

case study

Location: Calderwood Phase 1, West Lothian
Developer: Stirling Developments
Size: 11.1 hectares; 196 new homes for phase 1
Type: New Residential
Stage: Planning Consents Granted for first phase of Masterplan

This development complies with all of the five Designing Streets Policies:

- ✓ Street Design should consider place before movement.
- ✓ Street Design Guidance as set out in Designing Streets can be a material consideration in determining planning applications and appeals.
- ✓ Street Design should meet the six qualities of successful places, as set out in Designing Places.
- ✓ Street Design should be based on balanced decision-making and must adopt a multidisciplinary collaborative approach.
- ✓ Street Design should run planning permission and roads construction consent (RCC) processes in parallel.



Background

The developer plans to build 2300 new homes, a new secondary school, two primary schools, a park and ride facility, and a cemetery. The first phase is due to start summer 2013 on land which lies either side of an old farm road that will serve as the main access route.

Streetscapes have been considered as carefully as individual houses and landscaping. There is a hierarchy of streets, each designed to have its own specific character.

• **Attractive convenient greenways** provide safe green routes to schools and throughout the area. Calderwood is flat and sheltered and is

therefore ideally placed to support a cycling and walking culture.

• **Local Streets and 'Homezones'** will be focused on residents, pedestrians and cyclists with shared surfaces - promoting activity on the street.

• **Principal streets** provide key traffic routes. Standardised layouts, signing, kerb details and markings have been avoided and there is a series of pedestrian-friendly junctions which require motorists to think about the environment they are passing through. Design speeds are less than 20 mph with low speeds of 10-15 mph on smaller

streets and links. Parking areas are deliberately broken down into the smallest possible groupings, with a range of parking configurations.

SUDS is provided using permeable surfacing, which is piped to attenuation pods or the new Drovers Walk Water Course.

A number of phased Roads Construction Consents have been obtained; these have proceeded in parallel with Planning Consents. LA Roads Engineers were involved from the outset, and there have been no major changes to master plan proposals.

Site: Calderwood Phase 1, West Lothian

Developer: Stirling Properties
 Size: 11.1ha; 275 Homes
 Type: New Residential
 Scale: Not to scale

The Masterplan is illustrated below, showing the context around the site.



Step 1: B-Plan the Masterplan

Produce a B-Plan to the same scale as the Masterplan. This uses colour coding to make analysis easier (illustrated on page 21 of Designing Streets). It highlights the relationships between the plan's elements of movement, buildings and green space.

 Movement  Green Space  Buildings

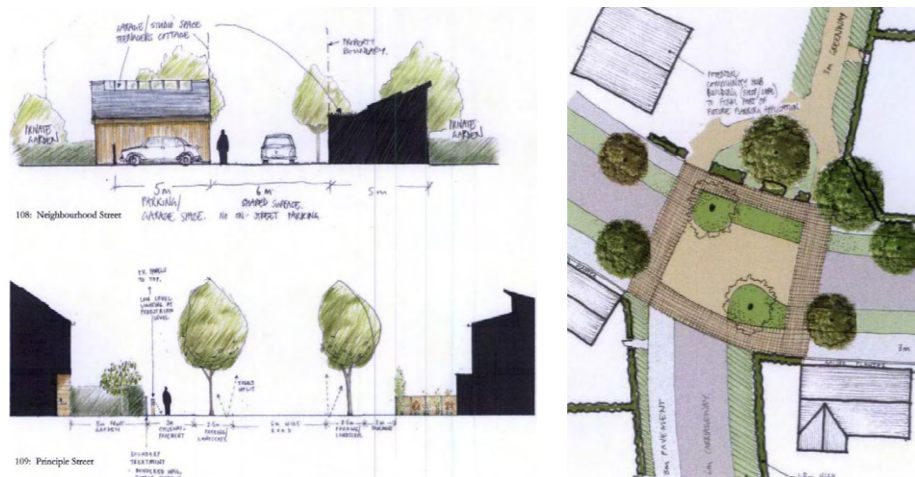


Step 2: Movement Analysis

Extract the movement (yellow) layer from the B-Plan. This will consist of streets as well as paths, closes, pends, squares etc. Annotate to specific points or places on the plan where the street design can be assessed against the key considerations within Designing Streets.

- ⑧ **Junctions for pedestrians first** – creative use of planting and materials allow pedestrians to continue along desire lines with minimum diversion.
- ⑤ **Walkable neighbourhood** – access to local shops and community cafe is a priority.
- ① **Pedestrians and cyclists** – Formal and informal crossings establish street hierarchy and contribute to ease of pedestrian movement along desire lines.
- ⑨ **Streets for people** – social spaces throughout, pedestrian movement given importance.
- ③ **Layout is permeable**, with no cul-de-sacs.
- ⑦ **Traffic calming provided by roads geometry** and junction types /materials rather than traffic calming features. By blurring the vehicular hierarchy, the design offers pedestrian priority.
- ④ **Distinctive block structure** – Streets converge around wider 'social street' and lead to village centre, adding character. Variety of streetscapes enhances sense of place.
- ⑥ **Public Transport** – located within walking distance.
- ⑩ **Range of parking types** – on-street; off street; extended car parking at centre of village.
- ② **Connections to wider networks** – multiple access points to existing streets and greenways.

Sketches of key junctions and street types



Greenspaces integrated within housing



Street Tool

Assessing the development against Designing Streets Policy

List Issues from B Plan

Match against Designing Streets Hierarchy

Match against 6 qualities of successful places

Check against Designing Streets Policy

ASSESS

- 1 Pedestrians and cyclists crossings contribute to ease of pedestrian movement along desire lines.
- 2 Connections to wider networks multiple access points to existing streets and greenways.
- 3 Connections within a place layout is permeable with no cul-de-sacs.
- 4 Distinctive block structure – ‘social street’ and ‘village centre’.
- 5 Walkable neighbourhood access to local shops and community cafe is a priority.
- 6 Public Transport located within walking distance.
- 7 Traffic calming provided by roads geometry rather than traffic calming features.
- 8 Junctions designed for pedestrians first with minimum diversion and maximum priority.
- 9 Streets for people – social spaces and shared surfaces.
- 10 Range of parking types – on-street; off street; extended car parking at centre of village.

Hierarchy of development

Street Structure

pedestrians and cyclists

connections to wider networks

connections within a place

block structure

walkable neighbourhoods

public transport

context and character orientation

Street layout

appropriate traffic speed

junction types & arrangements

streets for people

integrating parking

emergency/service vehicles

Street detail

reducing clutter

drainage

planting

materials

utilities

Qualities of successful places

yes	partially	no
✓		
✓	✓	
✓		
✓	✓	
✓		
✓		
✓		

distinctive

safe & pleasant

easy to move around

welcoming

adaptable

resource efficient

Designing Streets Policy

yes	partially	no
✓		
✓		
✓		
✓		
✓		
✓		

Street Design Guidance as set out in DS can be a material consideration in determining planning consents.

Street Design should run planning permission and roads construction consent (RCC) processes in parallel.

Street Design should meet the six qualities of successful places.

Street Design should consider place before movement.

Street Design should be based on balanced decisions making and a must adopt a multidisciplinary collaborative approach.

Images

1	2	3
4	5	6

1. Hierarchy of thoroughfares. Network of streets and green paths.
2. Creative junction type, streets lined with trees for reduced forward visibility, slowing traffic.
3. Shared surface streets and parking arrangement.
4. Junctions for people.
5. Social Squares integrated in street pattern.
6. Pattern of Community Gardens within built fabric.

