

# LAYOUT PRINCIPLES

## BUILDING LAYOUT AND MASSING PRINCIPLES

Before considering the actual design of the buildings, it is important to establish a logic for the placing of each building on its plot as well as the volume of the building in relation to its surroundings. It is important to establish a discipline, which maintains certain key aspects to maintain the coherence and identity of the place as a whole, while allowing individualism and personalisation, which in turn encourages longer term commitment to the place.

## POSITIONING ON THE EDGE OF THE PLOT

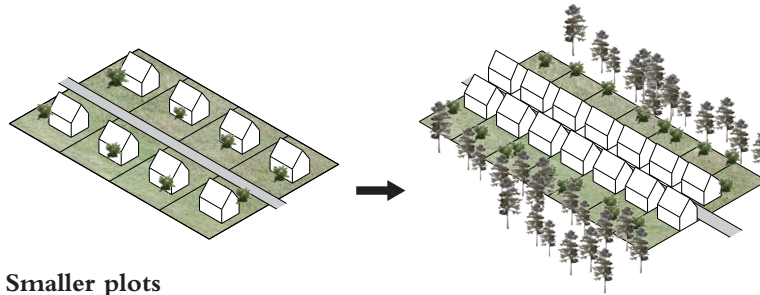
Generally, buildings would be placed close to the street, creating better microclimate and improving surveillance of the public spaces, as well as fostering community feeling with people meeting as they come and go. Additionally this would increase the useful garden area at the back.

## DIVERSITY

Plots would range in size, even on the same street to accommodate a range of different building types. The character of different areas and neighbourhoods would be varied, by the massing, street & woodland planting and other means.

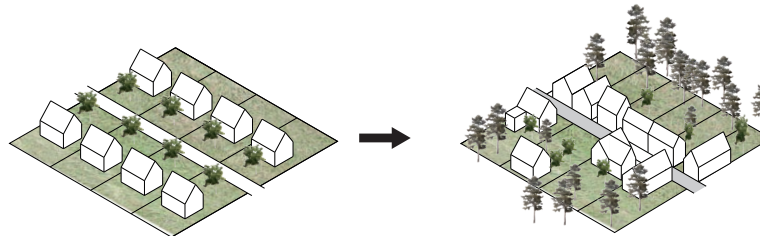
## JOINED-UP BUILDINGS

In the higher density areas, buildings would be joined up to maximise the buildable area, as well as for passive solar gain and shelter from the wind.



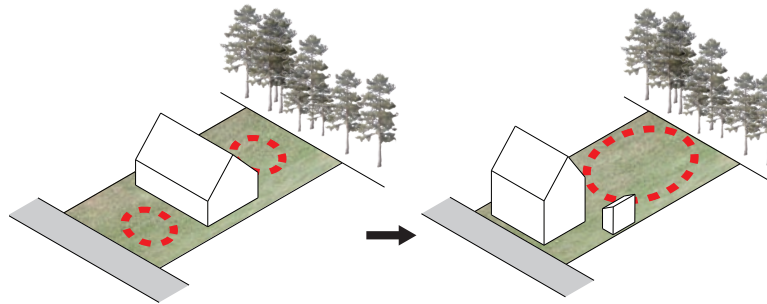
### Smaller plots

A key concept in the sustainable design of An Camas Mòr, is the notion of the smaller foot print. Greater density would give many advantages including an improved microclimate, greater proximity for walking and affordability, as narrower plots reduce the cost of infrastructure and so can be more affordable.



### Massing

The buildings would generally be low and more compact to provide the best microclimate around the buildings. Pitched roofs perform aerodynamically, minimising wind turbulence whilst enabling maximum sunlight penetration.



### Fronts & backs

There would be clear order of disciplined and coherent design of the fronts of buildings while at the backs there would be as much freedom as possible, subject only to any negative effect on neighbours.

# LAYOUT PRINCIPLES

## CREATING POSITIVE SPACE

Rather than buildings having many appendages, the different volumes would create positive, enclosed space, for usefulness, privacy and microclimate advantage.

## OUTBUILDINGS

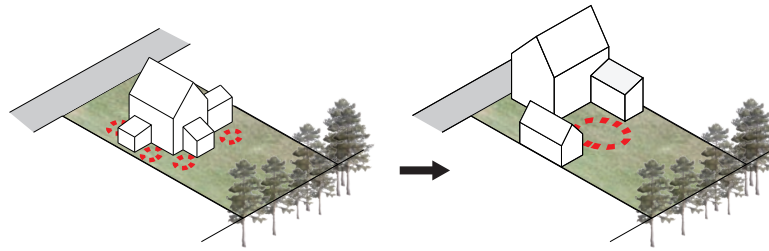
Plots would be able to accommodate not just a principal dwelling, but also outbuildings to allow for growth, additional space and changes of use in time.

## PRIVACY

Generally, the distance between the rear of buildings between facades is to be at least 20m and the master bedroom would normally be to the rear. The overlooking of back gardens is less of an issue when the main activity area in gardens is closer to the house and protected by the house. Windows are not generally permitted on shared boundaries, but side windows onto a house's garden would be very desirable. Narrower streets and having houses on the street mean that this dimension is less on the front, but the effect of this can be improved by making sure that houses are staggered and do not face each other directly. Privacy in the garden at ground level at the front can be accommodated by sheds, fences and to the rear with hedges and similar.

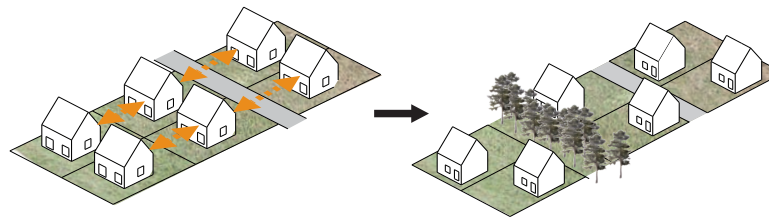
## VIEWS

Due to the density of the settlement not many buildings would have views of the Cairngorms. Some of the upper floors would have views of the mountains, while most would have local views of trees.



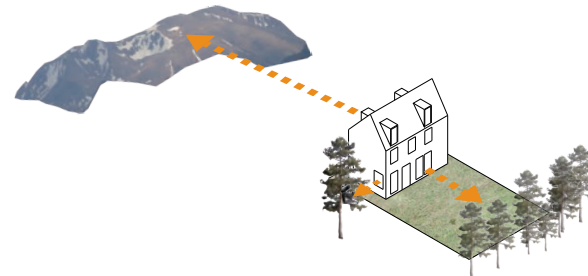
### Creating positive space

Where possible, any advantage would be taken to provide secure, physically and aesthetically attractive spaces.

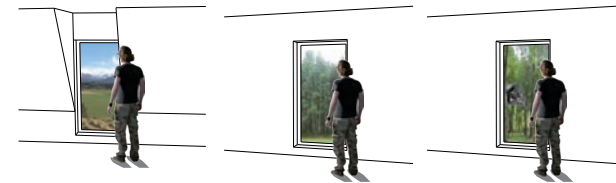


### Privacy

Overlooking would be minimised by introducing biostrips and staggering buildings.



### 3 types of view



Distant

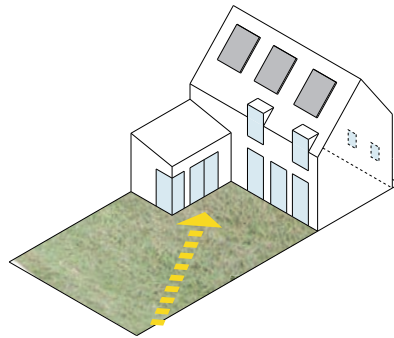
Overlooking

Close

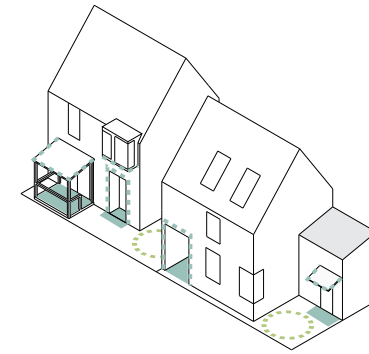
## ORIENTATION PRINCIPLES

### SUN & SOLAR GAIN

South-facing roofs and walls need to be utilised as far as practicable to capture radiant heat, externally in sunny corners as well as for the benefit of heating the buildings themselves. The High Street, running East-West does this, allowing the north side of the street to capture the sun in external spaces during the day. South-facing roof pitches can hold solar collectors and the glazing be designed to get solar gain. The positioning of buildings on side streets would generally also attempt this orientation.



**Larger windows and solar panels to the backside facing south.**



**Setbacks, corners, overhangs and porches would provide climatic shelter.**

### WIND & RAIN

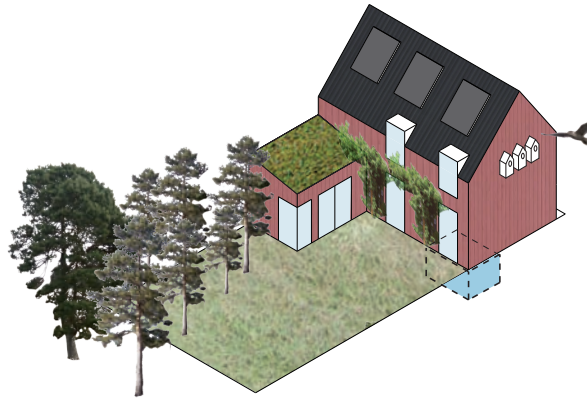
Shelter is a fundamental requirement of buildings, externally as well as internally. In all parts of the settlement the use of pends, porches, overhangs and corners would all be encouraged.

### INSIDE-OUTSIDE SPACES

Shelter on the edge of buildings makes for very useful spaces regardless of the weather. Throughout the settlement, porches, pends, overhangs, verandas and covered decks would be encouraged. These provide vital extra living space, especially in smaller homes, giving an extra play space in bad weather, a place to entertain, a place to hang washing, space for temporary storage or even a place to socialise.

### GREENER BUILDINGS

There are many ways to reduce the negative impact of buildings on the environment. The principles at An Camas Mòr would be to preserve and augment existing vegetation, have turf or sedum roofs as well as wall planting, have permeable surfaces and encourage rainwater collection and even include small details like every house having a couple of bird boxes.



### Building environment

Buildings can be designed with places for birds, bats etc., and boxes and other facilities would generally be encouraged, built into the buildings where possible.