MAYOR OF LONDON

GN1 London Development Toolkit

Guidance Note 1
Project feasibility and objectives

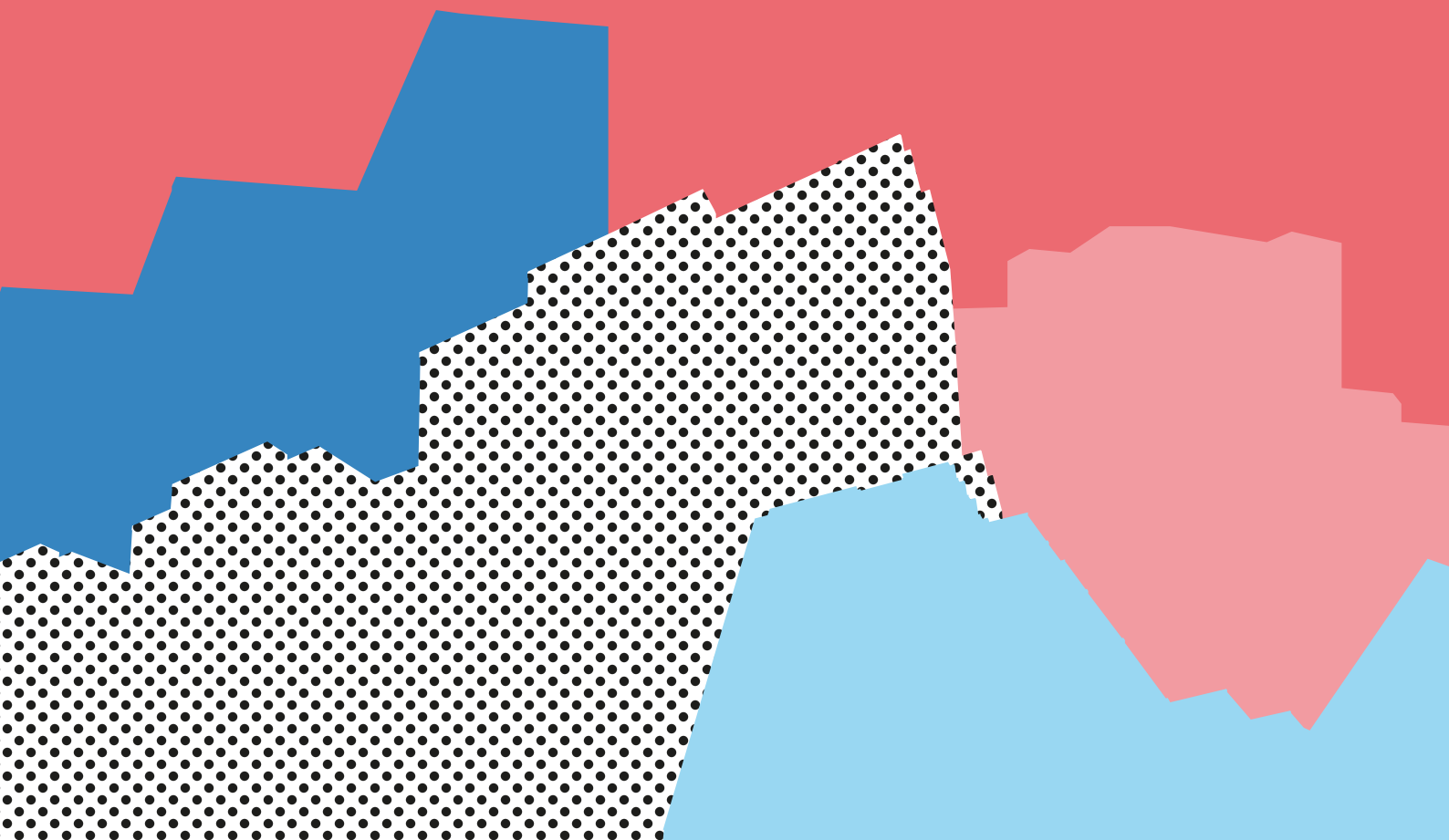
Published by
Greater London Authority
City Hall,
Kamal Chunchie Way,
London, E16 1ZE
london.gov.uk

Enquiries: 020 7983 4000
Minicom: 020 7983 4458

Copies of this report are available from **london.gov.uk**

Acknowledgements

Produced and authored by GLA in partnership with Montagu Evans and Addleshaw Goddard, and with contributions from GLA Group delivery organisations: LLDC, Places for London and OPDC; and Mayoral Design Advocate, Claire Bennie.



Contents

Toolkit

GN1

Guidance note 1

Project feasibility and objectives

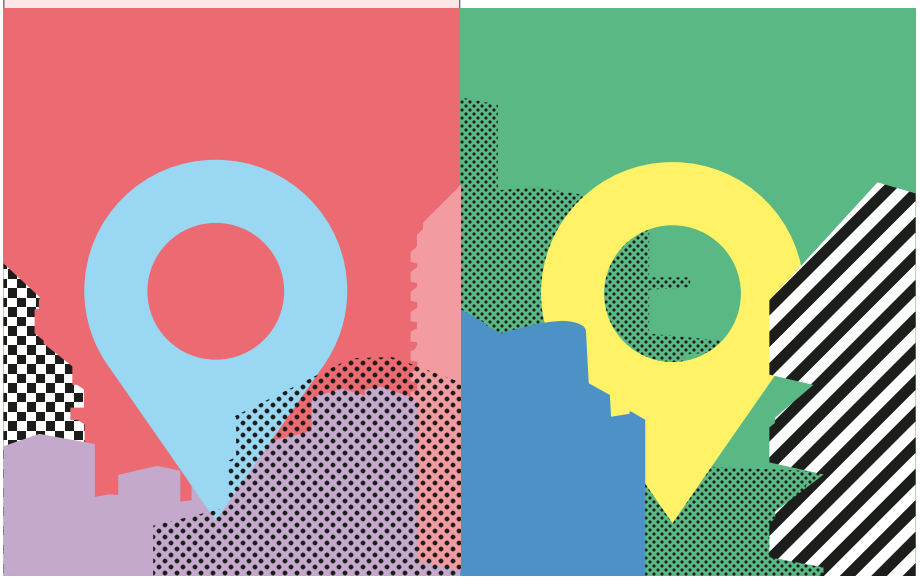
- Analysis of site and context
- Planning context
- Understanding legal title
- Stakeholder analysis and creating an engagement plan
- Creating a compelling vision and objectives
- Commissioning and conducting feasibility studies
- Viability testing
- Next steps and design development

GN2

Guidance note 2

Partnership and delivery structures

- The main types of land disposal and development delivery structures
- Their relative characteristics
- Variations and other structures
- Considerations when choosing a structure
- Common pitfalls



GN3

Guidance note 3

Procurement strategy

- The Procurement Act 2023
- Transparency and notices
- Preliminary market engagement
- Designing a procurement
- Exclusions
- Contract management under the Act

GN4

Guidance note 4

Setting a brief and managing a procurement

- Planning and resourcing
- Tender notice and project brief
- Participation stage
- Dialogue and negotiation
- Tender stage
- Award criteria
- Evaluation
- Assessment summaries
- Contract award

GN5

Guidance note 5

Contracts

- Overview of key development contracts
- Stewarding and managing quality
- Delivery of social value objectives
- Precedent forms of:
  - basic sale agreement
  - agreement for lease
  - development agreement
  - JV heads of terms
- Guidance on the use and operation of each

Introduction

This note provides guidance on the feasibility stage of the development process, where site analysis is undertaken to inform a clearly defined development opportunity, a robust set of objectives and a compelling vision for the site.

The guidance is aimed at public landowners involved in progressing development projects on their land, where a potential development site/s has already been identified.

It sets out steps that a landowner should consider when undertaking feasibility work. This includes the early analysis of a site and the surrounding place; a legal title review; and stakeholder engagement. Guidance is also provided on managing early design work, viability testing and the interdependencies between these tasks.

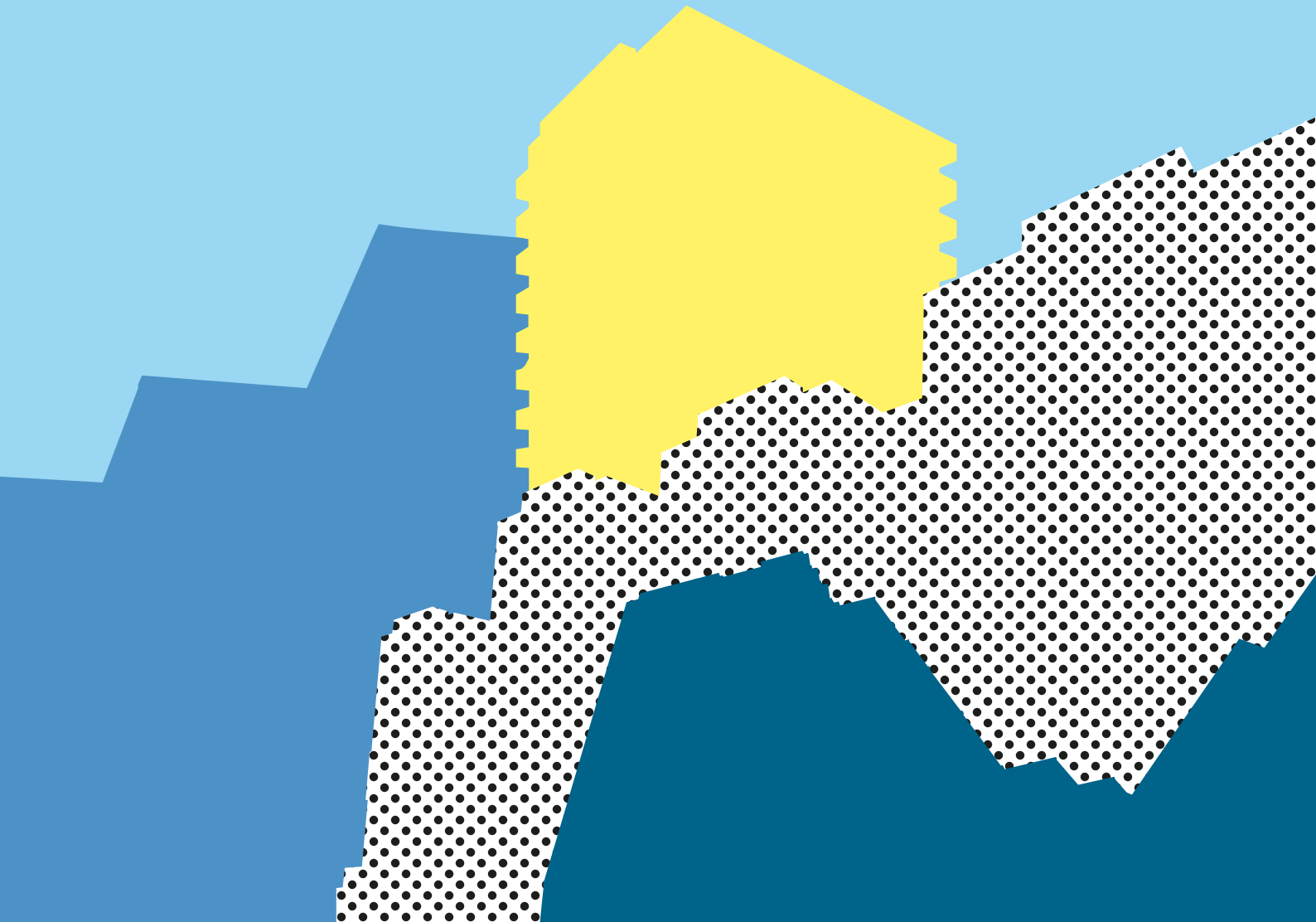
Many organisations will have their own policies and guidance that will need to be reviewed and taken into consideration, in addition to the steps set out in this note.

This guidance does not constitute commercial or legal advice. Landowners should always take their own advice when planning development on their land.

“This guidance does not constitute commercial or legal advice. Landowners should always take their own advice when planning development on their land.”

1 Commencing feasibility work

The feasibility stage of the development process looks to identify and define the development opportunity that is available.



This analysis and scoping work should be carried out before deciding on a delivery strategy for a site (which is covered in guidance note 2: partnerships and delivery structures). Having clarity on the project objectives, as well as the scale and composition of the opportunity at a high level, will help to accurately assess which delivery structure is most likely to respond to these.

The extent of feasibility work required will vary site by site, where more complex and/or strategic sites will likely require a more in-depth feasibility stage. The findings from the initial due diligence tasks will help inform how comprehensive the feasibility stage should be. This guidance note is not designed to be an exhaustive list, and it does not provide detail for specific site specialisms such as estate regeneration, land assembly and commercial development.

> By the end of the feasibility stage, the landowner should have a clear project vision, project objectives and an understanding of the scale and type of development opportunity that is available.

Having the right expertise early on is critical to ensuring that a site is robustly assessed. This will include design, planning, commercial, legal and local knowledge. A landowner should familiarise themselves with the resource and skills that exist in-house; and identify where expertise will need to be commissioned to support with the completion of the tasks set out in this note.

A landowner may choose to commission a multi-disciplinary consultant team to help complete all the feasibility tasks. An organisation with more internal capacity and place-making expertise may choose to commission design and commercial services once initial due diligence has been undertaken in-house, and a high-level project vision and objectives have been formed. Chapter 4 looks at commissioning consultants (design expertise in particular) to assist with the feasibility stage.

The flow diagram below sets out a suggested chronology of the feasibility stage and shows the inter-dependencies between the tasks set out in this guidance note. The feasibility stage usually isn't a linear process, and often requires revisiting and overlapping tasks to determine and define the development opportunity.

CHAPTER 2

Early due diligence is carried out on the site to identify the opportunities and constraints.

- Site inspection and technical analysis
- Understanding the wider place context
- Planning analysis
- Title review
- Stakeholder mapping and engagement

***Stakeholder engagement is continued throughout the feasibility stage.**

***Further due diligence, such-as site investigations, may be carried out later in the process to further de-risk the site.**

CHAPTER 3

High level vision and objectives are formed for the site.

The vision and objectives will be re-visited and updated, to respond to the findings from the design and viability work.

CHAPTER 4

Initial design and viability work is undertaken to test whether the project aspiration is deliverable, and to turn the project objectives into spatial options.

CHAPTER 5

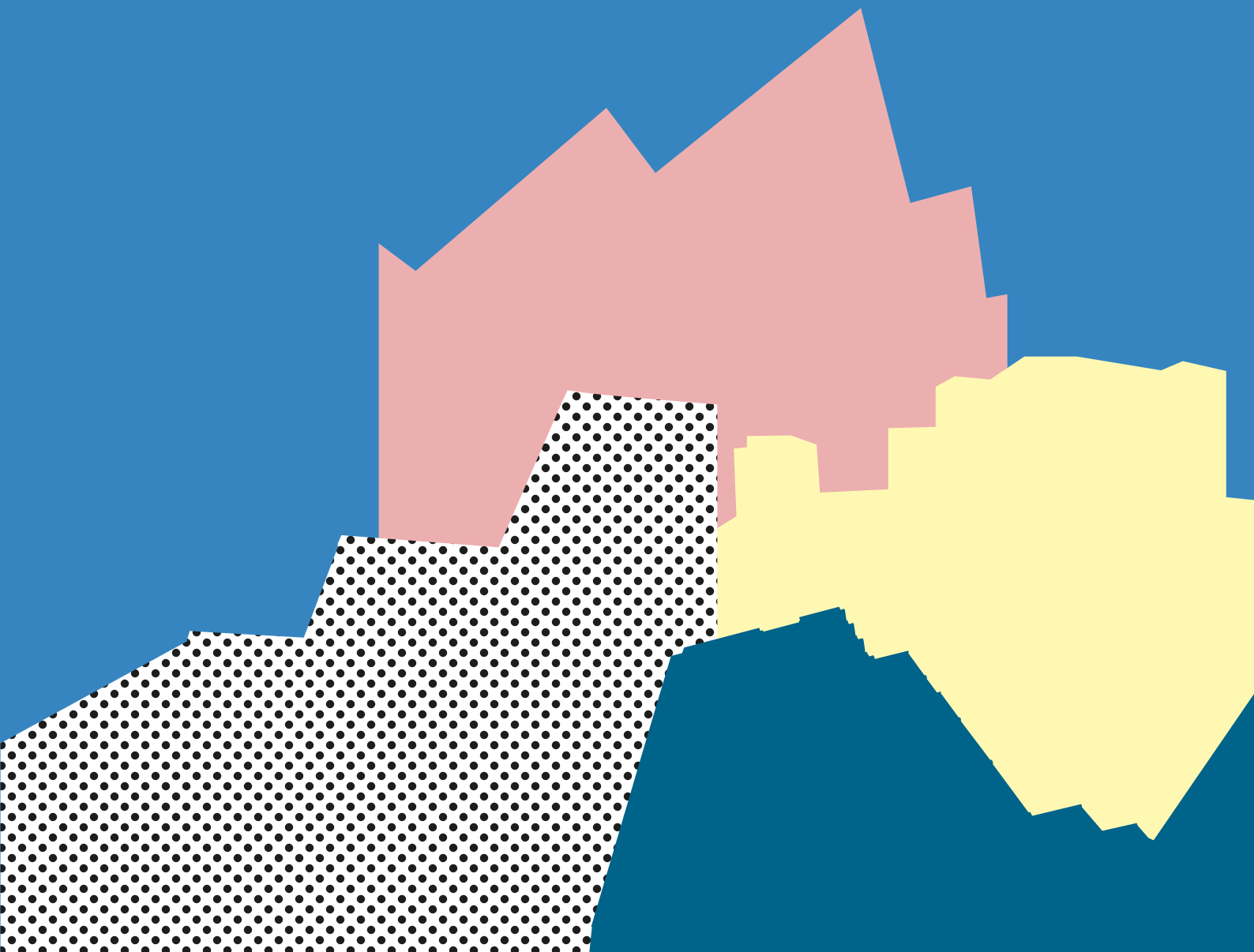
CHAPTER 6

A deliverable project vision and objectives have been established, and the scale and type of development opportunity that is available has been identified.

The landowner progresses to forming a delivery strategy for the site.

Development Feasibility Stage

2 Due Diligence



Physical site inspection and analysis

An initial step in any project should be to develop a detailed understanding of a site and its physical attributes, to start identifying the opportunities and challenges that it presents. This step is relevant to all scales and types of sites.

Due diligence would include a desktop review of the following:

- any site information, surveys and reports (including previous studies) held on record
- basic characteristics of the site – such as size, shape and orientation
- nature of boundary and edge conditions
- access/egress to the adopted highway and any highways, pedestrian and cycle routes through the site
- current and historic uses
- flood risk[1]
- PTAL[2] – detail on access levels to public transport services
- existing and proposed heat networks[3]
- any as-built drawings held on record

A site walkaround with core team members will help to better understand the above considerations as well as characteristics that aren't obvious when the site is reviewed remotely, such as:

- microclimate considerations such as wind, noise and traffic (pollution)
- edge and boundary conditions
- potential for overlooking and overshadowing (both from and to the site)
- physical features such as level changes and structures
- informal use and desire lines
- vegetation – quality and condition
- general condition of infrastructure and assets
- any features worth retaining.

Technical analysis

As part of the early site analysis, further surveys and investigations can help to better understand conditions that may pose a risk or cost to development. Though each site has its own constraints, areas of further analysis can include the following:

- utilities and services in and around the site
- topography
- ecology (including trees)

1. Guidance: Competitive Tendering Procedures
2. TfL, Webcat planning tool
3. London Heat Map

- ground conditions – any actual or likely contamination, water levels
- geotechnical attributes – analysis of the soil and subsurface conditions, and understanding their potential to support development.

Landowners should take a proportionate and risk-based approach to decide which surveys are useful at this early stage. The desktop analysis and site visit will help to identify areas of high risk and where further information is required. Desktop surveys will be easier and cheaper to undertake. Intrusive surveys may be undertaken at a later stage, following capacity and viability testing, to provide additional development certainty. A non-exhaustive list of potential surveys to support technical analysis can be found at **Appendix 1**.

If surveys are being procured via a consultant or sub-consultant, the contract should allow reliance to be sought on these. This reliance should also be able to be novated if required, as it may be passed to delivery partners at a later stage in the development lifecycle.

> Compiling thorough information about the site at the outset means that early design and viability work can respond to any known constraints.

© GLA, Council housing, Bermondsey

Understanding the place and wider context

As part of early due diligence, the context around a site should be assessed, including the urban setting; and economic, social and environmental factors. This will identify the role that the site has in the wider area and help inform the vision and objectives for the site.

A more in-depth review of the wider place context is likely to be appropriate for more strategic and complex sites, where external consultant support would often be required to undertake the analysis.

The wider place context should be assessed through area inspection, stakeholder engagement and the use of mapping, data and digital tools. Some available tools include:

- the GLA London Datastore[4] is a free and open data-sharing portal. The store includes demographic, environmental, employment, planning, economic and health data
- the ONS data website has an 'explore local statistics' tool[5] that provides a search function view of 2021 Census information for a local area such as a ward or town. The tool includes information on the economy, housing, education and skills, health and wellbeing, environment, and connectivity
- the Planning London Datahub[6] – a dashboard showing housing completions against the London Plan target by planning authority
- Vu City[7] – a 3D digital planning and design tool.

Physical Context

The wider physical context of the site should be assessed with a combination of desktop analysis and an inspection of the area to understand:

- land use: neighbouring and local uses
- built form and character: form, height, density and character of the local area
- connectivity: how people and vehicles move through the local area and whether the site enhances or impedes movement. This includes public transport and pedestrian networks
- public realm: open, green and play spaces, including their accessibility and condition
- amenities: commercial, education, cultural and social infrastructure, including nearest key services.

4. London Datastore, Dataset Search
5. ONS, Explore local statistics
6. London Datastore, Residential completions dashboard
7. VU.City, 1# 3D City Model & Digital Twin Software for Design & Planning

Market Context

Understanding the local market context, both from the perspective of existing and future neighbourhoods, will create an understanding of sales and rental values of nearby properties, as well as product demand. This will be a crucial input in the viability analysis that is covered in Chapter 5 of the guidance note. Some tools include:

- **Molior** – a data research company that provides data that is predominantly about residential development in London
- Property sites including Rightmove, Zoopla will have live sales/rental properties
- **GLA's Homes for Londoners property search** provides information about Shared Ownership, London Living Rent and other forms of affordable homes that are available across London.

Economic context

Local employment and businesses sectors should be identified, including the challenges and growth opportunities. Sectors that may not be immediately observable (such as the creative sector, the evening economy or distribution uses) should not be overlooked.

Available data for understanding the economic context include:

- ONS data on economic output and productivity[8] – includes a dataset that provides information about consumer card spending across the UK from 2019 to 2023
- ONS data on job density[9] – datasets including the numbers of jobs per resident aged 16-64
- ONS data on workforce jobs[10] – a quarterly measure of the number of jobs in the UK; this is the preferred measure of the change in jobs by industry.

> Future neighbourhoods, will create an understanding of sales and rental values of nearby properties, as well as product demand. This will be a crucial input in the viability analysis that is covered in Chapter 5 of the guidance note.

8. Nomis, Economic output and productivity
9. Nomis, Jobs density
10. Nomis, Workforce Jobs

Social context

Available data includes:

- households by deprivation dimensions[11] – 2021 Census data using dimensions of deprivation: employment, education, health and disability, and household overcrowding
- cultural identity[12] – 2021 Census data covering ethnicity, gender identity, language, religion and sexual orientation.

Environmental context

Available information includes:

- environmental data topics[13] – as part of the London Datastore, including green jobs, public realm, trees, waste, water and open space
- London tree map[14] – locations and species information for over 1m of London's public realm trees
- other considerations include flooding, pollution (air and noise) and green infrastructure.

Future context

A review of any future plans and strategies for the wider area will help a landowner to understand the emerging context and how the local area will change over time. This should include a review of local plans; area-based supplementary planning guidance; opportunity area frameworks; infrastructure plans; and a review of local planning applications and recent consents. The next section, 2c, provides further guidance on the analysis of planning documents.

> A review of any future plans and strategies for the wider area will help a landowner to understand the emerging context and how the local area will change over time.

Planning analysis

Securing planning consent is one of the biggest risks in the development process. Landowners should therefore investigate the planning context for any site as part of early due diligence.

A planning review can be carried out by consultants, or in-house if there is the right expertise. A review should consider the following:

- the London Plan and its supplementary guidance
- national planning policy, such as the National Planning Policy Framework

11. Nomis, TS011 – Households by deprivation dimensions
12. ONS, Cultural identity
13. London Datastore, Dataset search
14. GLA, London tree map

- the Local Plan and any supplementary documents
- the local site allocations map, to check whether the site has been designated for a certain use, and to check for any potential restrictions (e.g., conservation areas, tree preservation orders, article 4 orders)
- any extant planning consents (or refusals) on, or in the vicinity of the site
- recent decisions by the local planning authority (LPA) to understand any themes or issues
- the LPA's five-year land supply for housing and other uses – this may have a bearing on how the LPA will consider an application
- any studies that have helped inform policy (e.g., strategic housing market assessments, strategic land availability assessments
- local infrastructure plans to understand how the local authority plans to invest collected Community Infrastructure Levy (CIL) monies; and if the site is likely to be required to contribute to any infrastructure projects
- whether there are listed buildings on site or in the vicinity (via a check on Historic England's website).

Landowners should consider early pre-application consultation with the LPA once some viable development options have been formed. The LPA could be engaged before design work is done if a site has specific planning risks, or if the principle of development is likely to be challenged. Chapter 6 explores other options for de-risking sites from a planning perspective.

> Securing planning consent is one of the biggest risks in the development process. Landowners should therefore investigate the planning context for any site as part of early due diligence.

© Queen Elizabeth Olympic Park, Jim Stephenson, Chobham Manor

Title review

An important, early step is to commission a review to understand the site's legal title. The title is a legal record of the site's address, location, extent, ownership and any restrictions, rights and covenants benefiting or burdening the land.

Usually, the site will have a registered title – meaning title documents can be obtained from HM Land Registry. Sometimes, land may be unregistered which means that title needs to be evidenced through a chain of transfers, conveyances or other applicable physical documents. Even with registered land, there may be unregistered deeds and documents that are relevant to the title – so the deeds for a site should be checked in all cases.

A title report is a comprehensive examination of a site's title history to verify its legal ownership, and unearth any potential issues that may be relevant to the sale or development of the site. This should be undertaken by a qualified legal professional, and will likely include identification of:

- ultimate ownership of the site (the freeholder) and any past transfers of the land to other adjoining owners
- how the site is owned by the landowner, either freehold or leasehold; and, if leasehold, how long the unexpired term of the lease is and what restrictions on sale/development might be contained in the lease

- leases and sub-leases of the site (whole and part), and if/how they can be terminated early to facilitate sale or development
- financial charges on the land – these will need discharging ahead of or as part of the sale of the site
- rights benefiting the site, e.g., access or egress over neighbouring land, rights to use conduits crossing neighbouring land, rights of light and air
- any rights burdening the land, e.g., neighbouring land has right of access or egress over the site, rights to use conduits crossing the site (which could impact on development and may need to be diverted or stopped up)
- any other easements or wayleaves, e.g., an electricity supplier might have a right to access and maintain a substation on the site
- any positive covenants applying to the site, e.g., an obligation to maintain a boundary wall
- any restrictive covenants applying to the site, e.g., prohibitions on certain uses on the site.

A title review would not cover:

- matters that might only be apparent from an inspection of the site, e.g., informal rights of way or rights of light
- the exact location or extent of the legal boundaries – HM Land Registry states that its title plan boundaries only indicate the general position of the legal boundaries; landowners may need to take specialist advice if the precise extent of the boundary of the site is critical for development
- the location, capacity and availability of all conduits on, crossing or serving the site. The title will only reveal any registered documents relating to conduits, so may not be comprehensive
- matters that would be revealed by conveyancing searches (see on the next page).

It is important to understand a site's title and any encumbrances early on in the development process, as they may impact what can be delivered on a site. For example, a title review might reveal a restriction on the use of the site or a right of way. This may need to be resolved through negotiation with the beneficiary of these rights, or may require indemnity insurance to be put in place.

> It is important to understand a site's title and any encumbrances early on in the development process, as they may impact what can be delivered on a site.

Solicitors should be consulted before attempting to deal with any issues revealed by the title review, to understand the options and the order in which they should be taken. For example, in some instances it may be that approaching the beneficiary could then preclude indemnity insurance.

Prior to acquiring a site, a lawyer will give the vendor a list of standard enquiries, to better understand the site and any issues. They will also conduct standard "searches", which will include:

- local authority searches (planning, building control, highways, listed building/conservation area and pollution issues)
- land registry searches (checks the title register and plan, establishes ownership)
- environmental searches (flooding, subsidence, landslide, contamination issues)
- water and drainage searches (checking connections to drains and water supply)

The cost of a title review depends on the complexity of the title and number of documents involved. It could range from a few hundred pounds to several thousand pounds.

Stakeholder analysis and engagement

Stakeholder analysis

At feasibility stage, understanding the stakeholders who have a stake or interest in and around a site is important. They will be impacted by the development of the site; and have a role in its delivery, future use and guardianship.

An initial mapping exercise should be undertaken to identify the key stakeholders. When identifying stakeholders, their ability to influence the project should be considered, along with their interest and capacity to engage in the project.

Having carried out a mapping exercise, the landowner can then plan out if, how and when to engage key stakeholders and establish the aspects of the project that each stakeholder will be engaged on. The **timing** and **scope** of any engagement should be carefully considered:

- early engagement will ensure that project objectives and high-level spatial options consider the priorities and views of stakeholders
- early engagement will help to foster trust, understanding and inclusivity as the project progresses
- early internal engagement will identify any organisational policies or priorities that the development will be expected to uphold or contribute to

- any commitments made to stakeholders early on must be safeguarded as the project moves forward
- high-level feasible design options can provide a valuable opportunity for more focussed stakeholder engagement (see chapter 4)
- there should be a clear project governance process that sets out what stakeholder permissions and/or engagement will be required as part of this.

The **form** of engagement activity can vary. Some examples (which could be used in combination) include:

- Co-production or co-design, whereby groups are given the tools to shape the scheme. This process should consider the areas where co-design can genuinely shape the scheme, and how to give participants the tools and voice to effectively input into the scheme.
- Specialist review panels, made up of experts and/or community members, may be drawn on or formed for the project. This may bring lived experience from a wide range of stakeholders.
- Pop-up events – such as at key transport nodes, community centres or other areas with high footfall – can help identify and engage with stakeholders.
- Online forums - for interested stakeholders to contribute their views, concerns and ideas - can be a useful means of reaching a wide audience.
- Letters and questionnaires – a targeted means of engagement, which could be used effectively to gather views on specific topics from specific stakeholders.

> Understanding the stakeholders who have a stake or interest in and around a site is important. They will be impacted by the development of the site; and have a role in its delivery, future use and guardianship.

Distilling and summarising findings

The findings from the due diligence tasks set out in this chapter should provide a broad understanding of the site and its surrounding area.

A site summary report should be compiled at this point. This will distil the main outcomes; provide a high-level analysis of strengths, weaknesses and opportunities; and note any further investigations that might be required at a later point.

This summary exercise will help inform a robust set of objectives, and a clear vision for the site (covered in chapter 3). It will also provide a useful package of information to share when commissioning any consultants and briefing internal stakeholders.

This summary exercise can be particularly useful when a landowner is reviewing a portfolio of sites concurrently. A consistent approach across sites can aid comparability at this early stage; and help to prioritise the sites with the greatest chance of delivery within current market conditions.

A range of presentation tools can be used to illustrate the findings, and might include:

- site ownership plans and / or title plans
- site photographs, which can give a good sense of the existing context
- constraints and opportunities plan(s), including both technical and contextual points
- wider context plans showing other sites that may be coming forward for development
- planning policy maps showing designations and allocations.

3 Creating a vision and objectives

The tasks set out in chapter 2 should help shape a robust set of objectives and a clear vision for the site. This is a critical stage in a development project that clarifies the landowner's ambitions for a site.

A project vision is a concise and inspirational statement that articulates the future outcomes of the project. It sets the tone, and the landowner's overarching ambitions for the future of the place.

Project objectives are tangible, specific and measurable outputs that will be delivered through the project. The objectives sit alongside, and will deliver, the project's vision statement.

The agreed vision and objectives should be carried through to all future stages of the development process; and be at the forefront of decision-making in the project. They serve several purposes:

- providing a tool for engagement and collaboration with stakeholders to agree project priorities
- telling the story of the existing and future place
- supporting decision-making and consistency across the life of the project
- helping potential partners, developers and/or investors to clearly understand what the landowner is seeking to deliver.

At an early stage, the vision and objectives may be high-level and fluid. The landowner will want to ensure they are deliverable from design, technical and financial perspectives. As such, they will be further refined and adapted, following design and viability testing (see chapters 4 and 5).

Effective project visions and objectives:

are place-specific, rather than generic

distil the landowner's ambitions for the project into tangible outcomes

are robust and deliverable, taking into account any project constraints or challenges

embed design, economic, social value and sustainability aspirations for the project

speak to the final built outcome of the project, and what it will be like to live there for a range of users

seek to ensure the project makes a positive contribution to the local area and communities

are formed in close consultation with stakeholders to address their needs.

A range of methods can be used when forming a project vision and objectives, including:

- holding tailored workshops
- using maps, diagrams and other visual elements to draw out ideas using precedent projects to visit, research and reference to help develop and communicate the vision
- seeking external guidance – for example, Future City has developed a guide on to how to create a vision and objectives for sites.[15]

© East Wick (LLDC) Edward Bishop

15. Place Vision Toolkit: A New Resource for Cultural Placemaking for London Borough Councils | Futurecity | We are a placemaking agencyFuturecity | We are a placemaking agency

Examples of project visions

Some examples of early project visions and objectives that were produced by London Legacy Development Corporation (LLDC) for a number of their development sites can be found at **Appendix 2**.

Below is a list of more complex vision documents that demonstrate place specific and multi-layered visions for large projects in London.

Thames Road Vision and Design Code

The **Thames Road Vision and Design Code** is produced by Be First in collaboration with the London Borough of Barking and Dagenham; ARUP; BBUK; Building Environment Design; PRD; and Urban Flow.

Key features:

- vision illustration links to other notable developments and connections in the area
- four concise vision objectives, called 'place outcomes', that are specific to the area and future aspirations of the place.

Banbury Area Vision

The **Banbury Area Vision** is produced by We Made That in collaboration with the London Boroughs of Enfield and Waltham Forest; Social Life; and Useful Projects.

Key features:

- a shared vision between two local authorities that has aided decision making
- area challenges and opportunities clearly described and illustrated
- a clear overarching vision statement and supporting text, describing concisely the challenges and opportunities of the scheme.

Royal Docks and Beckon Riverside Opportunity Area Planning Framework

The **Royal Docks and Beckton Riverside Opportunity Area Planning Framework** is produced by the GLA in collaboration with the London Borough of Newham; the Royal Docks Team; Transport for London; strategic partners; local residents; and stakeholders.

Key features:

- four site-specific vision principles that are described through an overview statement, key bullet-point principles, and a diagrammatic map illustration
- a single 'strategic vision' page clearly linking the physical elements of the proposal with the area in a visual way.

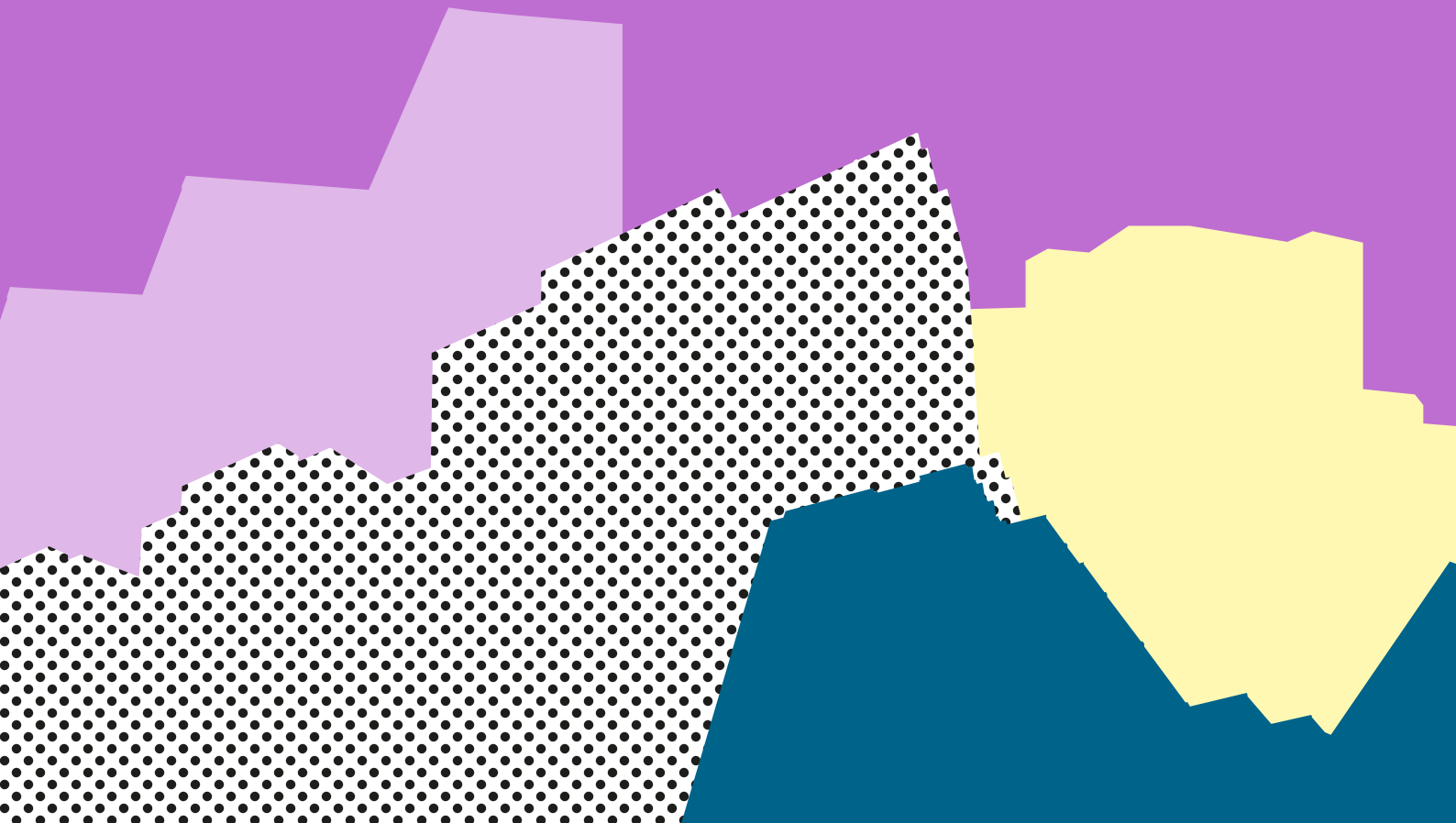
© Queen Elizabeth Olympic Park,
Jim Stephenson, Chobham Manor

4 Capacity testing and design studies

Design studies

Following initial site due diligence and some early work on developing a project vision and objectives, a landowner will want to ensure its plans and ambitions for a project are feasible from a technical and design perspective.

This is done through some form of design study, which could be a high-level capacity-testing study; a more detailed feasibility study; or an options appraisal. These studies test aspirations against what is deliverable in varying degrees of detail; and turn the vision and objectives into spatial options.



The different types of design studies are explored in the table below.

STUDY	WHAT IT ACHIEVES
Capacity testing RIBA stage 1 An initial high-level design assessment of what development may be appropriate and achievable on a site	Capacity testing can be a useful starting exercise to get an initial view on the following, before more detailed work is committed to: • the key design challenges and constraints, as well as opportunities for the site/project • the overall quantum of development possible on a site and how it might be arranged • whether the vision/objectives are achievable from a design perspective, and how they might be refined. The outputs from this type of study would typically include: • high-level diagrammatic information on layout, heights, massing, access • preliminary information on floor areas being achieved • a list of any caveats/assumptions made during the study • an indication of recommended next steps for further study or for progressing the plans.
Feasibility design study RIBA stage 1 A more focused piece of design work – still at a high level, but giving a greater level of confidence in a scheme's design feasibility through consideration of constraints, context and resolution.	Feasibility studies provide a greater level of clarity and certainty as to what is achievable on a site. They can provide a benchmark against which any alternative proposals can be assessed. Feasibility studies should have a greater focus than capacity studies on whether the scheme design is deliverable. There should be a greater level of detail including identifying constraints and responding to them. Feasibility studies should undergo a greater level of critical review by appropriate experts, and so a review stage or stages should be built into the programme. Outputs would typically include: • constraints plans • indicative 3D massing • scheme plans and indicative/typical building plans • preliminary development/accommodation schedules • precedent studies to illustrate how the design could respond to the project vision • written report that includes any caveats or assumptions made and an indication of recommended next steps.

STUDY	WHAT IT ACHIEVES
Options appraisal RIBA stage 1	A more extensive exploration of possible development options, allowing greater exploration of site optimisation, or where (for example) land assembly is being considered. Outputs would typically include the following for a number of different design and layout options: • indicative 3D massing • site plans and indicative/ typical building plans, • preliminary development/ accommodation schedules • a written report appraising the pros, cons and risks associated with each option • precedent studies to illustrate how the options could respond to the project vision.

Commissioning and conducting design studies

Some organisations may undertake design studies in-house if they have design-trained professionals, particularly at an early stage when undertaking capacity testing.

There are some tools that could be used to support early in-house design work, including the following:

- the GLA has produced a simple site capacity toolkit[16] that provides a set of 3D sketch models of typical residential typologies, and an accompanying excel spreadsheet to generate floor areas and other metrics
- There are also several emerging tools for testing site capacity, including Site Solve,[17] Blocktype,[18] and ArcGIS CityEngine.[19] The GLA does not endorse any particular software, and any outputs should be reviewed by experienced design professionals.

Most landowners will commission consultancy support when undertaking a design study. Even in instances where an organisation has internal design resource, consultancies are likely to have access to a range of tools and expertise that equip them to do undertake work effectively and efficiently.

16. London Datastore, Indicative site capacity toolkit
17. VU.City, SiteSolve
18. Blocktype, Faster and better feasibility studies, for everyone
19. ArcGIS CityEngine, Procedural City Generator | 3D City Maker

When external consultants are used for design studies, commissioning the right team is important. A high-quality team can add value; identifying possibilities beyond those originally considered.

The routes available to a public landowner when procuring design studies are usually open procedure (whereby any interested supplier can submit a tender as part of a single-stage process) and a competitive flexible procedure which could range from a two-stage process to a more bespoke process that meets the landowner's needs. There are also frameworks available which provide a pre-qualified list of consultants that can be selected from via a mini-competition process. The GLA has procured the Architecture & Urbanism framework (A+U)[20] which includes architects, urban designers and landscape professionals. The framework can be used by public sector commissioning authorities to appoint high-quality design services for a range of built environment projects.

Landowners could consider 'soft market testing' with consultants before commencing the procurement to obtain feedback on the scope and to ascertain the level of interest in the commission.

For an effective procurement process, a brief that clearly sets out the scope and expected outputs from a commission is required. Consultants will use this brief to inform their proposal for the commission.

A typical structure for a design study brief is set out below. The 'commission requirements' section of the brief should clearly reflect what the landowner is expecting to deliver through the commission. Earlier tasks set out in this guidance note can be incorporated within the brief to commission a more extensive feasibility report, where the required team structure must reflect the extent of skills and specialist input that is required.

“When external consultants are used for design studies, commissioning the right team is important. A high-quality team can add value; identifying possibilities beyond those originally considered.”

20. GLA, Procurement: Architecture + Urbanism Framework

CONTENTS	GUIDANCE:
1. Executive summary	High-level summary of: • the project • the landowner's vision and objectives • the team/skills required • key outputs and what they will be used for.
2. The project and context	
2.1. Project vision	Any agreed or draft vision statement.
2.2. Project objectives	Any agreed project objectives, whether they are 'fixed', and their order of priority.
2.3. Organisation and governance	Explain client structure (including client review, governance and sign-off processes) and key stakeholders. Consider use of organograms.
2.4. Site overview	An overview of the site, including its surroundings, context, constraints and opportunities. Chapter 2F sets out what might be included and how to present the information.
3. Commission requirements	
3.1. Client requirements and deliverables	A clear and concise description of what the consultant team is expected to deliver through the commission, and to what degree of detail. Type of study required, including a list of required outputs (e.g. presentations, reports, programmes, drawings) set out in RIBA stages or tasks. The limit/extent of the commission, and any possibility for extension, should be clear.
3.2. Team structure	The team required and its competencies/experience/skills, including any specialist input that may be required. Clarify whether commercial advisers should be part of the project team, or whether they will be commissioned by the landowner separately (see chapter 5: viability analysis).
3.3. Milestones and a preliminary programme	Set out tasks, milestones and project duration/ deadline.

3.4. General duties	Could include: • project management duties, e.g., managing sub-consultants; managing risks and programme; arranging meetings, agendas and minutes • how the team is expected to work together and with any other consultants/the client/stakeholders • information exchange requirements (digital/physical, etc) • any socio-economic requirements (providing paid work placements, London Living Wage etc) • any required professional qualifications and professional insurance • if any surveys are required, reliance to be provided that can be transferred to a future partner/developer.
4. Submission requirements and evaluation[21]	
4.1. Submission requirements	The award criteria that bidding consultants need to respond to; how they should submit their proposals; by when; and in what format. Any page/ word limits should be clear.
4.2. Evaluation	How bids will be assessed – i.e., the assessment methodology and what feedback will be given.
Appendices	Might include: • related studies • further information on site, policy, title/ ownership and people/place analysis • further organisational policies.

Equality, diversity and inclusion and social value when procuring consultants

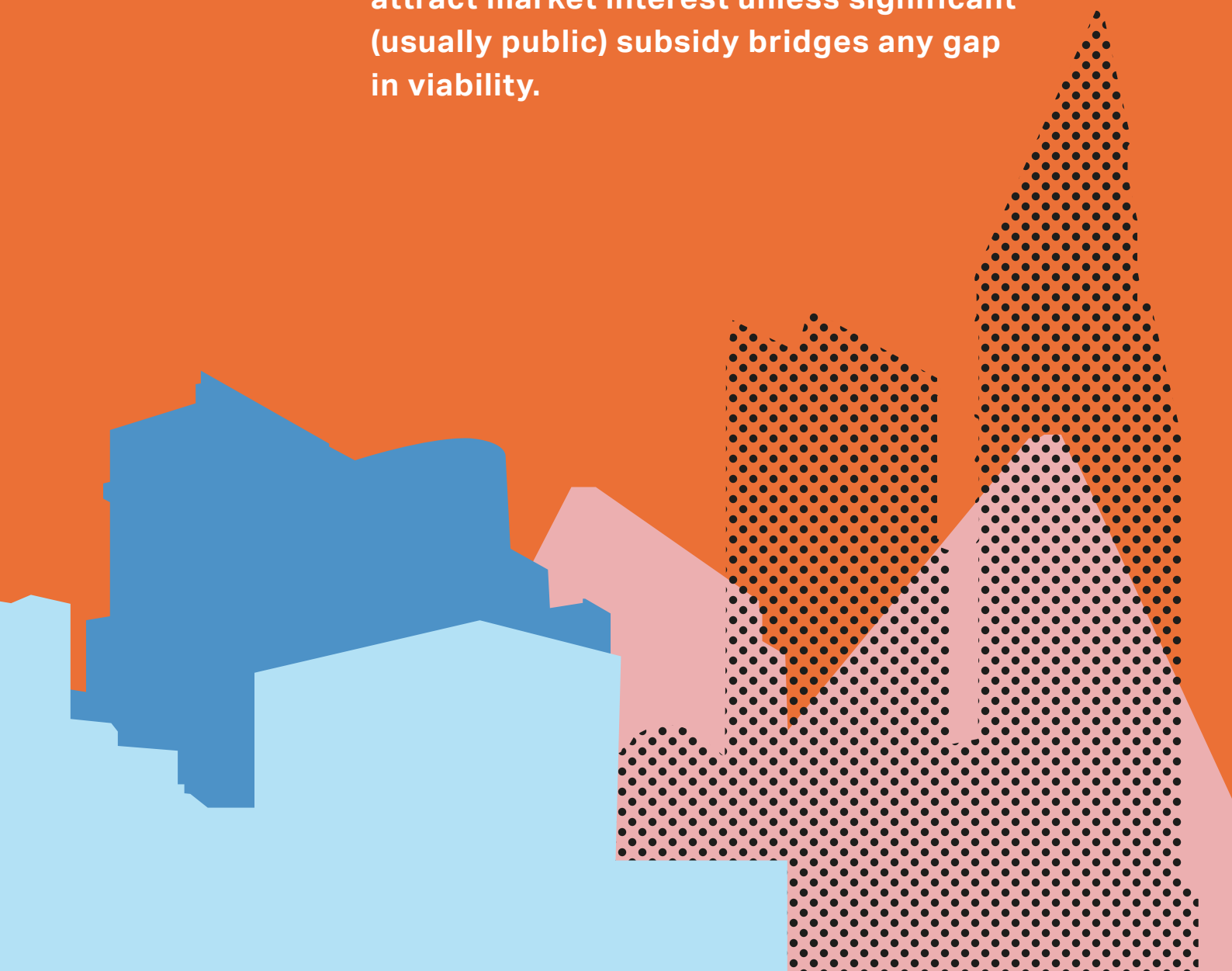
The procurement of consultant teams should be used to promote equality, diversity and inclusion (EDI) and deliver social value outcomes as part of the project. Award criteria on EDI and social value can be included, giving appropriate weight to it in the evaluation process. The following resources provide further guidance:

- the Good Growth by Design Supporting Diversity Handbook[22]
- the Good Growth by Design Process Note: Procuring Social Value and EDI.[23]

21. Guidance note 3 (procurement strategy) and guidance note 4 (setting a brief and managing a procurement) set out more details on award criteria and evaluation.
22. GLA, Handbook: Supporting Diversity, Good Growth by Design
23. GLA, Procuring Social Value and EDI: Process note

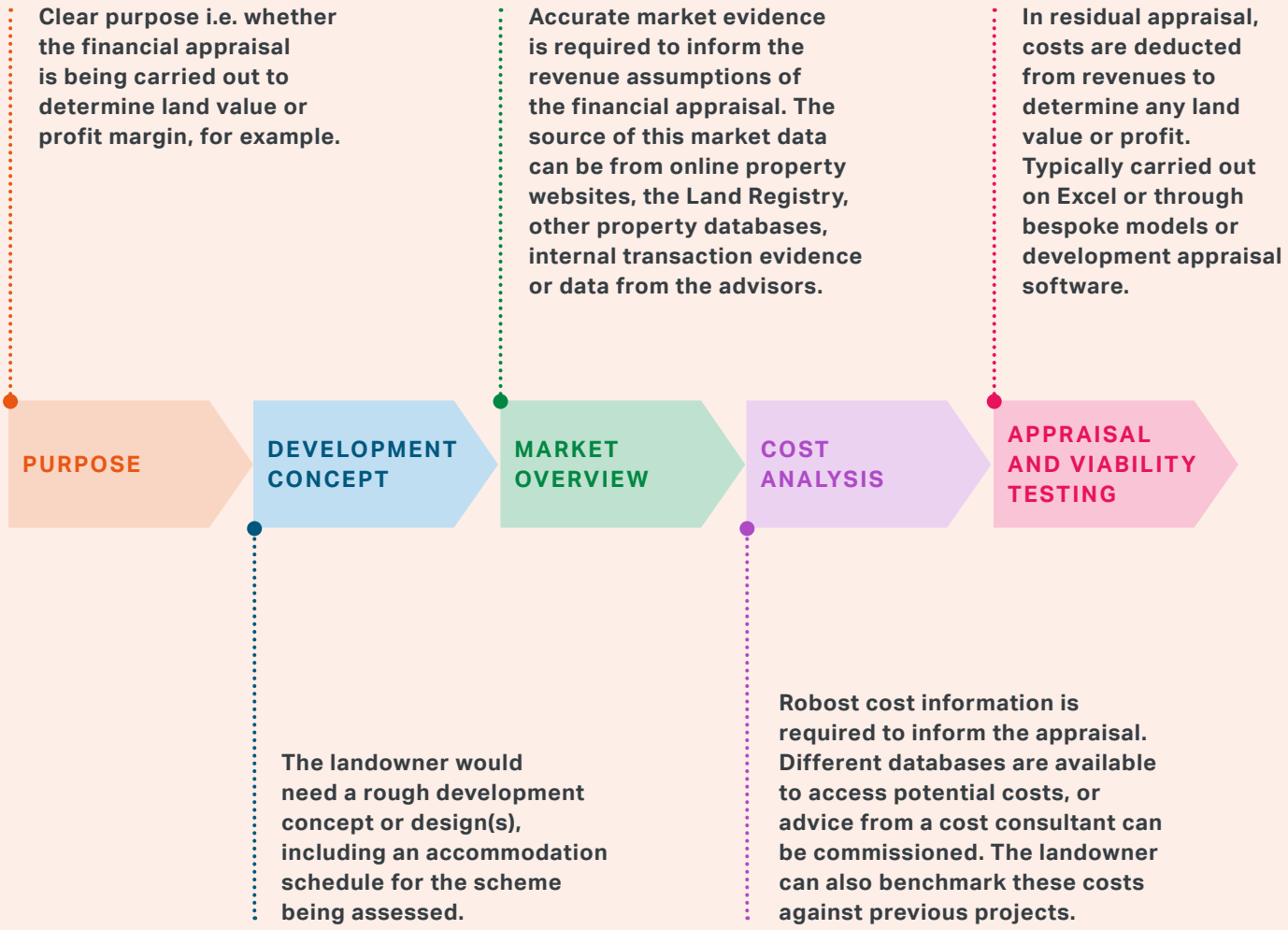
5 Viability analysis

Landowners will want to ensure that their vision and objectives, and any initial design proposals, are financially viable. In the context of this chapter, "financially viable" means the proposed scheme generates a positive land value and a suitable profit/returns for a developer or joint venture partners. This is an important step, as unviable schemes won't attract market interest unless significant (usually public) subsidy bridges any gap in viability.



Viability testing should be carried out by a suitably qualified member of the landowner's team or by external consultants. The Royal Institution of Chartered Surveyors (RICS) professional standard, "Valuation of development property", provides helpful guidance in preparing appraisals for development sites.[24]

Viability testing typically refers to the process of producing a financial appraisal assessing the land value or profitability generated by a given scheme. There are a number of key elements required for testing viability. These are shown in the diagram below:



24. RICS, Valuation of development property, 1st edition, October 2019

Link to design studies

Design and viability testing go hand in hand; the two processes need to work together, often in tandem, and they are iterative.

The landowner may have a defined scheme proposal or a number of options that can be financially appraised. If it is financially viable, the scheme could then be optimised from a financial perspective. This work could use market data to drive the best possible values, or cost data to drive efficiencies. Alternatively, the landowner could decide to forgo some land value/ profit to incorporate higher cost specifications or higher cost design or sustainability features.

The landowner should seek early commercial advice to better understand local market demand, so that any initial design work/concept schemes are market-facing and can help address this demand.

The landowner should use the design and viability testing process to understand the financial implications of:

- increasing/decreasing the quantum or density of development, adjusting storey heights or massing
- different uses, mixes of homes or building typologies
- different project objectives or developer requirements, such as different levels of affordable housing (e.g. policy compliant levels of affordable housing provision versus enhanced provision)
- different phasing arrangements and cost profile expectations.

Development appraisal

Generally, viability is assessed with reference to either the residual land value (RLV) or the development profit a proposed scheme can generate. (However, appraisals can be used to calculate other outputs if necessary.) These are summarised below:

- RLV: the leftover value when all costs of the development (including a fixed developer profit) are deducted from the anticipated revenues generated by a scheme. This is the amount that can be paid to buy the land.
- Development profit: the returns from a development, often expressed as a percentage of total revenues or costs, being the final cash position after all revenues are realised and all costs are paid, including land value.
- Development appraisals can be produced in many different formats. The most common are:
- simple Excel spreadsheets
- more complex bespoke models, typically including cashflows
- development appraisal software, such as Argus Developer.

Inputs in a development appraisal

Development appraisals are a product of their inputs; the accuracy and robustness of an appraisal depends heavily on the quality and accuracy of the data inputted into it. The basic inputs in a development appraisal are as follows:

- **Project timescales:** estimated timescales in relation to the project's life cycle – spanning site purchase, planning, pre-development, the construction period and sales.
- **Revenue assumptions:** the revenue-generating elements that make up the gross development value, such as anticipated income from the sale or letting of the completed development. It is essential to base these assumptions on current and reliable market data. Sources for this evidence include comparable transactions from online property platforms and databases such as the Land Registry, market research reports and data from agents.
- **Additional revenue assumptions:** any likely additional forms of revenue or funding (e.g. grant funding) should also be included in an appraisal.
- **Construction costs:** the cost of building the development; and any costs such as demolition, site-specific abnormal costs and infrastructure costs. This information can be obtained through build-cost databases and indexes; or from commissioning specific cost consultancy advice from a quantity surveyor.

  The Building Cost Information Service (BCIS)[25] provides a comprehensive range of construction cost and price data. BCIS data is widely used by RICS professionals.

  Depending on the scale and site-specific requirements/abnormals of a proposed development, dedicated cost consultancy advice is the most accurate form of construction cost forecasting when testing viability.
- **Contingency:** an allowance within an appraisal for unforeseen circumstances and risks. Usually expressed as a percentage of the total construction cost, this can vary significantly – from 2 per cent to 10 per cent – depending on the nature of the development. For a project at an early stage with many uncertainties, 5 per cent may be typical.

> “Development appraisals are a product of their inputs; the accuracy and robustness of an appraisal depends heavily on the quality and accuracy of the data inputted into it.”

25. BCIS, Building Cost Information Service Construction Data

- **Professional fees:** costs for the services of consultants required throughout a project including architects, quantity surveyors, structural engineers, project managers, and other specialists. Professional fees are usually reflected as a percentage of the total construction costs – typically within a range of 7 per cent to 12.5 per cent – but can vary based on the project's complexity, scale, and specific requirements. The percentage could be towards the lower end of this scale for very large projects.
- **Planning fees:** the estimated cost of obtaining planning permission for the proposed scheme.
- **CIL/S106 contributions:** depending on the nature of the development, CIL payments and Section 106 payments or obligations may need to be made to the LPA. These are imposed to generate funding for local infrastructure and mitigate the impacts of development.

  CIL is a fixed charge on new development to help fund infrastructure needed to support growth, including roads, schools, and parks. It can typically be calculated by following a local authority's CIL Charging Schedule.

  S106 payments or obligations are negotiated between the LPA and the developer to mitigate the impact of the proposed development locally.
- **Marketing/sales/letting fees:** costs to market/sell/let the completed development. These costs could be expressed as a fixed amount/ percentage agreed with the relevant services, or as a percentage of the overall sales. Broadly, typical rates may include a 1–3 per cent marketing budget; a 1 per cent sales agent fee; and lettings agent fees at 10 per cent of the first year's rent, depending on marketing strategy and price point.
- **Legal fees:** costs related to the conveyancing fees associated with the sale and letting of the completed development. Typical rates may be 0.5 per cent of total sales revenue for sales, and 5 per cent of the first year's rent for letting, again dependent on scale.
- **Funding/finance costs:** cost associated with funding or financing the project. Finance costs (i.e., interest) are incurred when a developer uses external financing (such as loans or credit facilities) to cover the costs of land acquisition, construction, and other project-related expenses, or can be applied as a notional rate of return required on any developer equity input into the project.
- **Developer profit:** the expected return that a developer receives from a project. Developer profit is often calculated as a percentage of the total development costs or gross development value.

A very simple development appraisal tool that calculates RLV is included at **Appendix 3**.

Sensitivity analysis

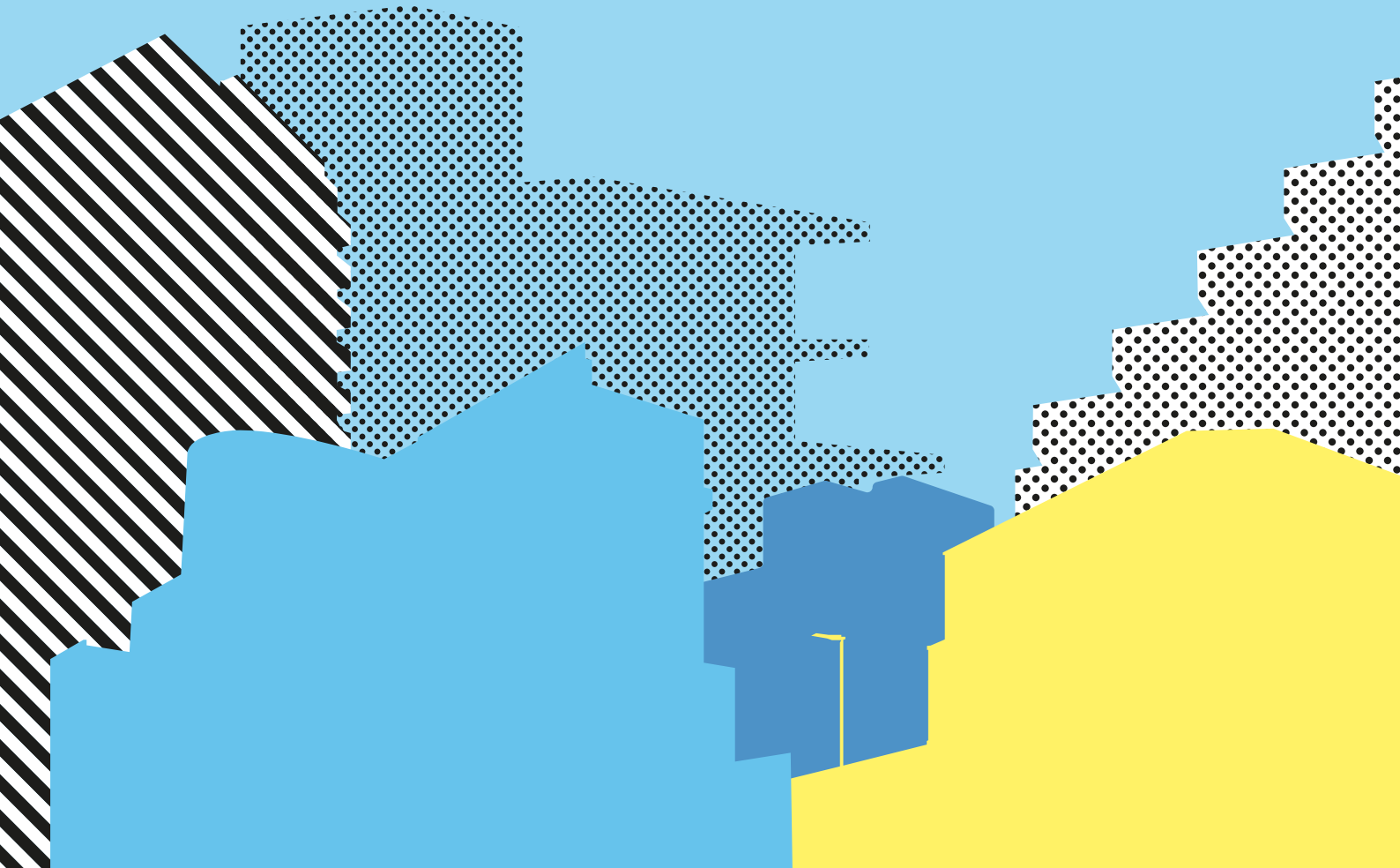
Appraisals are incredibly sensitive to the data input into them. When an appraisal has been completed, likely the landowner will likely want to apply a sensitivity analysis to assess how changes to key inputs impact the overall outcome. For example, what happens to the land value when costs are increased by 5 per cent and the revenues are reduced by 5 per cent?

Sensitivity analysis helps the landowner to understand the robustness of the results produced from a development appraisal; and identify which assumptions are responsible for driving the results observed. In the case of viability testing, changes to key inputs such as values, costs, developer profit and finance are typically tested as part of this analysis.

© GLA, Blackwall Reach, Tower Hamlets

6 Next steps

The design and viability work should provide the landowner with one or more deliverable option for the site. The landowner might decide to progress the delivery of the site at this point, particularly if the project is relatively simple and of limited scale. Guidance note 2 (partnership and delivery structures) explores different delivery structures which a landowner could adopt. Guidance note 3 (procurement strategy) explores how a developer partner can be procured, if the chosen structure and works require a regulated procurement process.



If the landowner is appointing a delivery partner, they might still decide to further develop the project design and planning approach prior to procurement. This could help de-risk the site, particularly if there are planning risks. It can also give the landowner greater control by ensuring that the design and sustainability ambitions are baked into the emerging project at an early stage.

The right approach will depend on the landowner's organisational policy, capacity and resources. Some options are presented in the table below.

ROUTE	SUB-OPTIONS	PROS AND CONS
Do no further design work Do no further work on the design/ planning of the scheme. Move straight to considering delivery structure options (and the appointment of a delivery partner, if the preferred delivery route).		Potentially the most time/cost-efficient approach. Useful for simple or small-scale schemes. Any planning risk/ uncertainty remains
Illustrative scheme design Produce an indicative scheme to articulate a desired approach to the site and set out key design principles.	**Sketch study:** At its most basic, this may involve drawing up sketches, diagrams, broad parameters and key design principles. This can show possible options. **Urban Design Framework (UDF):** Typically, a pack consisting of a high-level scaled design and a design code or framework. It can be particularly useful when resolving a more complex site, or one that is in multiple ownerships, prior to delivery.	Relatively time/cost-efficient, as there are short-term savings in producing less resolved design outputs. As the outputs do not have a planning status, there is a risk that the design could be unacceptable to the LPA (however, can be tested and refined through pre-apps, see row on the next page).

ROUTE	SUB-OPTIONS	PROS AND CONS
Engagement with LPA Engaging with the LPA via a site allocations process or pre-application advice can provide a good level of confidence in the scheme approach.	**Site allocation:** LPAs periodically run 'call for sites' exercises during Local Plan production. During these exercises, landowners can promote their land as development sites for a specific use. If successful, the site will be allocated in the local plan for a development. **Pre-application advice:** formal meetings with LPA to get advice on a proposed scheme. The LPA will provide written advice following the meeting.	Securing a site allocation provides a significant level of planning surety. However, site allocations are often not an exact science, and approaches to them can vary. The allocation figure should ideally correlate to, and be supported by, an appropriate design. Pre-app advice can provide more detailed guidance, including qualitative feedback on a design and proposed use class. LPAs charge for pre-apps.
Planning policy Work with the LPA to produce a planning policy to set the key principles of development.	**Supplementary planning document (SPD):** An adopted planning policy document that relate to a specific area or site. Typically this is produced by the LPA, but landowners could influence or lead their production.	SPDs are adopted documents, so carry weight in planning decision making. Can significantly de-risk a site from a planning perspective and provide a clear set of guiding principles for development. They are often valuable where a coherent/consistent approach is required across multiple land ownerships. An SPD requires significant resource to produce and buy in from the LPA.
Planning consent Secure planning consent for a given scheme on a specific site.	**Outline consent:** seeks consent for the type and quantum of development; block parameters; maximum heights; and access and design codes. Any planning matters that are not agreed through the outline application are 'reserved' to be determined through a future detailed planning applications. **Detailed consent:** seeks approval of all aspects of the proposed scheme. Landowners can also pursue a **hybrid consent**, where detailed consent is secured for a phase and outline consent is secured for future phases.	Securing planning consent will de-risk a site from a planning perspective. This creates certainty for prospective developer partners and should help improve the value of the land. It also allows the landowner to bake in its preferred design approach. Securing consent is costly and time-consuming, and the landowner will need the right resources to pursue a consent. Where the landowner then procures a developer partner, the consented scheme must be market-facing and deliverable from a technical and financial perspective, or risk deterring the market.

© Queen Elizabeth Olympic Park,
Jim Stephenson, Chobham Manor

Appendices

Templates and tools

Appendix 1
List of Surveys

Appendix 2
Example LLDC project visions

Appendix 3
Simple RLV appraisal