



The Scottish Government

Directorate for Local Government and Communities
Planning and Architecture Division

THE IMPLEMENTATION OF DESIGNING STREETS POLICY ACROSS SCOTLAND

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0.0 Executive Summary

1 Background

This report sets out findings of research undertaken by Anderson Bell Christie (ABC) on behalf of the Scottish Government; Planning and Architecture Division.

The aim of the research is to develop a better understanding of the way in which local authorities are currently implementing Designing Streets Policy in Scotland, to identify any barriers to compliance, and to recommend ways around these.

2 Designing Streets Policy Content

The policy document 'Designing Streets' (DS) complements 'Designing Places'. Both documents emphasise the importance of good quality design and place-making.

Designing Streets raises the importance of street design from guidance and advice to policy. Significantly, it moves away from a prescriptive standards-based approach, to one where designers and local authorities collaborate to develop a design-led solution.

Designing Streets contains five policies which empower local authorities to prioritise street design: they are supported by 18 key considerations which are outlined in the Designing Streets document and supported by guidance within.

3 Implementation of Designing Streets

Although Designing Streets has been broadly welcomed, there is currently a perception that some local authorities continue to use an outdated standards-based approach when designing or retro-fitting streets or roads.

Projects that are considered as compliant with DS policy are still finding difficulty in negotiating the approvals process. There have been fewer than expected examples of developments and masterplans that clearly match the aspirations of the policy.

4 Methodology

The study focuses on the following key stages:

- **Desktop evaluation** of published guidance by all of Scotland's local authorities.
- **Health-check questionnaire issued to local authorities and developers** to establish a baseline of information.
- **Interviews with randomly selected local authority officers, developers and their consultants** to examine specific issues in more detail.
- **Case studies:** good practice examples of masterplan layouts.
- **Blockers:** identifying barriers to good development

5 Findings and Analysis

All respondents indicated that they support good quality street design, but many had concerns about specific issues.

Findings (based upon responses to questionnaires and interviews) were compiled around the themes of 'Guidance', 'Process', 'Practice' and 'Suggestions'. They are summarised below and are followed by conclusions arrived at after analysis.

A) Guidance: the development and co-ordination of effective local guidance that complements DS Policy requires an iterative, collaborative approach between Local Authority Departments, so a structured approach to its development is essential. It takes time to work collaboratively between different departments but political or high level support and decision-making assists.

In addition to local guidance, National Roads Development Guidance is currently being developed by SCOTS (Society of Chief Officers of Transportation in Scotland). This will also impact on the application of DS.

Barriers to effective guidance have been identified at all stages of research and include:

- **Accessibility;** It can be difficult to locate relevant policy and guidance. Websites and telephone advice can be confusing and relevant guidance can be spread across a number of documents.

- **Content;** Guidance can be generic, referencing out-of-date standard designs. Often Guidance is not developed collaboratively between planning and roads departments, and does not consider how DS policy integrates with the wider context. There can be a need to refer to more than one guidance document, and there is little information about the important qualities of specific types of locations. Information about servicing and utilities is important but overlooked.
Some developers would prefer guidance to be more consistent across Local Authorities

B) Process: Because street layouts developed using DS demand a design-led approach, the way in which they are assessed differs from those developed using standard ‘templates’ for roads geometries.

The development of proposals based upon DS is perceived as being more resource and time intensive at the outset. However, this can be offset by faster assessment of consents. It is important, therefore, that this advantage is not lost through contradictory requirements and negotiation at a latter stage in the consents process.

The most significant barriers to the efficient, timeous progression of good quality street design through the approvals process include:

- **Roads Construction Consent (RCC) often follows on from planning consents and is not processed in parallel.** This can lead to reassessment of proposals which had previously been agreed at planning stage, because roads engineers take a different view to development management.
- **Some developers seek confidence that their approach to DS Policy will be acceptable,** but they advise that a Scotland-wide, consistent approach is not evident at present. Different criteria can be applied to assessment between different local authorities and between roads and planning departments within the same authority.
- **Developers can be time-constrained and negotiations with local authority departments during the approvals process can be protracted** As a result, developers move towards ‘tried and tested’ design solutions which do not take as long to agree. Often local authorities revert back to outdated development guidelines during the planning and RCC process.
- **Protracted timescales can be required to negotiate the consents process in relation to SUDs, utilities, cleansing etc.** There can be confusion about the criteria for assessment, resulting in a need to negotiate solutions for every development.
- **Designing Streets policy can be seen as optional,** and is not enforced.

C) Practice: Questionnaire responses clearly demonstrate a general frustration and lack of common understanding about what constitutes good street design. Barriers to effective application of DS have been identified at all stages of practice and include:

- **Local authorities’ attitudes to financial and safety risk** can impede the development of good quality design.
- **Developers’ choices are dictated by the market,** which can sometimes conflict with DS (for example, the use of standard house types and plot sizes).
- **There is a need to “prove” to developers that Designing Streets can work,** but there are a lack of completed projects which demonstrate good street design.
- **Integrating streets design with requirements for services and maintenance can be problematic,** with a clash between design aspirations, technical requirements (such as waste collection) and adoptable standards.
- **Consideration of future maintenance requirements** can negatively impact on materials choices.
- **There is concern from Local Authorities in rural locations** that Designing Streets Policy is not always the best fit for all situations – for example, where main streets within smaller settlements are also trunk roads.

D) Local Authorities are overcoming these barriers through:

- **Contributing, through SCOTS** (Society of Chief Officers of Transportation in Scotland), to the development of national roads guidance.

- **The development of comprehensive residential design guidance for specific locales** by individual Planning Authorities.
- **The use of the Processes identified within the DS Policy Document:**
- **Good communication** between departments within local authorities, and with developers and their consultants.
- **A structured approach to collaborative working**, (for example workshop-based processes) both in terms of developing local authority systems and processes, and in terms of working with developers during the approvals process.
- **Pilot projects**, often masterplans, to test specific aspects of DS policy, such as materials choices and roads geometries.
- **Learning by doing**, evaluating the approach to specific projects.
- **Specific personnel identified** to scrutinise proposals from day one, until completion on site.

6 Recommendations

A) Recommendations for Guidance include:

- **National guidance:** Determine timescales for SCOTS Roads Development Guidance and review against DS when issued in draft form, ensuring that any new national 'technical' guidance supports DS.
- **Local guidance:** Encourage local authorities that are using outdated streets design guidance to update it, and set suggested timescales for completion of revisions.
- **Improve access to guidance:** Encourage local authorities to provide accessible, suited guidance, including guidance on information expected to be supplied by developers for assessment.

B) Recommendations for Process include:

- **Promotion of a structured integrated approach to the street design process** based upon multi-disciplinary working and a shared understanding that the process is based upon design principles, rather than design standards.
- **Monitoring of Local Authority Performance;** for example using Key Performance Indicators.
- **A 2-Stage Roads Construction Consent**, integrated with planning so that the same drawn and specified material largely meets the submission requirements of both consents processes. The first stage could potentially cover geometry and levels, with a second stage covering detailed design including construction details, materials, lighting, street furniture.

C) Recommendations for Practice include:

- **Rationalising requirements for adoptable SUDs** between different agencies.
- **Assisting both Local Authority Officers and Developers to assess proposals**, using effective, structured processes, including the use of a common street design assessment tool that can consistently assess a layout against DS. (Currently under development; case studies in this report illustrate the technique.)
- **Building Confidence** within all sectors of the development industry about what constitutes good street design.

1.0 Introduction

1.1 Background

This report sets out findings of research undertaken by Anderson Bell Christie (ABC) on behalf of the Scottish Government; Planning and Architecture Division.

The aim of the research is to develop a better understanding of the way in which local authorities are currently implementing Designing Streets (DS) policy in Scotland, to identify any barriers to compliance, and to recommend ways around these.

Within this aim, the study focuses on the following key objectives:

- **Desktop evaluation:** evaluate the current position of published guidance by Scotland's 32 local authorities for applicants related to street or roads design.
- **Short 'Health check' questionnaire and follow up interviews:** To establish a baseline of information and to find out local authority and developer experience in practically implementing and dealing with Designing Streets policy and how the process of parallel Roads Construction Consent (RCC) and planning consent is working.
- **Case studies:** seek good practice examples of masterplan layouts (at any scale i.e. from 5 houses up to 800) and assess each of them against Designing Streets policy and the qualities of successful places. Create a comparable B-Plan of each using the technique that is within Designing Streets.
- **Blockers:** identify barriers to compliance with Designing Streets policy.
- **Conclusion and recommendations:** reporting on findings on the ways local authorities could implement Designing Streets policy more effectively, including the 'process' policy of RCC and planning in parallel.

1.2 Designing Streets policy content

In 2010 the document *Designing Streets* (DS) was launched by the Scottish Government to support their placemaking agenda. It raises the importance of street design issues from that of guidance and advice to policy.

It emphasizes that well-designed and well-connected streets are crucial components in sustainable placemaking and sits alongside the 2001 policy document *Designing Places* (DP), which sets out the role of the planning system in delivering good design.

Designing Streets established a significant change in policy related to the design of streets and roads within Scotland's urban and rural settlements. The policy moves away from a prescriptive standards-based approach, to one where designers and local authorities collaborate to develop a design-led solution.

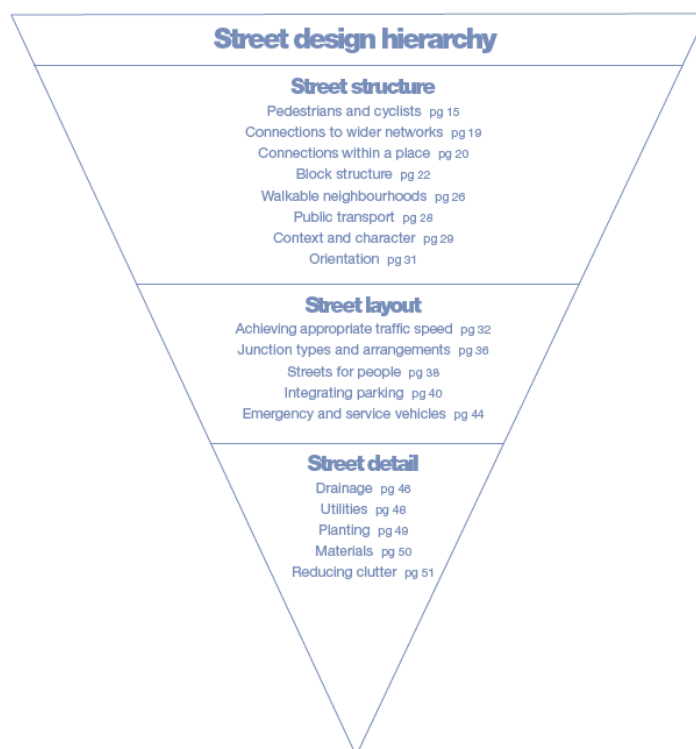
Designing Streets contains five policies:

- Street design guidance, as set out in *Designing Streets* can be a material consideration in determining planning applications and appeals
- Street design should run planning permission and Road Construction Consent (RCC) processes in parallel
- Street design should be based on balanced decision-making and must adopt a multi-disciplinary collaborative approach
- Street design must consider place before movement
- Street design should meet the six qualities of successful places, as set out in *Designing Places*.

These policies empower local authorities to prioritise street design when assessing consents, providing a framework to align both process and culture to support the creation of good streets.

They confirm the fundamental principle that place should be considered before movement, and are supported by 18 key considerations which are outlined in the *Designing Streets* document and supported by guidance within it.

Figure 1: Designing Streets Hierarchy; 18 Key Considerations



1.3 Perceived Issues associated with Designing Streets

Although Designing Streets has been broadly welcomed, anecdotal evidence has suggested that there is a perception by some that a number of local authorities continue to use an outdated standards-based approach when designing or retro-fitting streets or roads within their areas.

As a result there are projects, that could be considered as policy compliant by some stakeholders, that are still finding difficulty in negotiating the approvals process. There have been fewer than expected examples of developments and masterplans that clearly match the aspirations of the policy.

1.4 The Development Process

Key to understanding the issues affecting the implementation of Designing Streets policy is an awareness of the processes and policies which relate to street design, and with which developers need to comply.

The two main parts to the planning system most relevant to Designing Streets are noted below:

1.4.1 Development Plans

Local Development Plans are prepared by individual local authorities. They comprise a Local Development Plan (LDP) supported by Supplementary Planning Guidance (SPG) which set out how places should change, and also set out the policies used to make decisions about planning applications.

Local Development Plans must be replaced at least every five years. During the first stage of preparing a new plan, a main issues report (MIR) is prepared which sets out options and proposals for future development and allows for consultation. The local authority will then prepare a proposed plan and make it public for representations. Unresolved issues raised are discussed at an examination held by a person appointed by Scottish Ministers, who will make binding recommendations, and the plan is then adopted by the local authority.

Designing Streets policy supersedes much of previous roads guidance and standards which were based upon older principles within 'Design Bulletin 32: Layout of residential roads and footpaths' (DB32).

Many local authorities are currently reviewing and redrafting their own guidance for streets design, which will then be ratified through the five year cycle of the development plan process - as described above.

Some guidance which predates Designing Streets policy contains information which is still relevant about local context, construction and materials. However, other older guidance can contain information about street layouts and geometry which is not consistent with Designing Streets policy. In some cases, this older guidance may still be referred to while newer guidance is being prepared.

1.4.2 Development Management

Development Management (previously known as Development Control), is the process for making decisions about planning applications. There is a specific sequence of actions associated with the planning application process and these are noted below, together with their relevance to DS:

Table 1: the Planning Application Process

Stage	Designing Streets Considerations
Pre-application consultation	An opportunity for developers to discuss proposals with the planning authority (and sometimes roads authority and statutory bodies) in order to determine what is broadly acceptable. For major developments this is an opportunity to discuss proposals with the community.
Preparation of a Design and Access Statement & submission of an application	Consultants should be able to provide a Design Statement and comprehensive drawing package which clearly demonstrates that proposals comply with relevant policy regarding Streets Design.
Consultation	If pre-application process has been successful, statutory consultation should be straightforward. If not, the consultation stage could lead to redesign and potential delays.
Consideration and preparation of report of handling	Planning officers have advised that report preparation can be onerous and timescales do not allow a more detailed, ongoing discussion of proposals.
Decision notice	Proposals can be refused if they do not align with Designing Streets policy.
Review/appeal	If a development goes forward to appeal, assessments of street design quality will require to be backed up by robust planning guidance.

1.4.3. Roads Construction Consent

Within some local authorities RCC is administered by a separate roads or traffic department. Within others, both roads and planning fall within the same service.

Before undertaking any new road construction the developer must obtain detailed planning consent and seek Roads Construction Consent (RCC). The granting of one does not necessarily imply that the other will be granted.

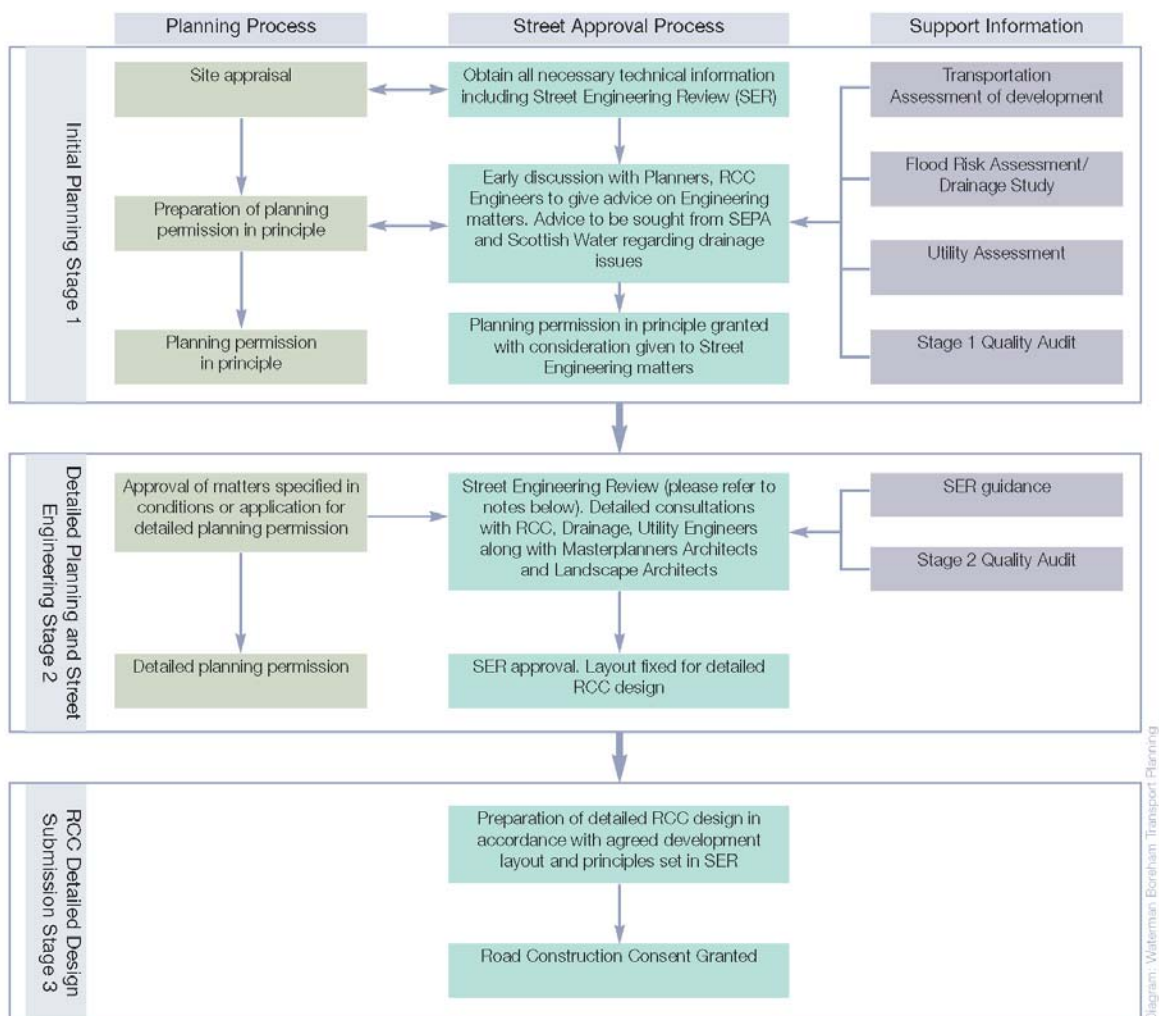
The granting of RCC signifies the local roads authority's approval of the proposed roads, structures, road drainage and lighting. Proposals will also have been audited for safety.

In accordance with Designing Streets policy, most authorities accept RCC applications in tandem with application for planning permission, but developers do not always wish to do this, as a full RCC application involves a very significant amount of detailed design and specification.

The Roads Scotland Act 1984 enables applicants to appeal the decisions of a roads authority. However, unlike the planning process, there is no timescale set to determine RCC applications. Where there are elements of a design which are more difficult to resolve, an application may never be determined, as there are no 'deemed refusals' (If no decision is taken within a determination period, there is considered to have been a deemed refusal.)

The research process has identified that most local authorities are revising and updating their roads guidance but this is a complex task. At present, therefore, some developments are assessed against the more flexible DS policy, some against older, prescriptive DB32 standards, and some are assessed against a combination of DS policy and older guidance, depending where in the country the application is submitted.

Figure 2: the Residential Street Approval Process (reproduced from page 57 of Designing Streets)



2.0 Desktop Review of local authority Guidance

2.1 Introduction

Stage 1 of the research process was a desktop evaluation to determine the current position of published guidance by Scotland's local authorities for developments including street or roads design, where Designing Streets policy is applicable.

Some local authorities in Scotland have developed their own street design guidance, others have other supplementary planning guidance in place which covers specific aspects of street design - for example street furniture, lighting, local character and/or material palettes.

Although the Designing Streets policy document contains guidance on design factors and processes, it advises that **“roads and planning authorities have considerable leeway to develop local policies and standards, and to make technical judgments with regard to how they are applied”**.¹

Local planning policy is required to deliver development which complies with National policy without repetition or reformulation. It would be anticipated that Local Development Plans should include policies which establish the main principles of Designing Streets, with Supplementary guidance providing a more detailed explanation of how compliance with policy can be achieved as **“there is still an important role for local guidance to ensure that streets design responds to its local context”**.¹

2.2 Capturing local authority guidance and policy

The Research Team contacted all local authority planning departments in two stages:

STAGE 1: Interrogation of local authority's planning department website: (Search for Main Issues Report, Local Development Plan and Supplementary Guidance.)

STAGE 2: Telephone Enquiry (Phone call to policy planning departments of all local authorities to ask for signposting to any specific policies or guidance documents incorporating DS principles.) We also endeavoured to determine whether guidance and policy was in draft form, and potential publication dates.

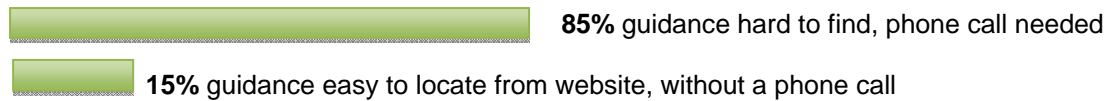
¹(Designing Streets Policy)#

2.3 Findings: Summary

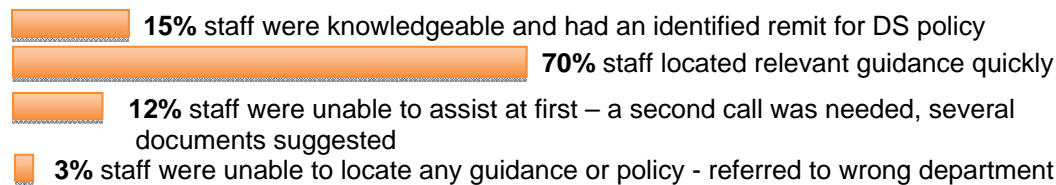
The Table below summarises our research findings. For further details refer to Appendix 1.

Figure 3: research findings

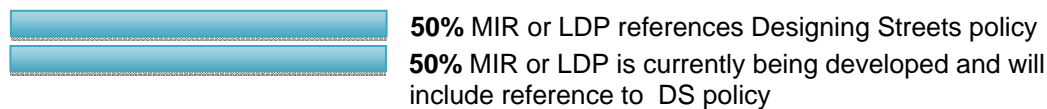
Website Accessibility



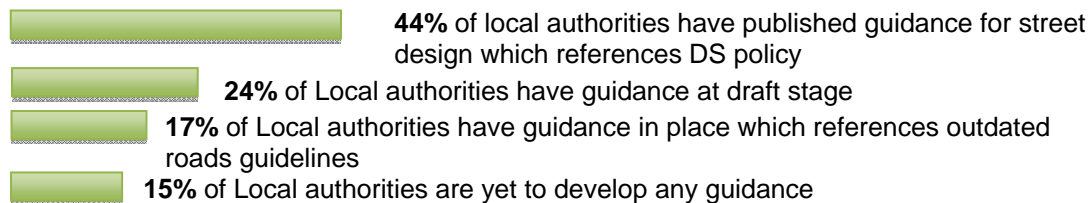
Staff response to phone enquiries



Designing Streets policy referenced in Local Development Plans

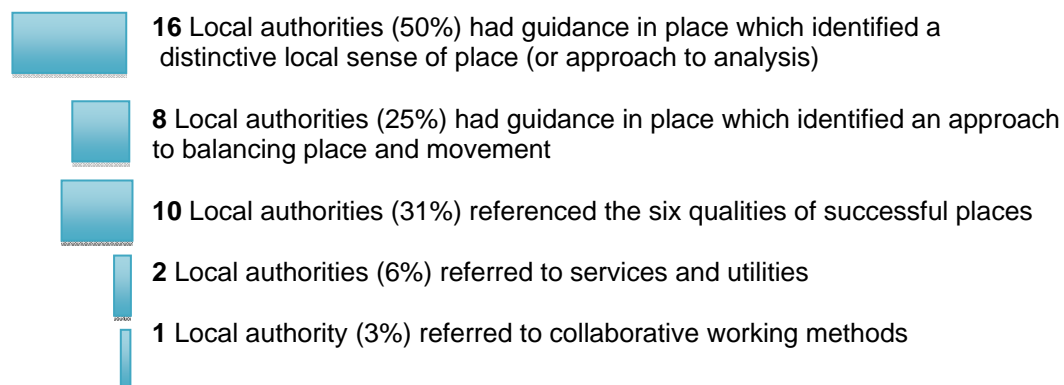


Supplementary planning policy referencing Designing Streets policy



Guidance Content

We examined Supplementary Planning Guidance for Streets Design produced by all 32 Scottish Local Authorities.



2.4 Observations

The issues experienced included:

It can be difficult to locate relevant policy and guidance:

- Websites can be confusing
- Often it is not possible to determine which guidance refers to Designing Streets Policy without examining all potentially relevant documents – which is time consuming.
- Telephone advice on what information is relevant does not, in some cases, reflect the guidance available
- Guidance may be under development but not yet published

Sometimes, guidance is not comprehensive or clear:

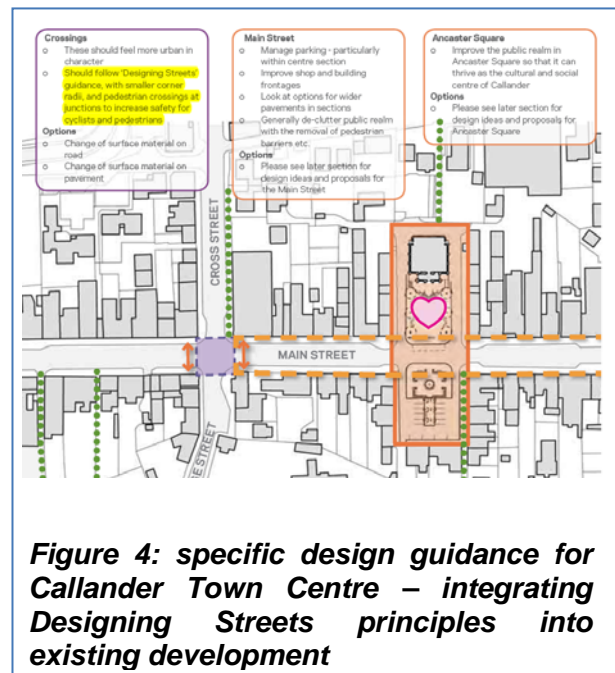
- **Supplementary design guidance can often be generic** - repeating content within the Designing Streets document rather than illustrating locally derived solutions.
- **Often guidance has not been developed collaboratively with roads and planning departments**, with the consequent need to refer to separate roads guidelines. Some guidance still refers to pre-DS roads guidelines which conflict with Designing Streets policy.
- **Often, there is a need to refer to more than one planning guidance document** to gain an overview of what is required. For example, some individual local authorities

provide a number of overlapping guidance documents (e.g. supplementary planning guidance for residential design, supplementary planning guidance for urban design, and supplementary planning guidance for open spaces).

- **There can be a lack of guidance on the important qualities of specific locations (a sense of place).** Some local authorities provide details of the analysis required by designers to develop an understanding of place-specific qualities. In some cases extremely detailed information was available in the form of development frameworks, briefs and master plans. (For example, Fife Council has developed specific guidance for St. Andrews (the St Andrews Design Guidelines) which provides design principles for buildings, streets and shop fronts in St Andrews Conservation Area and on the main approaches).

- However, many local authorities do not provide any guidance on this aspect of Designing Streets policy.

- **Information about servicing and utilities is important but is often overlooked.** Only three local authorities included information about cleansing department requirements. Very few local authorities included information about utilities requirements, street lighting etc.



- **Explanation of collaborative working processes.** Many guidance documents emphasized the importance of Design Statements as an important tool during the Design Development Process, but did not provide details of the Quality Audit Process or parallel planning consents and Roads Construction Consents.

Figure 5: example of better practice - Scottish Borders Design Guidance

4.3 Placemaking & design principles
Local area: existing/proposed

ROAD DESIGN
Roads need not necessarily be constant in width (so long as the running carriageway is at least 3.7m for single file traffic and 4.8m for two way traffic flow) and junction layouts can be informal.

STREET GEOMETRY
Reducing driver visibility distances, through tight building lines and avoiding overly engineered straights or curves, helps to reduce traffic speeds thus reducing vehicular dominance. The geometry of the street can be fairly constrained as long as there is sufficient access. A swamp path analysis should be carried out confirm that the largest vehicle (i.e. service/refuse vehicles) can be reasonably accommodated.

PEDESTRIAN VS VEHICLE
Shared surfaces, and removal or reduction of grade separation (the conventional method of separating pedestrians and vehicles through an upstand kerb) can help encourage responsible driving by a heightened sense of risk. This helps calm traffic speeds naturally, facilitating the use of streets by pedestrians and cyclists.

The incorporation of home zone measures such as narrowing of carriageways, use of speed tables and using on-street parking as a naturally occurring self-limiting factor on pedestrians sharing space with motorists of around 100 vehicles per hour.

AVOIDANCE OF CLUTTER
The street scene should be carefully designed to avoid a dependency on excessive street signage. Directional, warning and information signage can clutter the public realm and detract from the overall quality of the public realm when present in, often unnecessary abundance.

ACCESSIBILITY
A sustainable community or neighbourhood depends on a mix of uses and locally available public transport opportunities. To encourage walking, PAN 75: Planning for Transport recommends a walking distance of 400m (or a five minute walk) to local facilities such as the bus stop or corner shop. Where this is not possible, housing (in the urban context) should be no more than 800m (or a ten minute walk) from local services to encourage the creation of 'walkable neighbourhoods'.

4.3 Placemaking & design principles
Local area: existing/proposed

LAYOUT AND LEGIBILITY
Objective: creates streets and places that are distinctive and legible with a clear sense of identity.

The creation of distinctive, attractive places that are easy to move around should be the common aim of all new development. The layout of new housing should be designed in response to the built context and local townscape. New development must actively seek to provide a permeable, legible movement network that maximises the attractiveness of walking and minimises car dependency.

LAYOUT
Typically throughout the Scottish Borders, streets are often characterised by buildings arranged in a very organic way, close knit with a staggered building line and a range of double fronted, single fronted and gable fronted buildings. This variety and density of buildings adds richness and character. New development should strive to use the appropriate balance of variety and repetition in the built frontage to create continuity and rhythm and a clear sense of identity.

The layout of new development should consider:
✓ the nature of the site: the microclimate; the built

2.5 Initial Suggestions from Desktop Review

The following targets are suggested for local authorities:

- Suited guidance which refers to context and placemaking, design requirements, and the Designing Streets Process
- Guidance which integrates roads Department and planning requirements
- A "stand-alone" web page which gathers together all Designing Streets Guidance
- All personnel within Development Management to be able answer telephone and online queries regarding Designing Streets

Figure 6: example of better practice - design guidance from East Lothian Council

Design Standards for New Housing Areas

DESIGN REQUIREMENTS
 Designing an Urban Form: Creating Public Space
 Designing an urban structure

21 The policies of the East Lothian Local Plan supported by Government policy require the design of new residential development to be closely guided by and be a creative response to a detailed analysis of the site and its surroundings. The urban structure to be formed must ensure that a sense of place is retained and created. To retain a sense of place new development will fully integrate with its surroundings. This is especially so for all types of movement, including pedestrian and cyclist. Development shall also be arranged to integrate with, respect and respond to the landscape, landform, urban form and townscape of the area, and to positively incorporate and enhance key natural, built and physical features it and around the site. Complementing and extending existing street patterns, and retaining important public views of the surroundings across and from the site, and incorporating these into the development design allows a sense of place to be conserved.

22 To create a sense of place the urban structure must be ordered and understandable, providing a clear hierarchy of streets and spaces, including focal points, such as mixed use areas, principal public open spaces and key public buildings. In such locations there may be opportunities to develop at higher density. The urban structure must be organized around these focal points, linking them with an interconnected layout of streets. The street layout will define 'development blocks' for housing, open space and other uses. Principal streets will define neighbourhood blocks, which will be subdivided by a network of tertiary streets that define individual residential blocks. These tertiary streets will offer greatest potential to be treated as Home Zones. The developer must demonstrate to the Council that residential blocks are big enough to allow a perimeter of buildings around garden ground.

The movement framework

2.6 New development must create a hierarchical, permeable and interconnected street layout that complements and should extend the surrounding street pattern. Such layouts spread vehicle traffic evenly through a site and to the surroundings, help prevent localized traffic congestion, and encourage walking and cycling. They are also flexible in that their design can be adapted to produce a variety of regular or more organic street patterns to complement and respond to the proposed structure of development and layout of buildings. Proposed street layouts must maintain connections within the site and to surrounding streets, and ensure the movement requirements of the development strategy are met. Such layouts will provide a range of street types, each designed to satisfy its particular role in the movement framework by providing the necessary level and type of access, including for public transport and a variety of pedestrian and cyclist routes. By the design and arrangement of street types, street layouts must influence vehicle drivers preferred route choice to ensure the tertiary streets between residential blocks are less busy.

Examples of well connected layout

Examples of poorly connected layout

2.7 Street layouts must provide enough access through neighbourhood blocks to ensure they are sufficiently permeable to be served by narrow, shared surface, traffic calmed tertiary roads (See Table 1, page 8). These roads will give access to individual residential blocks. Such permeability, low vehicle speed and narrow roads provide flexibility in design, allowing roads to complement building layout, and public space between residential blocks to be designed as Home Zones.

Designing Space Between Buildings
 Layout and design of buildings

213 The urban structures of many recent housing developments have been dictated by standardized road layouts, often with predominantly standard and detached house types fitted around them. The consequence of such uniform design has been public spaces that are poorly connected, defined, enclosed and ubiquitous in appearance. The design of new urban structures will ensure that the building layout creates a sequence of distinctive public spaces and views as well as creates defined public from private space. This can be achieved by using a full range of built forms across the site, such as perimeter blocks, squares, courtyards, terraces, rows and laneways etc. Such built forms must be arranged so they complement one another. This will require developers to use a wider range of house types and plan forms in new housing development to ensure adaptability to such layout design. The following diagrams show how a range of house types and plan forms are used to, for example, turn external and internal corners, provide curved terraces and row ends, terminate a vista or change the direction of a road while providing continuity in built frontage and interest in key parts of the street. A wide range of house types and plan forms is required to provide the flexibility necessary to respond to the design of such urban structures and to create distinctive layouts and street spaces with identity.

214 In large developments the masterplan will establish the context for detailed design. It will set design principles for particular areas, establishing development block and individual building shapes and sizes, as well as the housing numbers, and the building height(s), land(s) and height(s) to be used. Detailed building layout and street design must be done together so the eventual appearance and operation of public space is conceived as an integrated whole. Buildings will be arranged to create street enclosure, subtle changes in character, and formal and informal street frontages as appropriate. Public realm landscaping and areas for community use should then be added to the public space created by the building layout. Finally, space for pedestrians and vehicles will be identified to those do not dictate building layout, and the form, function and character of public space. The following diagrams show how such designs begin with building layouts arranged to create street enclosure, identity and continuity in built frontage, clearly defining public from private space. Space for pedestrians, vehicles and community use is then identified and designed to reinforce the intended character of the public space, while ensuring sufficient carriageway width remains for vehicle tracking path requirements (See para 3.7).

2.15 Opportunities to enclose public space must be maximized. This should be achieved by ensuring continuity in built frontage and that building heights and the width of public spaces are well proportioned. At higher densities continuity will be achieved by judicious use of a continuous built frontage and, at lower densities, by complementing buildings with formal landscaping arrangements, such as tree planting, hedging, walls, fences and railings that prevent space visually leaking away between buildings and harming the continuity of the frontage. Table 2

Table 2
 Enclosure height to width ratios

	Maximum	Minimum
Mews	1 : 1.3	1 : 1
Streets	1 : 3	1 : 1.5
Squares	1 : 6	1 : 4

3.0 'Health-check' questionnaires

3.1 Questionnaire Content

A web –based questionnaire was developed using Survey Monkey. **(For details of content refer to Appendix 2: Questionnaire Content.)** Separate surveys were devised for developers and local authorities (roads and planning departments). Broadly, the content of both surveys was very similar.

Pilot surveys were circulated to a limited number of recipients to ensure that the content and structure of the questionnaire were clear, prior to general issue to local authorities and developers.

The Survey was divided into five short sections – Background (information about the organisation completing the form), guidance, Process, Practice and Case Studies.

3.2 Questionnaire Issue

The survey was administered by ODS and went "live" on line on 13th of December 2012. The research team sent emails with a hyperlink to the survey to all heads of planning at all local authorities, and to all roads engineers on the SCOTS (Society of Chief Transport Officers of Scotland) contact list.

In order to ensure contact with developers and house builders, Homes For Scotland were asked to issue emails with a link to the survey to all their members.

On the 7th January 2013, the research team issued a reminder email to all contacts at local authorities; Homes for Scotland also issued a reminder email to their members. The survey remained live until 1 February 2013 – a total of seven weeks.

3.3 Questionnaire Respondents

Refer to Appendix 2 for detailed Top Line report of questionnaire responses

3.3.1 Response to local authority surveys

66% (22) of local authorities responded to the Survey; 34% (10) did not respond. The local authorities that responded covered a mix of geographies and both urban and rural areas. The officers who responded were from both planning and roads departments.

Aberdeen City Council
Aberdeenshire Council
Argyll & Bute Council
City of Edinburgh Council
Clackmannanshire Council
Comhairle nan Eilean Siar (Western Isles Council)
Dumfries and Galloway Council
Dundee City Council
East Dunbartonshire Council
East Renfrewshire Council
Fife Council
Glasgow City Council
Highland Council

North Ayrshire Council
North Lanarkshire Council
Orkney Islands Council
Scottish Borders Council
Shetland Islands Council
South Ayrshire Council
South Lanarkshire Council
West Lothian Council

34% of local authorities did not respond to the survey:

Angus Council
East Ayrshire Council
East Lothian Council
Falkirk Council
Inverclyde Council
Midlothian Council
Moray Council
Perth Council
Renfrewshire Council
Stirling Council
West Dunbartonshire Council

3.3.2 Response to Developer Surveys

Homes for Scotland distributed the survey to all of their members. A total of 25 responses were received from a range of house builders, developers, consultants and one RSL (Glasgow Housing Association).

3.4 Local authority responses

3.4.1 Guidance

a) Most local authorities (88%) promote Designing Streets policy. They achieve this by direct referral to the Designing Streets policy document, and by promoting informal discussion between developers, planning officers and roads engineers. Only three local authorities advised that they provide 'location-specific' guidance which is clear and compliant.

b) Most respondents (68%) advised that their guidance and policy was partially aligned with Designing Streets policy. Only one local authority – Scottish Borders Council - considered that their guidance related to Designing Streets policy was up to date and complete. Some respondents (17%) advised that their guidance was not aligned with Designing Streets policy, and others (17%) did not know whether their guidance was aligned or not.

c) Partially compliant guidance has the potential to create difficulties in terms of:

- Poor communication between local authority departments and within local authority departments themselves.
- Confusion for potential Applicants – for example proposals still being assessed against older roads guidance for construction make up, materials and street furniture etc.
- Differing requirements between LA departments (for example the definition of acceptable materials palettes for streets often differs between roads, maintenance and planning).

d) In some cases, Designing Streets policy is seen as optional, and is not enforced. For example, proposals are still being assessed using older (1986) Roads Guidance which Designing Streets policy has replaced.

e) Guidance does not consider how DS policy integrates with wider considerations.

- The Design Manual for Roads and Bridges (DMRB) is at one end of the scale, with Designing Streets at the other, and the "middle ground" is missing where new residential development meets the wider roads network.
- There is little guidance applicable to smaller scale development in rural locations.

f) National Guidance is currently being prepared by SCOTS. This has the potential to clarify some issues and provide consistency; however there are concerns that this might result in a return to a more generic, prescriptive, standards based approach.

3.4.2 Process

a) Only 41% of local authorities reported that they provide advice on how to assess and evaluate design proposals to confirm compliance with Designing Streets policy. There was some confusion within more detailed responses, with some respondents referring to advice to developers, rather than in-house assistance for LA personnel. The percentage of local authorities providing advice to staff on evaluation methods is therefore likely to be even lower.

b) Most (74%) local authorities report that they have collaborative working methods in place to resolve potential conflicts during the consents process, with 17% advising that they are currently developing these but have not yet implemented them.

c) Only 22% of local authorities advised that they processed all planning consents and roads construction consents in parallel, as required by Designing Streets policy. Most (57%) advised that they sometimes did this, and sometimes did not.

Most local authorities (75%) agreed that it would be very possible to process planning and RCC in parallel, and would be prepared to endorse a streamlining of consents for streets/roads design.

However, respondents were not convinced that fast-tracking applications which are Designing Streets compliant would be feasible.

“The acceptability of proposals at both planning and RCC stage is determined by consideration of practical detail and is not merely a matter of policy.”

Local authority feedback

d) Respondents advised that parallel processing of Roads Construction Consents requires a greater degree of technical detail at an earlier stage in order that detailed consideration of design, material choices and construction details can be assessed.

More engineering input into proposals is therefore required at an earlier stage, with a consequent increase in timescales and costs for the developer. In some cases this approach is not appropriate. (For example where Planning Permission in Principle is obtained to add value to a site which will be sold on.)

“The parallel process of RCC and planning consent was applied but varying interpretations of ‘Designing Streets’ by the multiple disciplines involved in the design process lessened the potential time savings in running the two processes together.”

Local authority feedback

e) Where Roads Construction Consent is not processed in parallel with planning consent, local authorities aim to give assurances at planning stage that proposals will be accepted at RCC stage. This is not always successful, and sometimes RCC requirements will be found to differ.

3.4.3 Practice

a) Virtually all local authorities (95%) consider that the majority of developers and their consultants do not understand Designing Streets policy and would benefit from more training and knowledge sharing.

b) Integrating streets design with requirements for services and maintenance can be problematic; with a clash between design aspirations and technical requirements (52% of local authorities reported conflict between the requirements of statutory authorities and other LA departments). Specific issues include:

- Sizes of cleansing vehicles varies, cleansing vehicles can sometimes be so large that they impact on street design.
- The location and size of service strips for utilities – often detailed discussion is needed between LA, developer and utility provider which can be extremely time consuming.
- Agreement of materials and construction technologies for adoptable roads.

c) There can be a clash between the requirements for water management systems (SUDs) and aspirations for high quality design proposals.

At present, Scottish Water and the local authority must both agree to proposals on a site by site basis, for the design and future maintenance of different components of the waste water network.

In order for SUDs proposals to be adopted, they must comply with both Scottish Water and the local authority's roads department's own adoptable standards (Sewers for Roads and SUDs for Scotland respectively). Where needed, proposals must also satisfy SEPA in terms of flood protection. Adoptable standards can be inflexible and do not take cognizance of the overall design quality of a development.

Reaching agreement very often involves extensive negotiation and be extremely time consuming.

d) There is a need to “prove” to developers that Designing Streets can work.

Because the design of developments using Designing Streets policy is based upon the collaborative development of a site-specific design solution, the design process can be more resource and time intensive, and therefore more expensive, than an approach based upon standard house types and standard templates for roads design. Some respondents considered that developers are very conservative- for example:

- Using standard house types for which there is proven demand. The design and arrangement of standard house types can make it difficult to incorporate the design principles behind DS policy.
- Cherry-picking some features of Designing Streets (e.g. shared surfaces) and discarding others.

3.4.4 Suggestions emerging from local authority questionnaire responses

The following suggestions are intended to improve implementation of Designing Streets policy:

- Expanding the knowledge base of individual local authority personnel through knowledge sharing
- Better structured communication between local authorities to communicate completed solutions
- Training specifically related to process (e.g. assessment tools) and the specific requirements of local authority officers
- Case studies of completed projects
- Training for developers and their consultants
- Focus on community involvement, education and engagement
- Specific focus on rural areas

3.5 Developer Responses

3.5.1 Guidance

a) More than half (56%) of developers, (including developers, housebuilders and consultants) considered that local authority guidance rarely covered Designing Streets policy fully. A third of respondents advised that documents “often” complied.

b) Local authority or location-specific guidance was found to be the main guidance to encourage compliance with Designing Streets policy (44%) with direct referral to the Designing Streets policy used by 39% of respondents. Other respondents used a combination of Designing Streets policy and local authority guidance.

c) Respondents considered that often local authorities revert back to previous development guidelines during the planning consent and RCC process – a process which has the tendency to undermine initial more interesting ideas based upon Designing Streets policy.

d) Where guidance is in place, each local authority has developed it in a different way, to suit their particular circumstances. Some developers would prefer guidance to be more consistent across local authorities and it is suggested that greater prescription or additional guidance would be useful to clarify certain areas.

e) Guidance can be interpreted differently by local authorities and developers. For example, the need for permeable layouts can be interpreted by some local authorities as a fixed requirement for more than one vehicular access point regardless of the location and circumstances of specific sites.

f) Guidance and the market. Some housebuilders have developed a way of locating standard house types in a way in which they consider best meets the needs of the market. This does not always accord with Designing Streets policy. Conversely, other developers advise that they use Designing Streets as a marketing tool, emphasizing an attractive environment and sense of place.

“There is a desire within our organization to follow such design guides as an integral part of good urban design.” **Developer feedback**

“We have our own Design Standards for excellence manual, which promotes good design and is centred around Designing Streets principles. We also hold group-wide design forums to ensure sharing of best practice and adherence to the wider government design agenda.” **Developer feedback**

3.5.2 Process

a) Almost half (48%) of respondents reported that they sometimes worked with local authorities who had collaborative working methods in place to resolve potential conflicts. These included:

- Collaborative working arrangements between roads and planning departments
- Assessment of roads geometry and levels by both planning and roads departments at an early (pre application) stage in the process

- Attendance by roads and planning departments at meetings covering street design
- Design workshops attended by all involved in the development process
- Quality audit workshops
- Agreement of a set of design principles at an early stage

b) Developing proposals based upon Designing Streets is perceived as being more resource and time-intensive at an early stage. Every site requires a bespoke design solution focused on a sense of place. This requires:

- A wide range of skilled consultants, involved at an earlier stage
- A collaborative approach to assessment by local authorities which can take more time
- More negotiations with utilities and statutory providers.

c) Developers agree that high quality design is worth pursuing. However, they can be time-constrained. If the consents process takes too long they can be forced towards 'tried and tested' design solutions which will not take as long to move through the consents process. Often these are based upon older roads guidance.

d) Most respondents (48%) advised that a collaborative process was sometimes in place, but that they had encountered situations where there was very little collaboration. When this is the case, it is more likely that developers and/or their consultants can be forced into a role as mediators in order to rapidly agree a solution between planning and roads authorities, Utilities Providers and Scottish Water.

Often, situations cannot be resolved within developer's time frames and consultants are forced to change layouts to 'tried and tested' generic solutions - losing design quality as changes are made. Specific issues have included:

- Authorities where roads engineers are not involved in assessing planning applications at an early stage – leading to conflict later when RCCs are considered.
- Agreement of design proposals or principles at planning stage which is then overturned when RCC is being assessed later on in the process.
- Concerns about maintenance which leads to changes in material choices.

e) On some occasions, the role of the planner has been seen as that of a 'tick-box' administrator, unwilling to take on the role of mediator. planning authorities are perceived as sometimes unwilling to take on the role of coordinator between consultees, and do not take opportunities to resolve issues before they arise – for example developing a palette of material choices.

f) Many respondents (36%) advised that planning consents and Roads Construction consent were rarely run in parallel. Nearly all participants (48%) considered that a parallel process could be possible if all parties agreed, or that it was hypothetically possible to achieve but is unlikely to be agreed.

92% of respondents would endorse a streamlining of consents, and 79% would welcome fast tracking of proposals which comply with Designing Streets.

'We have yet to get approval undiluted for any of (our) proposals which leads us to question the delivery of any of these design led proposals which are more expensive in terms of consultants' time and the time taken to gain a decision as we argue about principles and specific materials.'

'It is normally the case that roads engineers over-rule to a more conventional solution.'

Developer Comments

3.5.3 Practice

a) Most (83%) developers consider that they and their consultants are able to develop master plans which are fully compatible with Designing Streets. However; some developers and their agents report that there is a shortage of consultants who are fully up to speed with Designing Streets policy and who are expert in good street design.

b) Residents' reactions underpin developers' choices of street design solutions. Proposals need to suit the buying public in order to generate sales. People can be very conservative, and like to stick with what they know – for example cul de sacs. Where homes are for rent, private and public areas need to be carefully defined and generally all public spaces are adopted.

c) Some developers consider that the increased capital costs associated with Designing Streets can be offset by greater densities, better sales and stronger revenues. Other developers consider that they are being pressurised into replacing standard house types and site layouts with bespoke design solutions and are unwilling to do so as they are not confident about the market's position in relation to these.

d) Most developers (58%) consider that the planners and roads engineers that they work with do not have a full understanding of Designing Streets policy. A third of respondents consider that local authority personnel do have a full understanding of DS policy.

e) Local authority's attitudes to risk can impede the development of good quality design. Specific issues include:

- Financial risk associated with future maintenance
- Road safety risks associated with the design of junctions and roads geometry.

f) Integrating streets design with requirements for services and maintenance can be problematic; with a clash between design aspirations and adoptable standards (54% of developers reported conflict between the requirements of statutory authorities, utilities and other LA departments). Specific issues include:

- Numbers of parking spaces and their location
- Local authority concerns about potentially more expensive maintenance regimes
- The need to factor some areas where they are not adopted by the local authority.
- The location and size of service strips for utilities – often detailed discussion is needed between local authority, developer and utility provider which can be extremely time consuming
- Agreement of materials and construction technologies for adoptable roads
- Agreement to adopt paths which are remote from the road.
- Street trees which are not adopted.

g) There can be conflict between the requirements for water management systems (SUDs) and aspirations for high quality design proposals.

- Adoption standards can be inflexible and do not take cognizance of the overall design quality of a development.
- Reaching agreement very often involves extensive negotiation and can be extremely time consuming.

'They all have their own agendas and seek all other parties to vary to accommodate their existing requirements.' **Developer Feedback**

3.5.4 Suggestions emerging from Developers' Questionnaire responses

Developers wish for a consistent approach to Designing Streets across all local authorities. Suggestions as to how this can be achieved include:

Understanding of the task

Developers are able to deliver better, more successful places and they need local authorities to provide positive support for new development. Local authority personnel should be cognisant with the principles underpinning good design and be able to consider these holistically, rather than applying policy.

Better Guidance

There have been a number of suggestions which include:

- A review of guidance content and its application
- More detailed and prescriptive guidance
- A joined up approach to guidance between roads and planning departments
- Less guidance and more focus on the assessment process

Knowledge Sharing

- Government should have a role in explaining DS policy, expanding on current guidance when necessary
- There should be a focus on regular multi-disciplinary inter departmental knowledge exchange, and on knowledge sharing between developers, consultants and local authorities
- Ongoing training
- Designing Streets Champions
- Expert facilitators
- Post occupancy evaluation

Monitoring of Local Authority Performance

- Establishing statutory processing timescales for Roads Construction Consents
- Consider rights of appeal for Roads Construction Consents
- Ongoing monitoring of performance within local authorities

Changes to the process

- Making DS guidance more enforceable
- Changes to the consents process in order to minimize the scrutiny needed for each planning application or roads construction consent. For example, competent individuals could be appointed as Approved Certifiers of Design and Approved Certifiers of Construction for some more detailed aspects of RCC (such as construction details). This system is already in place for the Scottish Building Standards.

4.0: Interviews

4.1 Introduction

The Study aimed to achieve a spread of interviewees, selected at random from those who provided questionnaire responses, and aiming at circa six interviews per sector - including local authorities (roads and planning departments), developers and their consultants.

A 'long list' of potential interviewees were emailed or telephoned in the first instance to request an interview, with emails addressed to specific individuals within each organisation. If no response was forthcoming initial emails/telephone calls were followed up by subsequent telephone calls, again to specific individuals.

Although some organisations were very keen to share their experiences of implementing Designing Streets policy, others proved hard to reach. Not all local authorities and developers who were contacted responded.

In particular the response from developers themselves was limited, but their consultants were able to provide a more detailed response.

Some interviewees had very little time available and preferred a telephone interview, others wished to provide a meeting coordinated between a number of staff members – this took time for them to arrange.

4.2 Interview Respondents

Respondents are noted in the table below

Table 2: Interview Respondents

Local authorities (target; 6no local authority responses)		
	Response from planning Dept	Response from roads Dept
Aberdeenshire Council	yes	yes
City of Edinburgh Council	yes	
Fife Council	yes	yes
Glasgow City Council	yes	yes
Highland Council		yes
North Lanarkshire Council	yes	
DPEA Reporters	Response received	
Developers (target; 6no developer responses)		
Glasgow Housing Association		
Stewart Milne		
Scotia Homes		
Places for People		
Consultants (target; 6no consultant responses)		
Turnberry Consultants		
Keppie		
Ryden		
Area		
Page and Park		
Hypostyle		
Pentreath Associates		
Smith Scott Mullen		

4.3 Interview Content

Discussion tended to focus upon the issues which each interviewee considered to be most important. Nevertheless, the following points were used as a basis for discussion in order to provide comparable data.

Table 3: Interview Content

	Local authority Interviews
1	Overview: what guidance is available?
2	Process: how did each LA's approach to Designing Streets develop?
3	Development Control: how are planning applications assessed against Designing Streets?
4	Specific Issues and solutions; what specific issues have been encountered? E.g. SUDs, Utilities
	Developer/Consultant Interviews
1	Overview: what is their experience of LA guidance?
2	Process: how is a design for a development generated and what is impact of designing streets on each stage?
3	Development Management: what is their experience of development control process in the context of Designing Streets?
4	Specific Issues: what specific issues have been encountered? E.g. SUDs, Utilities

Refer to Appendix 3 for details of individual interviews

4.4 Themes arising from Interview Responses

4.4.1 Feedback on guidance

The majority of local authorities are working towards synthesized suites of guidance which cover all aspects of street design and which relate streets to place.

a) Relationship to other guidance

Street layouts can still be based upon older roads guidance in some local authority areas. This includes Transport Scotland Design Manual for Roads and Bridges and "Strathclyde Roads Guidelines".

There is other roads guidance currently in place which remains relevant to street design – for example the "Disability Discrimination Act: Good Practice Guide for Roads.

b) A different kind of guidance

Interviewees have advised that DS policy requires a significant change in approach from previous guidance which was based upon templates for standard design solutions, and used in every location. This resulted in prescriptive roads geometries and generic layouts for streets.

DS policy now promotes a design-led process for new development which aims to provide locally distinctive solutions resulting in a specific sense of place. This marks a major conceptual shift in the way in which site layouts are developed, agreed and assessed by many in the development industry

Sometimes, developers and Council officers find it difficult to reconcile new concepts with older standards.

c) Guidance is required to reconcile complex design criteria

The development and coordination of effective guidance for DS policy has required an iterative, collaborative approach between local authority departments (for example, between planning, roads, roads maintenance, cleansing, land services), and this has taken time to administer.

At the point when guidance has been agreed by local authority departments, it has then to be ratified through reporting, consultation and committee processes. Political support and decision making at a high level have assisted in progressing this process - for example councilor support at Committee.

d) Development of design guidance

Because street design encompasses such a wide range of local authority services, a coordinated approach to formulating design guidance has proved to be very important.

- **In some cases, local authorities have had internal processes and groups in place to review policy and guidance prior to the introduction of Designing Streets.** These have been used to develop guidance for Designing Streets policy. (for example at City of Edinburgh Council)
- **In other cases, no specific mechanisms have been in place prior to DS policy introduction, but inter-departmental meetings between heads of service have identified the need for coordinated action.** Appropriate development and review processes have then been set up (for example at Glasgow City Council).
- **In most cases, the development of DS guidance has involved the review and consolidation of existing guidance documents.** For example, City of Edinburgh Council are currently consolidating existing planning guidance relating to street design into a suite of documents and this will align with guidance for Designing Streets policy; at present they are 50% complete. This guidance does not focus on the process; its primary role will be to explain the policies.

“Edinburgh Design Guidance” will sit beside “Edinburgh Guidance for Streets”. There is separate roads design guidance at present which will be replaced by the new guidance when it is complete.

e) National street design guidance is currently being developed by SCOTS (Society of Chief Officers of Transportation in Scotland). This will be web-based and it is understood that it will provide Scotland-wide guidance supplemented by more detail for each local authority area. It is understood that this is at draft stage (circa 70% complete) and will go out for consultation in the near future. Issues considered include:

- Defining roads hierarchy – within mixed use development
- Addressing aspirations for narrow roads and shared surface
- Emphasizing the need for different ways of working; for example swept path analysis.

f) The way in which design guidance is used;

Interviewees reported that design guidance serves a range of functions:

- **A source of information for developers and their consultants** (Some consultants have been designing innovative street layouts for many years and do not consider that guidance is helpful.)
- **A communication tool between planning, roads and other council departments**, and between personnel within individual departments who may be involved at different stages in the assessment process.
- **As clarification and confirmation of policy** which can then be used at appeals stage to confirm national and local authority policy requirements.

4.4.2 Feedback on Process

Because street layouts developed using DS policy demand a design-led approach, the way in which they are assessed differs from street layouts developed using standard design templates (where assessors have an easier task, based on comparing proposals to a predetermined set of rules).

The effective management of the design and construction of good quality streets demands a degree of technical detail and collaborative working at the outset of the design process. This is very different to a standards based approach where technical detail is required later.

a) Interviewees report that collaborative working between planners and roads engineers has been variable in the past but is now more stable. Where RCC has followed on from planning consent, a circular process can arise where street design is revisited and reviewed afresh against different criteria. There can be resistance to the principles of Design Streets policy, with reversion to standard templates for layouts leading to different design solutions.

Interviewees reported a range of ways in which roads and planning departments interact:

- Planners “anticipate” roads comment in pre application discussions.
- One roads engineer involved at pre application discussions and planning stage, but RCC process administered by a different member of staff (with consequent changes in requirements)
- A single point of contact from roads Department involved at every point in the planning and RCC process – this is the most successful approach.

b) In most cases, the approach to the timing of Roads Construction Consents is flexible. Interviewees advised of the following iterations:

- **Planning consent obtained first, with RCC applied for after consent confirmed.** Prior to DS, this was the sequence used in the vast majority of cases, and it still continues. This has the advantage of minimising financial risk as expensive technical input from consultants is only required after a planning consent has definitely been obtained. On the other hand, if roads layouts which follow the principles of Designing Streets, are used, they may well be accepted by the planning authority only to be refused by the roads Department. This results in significant negotiation and/or a reversion to street design to previous roads guidelines
- **RCC and planning consent applied for together.** This is more costly and time consuming for developers at the start of the development process, but leads to a greater degree of certainty later on. However, some developers and consultants consider that the detailed proposals required for RCC can be too restrictive at planning consent and are not keen to take this route.

c) Some developers can be unwilling to use the Designing Streets Process; and wish to utilise standard house types. Often, they prefer a degree of certainty in terms of timescales for processing consents, and design parameters. Where negotiation, or decision-making processes, are extended as a result of discussions about "non-standard" design, some developers may revert back to site layouts which comply with older guidance, rather than Designing Streets policy.

d) The Traffic Regulation Orders (TRO) Process A TRO is a legal document that creates a local traffic rule – for example bus lanes and one way streets. Permanent TROs have to go through statutory consultation procedures, which involve local councils, owners of frontage property and other stakeholders such as the police and transport operators. Official notices have to be published in the local press and are also posted "on street" to invite comments from the general public. This process can result in resident consultation which conflicts with planning applications.

e) Schemes which are contentious and where streets design is poor are likely to be refused planning consent but may get by on Appeal/Review as it is understood that streets design is often only one of many issues which Reporters or members of the Local Review Body take into consideration when making their decision. Robust policy and guidance is therefore essential in order to provide robust evidence if planning applications go to appeal.

The Scottish Government have consulted with Reporters to determine the weight given to DS policy during the appeals process. Reporters have advised that they would be unlikely to raise the issue of street design without it being explicitly mentioned in material regarding the planning application.

Only one example was found, to the knowledge of the Reporters interviewed, of an appeal that explicitly involved a masterplan's relationship with Designing Streets. In this case, the reporter dismissed the appeal partly on the grounds of a selective and misinterpreted application of DS.

f) Interviewees reported that different local authorities have approached the incorporation of assessment of DS policy aligned street design into their planning and roads construction consents processes in different ways. These have included:

i) Use of the process as identified within the DS policy document (as advised by Aberdeenshire Council)

Few local authorities are using the development processes identified within DS policy (See Fig. 2; Page 10) Nevertheless, where it has been used they have worked successfully.

Within **Aberdeenshire Council**, the Roads Development Section comments on planning applications. If a Roads Construction Consent is needed, then a Street Engineering Review /Quality Audit will be required (at PPP stage this is conditioned). This audit is based upon the Residential Street Approvals Processes outlined in Designing Streets policy, including Street Engineering Reviews, Quality Audits and Road Safety Audits. If this is not produced, roads will maintain their objections to the application. Conditions on planning applications will not be cleared until Quality Audits and Engineering Reviews are produced. Aberdeenshire Council have found that the proportion of planning applications without parallel RCC applications has fallen. The planning application process now takes longer, but obtaining an RCC can take less time. Where a “non standard” layout is used, proposals are assessed against a package of information including swept path analysis, traffic calming, geometries, junctions and sightlines, parking levels, full SUDs assessments, evidence of consultation with Scottish Water and SEPA, and 3D visuals. In order to comply with these information requirements, developers will need an engineer involved at an earlier stage than previously.

The new masterplanned development at Chapelton is typical of a **large master planned development**. Here, the local authority and developer have used a DS Approach, comprising Street Engineering Reviews and Quality Audits. The design team for Chapelton have identified key concepts for design rather than developing detailed proposals for roads layouts. (roads have not agreed to all of these as yet.) This is seen as the way forward for a development of this size.

A similar approach has been rolled out to **smaller sites** (including 6 or 7 houses) and can flag up issues which could have caused problems at RCC stage. This has led to improvements in SUDs siting, and better consideration of utilities.

ii) The ad hoc adaptation/inclusion of DS into standard local authority processes (as advised by a number of local authorities).

This tends to be less successful because:

- Timescales for processing applications are very tight following the recent Planning Act and do not allow individual planning officers much time to consider street design and to discuss this with other departments.
- Some individual Development Officers do not have the skills to assess proposals and provide conflicting or inappropriate advice.
- There would not appear to be any individual who is well placed to mediate between LA departments and statutory authorities at the consultation stage of a planning application (for example between Transport Departments and Scottish Water). Developers and their consultants report that planners (who collate consultation responses) often 'stand back', leaving consultants to broker solutions.
- There can be differing assumptions and requirements at different stages of the consents process, associated with different consents. For example Roads Construction Consent may require different roads geometry to that accepted at planning stage, leading to abortive work and/or significant negotiation.
- In some cases, developers submitting “traditional” layouts designed around previous standards are assessed against older guidelines.

iii) The use of a Pilot project to ‘test’ the process (As advised by East Dunbartonshire Council)

As an alternative to a top- down "committee-led" approach to identifying best practice processes to incorporate the requirements of DS policy into the

development process, East Dunbartonshire Council have used a single development as a pilot project to develop and test ways of collaborative working. The developer reports that this has been successful – the additional time required for DS at the beginning of the process has been offset by significant reductions in the time taken to process planning applications and roads construction consents. It is understood that this approach is intended to be rolled out to other applications in the future.

iv) The development of comprehensive residential design guidance (as advised by Glasgow City Council)

Although at draft stage, it is understood that GCC's guidance links physical requirements (such as road widths and geometries) to the design process, with a clearly identified review process linked to each development stage. This has been developed jointly by roads and planning departments. It should ensure that all LA officers, developers and statutory bodies will have certainty about what is required by GCC.

v) Workshop-based collaborative process (As advised by Fife Council)

Where a larger scale master plan is required for significant new development, the Council will lead a workshop based process at an early stage. This includes all LA personnel, the developer and their consultants. This has been proven to result in significant improvements to design layouts, achieved very rapidly and with buy-in from all parties.

The use of workshops is conditioned as part of the planning consent process (including PPP).

vi) Specific personnel identified to scrutinize proposals from day one (As advised by Argyll and Bute Council)

For major applications, senior roads department engineers (who are ultimately responsible for final decisions) are involved from pre-application stage onward. This removes the possibility of conflicts between decisions made at planning and Roads Construction Consent stage.

4.4.3 Feedback on Practice

Designing Streets policy is seen by most developers, consultants and local authorities as an opportunity to develop good quality street design. Nevertheless, the collaborative approach required can demand a resource hungry process. Although it can be effective, some local authorities have been reluctant to commit staff time.

a) Developers advise that consultants with the relevant skills and experience can be in short supply, and that consultants with the right expertise are invaluable in negotiating the consents process.

b) Some developers are not providing a design-based approach and are applying standard solutions using previous roads guidelines which are then assessed by local authorities on this basis. Other developers are keen to provide more holistic street designs but can be forced to revert to more conventional solutions based upon previous guidance if it takes too long to negotiate solutions with local authorities, utilities and statutory bodies.

c) There is concern that developers and local authorities will primarily seek to provide DS policy compliant developments, rather than focusing on good street design in the first instance. A standards based approach to street design has been in

place for many years prior to the introduction of DS policy. Because they are very used to working within this more prescriptive framework, some developers, local authorities and consultants have gravitated towards the incorporation of specific design features which they consider to be "Designing Streets compliant", rather than utilising the Design-led process advocated in Designing Streets policy. These elements can include:

- Shared surfaces
- Dwellings at the back of the pavement
- The use of non-standard materials
- "Nodes" at junctions with different hard landscaping to elsewhere in the development
- Reduced radii at junctions
- Where new developments provide an addition to existing developments designed to older roads guidelines, LA s and developers advise that they do not always consider that "DS policy type layouts" are appropriate

d) There is concern that innovative street design may be less acceptable to the market

Developers need evidence that different and unusual types of development will suit the market, and prefer a degree of certainty in terms of timescales, and design parameters. They often wish to use standard house types which are not flexible – it can be difficult to bring them closer to the pavement or to alter the location of parking.

e) Maintenance

Most roads and access ways forming part of a new development will be adopted by the local authority, who will be responsible for their maintenance, together with the maintenance of associated street furniture such as signage and lighting columns.

As this can represent a significant financial obligation, local authorities have traditionally restricted the palette of materials which designers can use in order to avoid the use of very expensive materials, and in order to ensure that materials can either be easily sourced or kept in stock.

Because Designing Streets policy is focused on the high quality design of streets and public spaces, designers are coming forward with proposals which incorporate non-standard materials. These require to be sourced and can cost more than their standard equivalent.

Some local authorities (e.g. City of Edinburgh Council) will allow limited use of non-standard materials provided that a percentage is set aside for further repairs. Other local authorities are considering the use of a Bond (a sum of money set aside) to cover future costs for non-standard repairs. Most local authority interviewees restrict materials to a limited palette or are considering doing so.

f) Statutory Authorities and Sustainable Urban Drainage

The consents process can involve significant negotiations about preferred systems, and responsibilities for maintenance for water management systems or SUDs (Sustainable Urban Drainage Systems).

At present, local authority roads departments are responsible for the design and maintenance of SUDs systems for roads. The document "SUDs for Roads" details adoptable standards relating to this section of the SUDs system.

Scottish Water is responsible for all other common SUDs systems and generally provides "end of line" SUDs treatment as SUDs ponds. The document "Sewers for Scotland" details adoptable standards relating to this section of the SUDs system. There are no standards which cover all parts of the SUDs system.

Inevitably, there is crossover between the two – water from local authority SUDs systems for roads is often taken into Scottish Water's SUDs pipes and ponds for treatment. Deciding on what exactly is required, and who takes responsibility for different parts of

the system can be the subject of extensive negotiation for projects on a site by site basis, which can be very time consuming and is often exacerbated by the need to consider flooding or improvements to SUDs and drainage out with the development site.

A system of devising and agreeing shared responsibilities for maintenance of SUDs systems has been set up. Local authorities and Scottish Water can, in theory, set up a Section 7 Agreement to agree shared maintenance responsibilities. In practice, this has only been taken up on a handful of occasions.

g) Rural Locations

There is concern from local authorities in rural locations that Designing Streets policy is not always the best fit for all situations. For example, many towns and villages have high streets and main roads which are also 'trunk' roads – they therefore have to comply with Transport Scotland's requirements so it is not always possible to apply Designing Streets policy.

In other locations, settlements are so small that urban street solutions are not appropriate. Local authorities who were interviewed (for example Argyll and Bute Council) are developing their own guidance for these types of locations.

4.4.3 Suggestions emerging from interviews

- **Most interviewees would welcome a degree of flexibility in approach**, and agree that pre-application discussion is extremely helpful. Less negotiation on specific issues, such as SUDS, during the consents process would be helpful.
- **Some interviewees have advised that rolling out the specific process as identified within the DS policy document would assist.**
- **Most have advised that a 2 Stage RCC process would be helpful to resolve reported differences of opinion between planning and roads departments regarding roads design.**
 Stage 1 could potentially cover geometry and levels, and stage 2 cover detailed design including construction details, materials, lighting, street furniture.
 stage 1 would need some flexibility – for example covering principles and approach rather than determining specific geometries for particular locations at larger developments. Broadly, areas addressed could include those included in the street engineering review process identified in DS policy.
 A two stage RCC process would allow roads to define precisely what information would be needed to assess proposals at planning stage. Often developers will not have an engineer on board at this stage so this approach may prove more costly for them.
- **There is potential to redefine the role of the planner** – as a moderator, for example coordinating SUDs, roads design.
- **Sometimes individual officers within local authorities do not have the skills to assess "non-standard" streets layouts.** Individual officers within development management can lack design skills and it can be difficult for them to participate in discussions. Interviewees advised that further training for designers and road engineers could be useful if they are thoroughly taught at university level. Partial training is not always helpful.
- **Many interviewees advised that a "Knowledge Base" would be extremely helpful** – an organization or resource which acts as a body for DS and which is neutral with an educational function.

- **Case studies of completed development and precedent visits were suggested by most interviewees.**
- **Further training was suggested** – for planners, roads engineers, developers and consultants.
- **Post Occupancy Evaluation;** it is important to consider the views of residents. Interviewees have advised that – when asked – the public seem to be generally happy with the idea of changing street design. Some aspects of DS policy may prove more attractive than others in terms of the market and in terms of resident's safety and comfort.
- **A Place-making expert in the local authority** who could reconcile place and roads, together with providing further training on Designing Streets could be helpful.
- **Better solutions for agreeing and managing SUDs systems need to be considered** – this is dependent on maintenance arrangements between local authorities and Scottish Water. Scottish Government intervention could be useful in this regard.
- **Appointing a Scotland-wide expert, or expert panel,** to advise and comment on applications would be beneficial (e.g. an organization such as A&DS or a very experienced consultant).
- **Further thought could be given to** closely linking the visual analysis of a B-Plan tool and the content of Design Statements. This could help address the issues concerning applications which lack clear, robust evidence regarding streets/roads that would be relevant and available at appeals stage.

5.0: Case studies

5.1 Introduction

Feedback from the online questionnaire supported the research methodology, as many respondents suggested that it would be very useful have more completed examples of best practice in good street design available, in a Scottish context.

Previous feedback from all stages of the research process had suggested that many initial design proposals and master plans have achieved planning consents but had not successfully negotiated the RCC process. Care was taken, therefore, to select Case Studies which had travelled as far as possible through the consents process, in order to demonstrate what can be achieved.

5.2 Methodology

The online survey included a section which asked respondents (both local authorities and developers) to suggest master plans and developments which could be used as potential case studies.

Developers and local authorities suggested a total of twenty eight examples which they considered might be suitable. These were methodically assessed using a two-stage process to determine a final eight Case Studies which were then examined in more detail, with fact sheets for each compiled.

In order to avoid a subjective selection of Case Studies (for example based upon perceived design quality, rather than alignment with DS policy) the following criteria were used;

Stage 1: Longlist

All potential case studies were assessed and a longlist of 19 developments was drawn up using the following criteria:

- Some phases of development should be complete, or near complete in order to demonstrate that designs comply with both RCC and planning consents.
- A Scotland-wide geographical spread with urban, rural and edge of settlement locations.
- A range of development sizes from new towns and neighbourhoods to small scale infill.
- Inclusion of some developments using standard developer house types.

Stage 2: Shortlist

Shortlisted projects were assessed against Designing Streets policy using a standardized assessment tool that incorporates the B-Plan colour-coded technique as included on page 21 of DS. This was developed specifically to ensure that each development was examined against every aspect of DS policy and referencing specific pages in the DS policy document.

Stage 3: Final Case Studies

Eight suitable developments were finally selected as Case Studies and these are noted in the table below. They were selected in order to demonstrate a range of responses based upon differing development scales and demonstrating from full alignment with the principles of DS to partial compliance.

Table 4: Final Case Studies

	Name	Location	Authority	Developer	PP	Phased development	Density	Type
Larger Master Plans with subsequent phased development								
1	Chapelton	Stonehaven	Aberdeenshire Council	Elsick Developments	Yes	Phase 1 Planning Consent Pending	Mid density - mixed	Edge of settlement
2	Greendykes North	Edinburgh	City of Edinburgh Council	Phase 1 Castle Rock Edinvar and ASL Phase 2 CEC Hart Builders Ltd Hypostyle	Yes	Phase 1 is complete Phase 2 is at design stage	Mid density - mixed	Regeneration area
3	Wauchope Square	Edinburgh	City of Edinburgh Council	Places for People Housing Association Page & Park, Hypostyle; Elder and Cannon	Yes	Phases completed	Mid density - mixed	Regeneration area
Developments of over 60 units								
4	Lairds Gate	Stewarton	East Ayrshire Council	Stewart Milne	Yes On site	On site 200 units	Low density	Edge of settlement
5	Gracemount	Edinburgh	City of Edinburgh Council	Cruden	Yes	First phase complete- Smith Scott Mullen circa 100 units	High density	Urban
6	Calderwood	East Calder	West Lothian Council	Stirling Developments	PPP for master plan	First phase moving to consent stage	Low density	Edge of settlement
Developments of under 60 units								
7	Willowfield Road	Nitshill	Glasgow City Council	Merchant Homes	Yes	Starting on site – 49 units	Low density	Urban
8	Coal Board Site	Twechar	East Dunbartonshire Council	Places for People	Yes	Starting on site – 20 units	Medium density	Edge of settlement

5.3 Fact Sheets

Fact sheets were then compiled which analyse case studies in an easy to understand, methodical way, using a format developed collaboratively with the Scottish Government. Each of the fact sheets contains a comparable standard technique of assessment. These are enclosed in Appendix 4, with both a blank and an annotated template for the assessment included overleaf.

Figure 7 (a): Draft Assessment Tool (blank)

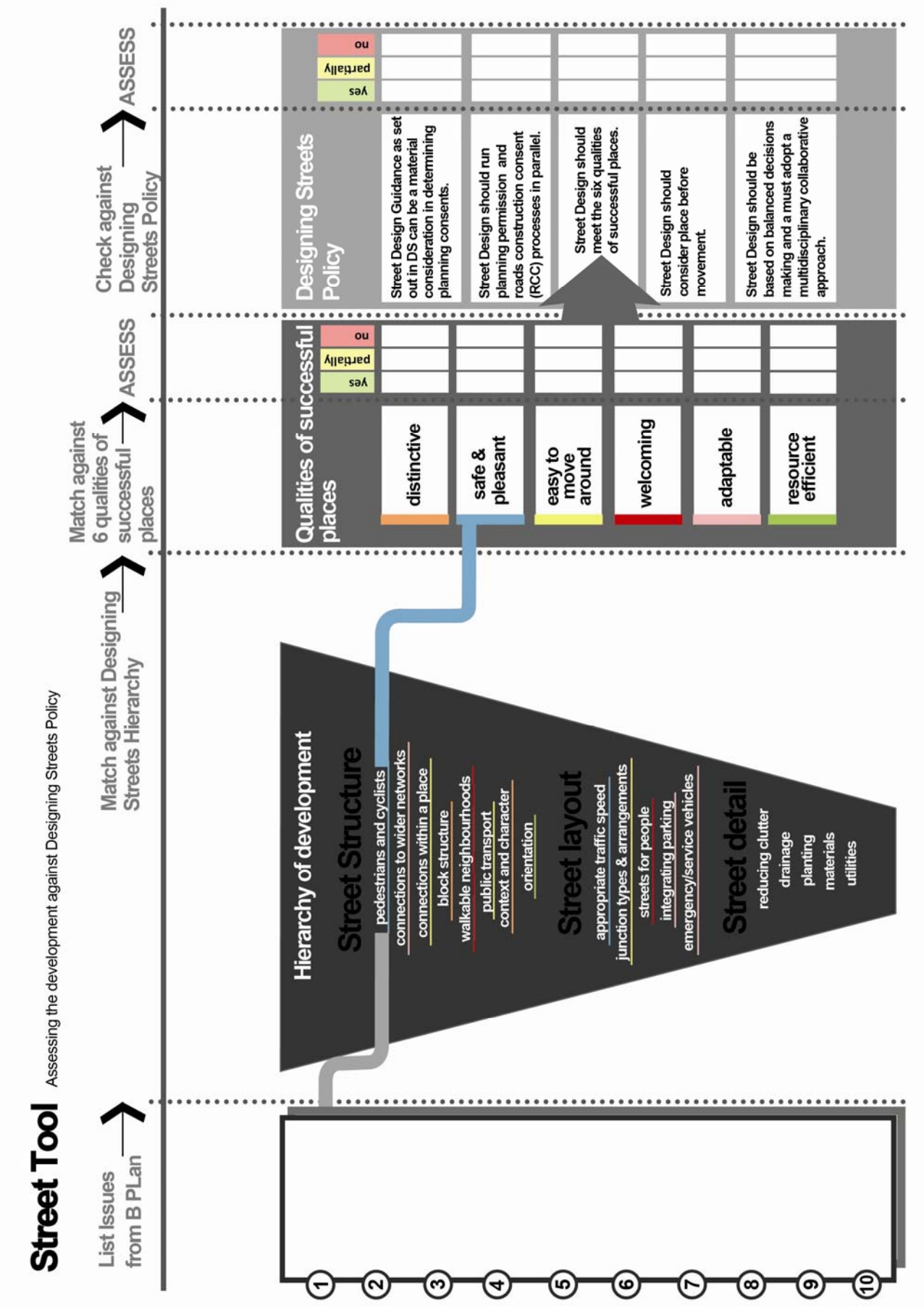
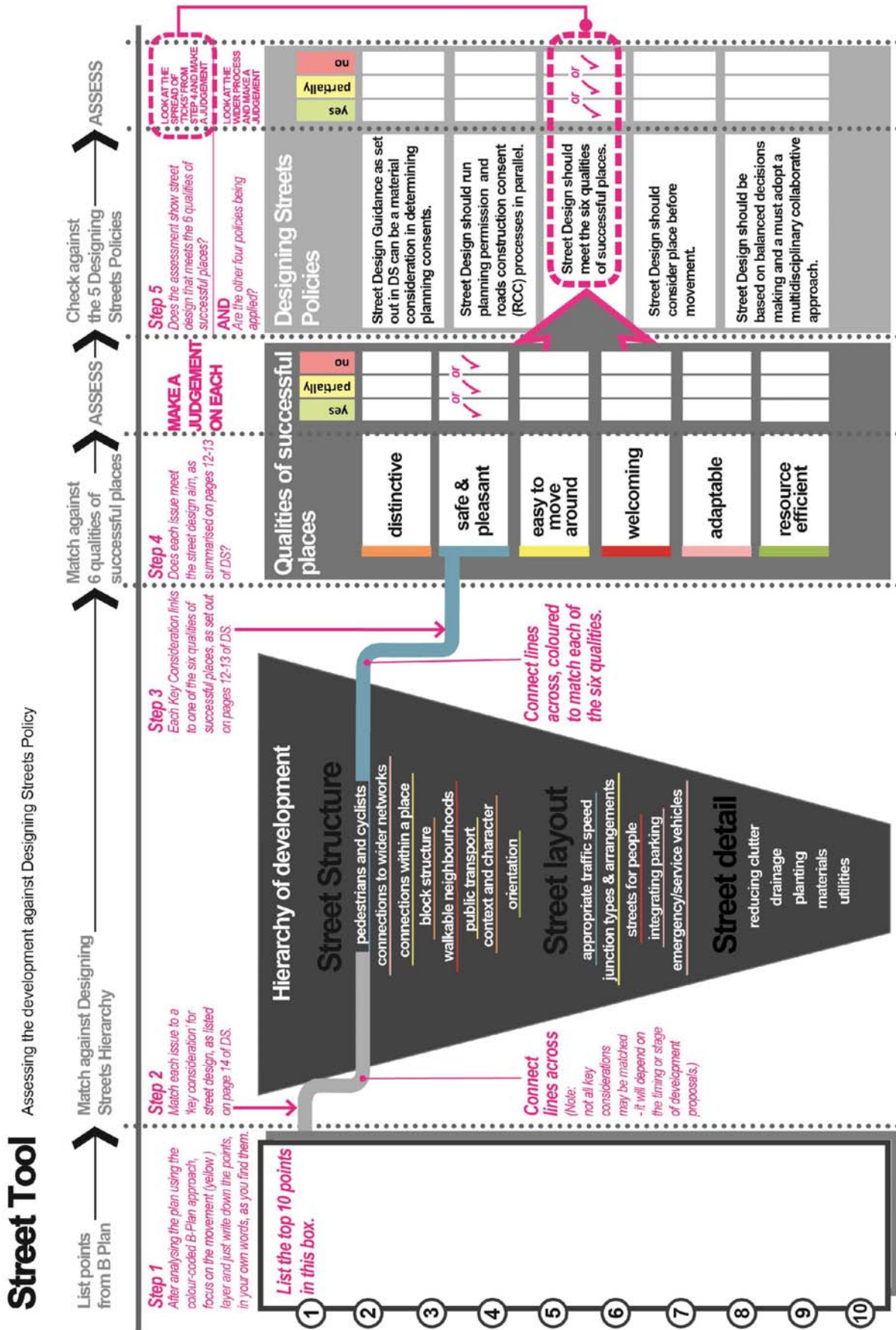


Figure 7 (b): Draft Assessment Tool (with explanation notes annotated in pink)



5.4 Observations from analysis of Case Studies

The case study assessments were based upon a number of key stages – each of which was related to the B Plan technique. This ‘step-by-step’ process proved to be a very helpful way to break down the assessment of master plans and site layouts. Importantly, it allowed assessors to relate their analysis directly to the six qualities of successful place-making and then allowed a consistent check to be made against all of the five policies within DS. It can therefore demonstrate whether a masterplan is compliant with DS or not.

With further development and simplification of its user interface, this method has scope to provide both planners and developers with a standard tool used in pre-application discussions and planning applications. All of the case studies are in Appendix 4 but one of the eight follows overleaf:

Figure 8: Example Case study: Wauchope Square

designing streets

case study



Wauchope Square, Edinburgh

Location: Parc Craigmillar
Developer: 6 hectares; 250 new, detached homes
Size: New Residential
Type: Phased construction currently completing
Stage:

Background

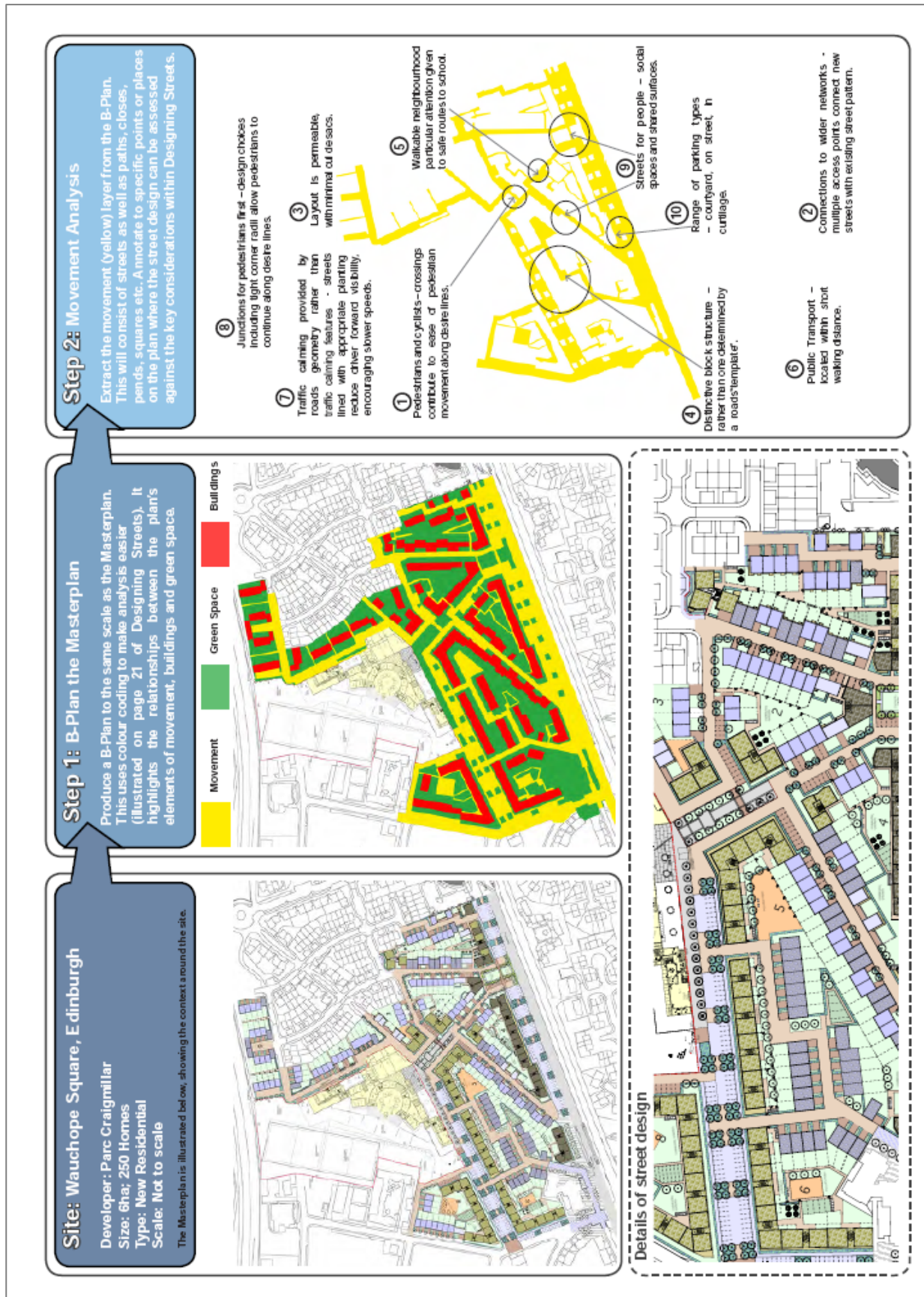
The master plan for Wauchope Square forms including safe access to the local primary school part of the wider regeneration of the Craigmillar and access to public transport. It provides a consistent approach to the design of streets, squares, public realm and greenspaces. The Street design complies with the Edinburgh Public Realm Strategy, which outlines the Council's aspirations for a high quality public realm. It also complies with CEC Road Construction Guidelines for Development.

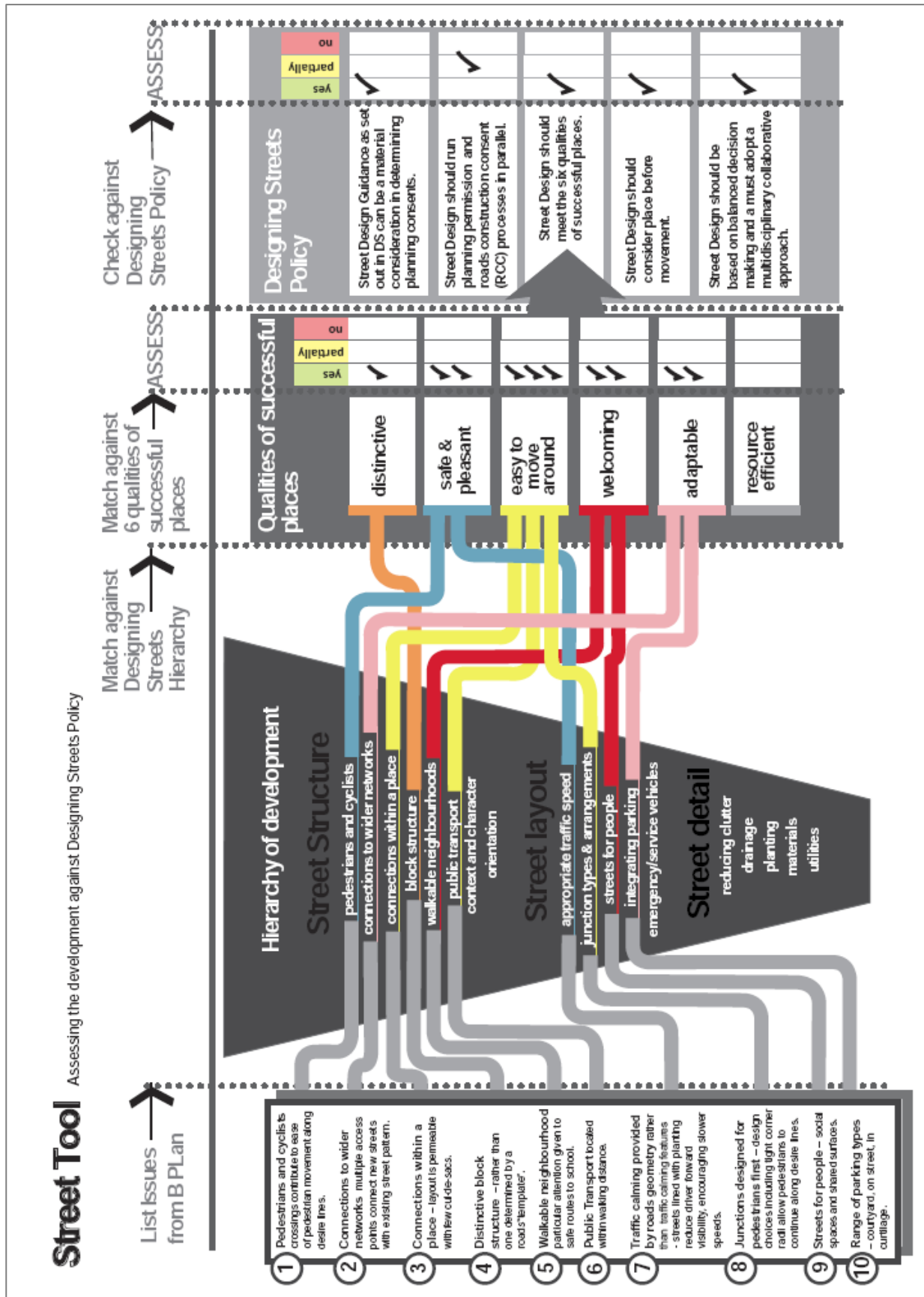
The master plan process included input from the City of Edinburgh Council Roads, Traffic and Planning Departments, and the local community. Niddrie Mains Drive providing the main vehicular access. These streets are identified as 'collector

Between these routes, streets have a specific identity where pedestrians take priority. These are based upon 'mews play streets', (a series of courts which challenge the driver to negotiate right angled manoeuvres) 'village play streets' provide continuous gardens, and 'garden play streets' (landscaped spaces and front gardens). Within housing blocks, inner courtyards provide both private gardens and shared community gardens.

This development complies with four 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.





1. Massing and scale integrates development into existing fabric
2. Hedges and trees line pedestrian spaces
3. Connectivity between existing and new development
4. Streets are safe for children to play
5. Pedestrian Street
6. Views through pedestrian pends provides a means of navigation

1	2	3
4	5	6

Images



6.0 Summary Evaluation and Conclusions

From the results of the initial survey into DS policy guidance, through questionnaire responses and Interviews to consideration of Case Studies, it is evident that the majority of respondents support the overall approach advocated in DS policy, albeit with some concerns about specific issues.

Nevertheless, the use of DS requires a significant change in approach for all involved in the development process.

Previous guidance was based upon templates for standard design solutions, resulting in prescriptive roads geometries and generic layouts for streets.

DS policy now promotes a design-led process for new development which aims to provide locally distinctive solutions resulting in a specific sense of place. This marks a major conceptual shift in the way in which site layouts are developed, agreed and assessed.

6.1 Evaluation of guidance related to implementing DS.

6.1.1 Development of Design Guidance

The majority of local authorities are working towards synthesized suites of guidance which cover all aspects of street design and which relate streets to place. Most local authorities (88%) promote Designing Streets policy but often guidance is under development (68%) but not yet published.

Because street design encompasses such a wide range of local authority services, the development and coordination of effective guidance for DS policy requires an iterative, collaborative approach between many local authority departments.

In some cases, local authorities have had internal processes and groups in place to review policy and guidance prior to the introduction of Designing Streets, which have been used to develop guidance for DS policy. In other cases, no specific mechanism has been in place prior to DS policy Introduction, but a need for coordinated action has been identified and appropriate development and review processes have then been set up.

In most cases, the development of DS guidance has involved the review and consolidation of existing guidance documents across two local authority departments - Supplementary Planning Guidance and Roads Department Guidance.

National Street Design Guidance is currently being developed by SCOTS (Society of Chief Officers of Transportation in Scotland).

6.1.2 The way in which Design Guidance is used

Guidance is used as a Communication Tool within local authorities – coordinating individual departments who are involved at different stages in the assessment process. It also provides Clarification and Confirmation of National and local authority policy requirements

6.1.3 Barriers to effective implementation of guidance.

Barriers identified at all stages of research (review, questionnaire and interviews) include:

Accessibility

- It can be difficult for developers and consultants to locate relevant Street Design Guidance; websites and telephone advice can be confusing.
- Relevant guidance can be spread across a number of guidance documents.

Content

- Guidance can be very generic, without advice on place specific, contextual solutions.
- Often, guidance has not been developed collaboratively between planning and roads departments.
- Guidance may refer to out of date standard designs for roads, which is used to assess proposals for streets.
- Guidance does not consider how DS policy for streets integrates with the wider context.
- Information about servicing and utilities is important but overlooked. For example guidance on the type and size of waste collection vehicles is often overlooked but is important as it can impact on street geometries
- There can be no explanation about collaborative working processes.
- Partially compliant guidance can create difficulties in terms of poor communication between local authority personnel and departments, and confusion for potential applicants.
- Some developers would prefer guidance to be more consistent across local authorities.

6.2 Evaluation of Process related to implementing DS.

6.2.1 The Consents Process (Planning Consents and Roads Construction Consents)

There is a need for a structured, collaborative approach to design development and the assessment of proposals as they progress through the development process. This is not always in place, with specific difficulties reported in coordinating planning consents and Roads Construction Consents.

local authorities report that they either have collaborative working methods in place to resolve potential conflicts during the consents process, or are currently developing them. These include:

- **A focus on collaborative working arrangements between roads and planning departments**, including assessment of roads geometry and levels by both planning and roads departments at an early (pre application) stage in the process.
- **The development and use of specific design tools**; including design workshops attended by all involved in the development process.
- **The use of a Processing Agreement** – which sets out the local authority's commitment to collaborative working at key stages.

6.2.2 Processing Planning Consents and Roads Construction Consents in parallel

In most cases, local authorities' approach to the timing of RCC is flexible. Some planning consents and RCCs currently being processed in parallel, while in other cases RCCs are pursued after planning consents are obtained.

Some developers and consultants have advised that the DS approach involving early resolution of all street design issues was helpful, with a greater degree of certainty and an overall reduction in timescales to achieve consents. However, others reported that parallel processing of Roads Construction Consents requires a greater degree of technical detail at an earlier stage, in order that detailed consideration of design, material choices and construction details can be assessed. This process can be expensive to

resource and can also be overly restrictive – especially where master plans are followed through by phased development in the longer term.

Where Roads Construction Consent is not processed in parallel with planning consent, local authorities aim to give assurances at planning stage that proposals will be accepted at RCC stage. This is not always successful, and sometimes RCC requirements will be found to differ.

Most local authorities would be prepared to endorse a streamlining of consents for streets/roads design. However, they consider that fast-tracking applications because they are DS compliant would not be feasible, as there are many other issues which need to be considered.

6.2.3. Timescales

Developers agree that high quality design is worth pursuing. However, they can be time-constrained and if the process takes too long they can be forced towards 'tried and tested' design solutions which will not take as long to move through the consents process. Often these solutions are based upon older roads guidance.

Developing proposals based upon DS policy is perceived as being more resource and time-intensive at an earlier stage. A significant amount of technical detail is now required at the outset of the design process, which was not the case previously. Nevertheless, some developers have reported that there can be a consequent, faster assessment of consents. It is important, therefore, that this advantage is not lost through contradictory requirements and negotiation at the latter stages of the consents process.

6.2.3 Barriers to effective processes to implementing Designing Streets

Barriers identified at all stages of research (review, questionnaire, interviews) include:

Design Quality

- Some developers and LA officers are unsure about what is required in terms of design quality and are not aware of completed examples of best practice which would assist them.
- The focus on Designing Streets Compliance rather than good street design has the potential to result in the return of a standards based approach
- There is concern that DS policy is seen as optional, and is not enforced.
- Some developers can be unwilling to use the Designing Streets Process; and wish to utilize standard house types and layouts.

Lack of consistency

- A minority of local authorities reported that they provide advice on how to assess and evaluate design proposals to confirm compliance with Designing Streets policy.
- Sometimes, Development Management lacks advice on the basis for consistent, rational assessment against Designing Streets policy.
- Where senior roads engineers are not involved in assessing planning applications at an early stage, conflict is almost inevitable later.
- On some occasions, the role of the planner has been seen as that of a 'tick-box' administrator, unwilling to take on the role of mediator.
- The TRO process can result in conflict with planning applications.
- Some developers seek certainty and a Scotland-wide consistency of approach from local authorities.

Extended timescales

- Timescales can be more protracted where innovative street design is attempted, as there is confusion about criteria for assessment and a need to negotiate solutions for SUDs, utilities, cleansing etc.

- Innovative proposals can gradually lose individuality as developers and their consultants change proposals to more conventional solutions in order to achieve consents within reasonable timescales and avoid delays

6.3 Evaluation of Practice related to implementing DS

6.3.1 Defining good street design

There is a general frustration and lack of common understanding about what constitutes good street design, which is clearly demonstrated by questionnaire responses.

Most developers (83%) consider that they and their consultants are able to develop master plans which are fully compatible with Designing Streets policy. Most developers (58%) also consider that the local authority planners and roads engineers that they work with do not have a full understanding of Designing Streets policy.

However, virtually all local authorities (95%) consider that the majority of developers and their consultants do not understand Designing Streets policy and would benefit from more training and knowledge sharing.

These results suggest a lack of communication and collaborative working between all parties

6.3.2. The importance of the market

Residents' reactions underpin developers' choices of street design solutions. Developments need to appeal to the public in order to generate sales.

Some developers consider that the increased capital costs associated with Designing Streets can be offset by greater densities, better sales and stronger revenues. Others consider that they are being pressurized into replacing standard house types and site layouts with bespoke design solutions and are unwilling to do so as they are not confident about the market's position in relation to these.

Developers need evidence that different and unusual types of development will suit the market, and prefer a degree of certainty in terms of timescales, and design parameters.

6.3.3 'Designing Streets Compliant Development'

A standards based approach to street design has been in place for many years prior to the introduction of DS policy. Because they are very used to working within this more prescriptive framework, some developers, local authorities and consultants have gravitated towards the incorporation of specific design features which they consider to be 'Designing Streets Compliant'. This approach is at odds with design as a broad creative process which is concerned with how places work as well as how they look. The policy on Architecture and Placemaking for Scotland defines good design as:

'... not merely about how building looks... it is an innovative and creative process which delivers value'

6.3.4 Maintenance

Because Designing Streets policy is focused on the high quality design of streets and public spaces, designers often come forward with proposals which incorporate non-standard materials. These require to be specially sourced and can cost more than their standard equivalent.

Some local authorities (e.g. City of Edinburgh Council) will allow limited use of non-standard materials provided that a percentage is set aside for further repairs. Other local authorities are considering the use of a Bond (a sum of money set aside) to cover future costs for non-standard repairs. Most local authorities restrict materials to a limited palette or are considering doing so.

6.3.5 Rural Locations

There is concern from local authorities in rural locations that Designing Streets policy is not always the best fit for rural situations.

6.3.6 Practical Barriers to implementing Designing Streets.

Barriers identified at all stages of research (review, questionnaire and interviews) include:

Local authorities' attitudes to risk. Specific issues include

- Financial risk associated with future maintenance – for example the use of non-standard materials which are costly or difficult to replace
- Road safety risks associated with the design of junctions and roads geometry – for example ensuring adequate sightlines and traffic calming.

Integrating streets design with requirements for services and maintenance can be problematic, with a clash between design aspirations, technical requirements and adoptable standards (54% of developers reported conflict between the requirements of statutory authorities, utilities and other LA departments).

There can be conflict between the requirements for water management systems (SUDs) and aspirations for high quality design proposals.

- Adoption standards can be inflexible and do not take cognizance of the overall design quality of a development.
- Reaching agreement between all parties very often involves extensive negotiation and can be extremely time consuming.

Concerns about maintenance which lead to changes in material choices

- Consideration of future maintenance requirements can negatively impact on materials choices
- There are no mechanisms in place to allow for the use of non-standard materials
- Often a limited range of construction details is acceptable.

7.0 Recommendations

A wide range of recommendations have been identified at each stage of the research process, derived from feedback from developers and local authorities. Some are more or less achievable than others. Those that can be immediately addressed, or which should be prioritized, are noted below:

7.1 Guidance

Recommendations include:

- **National guidance:** Determine timescales for draft SCOTS Roads Development Guidance and review against DS when issued. Ensure that any new national 'technical' guidance works with DS
- **Local Guidance:** Encourage local authorities who are using outdated streets design guidance to update it, and set suggested timescales for completion of revised guidance.
- **Improve access to guidance:** Provide advice to local authorities on how to improve accessibility for street design guidance on their websites. Encourage local authorities to provide suited guidance which integrates current guidance on context and placemaking, technical design requirements, and the designing streets process, including guidance on information to be expected from developers to allow assessment by local authorities.

Suggested First Steps include:

- Confirm timescales with SCOTS
- Contact relevant local authorities to facilitate progress
- Provide advice on requirements for guidance content

7.2 Process

Recommendations include:

- **Promote an integrated approach to the design process** based upon multi-disciplinary working and a shared understanding that the process stems from applying design principles, rather than design standards.
- **Assist and advise local authorities to put in place effective, structured, processes** including pre-application consultation processes, 'Processing Agreements' for major development and consistent assessment of applications.
- **Monitoring of local Authority Performance;** Establishing statutory processing timescales, and ongoing monitoring of performance within local authorities
- **A 2-Stage Roads Construction Consent process is recommended.** Stage 1 could potentially cover geometry and levels, and stage 2 cover detailed design including construction details, materials, lighting, street furniture. Stage 1 would require some flexibility – for example, for larger developments broad principles and approach would be required, rather than determining specific geometries for particular locations.

It is suggested that timescales for determination are introduced together with 'deemed refusal' and a right to appeal. This makes good sense for the following reasons:

- It ratifies a process which is happening anyway in many local authorities
- It encourages effective collaborative working – integrating roads and planning input - which can focus on shared assessment of urban design
- It is a good fit with the design process
- There should be no significant additional work, risk or additional costs for developers for RCC, because a single package of information will meet both planning and Stage 1 RCC requirements.
- A first step towards a single consent
- Previous research (Action Research on Road Construction Consent) corroborates this approach

Suggested First Steps include:

- Consultation with SCOTS and Transport Scotland on 2-stage Roads Construction Consent, using DS as central to simplifying the process (see figure 9).
- Update Homes for Scotland

7.3 Practice

Recommendations include:

- **Rationalising criteria for SUDs;** including Scottish Government facilitation of better communication and working methods between local authorities and Scottish Water, who each have responsibilities for different aspects of the surface water management system, and their own adoptable standards.
- **Assisting local authority officers with the assessment process associated with consents.**
 - **National street design enablers** working with planning and roads departments to assist them with the assessment of individual applications (as an alternative to review panels)
 - **A place-making expert within each local authority** who can assess proposals and provide further training on Designing Streets
 - **A standard assessment tool** is being developed which will be piloted and then published on the Scottish Government website
 - **Post occupancy evaluation** Structured review of completed projects
- **Building Confidence**
 - **Knowledge Sharing;** A focus on regular multi-disciplinary inter departmental knowledge exchange, and on contact and good communication between developers, consultants and local authorities.
 - **A "Knowledge Base";** an organization or resource which acts as a body for DS policy and which is neutral with an educational function.
 - **Focus on Community involvement,** education and engagement
 - **Specific focus on further guidance and case studies for rural areas**

- **Further clarity and agreement of specific issues** such as adoptable material palettes, construction techniques, maintenance and cleansing service vehicle access.
- **Further case studies of completed projects** that include technical analysis or information.

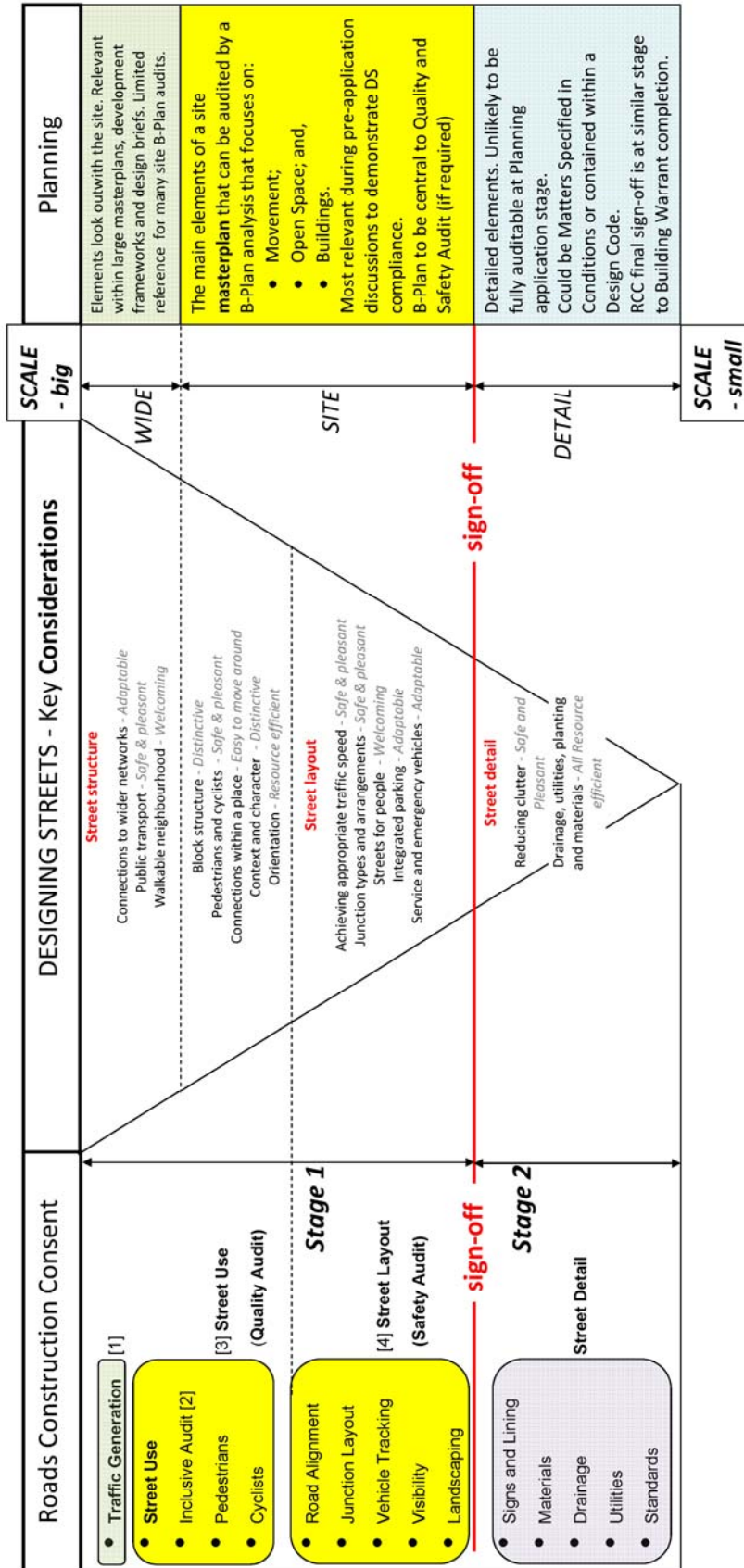
Suggested First Steps include:

- Scottish Government meeting with Scottish Water.
- Assessment tool piloted on a range of development proposals within different local authorities to test its viability.
- Local authorities and developers invited to select Street Design Champions.
- Consideration of suitable framework for developing a shared knowledge base – for example industry-wide forums, website, links to other organisations. This could include regional ½ day knowledge sharing workshops where delegates share best practice and their experience of Designing Streets policy.

Process Mapping of the Key Considerations of DS alongside a 2-stage RCC and Planning Permission.

This proposed process mapping diagram aims to show that the design aspects of streets, as defined by DS, are the key to consolidating supporting information. Supporting audits will be needed where engineers ask for technical information to supplement the core information used as a basis for B-Plan analysis.

Both the diagram below and the 'Street Engineering Review' (SER) process described in p57 in DS propose that a design-led staged approach can allow consents to be signed-off in parallel. RCC Stage 1 within the diagram will equate to the second stage of the SER process, and RCC Stage 2 will equate to the final stage (i.e. RCC granted and streets are ready for adoption).



Notes on diagram:
 [1] – Larger projects model the trips generated by a development on a network of routes using engineering software. SPP asks for **Transport Assessment** for projects with significant travel impacts.
 [2] – To be checked against 'Inclusive Design' PAN 78, and against Transport Scotland guidance on DDA good practice.
 [3] – Combine these elements into single subject called 'Street Use' or use the term **Quality Audit** that DS already notes is about balancing different design considerations
 [4] – 'Street layout' combines the main elements that are auditable against DS compliance using the B-Plan technique. More technical detail (gradients etc) for full **Safety Audit** to DMRB guidelines

Figure 9: Diagram: Staged RCC process related to planning consent process