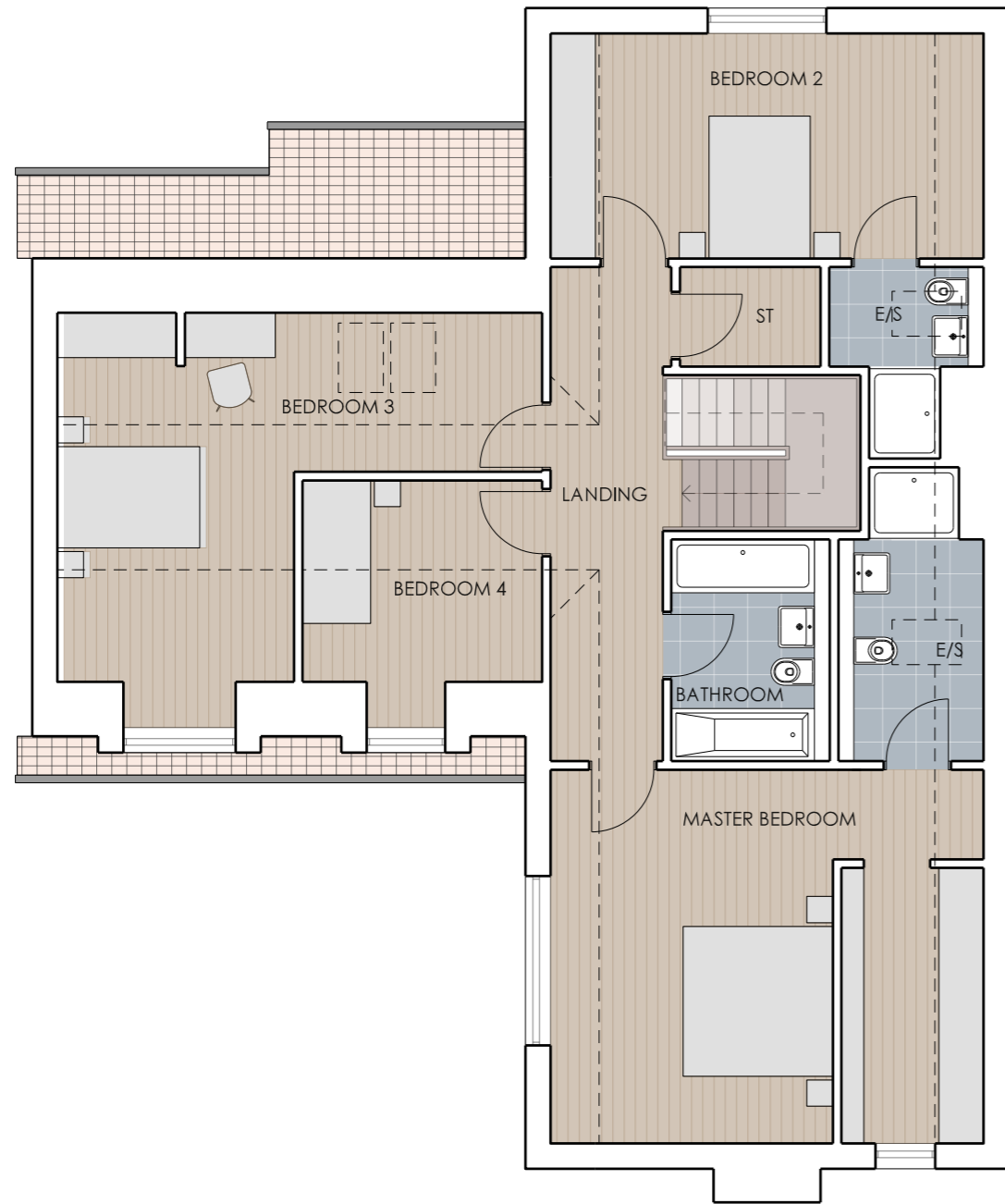
Ample external space has been included to both the front and rear of the design, maximising privacy to the back and providing sufficient space to the front of the development for both internal and external parking.



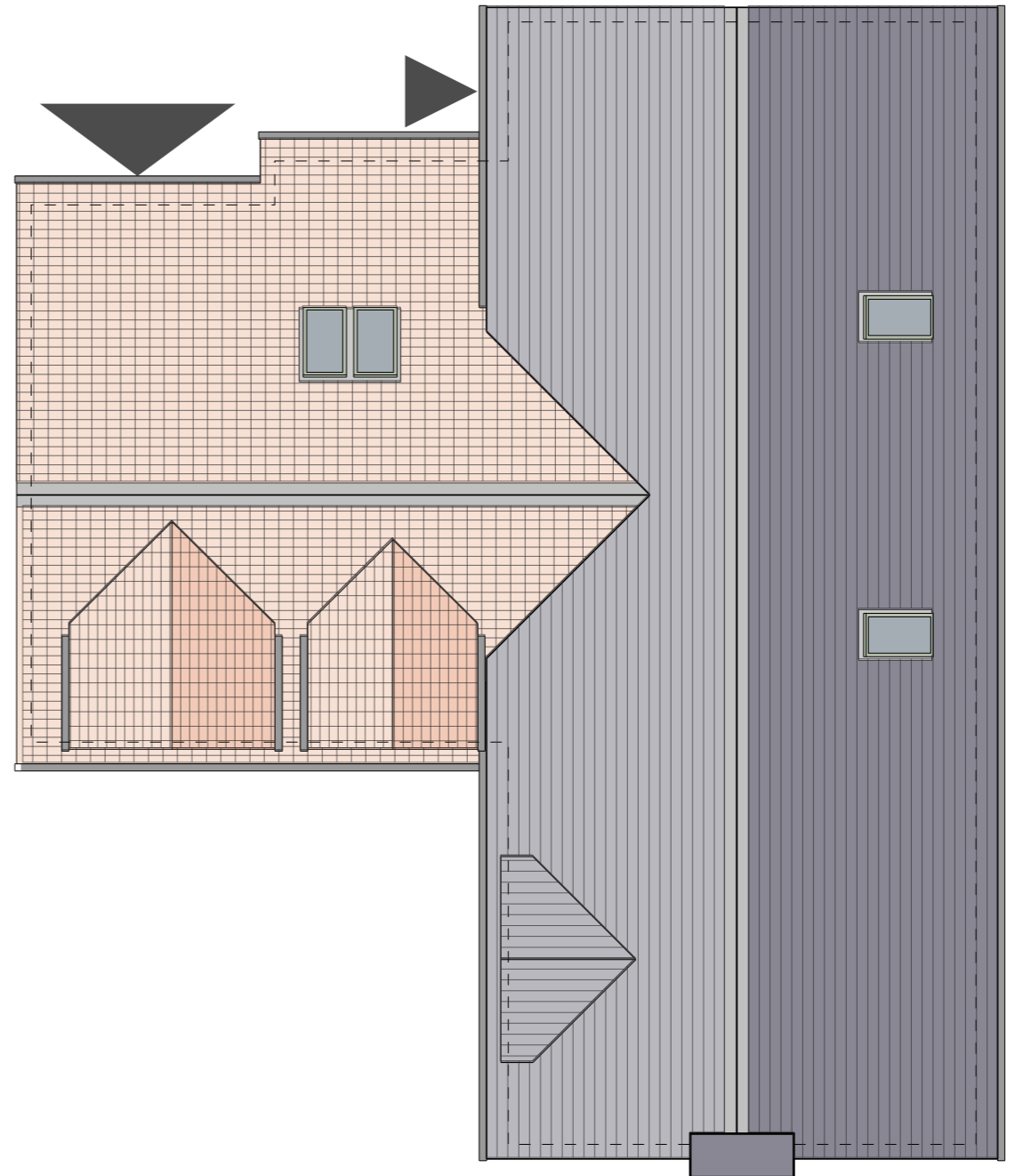
A / Ground Floor Plan

3.0 PROPOSALS

3.4 HOUSE TYPE 1A PLANS



B / Second Floor Plan



C / Roof Plan

3.0 PROPOSALS

3.5 HOUSE TYPE 2A PLANS

Proposed house types include both attached and detached garaging. House type 2A shows a typical example of a detached garage.

The floor plan is laid out with principle living spaces on the ground floor, with private spaces on the upper floor.

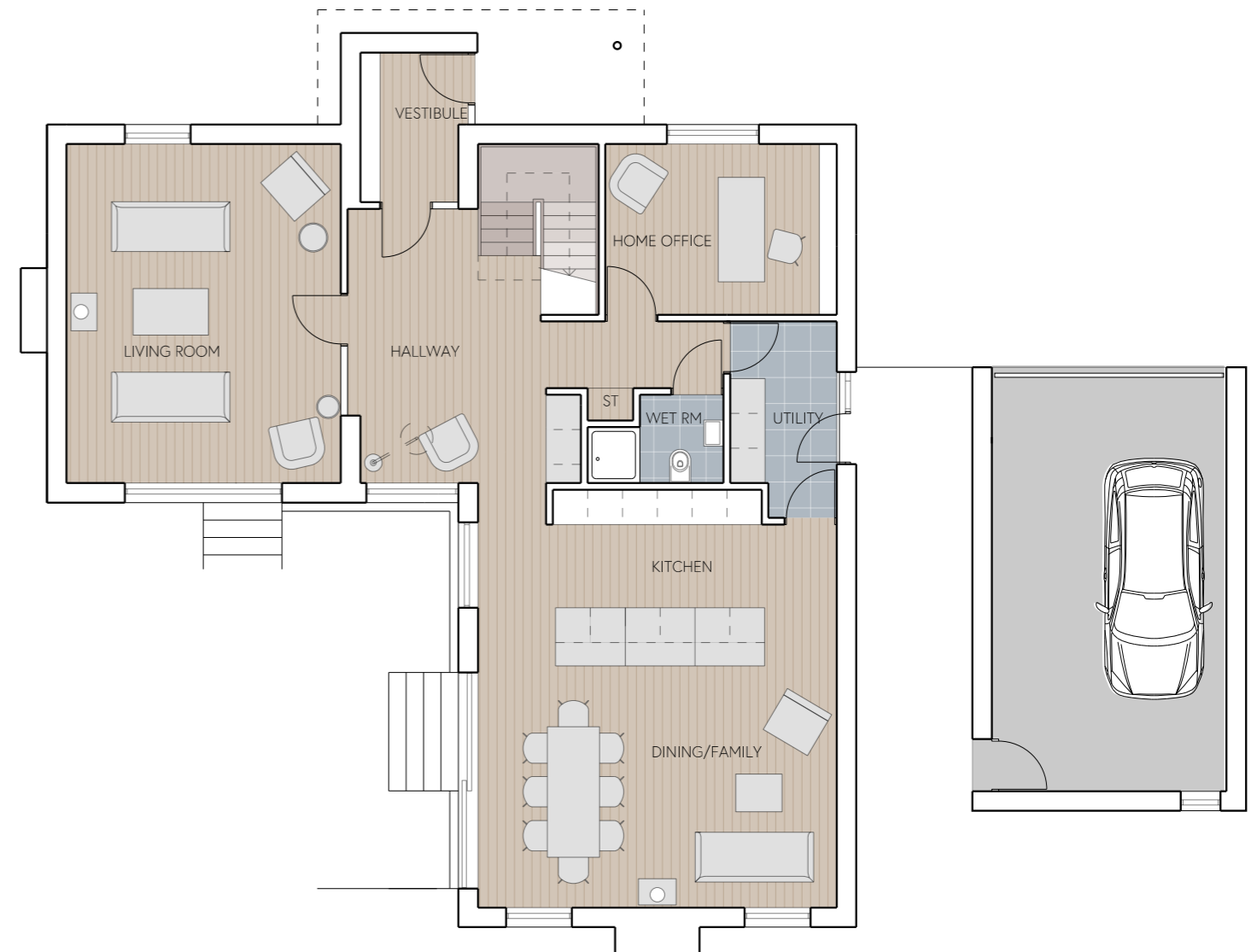
On the ground floor the following spaces are included:

- Kitchen
- Dining/Family Room
- Living Room
- Home Office
- Wet Room
- Utility
- Vestibule
- Detached Garage

On the upper floor the following spaces are included:

- Master Bedroom (with en-suite)
- Bedroom 2 (with en-suite)
- Bedroom 3
- Bedroom 4
- Bathroom

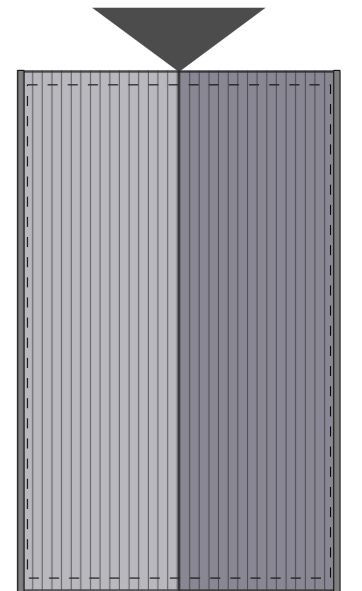
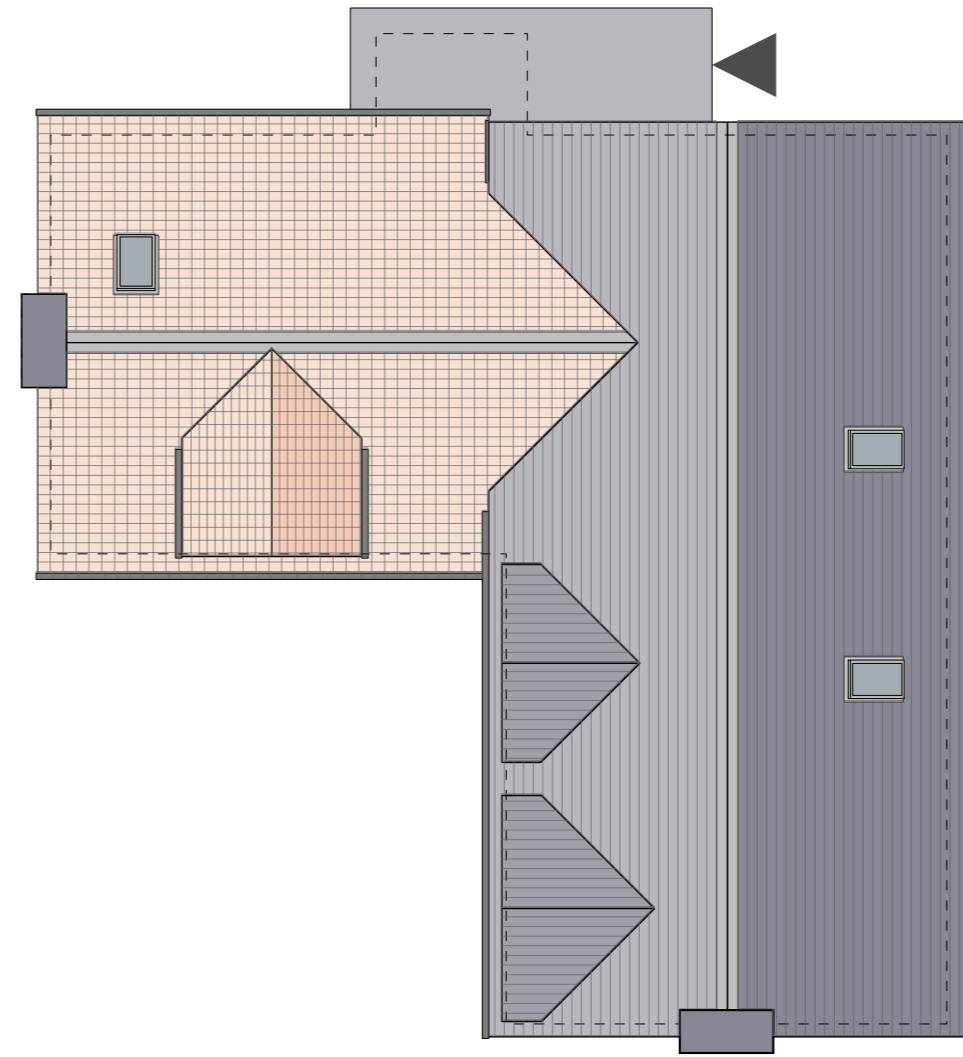
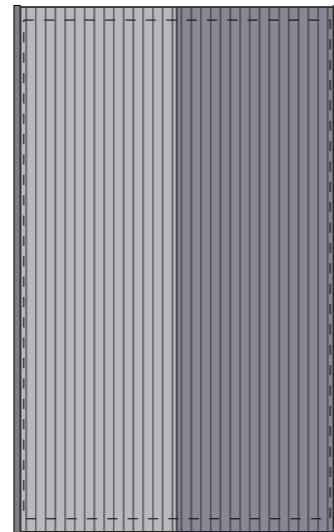
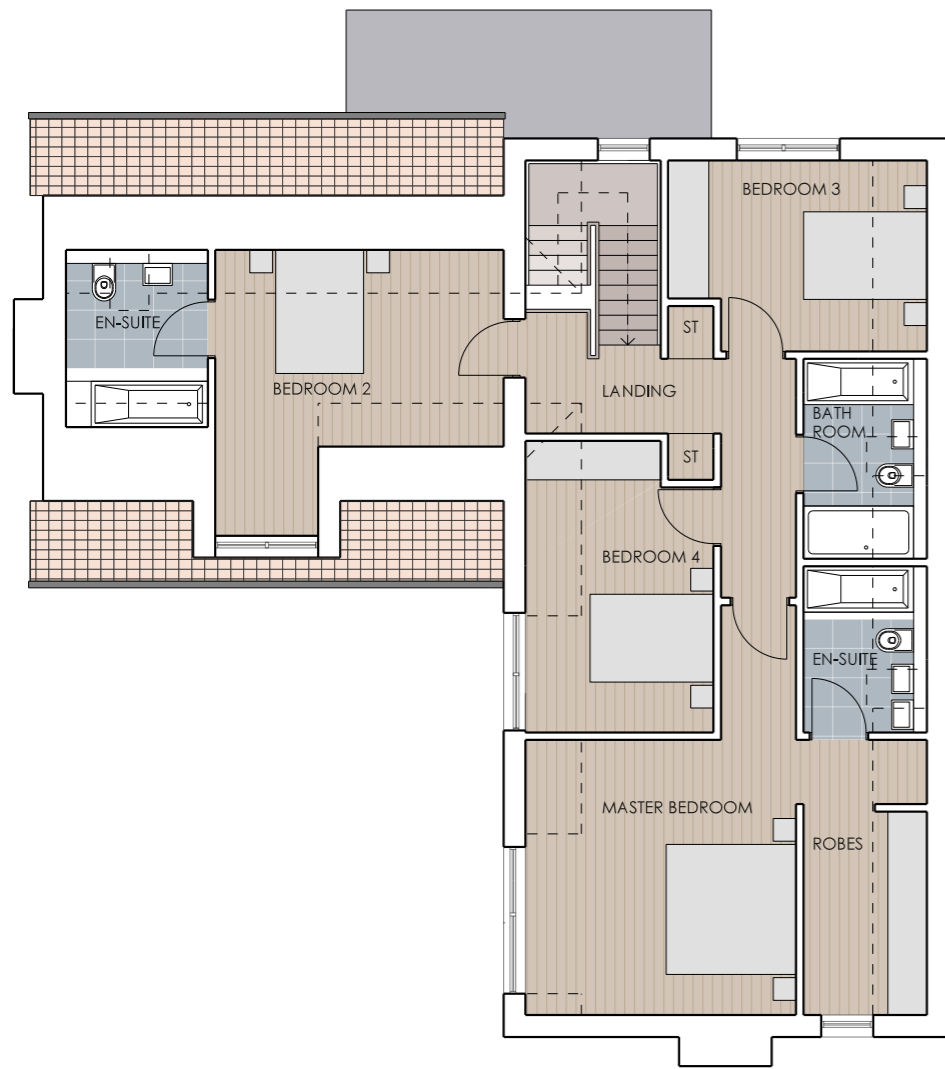
Ample external space has been included to both the front and rear of the design, maximising privacy to the back and providing sufficient space to the front of the development for both internal and external parking.



A / Ground Floor Plan

3.0 PROPOSALS

3.5 HOUSE TYPE 2A PLANS

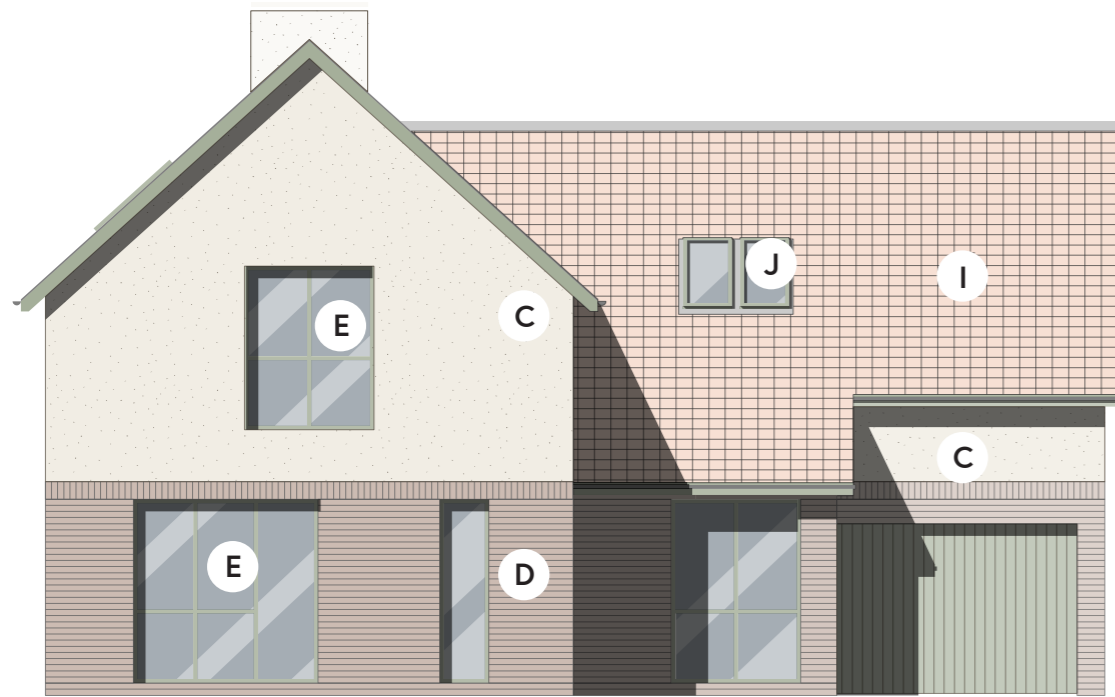


B / Second Floor Plan

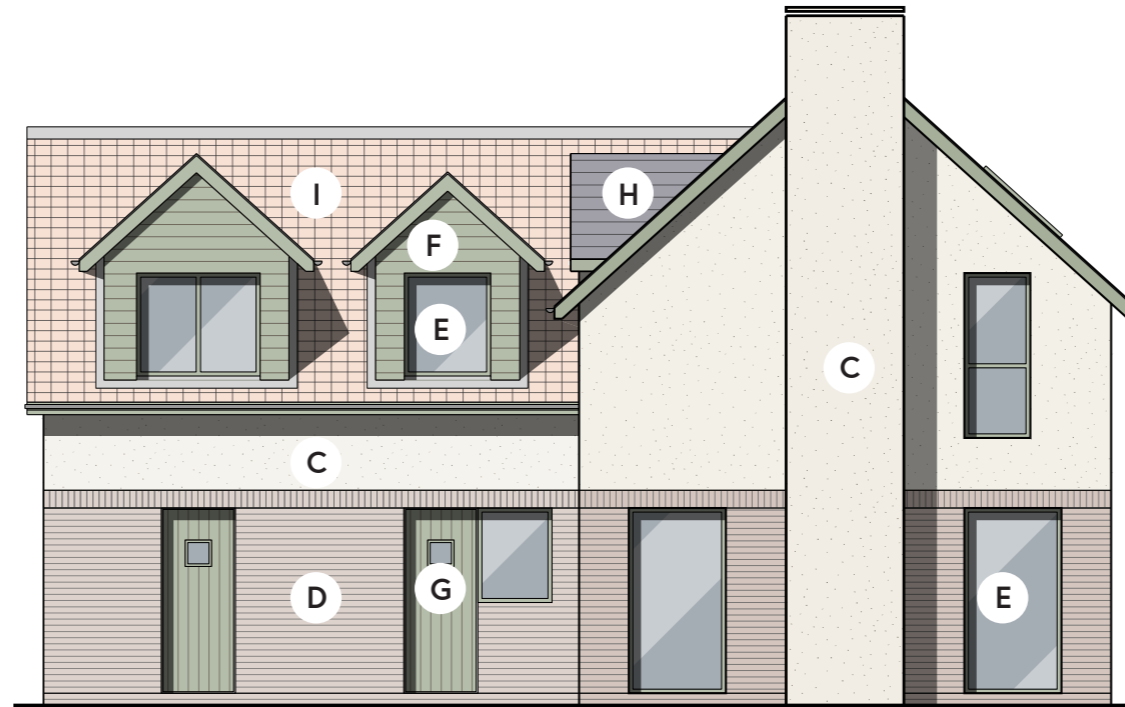
C / Roof Plan

3.0 PROPOSALS

3.6 ELEVATIONS / EXTERNAL MATERIALS



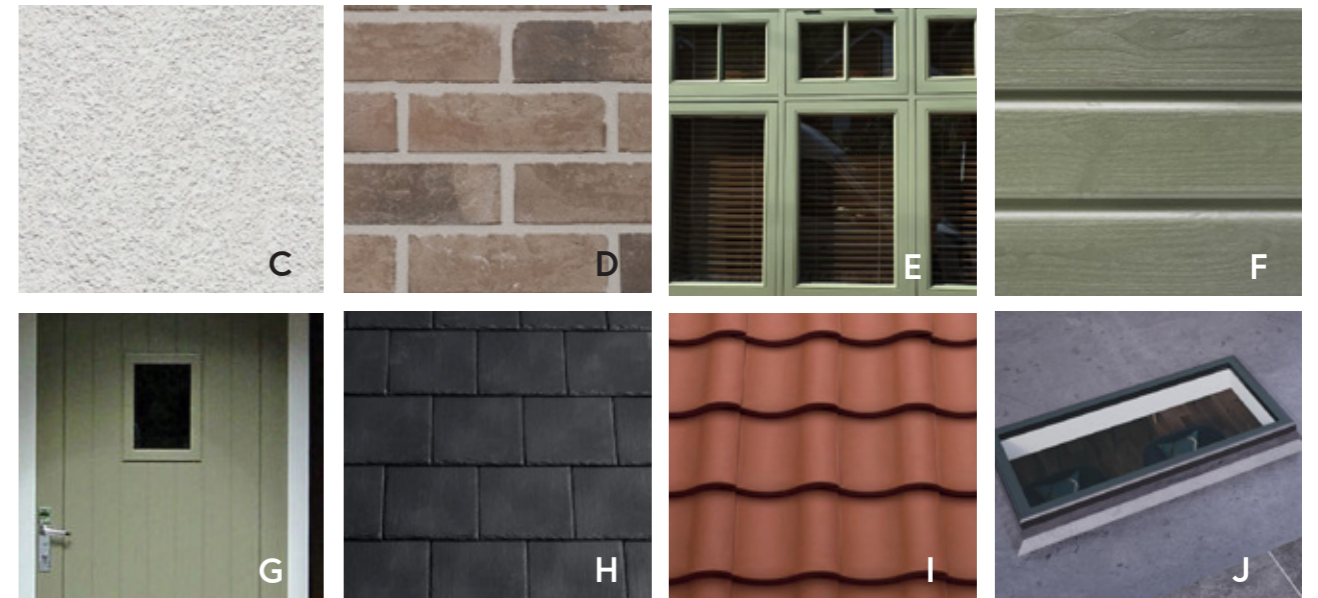
A



B

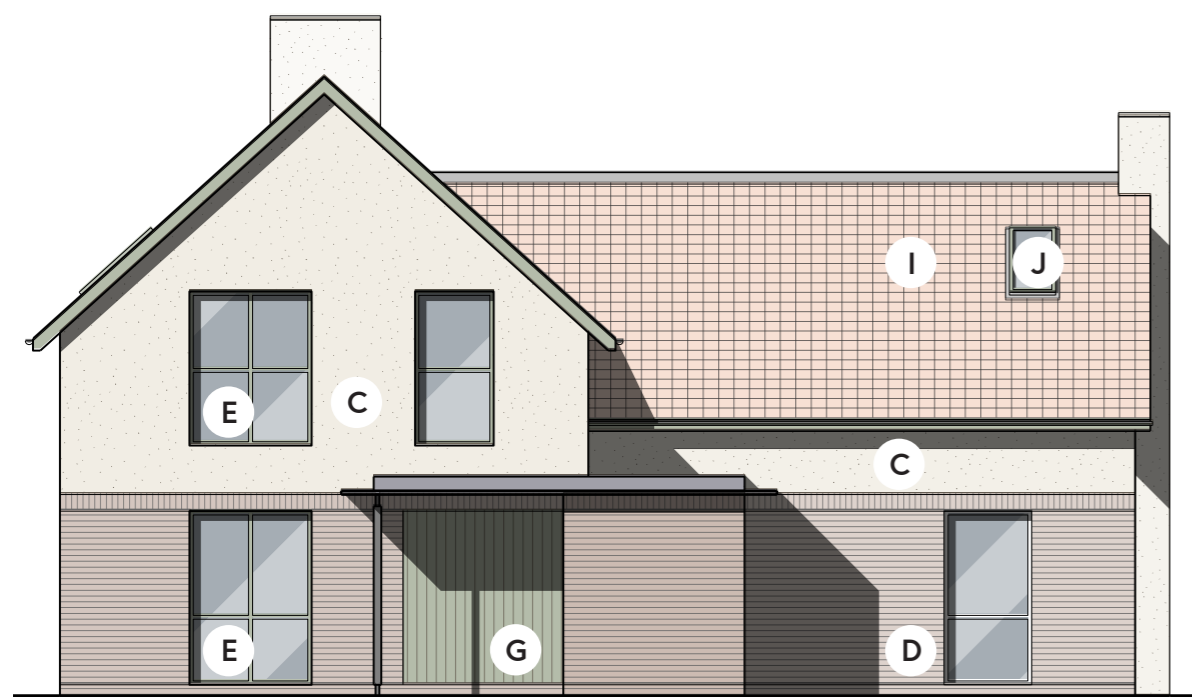
- A / House Type 1A Front Elevation
- B / House Type 1A Rear Elevation
- C / Off White Render
- D / Buff Facing Brick
- E / Timber Framed Windows

- F / Horizontal Cladding
- G / Timber Door
- H / Natural Slate
- I / Red Pantiles
- J / Grey Rooflight

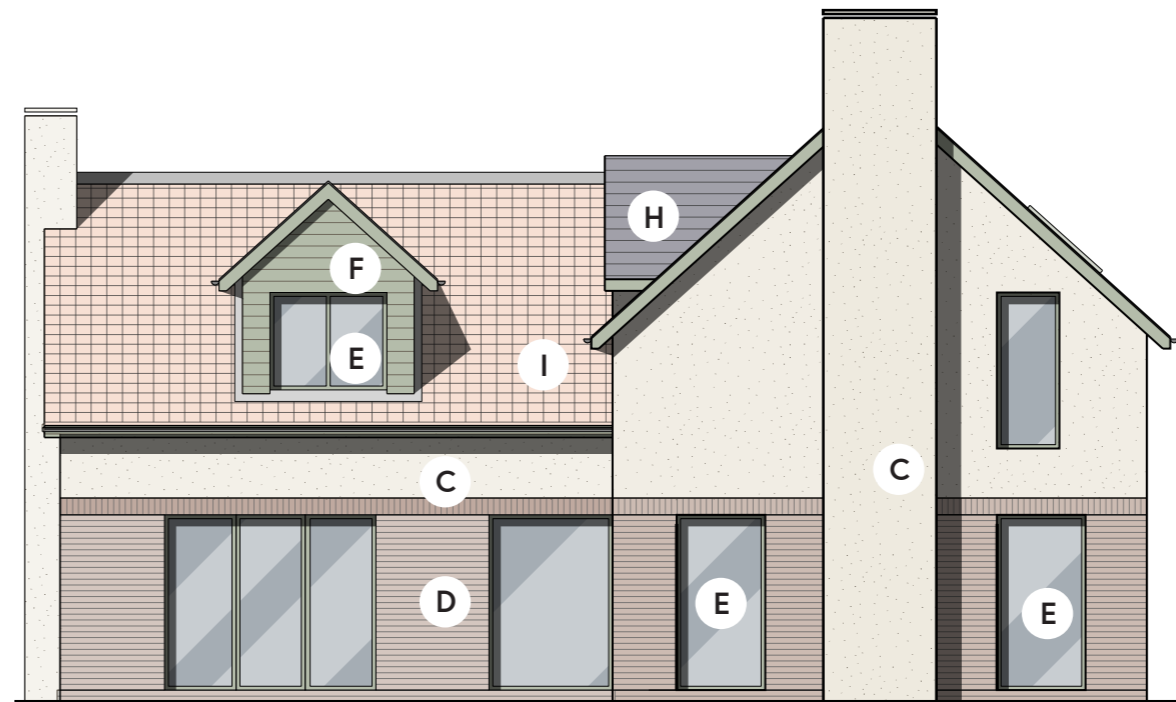


3.0 PROPOSALS

3.6 ELEVATIONS / EXTERNAL MATERIALS



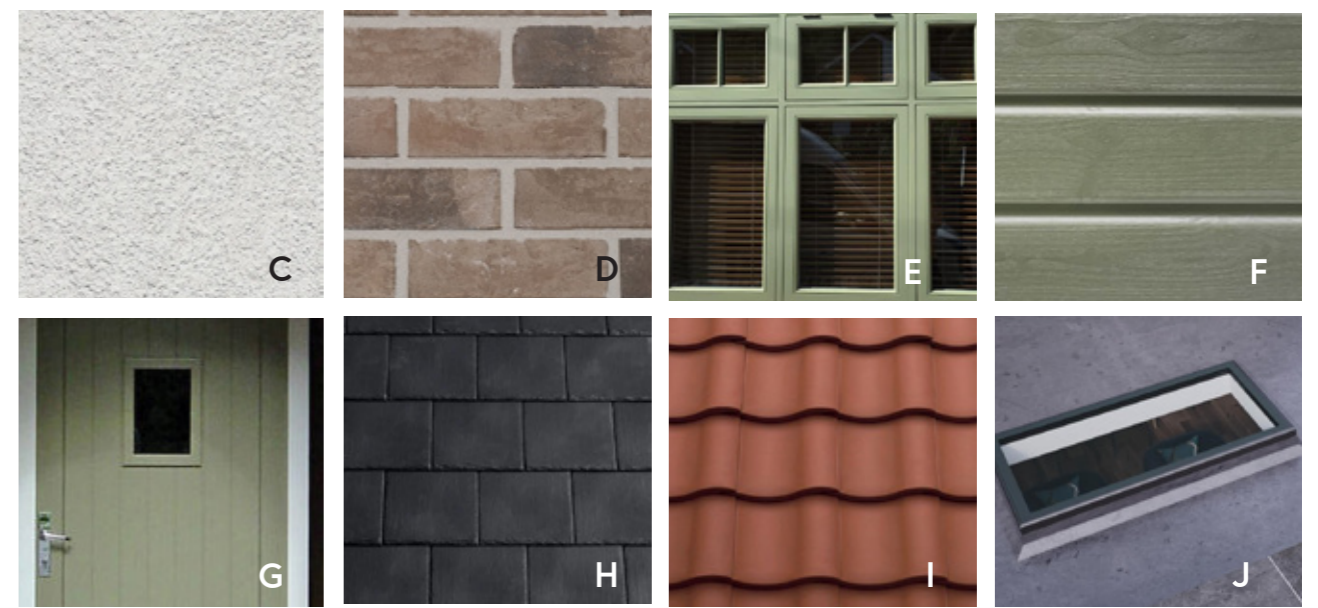
A



B

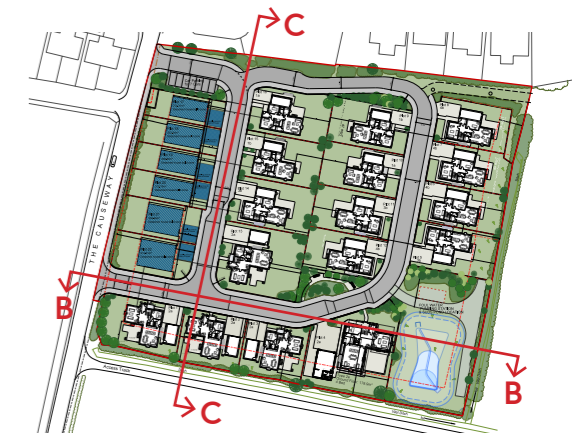
- A / House Type 2A Front Elevation
- B / House Type 2A Rear Elevation
- C / Off White Render
- D / Buff Facing Brick
- E / Timber Framed Windows

- F / Horizontal Cladding
- G / Timber Door
- H / Natural Slate
- I / Red Pantiles
- J / Grey Rooflight



3.0 PROPOSALS

3.7 SITE SECTIONS



A / Site Section BB



A / Site Section CC

3.0 PROPOSALS

3.8 SOFT LANDSCAPING

Broad leaf trees existing on site are retained with existing hedging enhanced. This will be achieved with a palette of native low level flowering shrub and hardy native self seeding wild flower annuals to be planted to encourage butterflies, moths and other insects.



The planting of trees and shrubs linked to the existing soft landscaping will encourage biological diversity for passerine birds, insects and mammals. The tree planting is to be a woodland mix of native species as following:

- 20% *Butula Pendula* (Birch)
- 20% *Quercus Petraea* (Sessile Oak)
- 15% *Alnus Glutinosa* (Alder)
- 15% *Sorbus Aucuparia* (Rowan)
- 15% *Crataegus Monogyna* (Hawthorn)
- 10% *Pinus Sylvestris* (Scots Pine)
- 5% *Larix X Eurolopsi* (European Larch)

1800 high privacy screen fencing between plots is proposed.

5 Bat and 6 Swift Boxes are to be added to plots around the proposed development. Bat boxes will be placed at a minimum of 4m from ground level, on either southern or western edges and on plots close to vegetation. Swift boxes will be placed a minimum of 5m from ground level, with clear adjacent access away from direct sunlight.

Key

-  1no. Bat Box/Brick Location
-  2no. Swift Box/Brick Location



A / Ecological Additions to Site

3.0 PROPOSALS

3.9 HARD STANDINGS

New access road and link road to existing road and associated footways to have asphalt, and roadway pavers.

Private car parking courts, parking areas, driveways and paved areas to have permeable paving.

A grass reinforcement system is to be paved along north eastern edge of the site for cattle/farming traffic and access to adjoining farmland.



- A / Site Plan Locating Paving
- B / Asphalt
- C / Permeable Block Paving
- D / Road Block Paving
- E / Grass Reinforcement System



4

ACCESS AND AMENITY

4.0 ACCESSIBILITY

4.1 ACCESSIBILITY AND CONNECTIONS





The main vehicle access to the site is via The Causeway, with 2 entry and exit points to the development. Secondary routes for farming access to the adjacent fields in incorporated along the northern section of road.

The site is in close proximity to the 6ss bus stop, heading towards Leslie or Kinross, connecting the development to surrounding villages via public transport links.

Disabled access to the site has been integrated into the development, with suitable wide paths and paving.

7 visitor parking spaces are proposed at the north entrance to the development to improve local visitor parking provision.

Key

-  Primary Road
-  Site Access Points
-  Secondary route / Farming Connection
-  Bus Stop
-  Visitor Car Parking



A / Site Plan Showing Accessibility and Connections

5

SUSTAINABILITY

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5.0 SUSTAINABILITY

5.1 SUSTAINABLE ASPECTS OF DEVELOPMENT

The proposed development has been designed with sustainability in mind. Sustainable/ ecological features are the standard, greatly reducing running costs and energy consumption over the lifetime of each home.

Each home will be constructed with SIPs panels to ensure a pre-insulated structure for each house. Passive level SAP A rating will be achieved through the addition of the following aspects:

- Low U-value thermal envelope - we achieve this with walls having a base at 0.12 w/m²k and the roof at 0.11 w/m²k
- Airtight Construction - using both Illbruck FM330 Airtight foam and D4 glue along with air tape joints, the envelope is fully airtight
- Thermal Bridge free - using SIP splines and insulated structural timber, thermal bridges are eliminated.
- Mechanical Ventilation Heat Recovery System
- Thermally efficient windows

Air source heat pumps and eco design wood burning stoves are proposed as energy efficient and cost-effective heating solutions.

The stoves installed will comply with the Ecodesign Regulations, (which came into force 1st January 2022 to meet the Clean Air Act), which sets tough new standards for wood burning stoves well beyond what is currently required for the UK CA mark under the Construction Products Regulation. Stoves proposed for homes will comply with the new minimum required efficiency for the appliance rise of 75% and an 88% improvement on permitted CO emissions and will also set strict emission limits for the following:

- Particulate matter (PM)
- Organic gaseous compounds (OGC)
- Nitrogen oxides (NO_x)

The development's carbon footprint will be further reduced by exploring the following passive, mechanical, and electrical specification measures at detail design stage :

- LED lighting throughout
- Naturally ventilated spaces
- Air source heat pumps
- Underfloor heating system to ground floor level of homes
- Building Fabric - BRE Green guide A & A+
- Recyclable materials - maximisation of end of life recyclable materials
- Water Consumption - Aerated shower heads and dual flush WCs to reduce water consumption.
- Inclusion of Solar Photovoltaic Panels

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