

Delivering green infrastructure through major residential development: challenges and enablers

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June 2022



The Ashlands, Portishead

What is green infrastructure?

Green infrastructure

A network of multi-functional green space, urban and rural, which can deliver a wide range of environmental and quality of life benefits for local communities

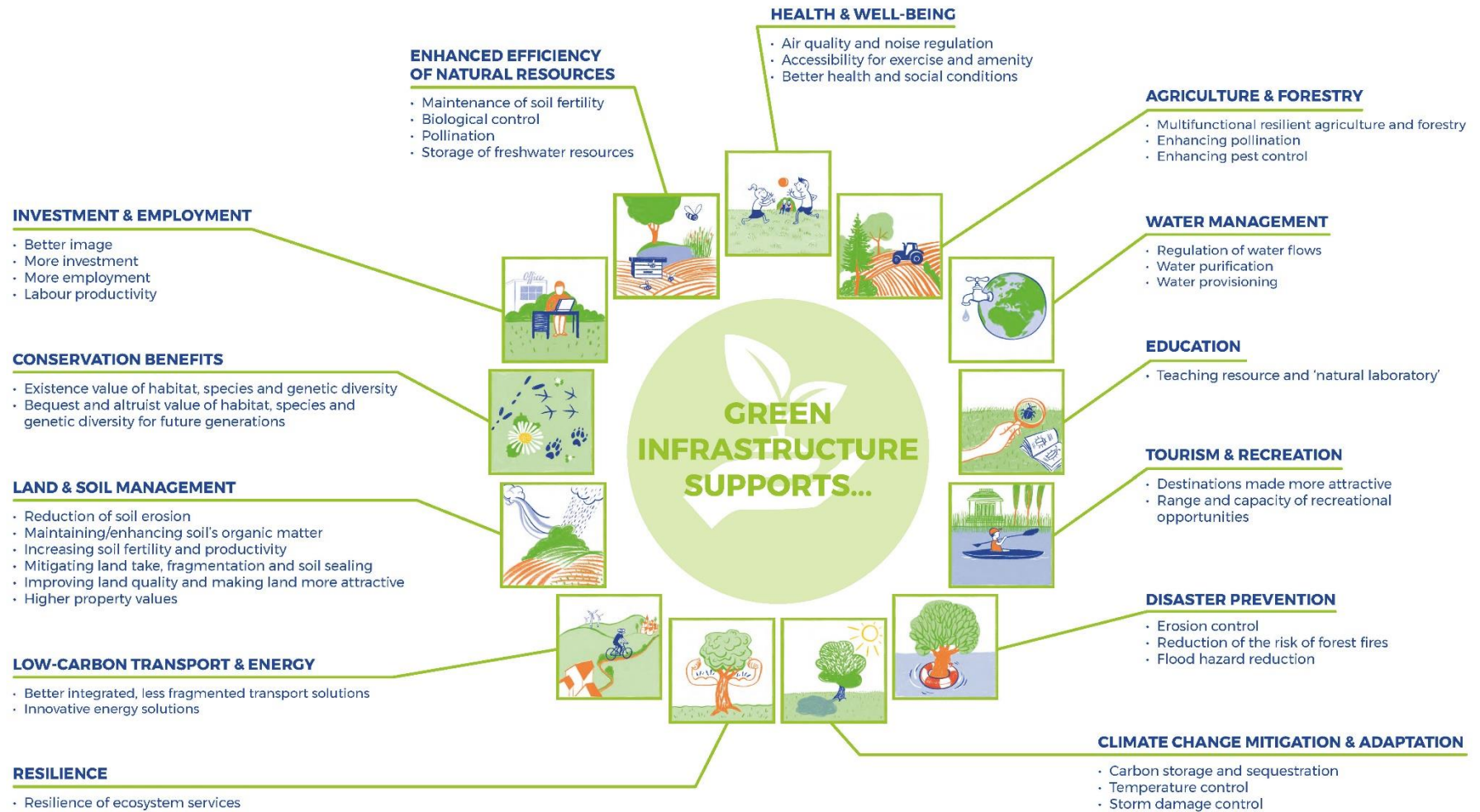
Public Health England (2020), p6.

Green space

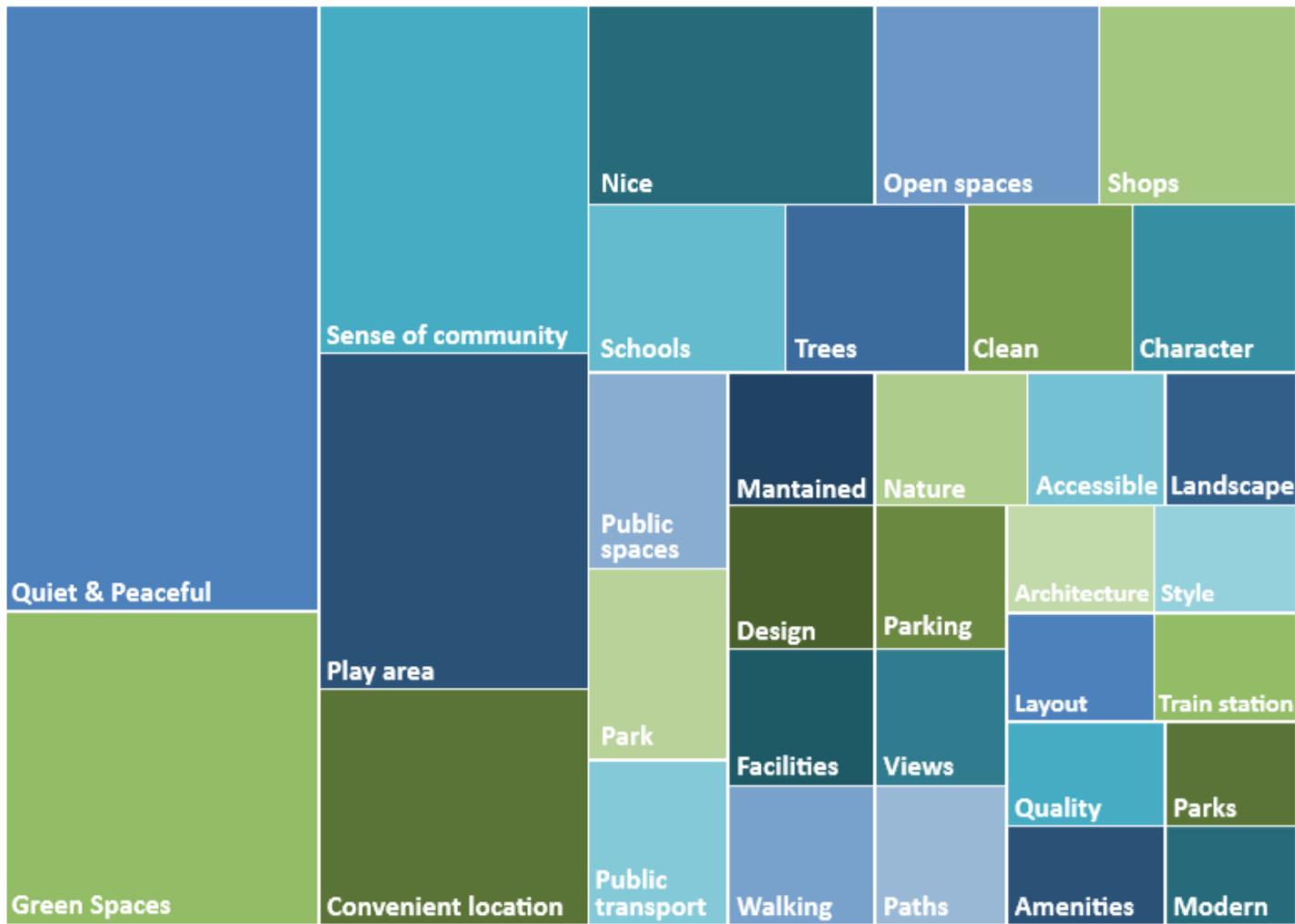
“Any area of vegetated land, urban or rural. This includes both public and private spaces such as parks, gardens, playing fields, children’s play areas, woods and other natural areas, grassed areas, cemeteries and allotments, green corridors, disused railway lines, rivers and canals, derelict, vacant and contaminated land which has the potential to be transformed”.

Public Health England (2020), p6.

What benefits does it bring?



Consumers, what three things do you most want to see in a new development?



Place Alliance (2020) A Housing Design Audit for England, page 92.

Demand into vision...



Generic Artists Impression of Arrival Corridor

<https://www.sussexexpress.co.uk/news/politics/outline-plans-for-199-new-homes-in-southbourne-submitted-3573162>

But often the reality...

Residents tell of 'nightmare' and vent frustration at developer Avant Homes after estate with properties worth up to £600,000 is left in an unfinished and 'treacherous' state YEARS after they moved in

- Homeowners on a unfinished Nottinghamshire estate have slammed a developer's 'lack of communications'
- Martin's Reach estate in Wollaton was given planning permission in 2019 with homes completed last year
- But the area's pavements, footpaths, allotments and children's play area are still languishing incomplete
- Meanwhile, houses on the estate are being sold for prices anywhere between £240,000 and £600,000

By [STEWART CARR FOR MAILONLINE](#)

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Menu ☰



EXCLUSIVE

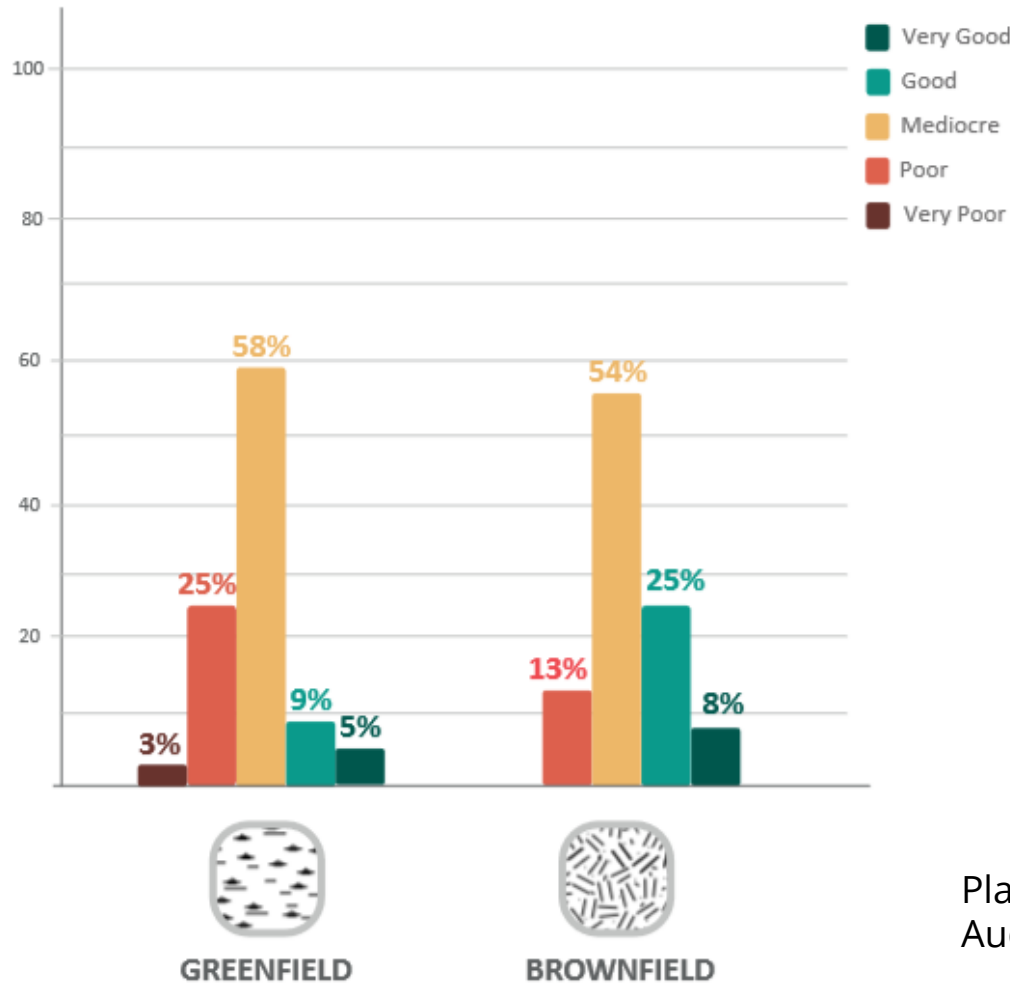
News > UK News

'IT'S HORRENDOUS' I won't let my kids play by our new build house – we were promised a lush park but it's a rubbish-filled scrap of land

[Ed Southgate](#)

9:01, 18 Jun 2022 | Updated: 11:24, 18 Jun 2022

With major residential greenfield sites being the worst offenders?



Place Alliance (2020) A Housing Design Audit for England, page 92.

Research focus

How does the planning and development process impact on the implementation of high-quality GI in major residential developments?

- What are the processes for designing, planning and delivering high-quality GI in major residential developments?
- To what extent is the design, planning and delivery of high-quality GI shaped by the attitudes, competencies and experiences of the actors and stakeholders involved with major residential developments?
- What is hampering the design, planning and delivery of high-quality GI in major residential developments?

Three aspects of study

Design

e.g. understanding the site and policy context, acknowledging local and strategic needs, developing a vision

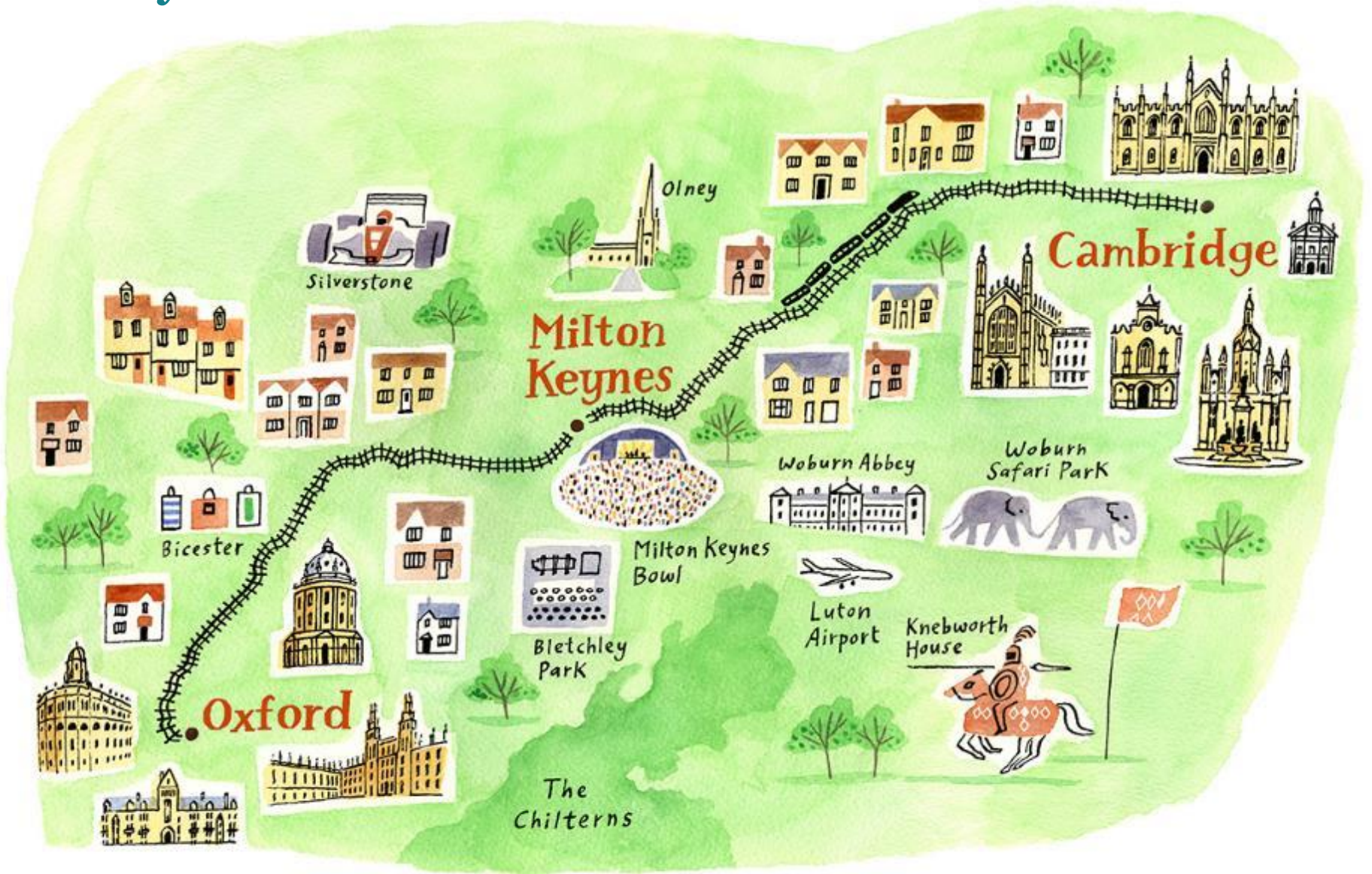
Planning

e.g. negotiating and agreeing on scheme design and development parameters, acquiring the relevant permissions, establishing obligations and conditions

Delivery

e.g. site construction, establishing site management and maintenance arrangements

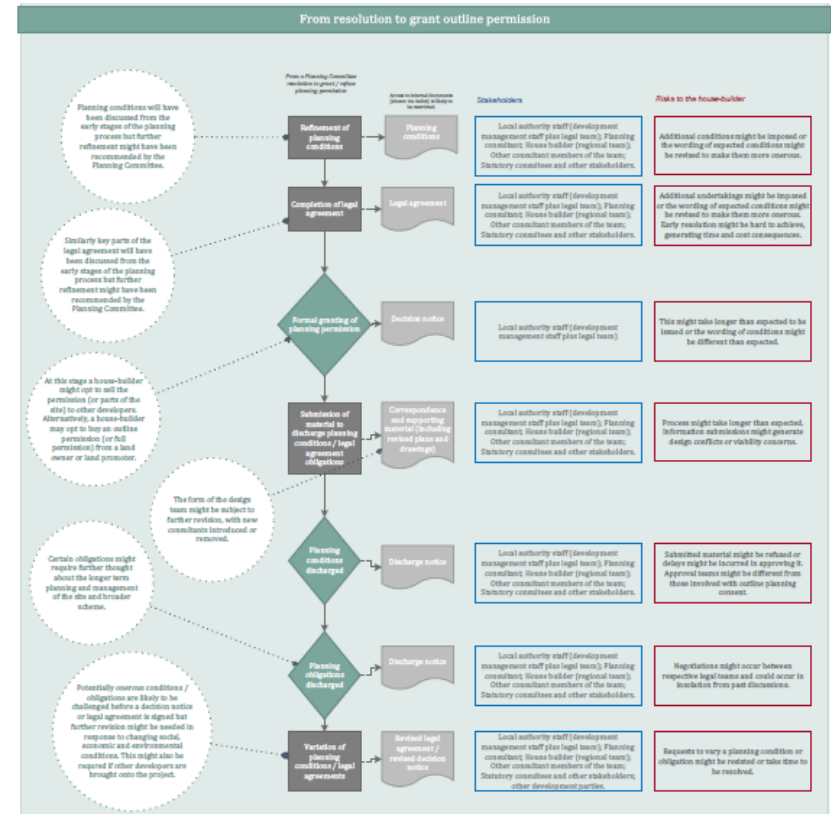
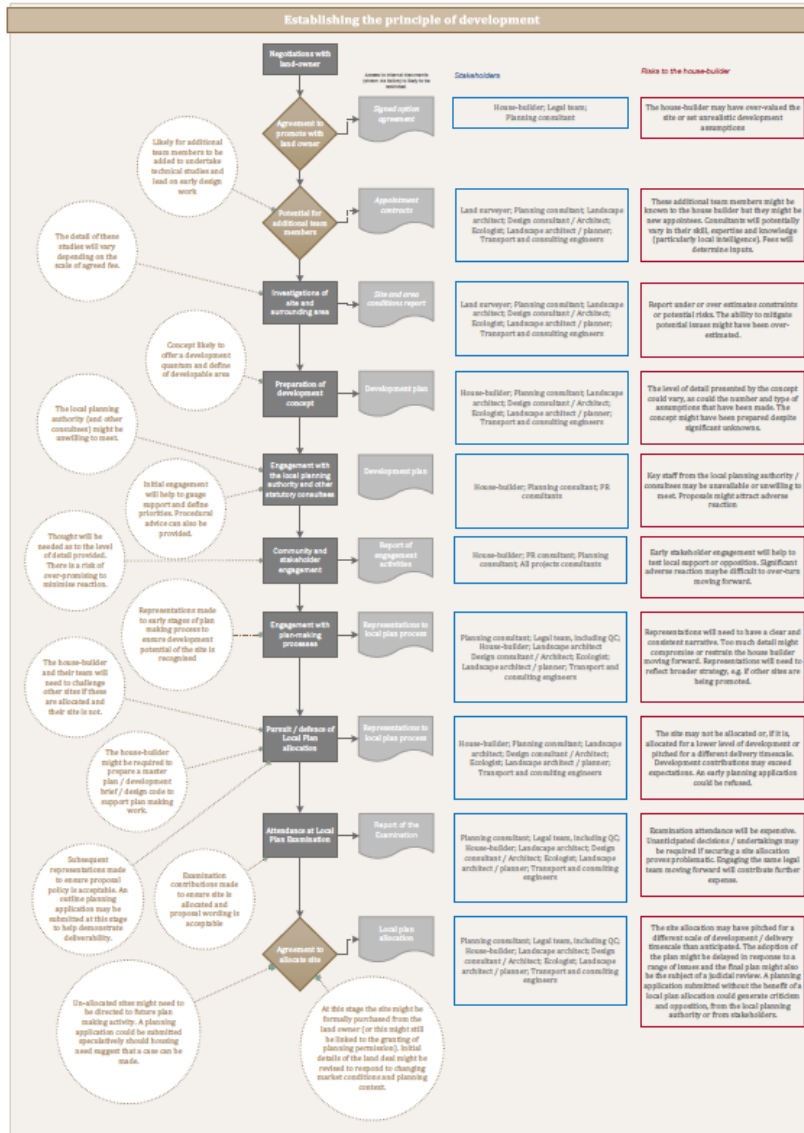
Study location



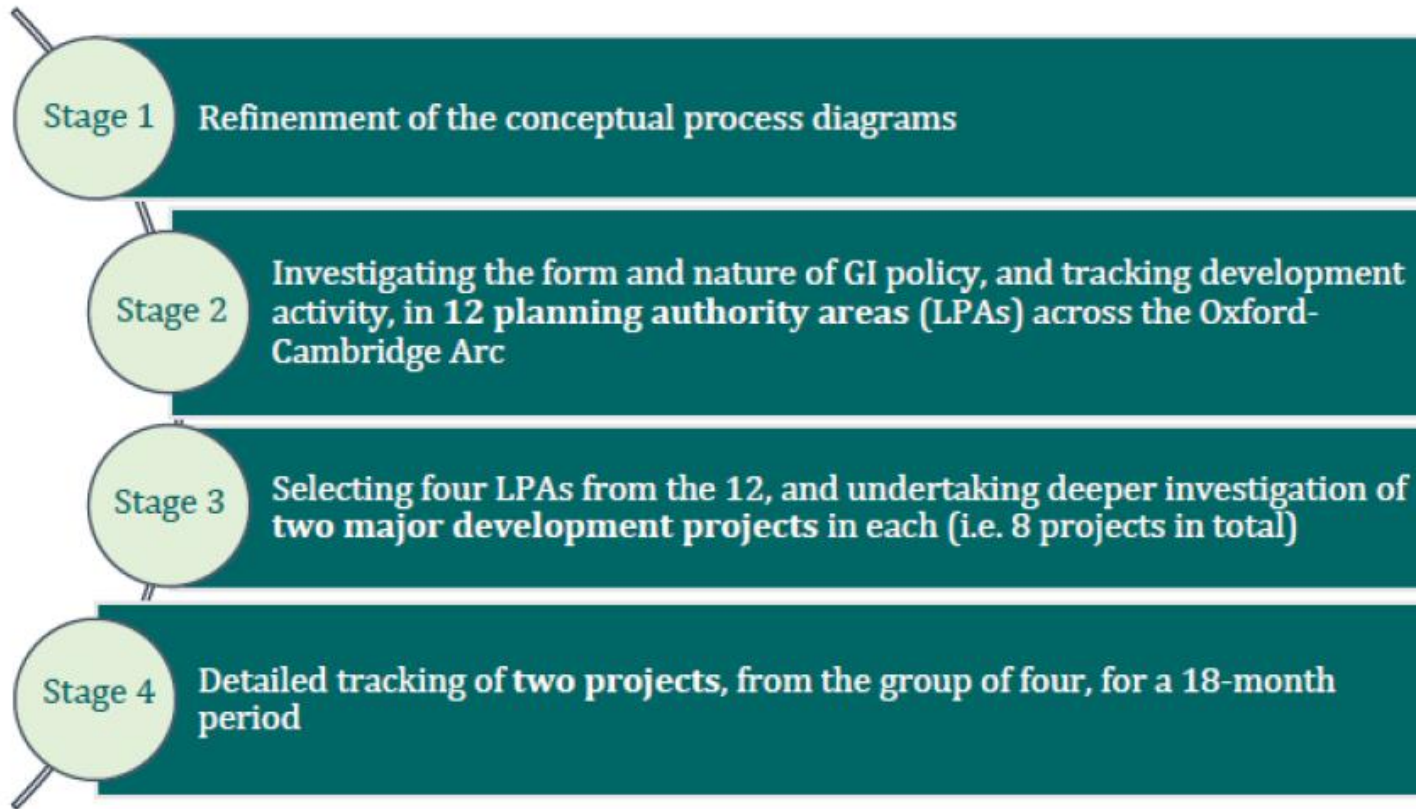
The literature review

Principal term		Secondary term	Search inputs (Scopus)	Results	AND UK
(A) Green Infrastructure <i>ABS (green AND infrastructure)</i> 9,967 results	And	Definition	(ABS (<i>green</i> AND <i>infrastructure</i>) AND ABS (<i>definition</i>))	183	5
		Typology	(ABS (<i>green</i> AND <i>infrastructure</i>) AND ABS (<i>components</i>))	120	3
		Benefits	(ABS (<i>green</i> AND <i>infrastructure</i>) AND ABS (<i>benefits</i>))	1,881	60
		Actors	(ABS (<i>green</i> AND <i>infrastructure</i>) AND ABS (<i>actors</i>))	197	9
		Quality	(ABS (<i>green</i> AND <i>infrastructure</i>) AND ABS (<i>quality</i>))	1,863	29
		Implementation	(ABS (<i>green</i> AND <i>infrastructure</i>) AND ABS (<i>implementation</i>))	1,305	24
		Management	(ABS (<i>green</i> AND <i>infrastructure</i>) AND ABS (<i>management</i>))	2,663	52
		Maintenance	(ABS (<i>green</i> AND <i>infrastructure</i>) AND ABS (<i>maintenance</i>))	539	17
		Policy	(ABS (<i>green</i> AND <i>infrastructure</i>) AND ABS (<i>policy</i>))	1,741	57
		Planning	(ABS (<i>green</i> AND <i>infrastructure</i>) AND ABS (<i>planning</i>))	2,219	45
		Strategies	(ABS (<i>green</i> AND <i>infrastructure</i>) AND ABS (<i>strategies</i>))	1,749	34
		Development	(ABS (<i>green</i> AND <i>infrastructure</i>) AND ABS (<i>development</i>))	3,751	76
		Residential	(ABS (<i>green</i> AND <i>infrastructure</i>) AND ABS (<i>residential</i>))	435	9
Major projects	(ABS (<i>green</i> AND <i>infrastructure</i>) AND ABS (<i>major</i> AND <i>projects</i>))	202	3		

Process diagrams



Research design



Selected authority areas: Buckinghamshire; Huntingdonshire; South Cambridgeshire; Central Bedfordshire; West Oxfordshire; South Oxfordshire; Daventry; East Cambridgeshire; South Northamptonshire; Cherwell; the Vale of White Horse; and Fenland.

Graven Hill, Bicester



Available at: <https://www.gravenhill.co.uk/wp-content/uploads/graven-hill-design-code.pdf>

Graven Hill, Bicester

2011	
2015	
2016	
2017	

	Outline permission
	Scoping
	Variation of conditions
	Discharge of conditions
	Non-material amendment
	Submission of reserved matters

Keep in touch

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