

East Leake Neighbourhood Plan Group  
Building for Life Workshop  
12th May 2014

## **Achieving well-designed housing in East Leake**

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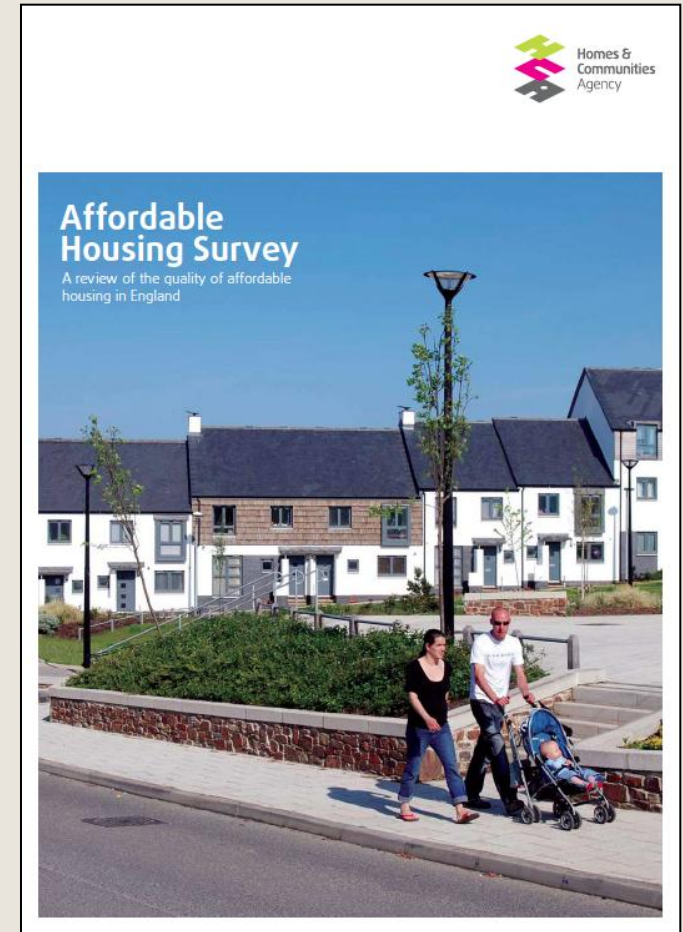
# Introduction

- Good housing design cannot be achieved by following a rule book
- Design is a complex process, requiring time, effort and creativity
- What is the role of Parish Councillors and neighbourhood planners in achieving design quality?



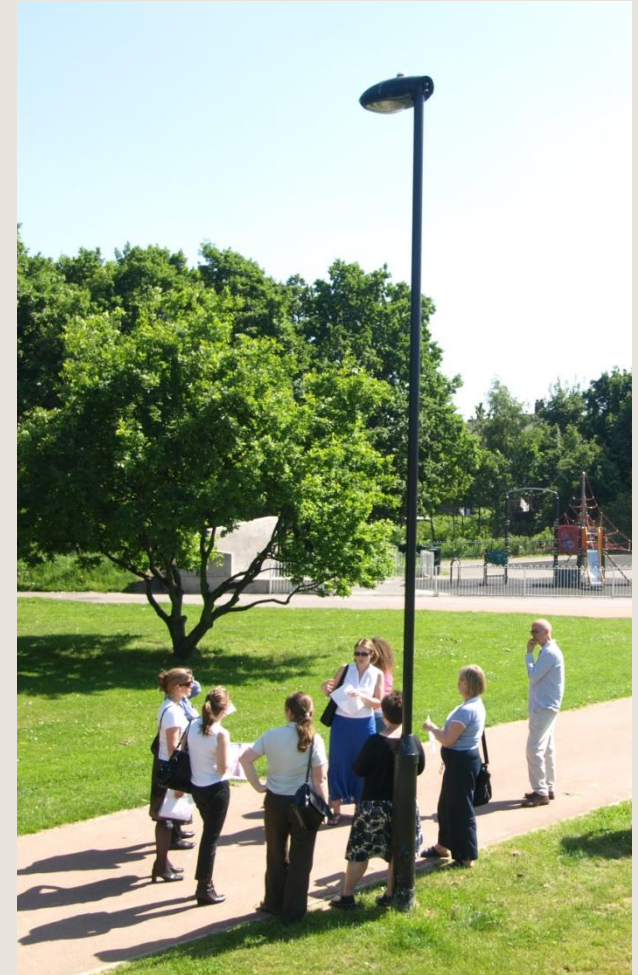
# Role of Neighbourhood Plans

- *CABE Affordable Housing Survey*
- Designs poorer where housing association client not involved at outset
- Quality better with design guidance
- Design briefs also improve quality



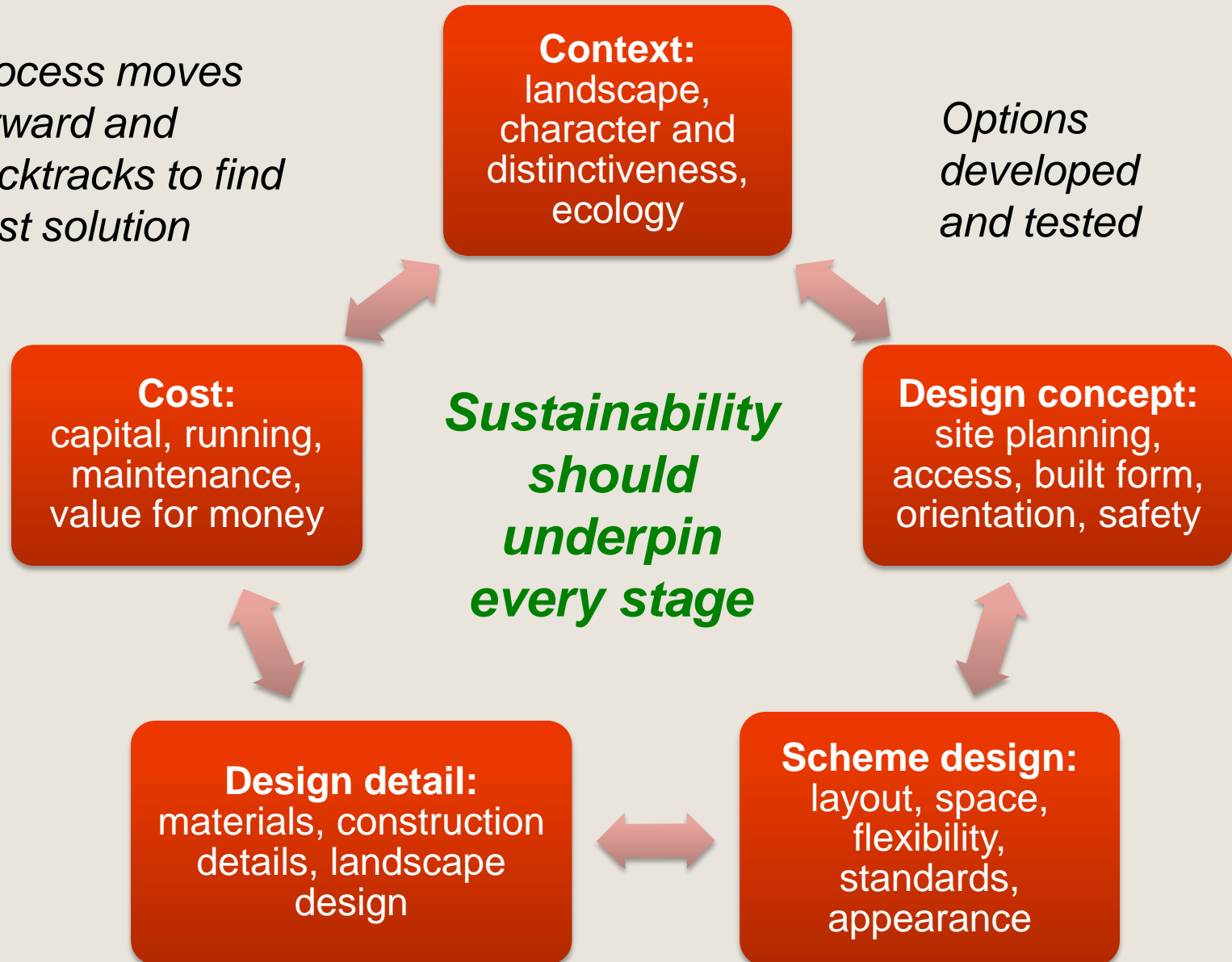
# The design process

- Good design is the result of effective processes
- Design is an iterative process where options are constantly created, evaluated and modified
- Good design is also the result of constructive team working
- Close involvement of clients and end users produces better buildings and environments



# The iterative design process

*Process moves forward and backtracks to find best solution*





# What is good design?

- Will the design last and be sustainable?

*Firmness*

- Does it do the job well?

*Commodity*

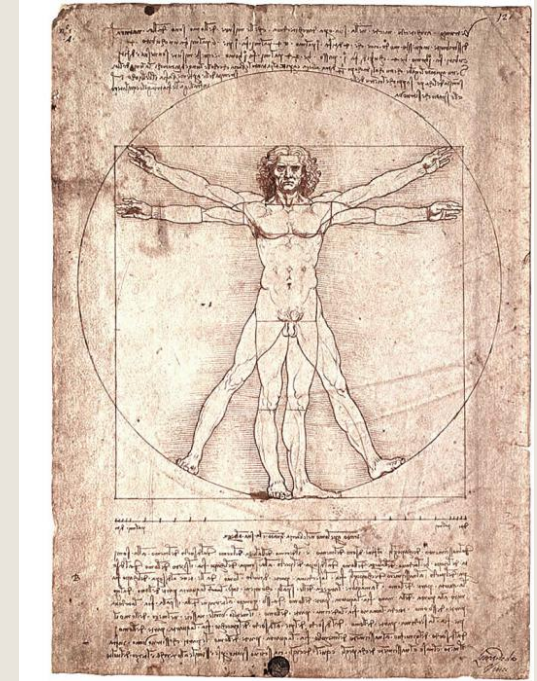
- Is it pleasing to the eye?

*Delight*



# Delight

- Ideas of good proportions have been with us since the Greeks: well proportioned elevations cost nothing extra
- Appropriate scale creates humane environments
- Well designed places create well being and enjoyment
- Delight does not need a 'wow' factor!



# Delight

- Our research in England found a limited number of well rural schemes that are successful in all three respects
- Tend to adopt a more vernacular approach to style, but often successfully



Dukes Rise, Shepton Mallet, Somerset

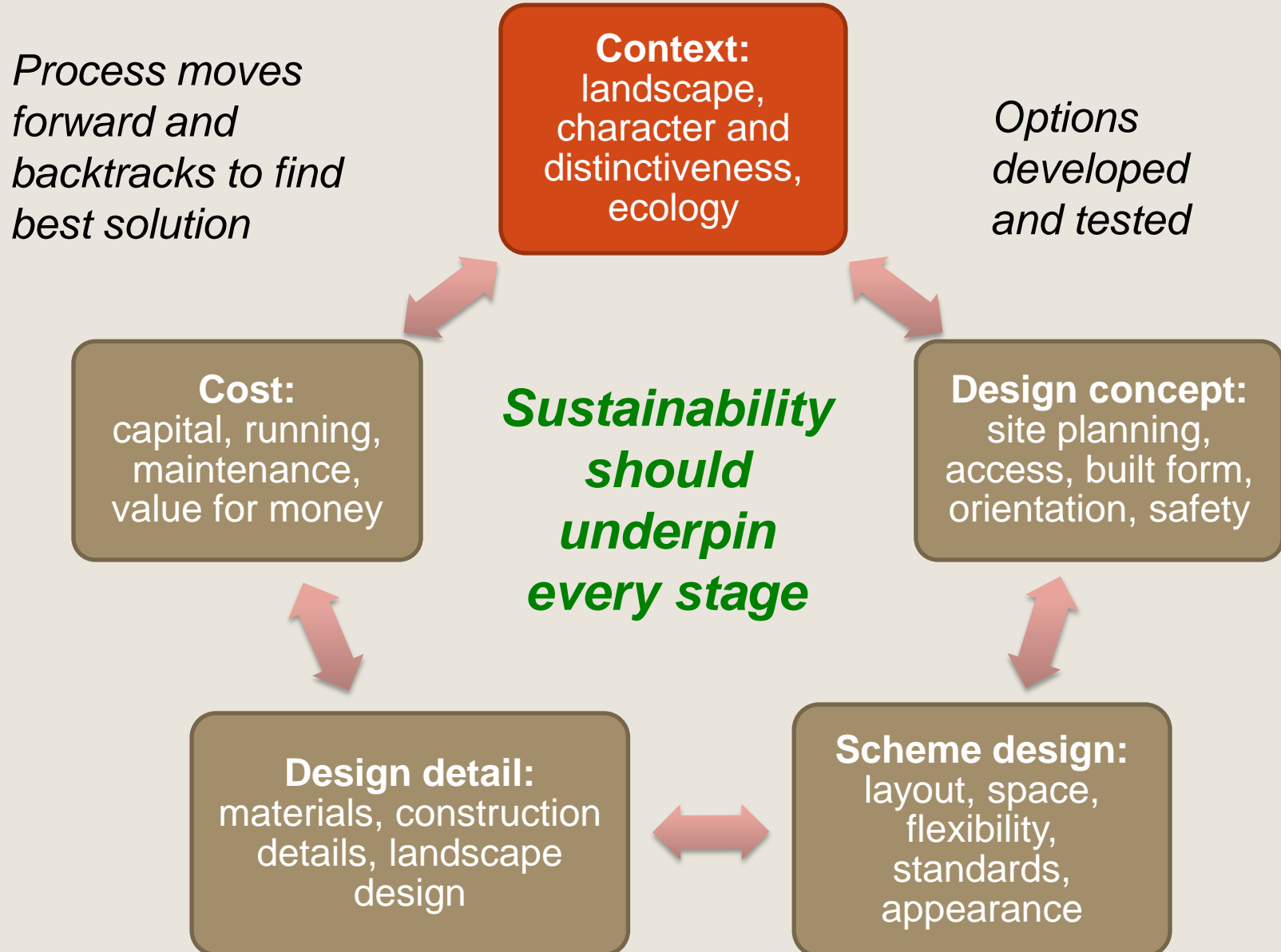




WWW.HDAWARDS.ORG

Derwenthorpe, York – Housing Design Award winner 2013  
Joseph Rowntree Housing Trust and David Wilson Homes

# The iterative design process



# Context

- Start with the place!
- History and evidence of the past
- Landscape features, topography, gradients
- Views and orientation
- Character and distinctiveness of the place
- Routes and movement
- Townscape: patterns of development and built form
- Ecology and biodiversity

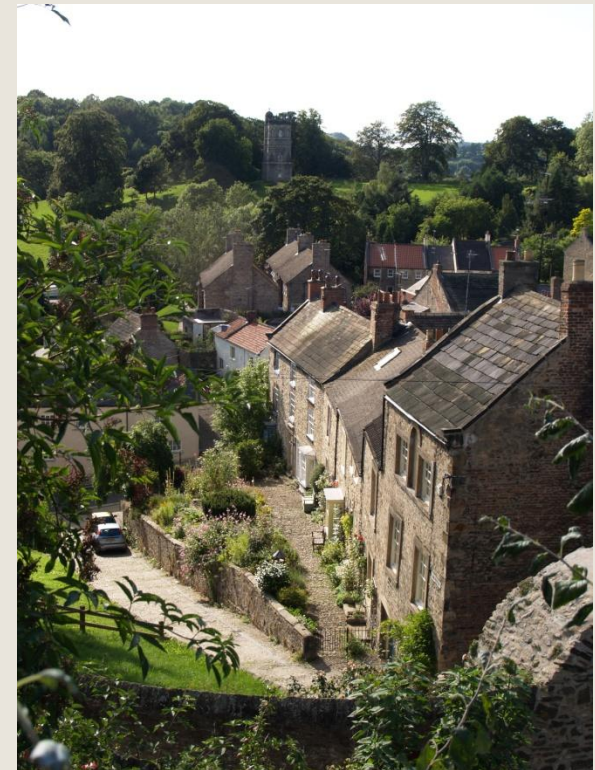




# Building in context

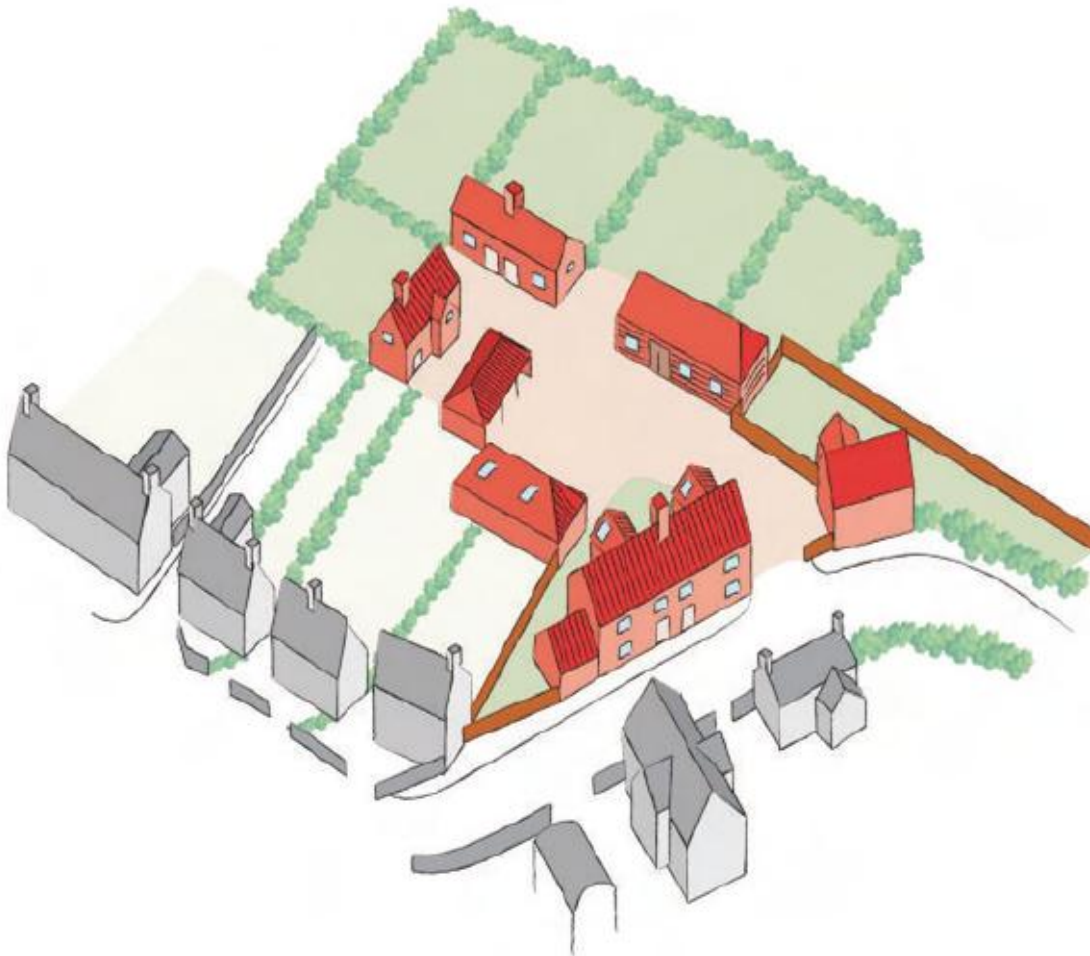
## *Building in context: new development in historic areas – CABE and English Heritage, 2001*

- Relate well to the geography and history of the place
- Sit happily in the pattern of existing development and routes
- Respect important views
- Respect scale of neighbouring buildings
- Materials and building methods as good as those in existing buildings
- Create new views and juxtapositions which add to variety and texture of setting





# Building in context



A village infill example:

- Maintain the street line
- Parking and access a yard not a road
- Retaining existing buildings
- Form and massing match surroundings

# Local Distinctiveness



# The iterative design process

*Process moves forward and backtracks to find best solution*

**Context:**  
landscape,  
character and  
distinctiveness,  
ecology

*Options developed and tested*

**Cost:**  
capital, running,  
maintenance,  
value for money

***Sustainability  
should  
underpin  
every stage***

**Design concept:**  
site planning,  
access, built form,  
orientation, safety

**Design detail:**  
materials, construction  
details, landscape  
design

**Scheme design:**  
layout, space,  
flexibility,  
standards,  
appearance

# Design concept

- Develop a distinctive vision
- Create an urban design framework
- Determine access and movement patterns
- Indicate block layouts: fronts and backs

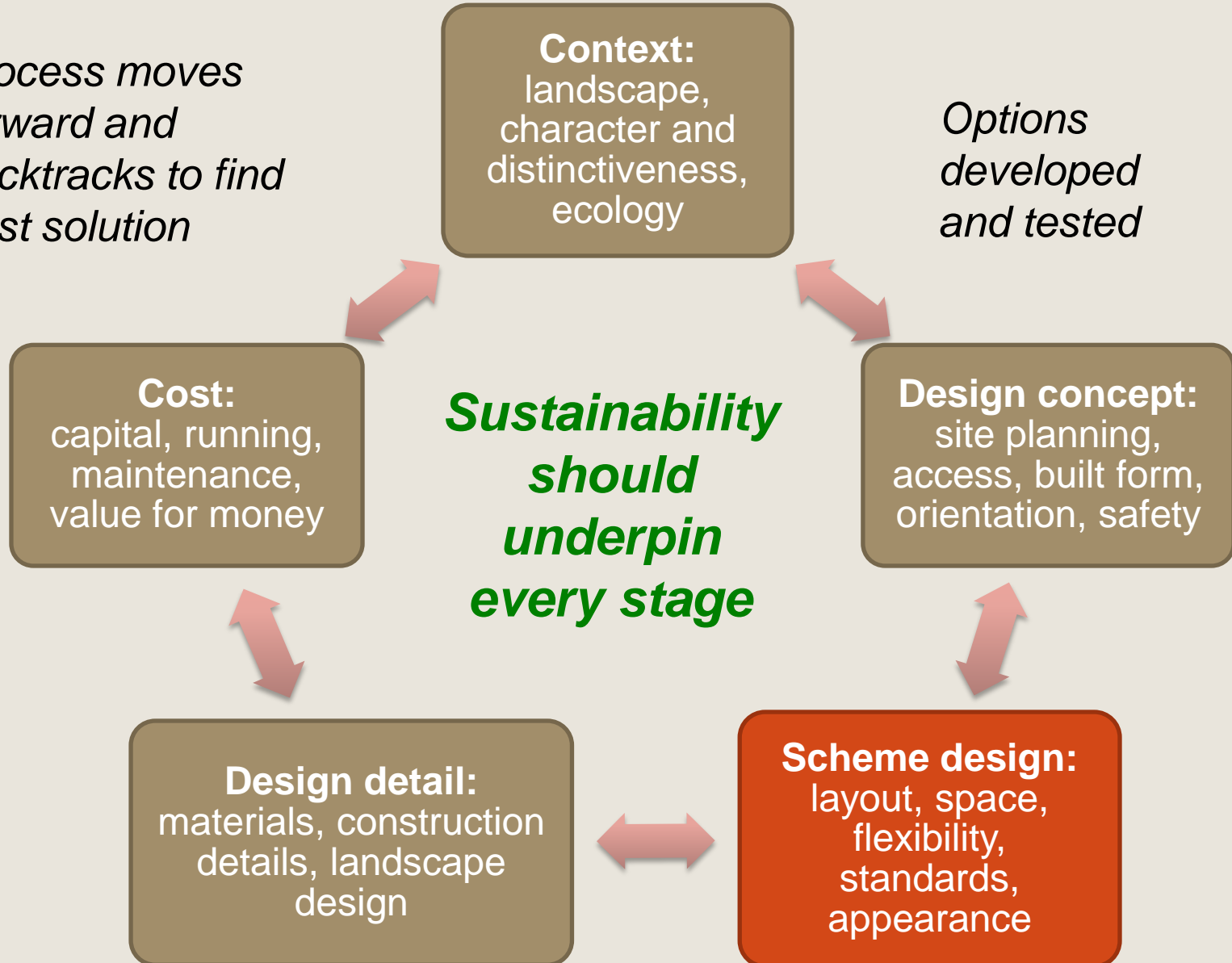


## Site planning

- Older buildings can create backdrop that already acquired a sense of place
- Sense of enclosed external space: outside rooms balanced by buildings of right height, scale, proportion and ability to capture sunlight
- Outside spaces that are useful, well overlooked, encourage street life, linked by safe and friendly routes and feel connected
- *Create places that get better with time*

# The iterative design process

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# Scheme design

Building design now heavily regulated:

- Building Regulations – means of escape, acoustics, areas of glazing, thermal performance, wheelchair access, etc
- Secure by Design; Safer places
- Design and Quality Standard (HCA)
- Lifetime Homes
- Code for Sustainable Homes
- Building for Life
- Space standards for homes?

# Scheme design

House types need to relate to site layout:

- Maximise natural daylight, sunlight, ventilation in principal rooms, views
- Minimise overlooking
- Roof pitches facing north/south for solar panels and PVs
- Internal and external storage
- Flexibility and adaptability
- Direct access to larger gardens
- Relationship to car parking



Freiburg, Germany



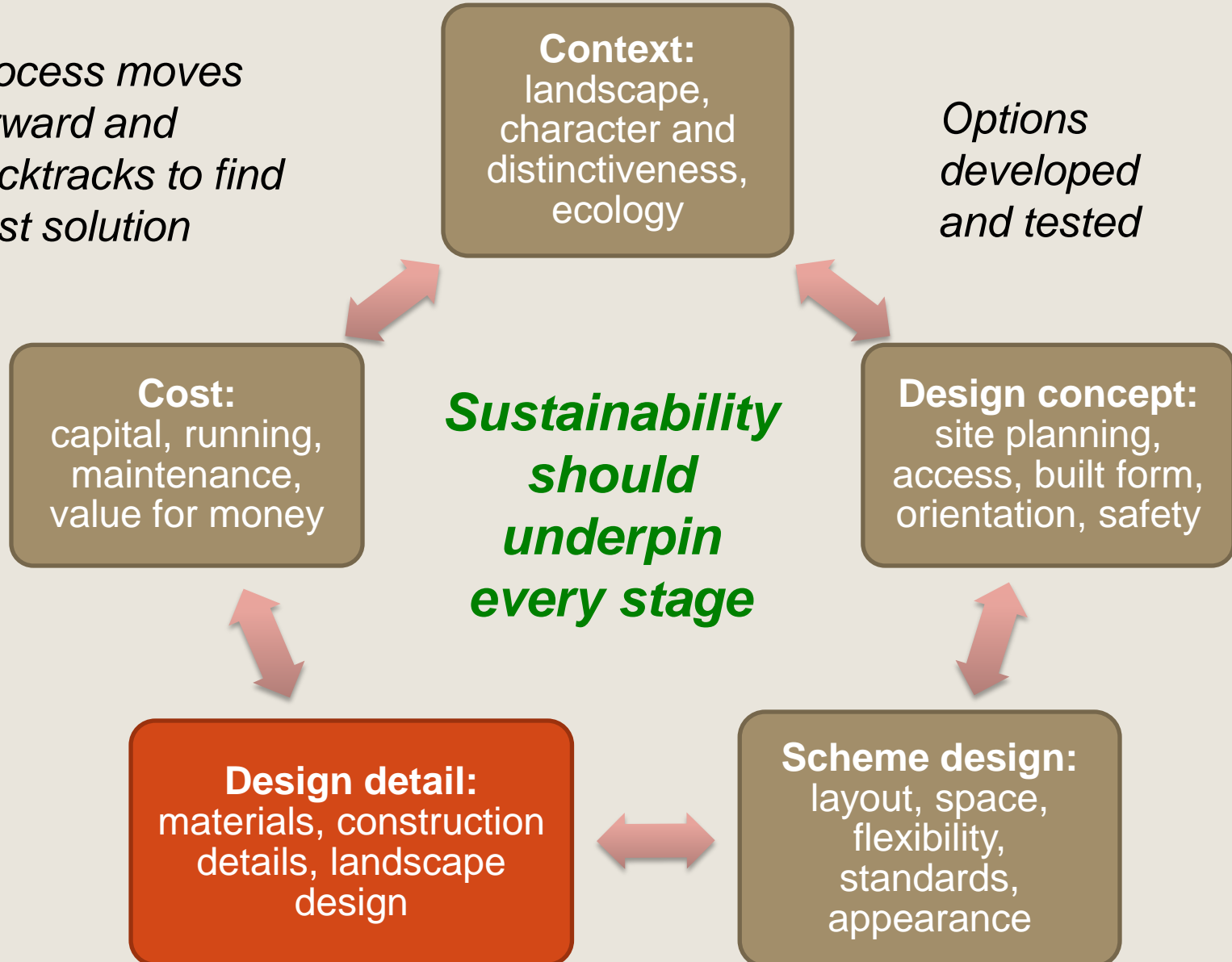
# Scheme design

- Integrated design: plans, sections and elevations of buildings should be developed together
- Optimise space: astute planning creates layouts that provide maximum useability
- Construction, structure and services should be considered in parallel with design development



# The iterative design process

*Process moves forward and backtracks to find best solution*



# Detailed design

- The devil is in the details: a scheme that looks good on 1:100 drawings can be ruined by poor detailing
- Avoid frivolity: details should be functional and elegant
- Door and window openings, porches and canopies, roof eaves and verges, chimneys all deserve careful attention

Highfield Drive, Bakewell, Derbyshire



# Materials

- Select materials appropriate to context
- Limit range of materials – three for a small building!
- Invest in quality, particularly in prominent areas
- Use materials that improve with age and weather
- Low embodied energy – local, natural, renewable



Clay Lane, Elmswell, Suffolk

# Landscape design and detail

- Quality of hard landscape materials, boundaries and planting has major visual impact
- Lower cost per m<sup>2</sup> but bigger impact than buildings
- Poor design results in high recurrent costs – maintenance, repairs, vandalism
- Significant impact on sustainability: storm drainage, ecology, biodiversity

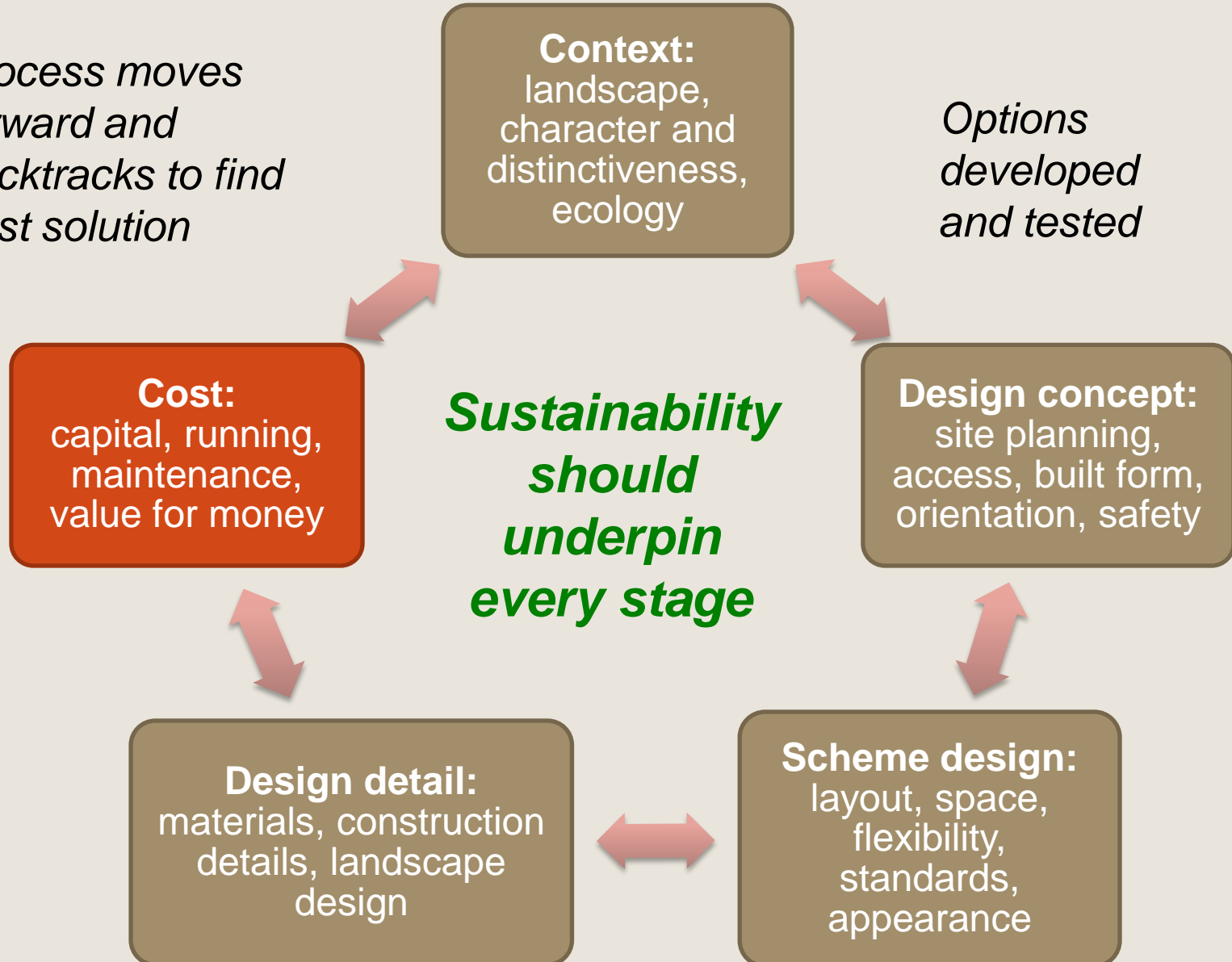


Upton, Northamptonshire



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# Cost

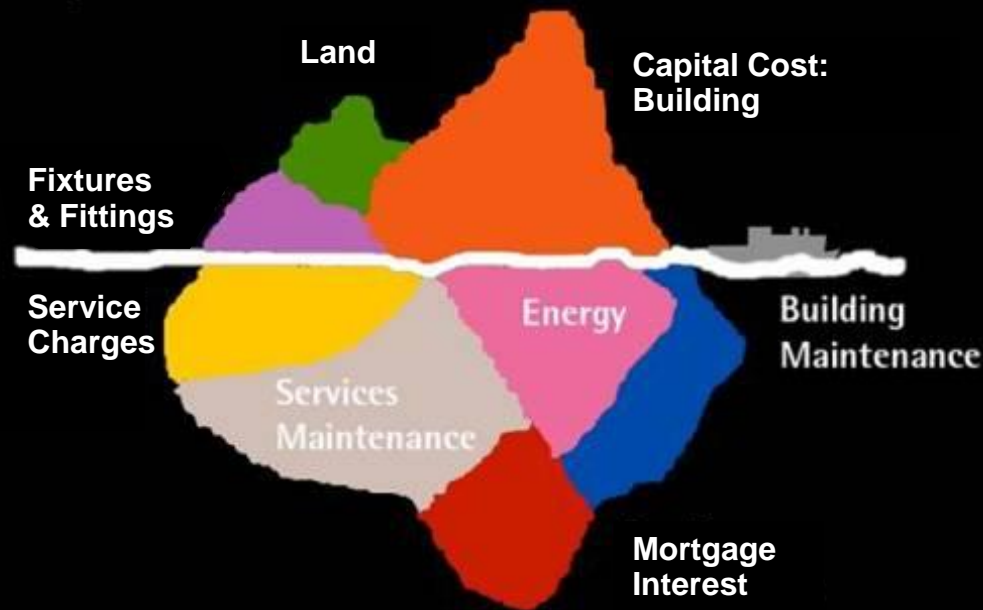
- Vital to monitor cost throughout design process
- Consider whole life costs
- Avoid unnecessary costly features
- Off-site construction can reduce waste and improve quality
- Allow for future investment in improvements - adaptability
- Invest in design – very small proportion of total cost

Joceylyn Park, Somerset;  
weathertight in 3 days



[www.wrap.org.uk/construction/](http://www.wrap.org.uk/construction/)

## Initial Capital Costs



## Recurrent Cost

- Capital Cost = ca 41 %
- Recurrent Cost = ca 59%
- Design Cost = ca 4 %, but major impact on remaining 96%

Source:

*Davis Langdon, National Audit Office*

# Value

- Good design adds value
- Developers use their design awards to sell houses
- RSLs can let well designed housing more easily
- See 'The Value Handbook' - CABE

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### Rosemullion Homes - About Us

Founded in 1994, Rosemullion Homes' mission is to provide homes that blend with their surroundings and contribute to the character of the local town or village.

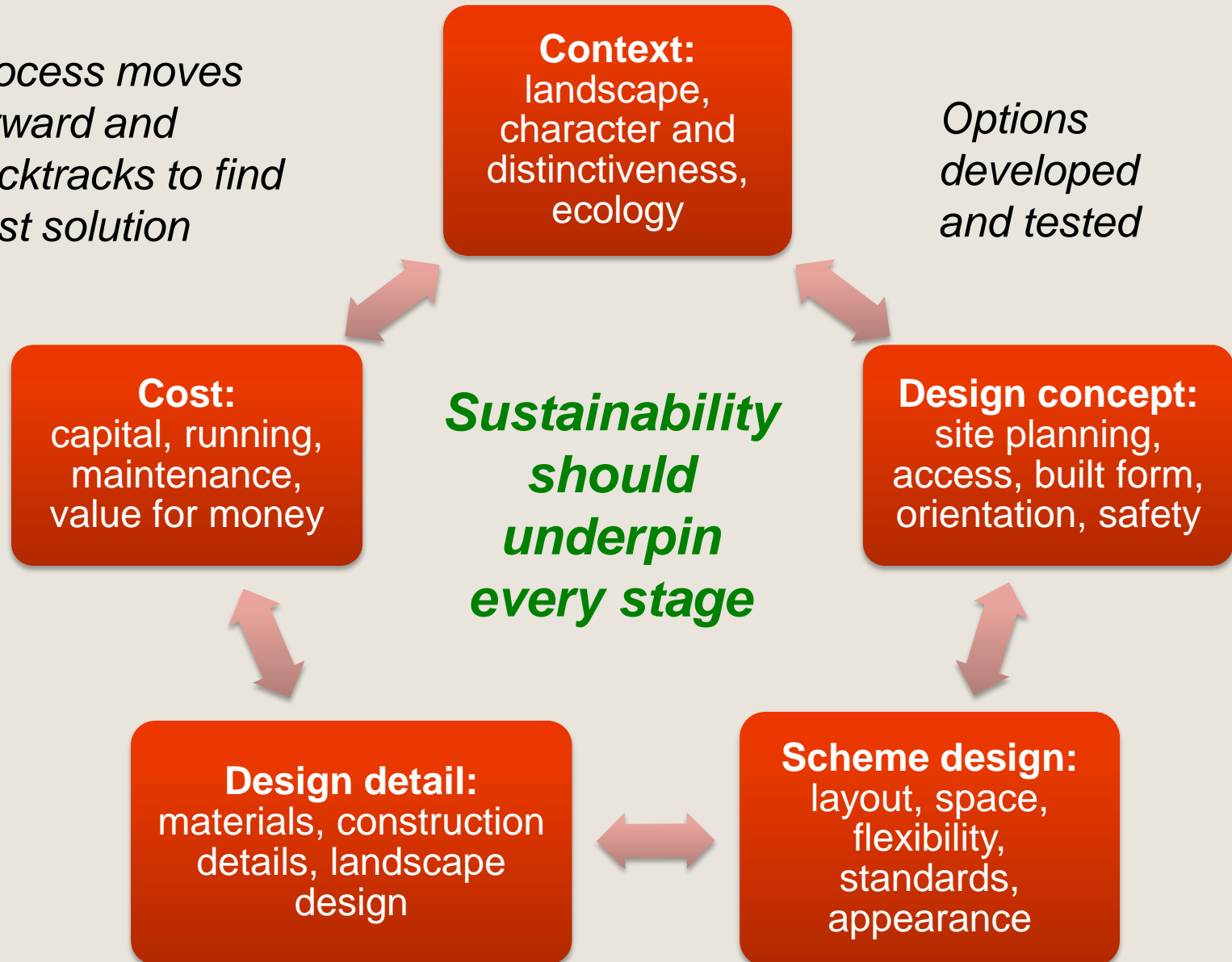
Rosemullion Homes has gained a reputation as one of the premier housebuilders in the South West and in 2008 was named as UK Housebuilder of the Year in the What House? Awards. The company builds only at carefully selected sites in Cornwall.

Rosemullion Homes have built almost 200 houses on small carefully chosen sites. Our efforts over the last 15 years have resulted in solid, traditionally built homes, enjoyed by their new owners; in addition we hope we have helped stimulate debate about the importance of good housing design.

The company is rooted in Cornwall; our Directors and Staff all live in the county and have a strong sense of commitment to it. The challenge of producing homes of real worth and distinction is the main motivating factor for the whole Rosemullion team.

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# Sustainability

- Should be integrated into every stage of design process, and underpin all decisions. Consider:
  - Energy conservation and CO<sub>2</sub> emissions
  - Renewable energy sources
  - Pollution
  - Water
  - Health and well being
  - Materials
  - Surface water and SUDS
  - Ecology and biodiversity
  - Waste

Biomass heating plant, Manby, Lincolnshire



# Burnhill Green, Staffordshire

Key features of the development include:

- Homes meet Code for Sustainable Homes level 4.
- Ground-source heat pumps in each home.
- FSC-approved timber frame construction.
- Considerable use of local recycled materials.
- Design is inclusive for all, regardless of ability, age or tenure.
- Restoration of the village green and new habitat creation.
- All spoil was used onsite or recycled.
- Rainwater harvesting and utilisation.
- High performance joinery.
- Traditional lime mortar.
- Reclaimed roof tiles.
- Pulse meters provide occupants with the ability to monitor usage of water and electricity.
- Individually thermostatically-controlled rooms.
- Under-floor heating.
- Sheep wool insulation means homes emit around 8 times less CO<sub>2</sub> than conventional sources.
- High efficiency wood burning stoves in each house.
- Highly efficient appliances reducing water and energy consumption.



Shortlisted for HCA Rural housing  
Design Award 2010  
BfL Silver Award

# Line Tree Square, Street, Somerset

- EcoHomes 'Excellent'
- SUDS
- Wetland area
- Meadow habitat
- A-rated materials
- Heat recovery system
- Energy efficient lighting
- Cycle storage



Building for Life Gold award 2009





# Thank you

Andy Beard

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