

**MAYOR OF LONDON**

**DELIVERING  
QUALITY  
HOMES**

**HANDBOOK**

**DRAFT NOVEMBER 2021**

**GOOD GROWTH BY DESIGN**

**A  
BUILT  
ENVIRONMENT**

**FOR  
ALL  
LONDONERS**

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## FOREWORD

The pioneering post-war housing minister, Aneurin Bevan once said: “While we shall be judged for a year or two by the number of houses, we build... we shall be judged in 10 years’ time by the type of houses we build”. That sentiment is as true today as it was in the years after the Second World War.

Every Londoner should have access to a well-designed, safe, good quality home they can afford. This should be a right, not the preserve of the rich. Yet, too many Londoners continue to face inadequate housing options. COVID-19 has shone a fresh light on housing inequalities across the country, including in our capital city. The impact of this health crisis has been worsened by the existing housing crisis, with many confined to unsuitable accommodation.

This is why the Mayor has introduced new standards as a requirement of his £4bn Affordable Homes Programme 21-26 across design, sustainability and building safety. These standards provide a blueprint for putting high-quality social housing at the heart of his plans for London. They will set the standard nationally when it comes to excellent design, safety and sustainability.

As part of this emphasis on quality, I am delighted to support the Delivering Quality Homes initiative, which aims to ensure the Mayor’s investment partners are well-equipped to deliver the quality homes that Londoners deserve.

This Handbook and the template Action Plan have been developed by the Mayor’s Housing team, Mayor’s Design Advocates and the Good Growth by Design team, in consultation with many of London’s high-performing housing organisations. These resources offer a roadmap for the delivery of good quality homes and places.



With the support of this initiative, I want to see new genuinely affordable homes that are healthy, safe, sustainable, comfortable, flexible, welcoming, robust and long-lasting - homes that truly work for their residents and enhance the neighbourhoods in which they are built. I hope you find this Handbook useful in achieving that aim.

**Tom Copley**  
**Deputy Mayor for Housing and Residential Development**

**Tom Copley**  
**Deputy Mayor for**  
**Housing & Residential**  
**Development**



# INTRODUCTION

# THE MAYOR'S AMBITION FOR QUALITY

## **Achieving the Mayor's vision for housing**

The Mayor's Housing Strategy sets out his vision and proposals to provide all Londoners with a good quality home they can afford. Its aim is that every Londoner can access a well-designed, safe, good quality home that meets their needs and is genuinely affordable.

The twin goals of affordability and quality are also at the centre of the new £4bn Affordable Homes Programme 2021-2026 (AHP). It includes 19 new funding requirements focusing on design, sustainability, and building safety, alongside a renewed emphasis on Modern Methods of Construction. In addition, the Mayor has committed to trialling the use of the Delivering Quality Homes (DQH) Action Plan and Post Occupancy Evaluation through two pilot initiatives.

## **Delivering good growth**

The Mayor's vision for good growth is to create a city that works for all Londoners. This means new development should benefit everyone who lives here. As such, it should be sensitive to the local context. It should be environmentally sustainable, physically accessible and socially and economically inclusive.

The Mayor's Good Growth by Design programme aims to improve the design quality and inclusivity of buildings and neighbourhoods for all Londoners. This handbook is part of a suite of resources published under the six Good Growth by Design pillars. It links to the Commissioning Quality pillar, which ensures excellence in how the Mayor and his partners appoint and manage architects and other built environment professionals. It also complements the Good Quality Homes for All Londoners Supplementary Planning Guidance, which sets the standard for designing and assessing new housing. This handbook focuses on the processes and practices that housing delivery organisations adopt to achieve good quality outcomes throughout all stages of development and into occupation. These activities are referred to collectively as quality management.



### **Quality outcomes**

Quality outcomes are the human, social, environmental and aesthetic outcomes achieved during the development and use of new homes. Section 1.3 explores this concept further, providing a range of quality outcome topics. These can be specifically defined, assessed and measured by individual organisations.

### **Quality management**

Quality management is defined as the processes and practices housing delivery organisations adopt to achieve good quality outcomes throughout development and occupation.

**'The Mayor wants to ensure affordable homes exhibit high-quality design that is socially and economically inclusive and environmentally sustainable, which support Good Growth principles.'**

Mayor of London





Image courtesy of Pete Landers - Colville Estate by Karakusevic Carson Architects



# ABOUT THIS HANDBOOK

## **Background and purpose**

The Mayor's Housing and Land Team commissioned Claire Bennie, a Mayor's Design Advocate with 30 years' experience in housing design and delivery to produce the Delivering Quality Homes Action Plan and this accompanying handbook.

These resources will support the Mayor's Investment Partners, chiefly councils and housing associations, delivering homes through the £4bn AHP 21-26 to meet prospective contractual requirements. However, all housing delivery organisations are encouraged to use the action plan and handbook to reflect upon, and, where appropriate, improve their quality management practices. The primary aim is to support in-house development and delivery teams to achieve good quality outcomes and deliver good quality homes for Londoners.

The handbook considers the processes, procedures and practices all housing delivery organisations can follow to create good quality homes. It provides a framework for prioritising quality management activities and examples of good practice, including how to overcome common challenges. It also offers a range of arguments for investing in the organisational conditions which support quality outcomes.

The handbook works alongside the Delivering Quality Homes Action Plan, which prompts organisations to assess their current performance and set out activities for continuous improvement. There is a broad range of quality management experience amongst delivery organisations. The action plan, therefore, is a flexible tool which accommodates that range, from those that are starting out, to those that are well-advanced in their approach.

These resources have been drafted with input from an expert advisory panel. This includes representatives from housing associations, councils, council-owned companies and the Mayor's Design Advocates. All have demonstrated excellence in quality management leading to the delivery of high-quality homes and neighbourhoods.





Image courtesy of Tim Crocker (c) 2019 - Goldsmith Street, Norwich by Mikhail Riches



The quality management practices described in this handbook are drawn from interviews with case study organisations, and from the collective experience of the author and advisory panel members.

Case study organisations were selected for their track record of delivering homes acclaimed for their quality by residents, local people and built environment professionals. Interviews established how good quality outcomes have been achieved, and common practices have been written up and assembled into this handbook. It is recognised that a large and comparable set of post occupancy data would enable a more robust approach to case study selection based on measurable resident feedback. Whilst this is not yet available, it is the focus of another design pilot led by the Mayor's team.

This draft publication is currently being tested and refined in collaboration with some of the Mayor's investment partners throughout a pilot initiative. It is anticipated that the final version will be published by Q1 2023-24.

### **Points to keep in mind**

It is acknowledged that housing delivery organisations vary widely across London in terms of their organisational size; delivery experience; the size, complexity and viability of their programmes; and in terms of their approach to managing quality. This means there is of course no 'one size fits all' approach to achieving quality outcomes. Many of these differences are reflected throughout the handbook.

This handbook is meant for a housing sector audience. As such, it is anticipated that most technical terms will be understood. However, where new terms are introduced or the distinction between terms is of particular importance, definitions are provided throughout.

The primary audience is in-house teams led by councils and Registered Providers (RPs) using their own development and project management staff. Consideration is also given to quality management for projects where delivery is more arms-length (for example, via a development partner or through Section 106 agreements).

Council and housing association delivery teams often procure design teams, then use Design and Build (D&B) procurement to tender for and execute construction works. The handbook also recognises and



addresses alternative procurement routes as well as large variations within D&B tendering practice.

The Mayor wants to encourage Modern Methods of Construction (MMC), ranging from component standardisation through to volumetric design. At its most comprehensive, MMC involves a different delivery process map, requiring the front-loading of procurement decisions. Quality management under this form of MMC is touched on throughout the handbook.

**'To build exemplary housing schemes, you need to work really really hard at all stages of the process and a lot of that hard work comes after you've got planning permission and it's a labour of love, all the way through.'**

London Borough of  
Hackney



Image courtesy of Lewis Ronalds - Kings Crescent by Karakusevic Carson Architects

# QUALITY MANAGEMENT OVERVIEW

Quality management is the art of being an editor; all great writers need great editors to challenge them and help them deliver an engaging and viable product. The role of the housing delivery organisation is similar. It involves setting the scene, choosing the best design team, then encouraging and challenging them throughout the development process on programme, cost and quality.

There are many project management tools, such as Prince, for managing tasks, programme, budget and risk. However, when it comes to quality management less information and fewer resources are available. Therefore, this handbook sets out the processes by which quality is demanded, sustained and realised from concept through to completion, and beyond. It focuses explicitly on quality management rather than programme, cost or risk. It is acknowledged that delivery organisations make choices (for example, about standards and procurement) based on all these parameters. The aim of this document is to bring the qualitative considerations to the foreground.

## **Overcoming the barriers**

Organisations aiming to deliver better quality outcomes can encounter a variety of challenges:

- Uplifted cost and resulting perception of poor value for money (VfM)
- Procurement constraints around VfM and external consultant and contractor selection
- Inability to recruit staff with project management, financial and expertise to deliver quality outcomes
- Focus on hitting programme delivery dates being paramount
- Unclear accountability for quality monitoring, especially on site
- Skills gaps in both design and construction

- No time or resource allocated to complete post occupancy evaluation.

Despite these perceived barriers, there is already much good practice amongst housing delivery organisations. This handbook draws out this good work. It explains how those already focused on quality management have overcome such challenges and adopted excellent practice, leading to high quality results. Essential to these achievements is being able to make the case for investing in quality. The arguments are presented throughout this handbook, and are summarised below:

- Providing safe and good quality homes for all Londoners, that improve rather than hinder wellbeing
- Creating homes that are welcomed by local people, rather than resisted
- Enabling faster planning consents through planning officer and political endorsement
- Ensuring long-term value for money
- Ensuring regulatory compliance
- Achieving more sustainable homes and reducing fuel poverty
- Being viewed as an outstanding contributor to London's built environment and to the lives of Londoners.

## USING THIS HANDBOOK

This handbook details 50 actions housing delivery organisations can take to ensure a good standard of quality management practices. Taken together, these actions provide a comprehensive overview of the tools that delivery organisations can use to achieve quality. However, it is not intended that every organisation will carry out all 50 actions from the start. Each must self-assess its current performance and determine which actions will have the biggest impact on priority quality outcomes. A specific requirement will be set out in the Capital Funding Guide (CFG) for those accessing funding through the AHP 21-26, if the DQH Action Plan is adopted as a condition.

### Themes

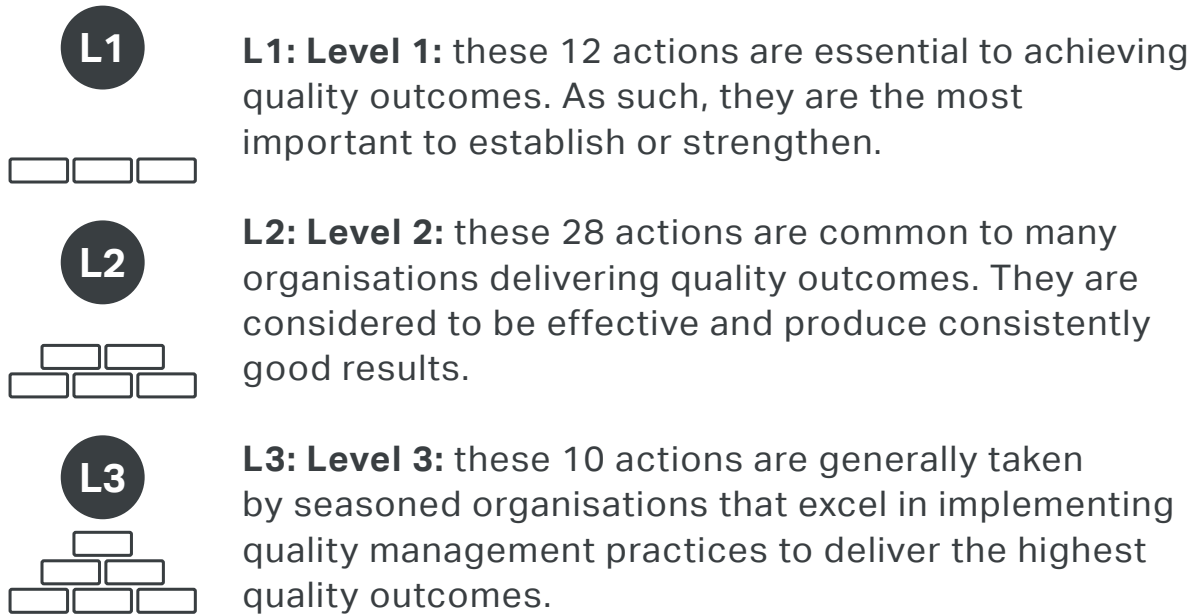
The 50 actions are organised into four colour-coded themes

- **Culture and People (8 actions):** Embedding a quality culture within the organisation, with leadership that supports and rewards quality
- **Brief and Standards (12 actions):** Establishing a set of briefs and standards which show clearly and comprehensively the quality standard which is sought
- **Procurement (14 actions):** Using a creative, efficient and diverse supply chain of designers and contractors
- **Stewardship (16 actions):** Creating and actively managing the design scrutiny processes carried out throughout a project's life

Within each of the four themes, actions are shown in broadly chronological order. For example, the Procurement section deals with strategic activities first, then design team procurement, and finally contractor procurement.

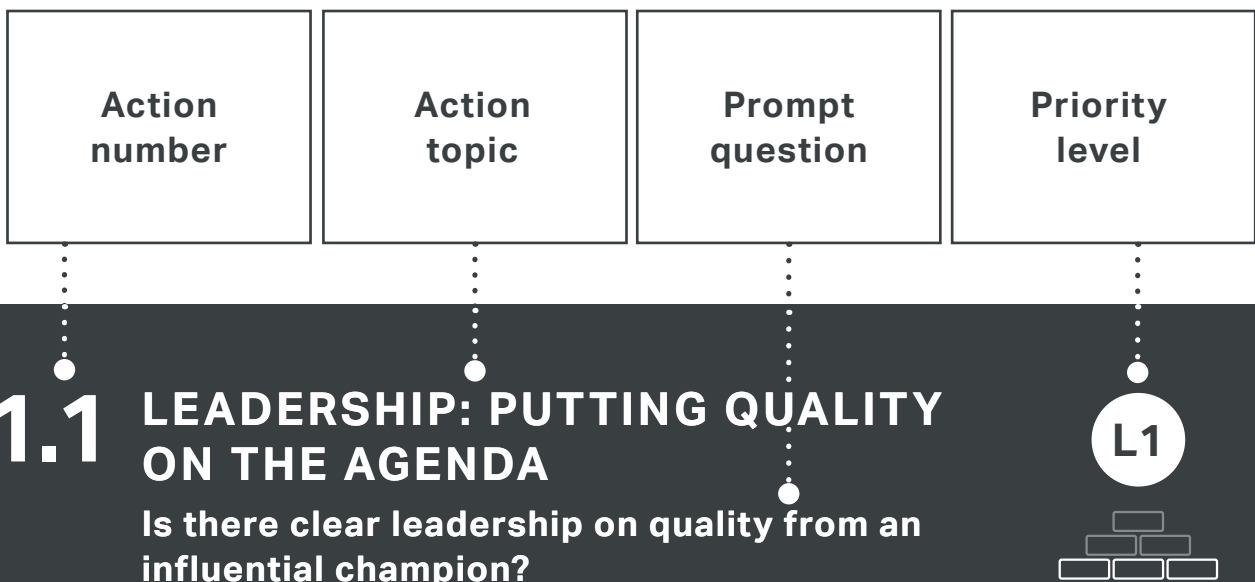
## Priorities

These actions are organised into three prioritised categories, that should be worked through sequentially from Level 1 to Level 3:



## Actions

Each of the 50 actions is shown as follows:



The prompt question helps organisations to quickly assess whether they're taking the action already, and to what degree. The narrative that follows describes more fully what the action entails including challenges that may arise.

## Action map

The following diagram gives an overview of all 50 action topics by project stage (left hand column) and by theme (across the top). Over half of the actions take place at the strategic level, prior to individual projects being set up. This illustrates the importance of strategic and organisation-wide thinking about how quality is delivered.

| STAGE/THEME         | 1. CULTURE AND PEOPLE  | 2. BRIEF AND STANDARDS   | 3. PROCUREMENT  | 4. STEWARDSHIP  |
|---------------------|--|--|---|---|
| STRATEGY            | <ul style="list-style-type: none"> <li>1.1 Leadership</li> <li>1.2 Organisation-wide culture</li> <li>1.3 Defining quality together</li> <li>1.4 Valuing &amp; communicating quality</li> <li>1.5 Project-based culture</li> <li>1.6 Design scrutiny resource-minimum</li> <li>1.7 Design scrutiny resource-added</li> <li>1.8 Training</li> </ul> | <ul style="list-style-type: none"> <li>2.1 Vision</li> <li>2.2 Value for money</li> <li>2.4 Planning policy</li> <li>2.5 Design standards</li> <li>2.5 Sustainability</li> <li>2.6 Building safety</li> <li>2.7 ERs - creation</li> <li>2.8 ERs - structure and content</li> </ul> | <ul style="list-style-type: none"> <li>3.1 Programme analysis</li> <li>3.2 Design team requirement</li> <li>3.3 Employer's Agent requirement</li> <li>3.4 Scopes of service</li> <li>3.5 Design team retention</li> <li>3.6 Procurement aims</li> <li>3.7 Selection criteria</li> <li>3.8 Micro practices</li> <li>3.9 Competitors</li> </ul> | <ul style="list-style-type: none"> <li>4.1 Development manual</li> </ul>  |
| PROJECT SET-UP      | <ul style="list-style-type: none"> <li>1.5 Design team visits/bonding</li> </ul>   | <ul style="list-style-type: none"> <li>2.12 Developer design brief</li> <li>2.9 Project brief</li> <li>2.10 Surveys</li> </ul>   | <ul style="list-style-type: none"> <li>3.7 Selection criteria</li> </ul>  | <ul style="list-style-type: none"> <li>4.2 Project leadership</li> <li>4.3 Community engagement</li> </ul>  |
| DESIGN TO PLANNING  | <ul style="list-style-type: none"> <li>1.5 Internal crits</li> </ul>   | <ul style="list-style-type: none"> <li>2.9 Updated project brief</li> </ul>  |   | <ul style="list-style-type: none"> <li>4.3 Community engagement</li> <li>4.4 Landlord scrutiny</li> <li>4.5 Technical scrutiny</li> <li>4.6 Pre-application planning scrutiny</li> <li>4.7 Planning submission</li> </ul>   |
| CONSTRUCTION TENDER |  | <ul style="list-style-type: none"> <li>Project ERs - see 3.10</li> </ul>   | <ul style="list-style-type: none"> <li>3.10 Tender documentation</li> <li>3.11 Tender conduct</li> <li>3.12 Dialogue and value engineering</li> </ul>   | <ul style="list-style-type: none"> <li>4.9 Internal handover</li> </ul>   |
| ON-SITE             | <ul style="list-style-type: none"> <li>1.5 Learning visits</li> </ul>  |  | <ul style="list-style-type: none"> <li>3.13 Developer procurement</li> <li>3.14 Development &amp; JV agreements</li> </ul>  | <ul style="list-style-type: none"> <li>4.10 Early on site quality culture</li> <li>4.11 Planning condition discharge</li> <li>4.12 Sample panels</li> <li>4.12 Design development drawings</li> <li>4.13 Change proposals</li> <li>4.14 Site inspection</li> <li>4.15 Scheme completion &amp; handover</li> </ul> |
| POST-CONTRACT       | <ul style="list-style-type: none"> <li>1.5 Organisation visits</li> </ul>  | <ul style="list-style-type: none"> <li>2.11 Standards updates</li> </ul>   |   | <ul style="list-style-type: none"> <li>4.16 Post occupancy review</li> </ul>  |





Image courtesy of Nick Kane - Kings Crescent by Karakusevic Carson Architects

# DELIVERING QUALITY HOMES ACTION PLAN

## Overview

The Delivering Quality Homes Action Plan tool provides a structured framework for assessing and enhancing quality management performance. This section provides step-by-step instructions to help delivery organisations create their own DQH Action Plans.

## Step 1: Initial self-assessment

The first step in preparing the action plan is assessing an organisation's current performance against the 50 prompt questions. This is done by simply rating current practices in response to each prompt question, as follows:

1. Not currently doing
2. Room for improvement
3. Yes, fully carrying out action
4. Don't know (for level 2 and 3 only)
5. Not applicable

## Step 2: Creating the action plan template

Based on areas where limited or no action is currently being taken, organisations may select which activities to develop in their action plans. It is recommended that organisations initially choose 5 – 10 actions topics, across the four themes. Level 1 actions should be done to a good standard, or identified for improvement in the plan, before moving to levels 2 and 3. If the DQH Action Plan is adopted as a condition of the AHP 21-26, a minimum number of actions will be set out in the CFG.

## Step 3: Detailed self-assessment

For each of the selected action topics, organisations should reflect on their current practices in more detail, writing a brief description of activities already taking place, if any. These should then be compared to the action descriptions and good practice examples in this handbook to identify opportunities for improvement.





Image courtesy of Jack Hobhouse - Agar Grove by Hawkins\Brown

#### **Step 4: Action planning**

A specific statement of action, action owner, and target completion date should be put against each of the identified action topics. This should describe how existing activities can be improved or new practices established.

#### **Step 5: Review and update**

The action plan should be reviewed and updated regularly, ideally on an annual basis. The CFG will set out specific milestone requirements for AHP 21-26 funding partners.



**Good Growth By Design**

**AHP Prospectus**

**London Plan**

**London Housing SPG – Good Quality Homes for all Londoners**

**Creating Successful Places – Toolkit – Berkeley Homes**

# **THEME 1: CULTURE & PEOPLE**

**'Quality is not an act – it is a habit' - Aristotle**

## **EMBEDDING A QUALITY CULTURE WITHIN THE ORGANISATION, WITH LEADERSHIP THAT SUPPORTS AND REWARDS QUALITY**

**A quality culture is one where 'quality' is defined by the organisation, where high quality outcomes are expected and rewarded, and where quality is discussed and debated regularly by colleagues. This culture needs to be led at a senior level by Members, Executives or Directors, and is essential to the delivery of quality. It must also be supported by appropriate people resource and training programmes, whether in-house or externally appointed.**

## Prompt Questions Summary

| No       | Topic                              | Questions  | Priority              |                       |                       |
|----------|------------------------------------|--|-----------------------|-----------------------|-----------------------|
|          |                                    |  | L1                    | L2                    | L3                    |
| <b>1</b> | <b>CULTURE AND PEOPLE</b>          |  |                       |                       |                       |
| 1.1      | Leadership                         | Is there clear leadership on quality from an influential champion?   | <input type="radio"/> |                       |                       |
| 1.2      | Organisation-wide culture          | Are all relevant internal teams aligned around a quality agenda?   |                       | <input type="radio"/> |                       |
| 1.3      | Defining quality together          | Has a cross-team definition for 'quality outcomes' been produced, involving residents, which is alive and relevant to each team?         |                       | <input type="radio"/> |                       |
| 1.4      | Communicating and valuing quality  | Is quality being visibly encouraged and incentivised through exhibitions, visits, or awards?   |                       |                       | <input type="radio"/> |
| 1.5      | Project-based culture              | Are opportunities maximised to use ongoing and completed schemes to reinforce a quality culture and set quality expectations?            |                       |                       | <input type="radio"/> |
| 1.6      | Design scrutiny – minimum resource | Is there adequate internal and external design scrutiny resource?  | <input type="radio"/> |                       |                       |
| 1.7      | Design scrutiny – added resource   | Is appropriate additional design scrutiny resource in place for more complex programmes?   |                       |                       | <input type="radio"/> |
| 1.8      | Quality-based training             | Is the development team benefiting from continual quality-based training from appropriately qualified in-house or third-party providers? |                       | <input type="radio"/> |                       |



**'Being a resident led organisation, at Phoenix we are able to prioritise quality and we can have the conversation - yes, this will cost a bit more, but we examine the savings that you'll make in the future on maintenance because things are done better now. It's a thoughtful, considered conversation.'**

**Phoenix Community Housing**



Image courtesy of Phoenix Community Housing - Hazelhurst by Levitt Bernstein

# 1.1 LEADERSHIP: PUTTING QUALITY ON THE AGENDA

L1

Is there clear leadership on quality from an influential champion?



Many organisations delivering the highest quality new housing schemes in London and the wider UK share one key characteristic: there is a senior leader who believes that investing in and achieving design quality in their new homes programme is an essential outcome. This sets the tone for the rest of the organisation, ensuring that quality is at the heart of recruitment and business processes. The quality agenda in most local authorities and RPs is usually driven by a Member or Executive Director, with a senior development officer then executing it. Councils with wholly-owned companies delivering their new housing programmes must take particular care that their quality aspiration is translated through to the company. This might be through a board position for the council design champion and a joint process to agree standards and processes.

**'The Deputy Leader is very keen that we have design quality, enhanced environmental standards, that we are addressing issues for our tenants around space, fuel poverty – she is a very good champion for us. The Deputy CEO could see what a quality scheme was – that actually it was a better legacy for the city than just any other standard housing development that we could have done.'**

Norwich City Council



## GOOD PRACTICE EXAMPLE: PHOENIX COMMUNITY HOUSING

Phoenix is a housing association in Lewisham whose resident-led board has prioritised quality through:

- Clear leadership on quality from board and CEO including consideration of long-term value for money
- Investment beyond the site boundary for any given site
- Scheme peer review from one architect to another
- 'Lunch and learn' sessions on Passivhaus including landlord teams
- Resident involvement in architect interviews



# 1.2 ORGANISATION-WIDE CULTURE

Are all relevant internal teams aligned around a quality agenda?

L2



A typical housing development programme will involve numerous internal teams, with council teams additionally including planning and highways. The quality agenda must be valued and embedded within all of these teams for quality outcomes to be delivered. The long-term landlord teams must have a stake in defining and scrutinising quality. The critical support functions (finance, procurement) also need to understand the implications of a quality agenda for their service. It can be challenging to reconcile these teams' views - for instance where landlord teams have always used certain products or processes. It is the role of the development team, supported by good leadership, to listen to their colleagues and make the case for change and innovation. Successful organisations often have teams where the following alignment has developed:

- Members/boards/executives: providing high level leadership on quality, removing any obstacles, supporting budgets and processes, ensuring rewards for quality outcomes.
- Development: managing projects to achieve quality outcomes as well as delivery objectives, coordinating all stakeholder inputs.
- Landlord teams: providing expert advice and feedback to achieve long term robustness, encompassing safety, management, technical and social requirements.
- Finance: understanding value for money through a long-term lens, challenging the development team to balance capital and revenue costs.
- Procurement: understanding both the financial and quality drivers for evaluating and choosing design teams and contractors and aligning procurement processes to suit.



Delivery organisations with larger programmes sometimes allocate dedicated finance and procurement resource to the development team enabling a close mutual understanding of quality and financial drivers. In addition, councils can bring their planning and highways teams into the quality agenda. There are several councils where the planning team has driven the quality culture, through their understanding of the area and a desire that all new housing is a worthy addition to the borough.

**'I think it's having a small number of people with a very strong commitment and passion for building high quality housing and good places. That sort of commitment and passion is infectious – it spreads and becomes part of the culture of the organisation. Political support really helps too.'**

London Borough of Hackney

# 1.3 DEFINING QUALITY TOGETHER

Has a cross-team definition for 'quality outcomes' been produced, involving residents, which is alive and relevant to each team?

L2



There are several ways in which a quality culture can start and grow across different teams in an organisation. Some organisations have done this by defining a quality vision together, across teams and with residents. This vision document then forms the first tier of quality documents described in Section 2. This is the basis from which all other more detailed brief and standards can flow. It needs to be alive to all teams across the organisation from planning to maintenance. For councils particularly, a quality vision should have a bespoke, local flavour, encompassing the heritage and character of the borough as well as the area's social and environmental dynamics. The local definition of quality is likely to have several dimensions from the human to the global. It should not be limited to architectural considerations or pure functionality, but should include both and more.

**'Camden has a rich history of architecture – our planners and policies really push us to do something which is exemplar'**

London Borough of Camden



Image courtesy of Benedict Luxmoore - Bourne Estate by Matthew Lloyd Architects

## Defining and measuring quality outcomes

Traditional metrics such as space standards remain key to achieving a minimum standard of housing quality. These standards are now largely included in Building Regulations and Planning Policy (including the London Plan). Some may consider that meeting these benchmarks assures a decent level of quality. However, there is a range of quality outcomes which encompass the human and social experience, as well as environmental and financial value. These are not all necessarily considered through regulation and policy, and housing providers must therefore think beyond the standards. That means reflecting on the full array of quality outcomes that can be achieved during development as well as in occupation.

The following table offers a selection of such quality outcomes an organisation can define, assess and measure.

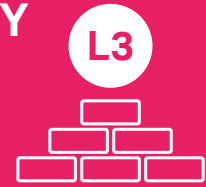
| <b>QUALITY OUTCOMES</b> | <b>IN DEVELOPMENT</b>  | <b>IN USE</b>   |
|-------------------------|--|---|
| Human value             | Local engagement, considerate construction   | Comfort, health, privacy, affordability, safety                         |
| Social value            | Local jobs, training schemes, supply chain opportunities including diversity initiatives | Neighbourliness, local character, generosity, connectivity, inclusivity |
| Environmental value     | Resource efficiency, embodied carbon, tree retention, waste minimisation                 | Whole life resource efficiency, nature friendliness                     |
| Financial value         | Efficient cost, value creation   | Long term cost aka robustness, ease of management, minimal defects      |

Fundamental to defining quality is understanding how residents experience their homes. However, there is a lack of accessible and standardised post-occupancy data to tell us how new housing performs for residents and in environmental terms. The Mayor is doing further work to create a single store of comparable post-occupancy data. This tool will provide invaluable feedback to both delivery organisations and policymakers. For more detail, see section 4.16.

## 1.4 COMMUNICATING & VALUING QUALITY

Is quality being visibly encouraged and incentivised through exhibitions, visits, or awards?

L3



Delivering high quality schemes invariably generates huge pride, both in the delivery organisation and the local community. Completed schemes can help to promote and sustain a quality agenda in the following ways:

Exhibitions of images of in-train and completed schemes build team pride. They help to start conversations with colleagues about successes and challenges, and show new team members the quality aspiration.

- Visits to completed schemes achieve the above aims, but also allow landlord colleagues and residents to feedback (including over many years).
- Training sessions in aspects of design (see section 1.8) can be open to the whole organisation. This allows all teams to develop a quality understanding together.
- Internal awards schemes (via planning or development) can incentivise quality through visible recognition. Residents and the landlord team can be involved in judging through post-occupancy feedback.
- External awards can also generate pride as third-party experts judge a scheme to have achieved quality outcomes.





Image courtesy of Jack Hobhouse - Agar Grove by Hawkins\Brown

**'People love RDAG - our external design advisory panel. It's always a lively debate, interesting, inspiring. It is open to all, and people from all levels come along. When we set it up, we didn't realise quite how valuable it would be in changing the culture of the team.'**

**London Borough of Hackney**

# 1.5 PROJECT-BASED CULTURE

Are opportunities maximised to use ongoing and completed schemes to reinforce a quality culture and set quality expectations?



Building awareness of projects, both under way and completed, can catalyse and inspire a team and create an organisation-wide quality culture. The following activities are suggested:

- Early project team synthesis: new project teams can visit the organisation's and/or design team's completed schemes to discuss and set quality expectations for current projects.
- Internal critiques/presentations: as schemes progress to planning, design teams can present proposals so that staff from across the organisation can offer tailored critiques.
- Site visits: staff members can be invited on to site (subject to safety training) to watch the build process. They can see how things change once on site and how the build is scrutinised from a quality perspective.
- Post-completion: a quality culture can really come alive when cross-team staff visit completed schemes and listen to residents and landlord team members first-hand.

Quality management - the coordination of all the activity described here - is done by the development team. An important part of that activity is enabling scrutiny of design and construction from multiple stakeholders throughout the project, and reconciling that feedback. The following sections explore the relationship between the development team and the scrutineers.





Image courtesy of Tim Crocker (c) 2019 - Goldsmith Street by Mikhail Riches

**'What really helped was taking our senior officers and Members out to see those schemes and to speak to the tenants who lived in those properties. We have a real issue with fuel poverty in Norwich so I think that was particularly pressing for members that they wanted to do something to address that, by speaking to the tenants who lived in Passivhaus homes they could see that was a way of delivering against that objective.'**

Norwich City Council



### **Development Team - overview**

The development team is the central pivot of any new homes programme, coordinating and reconciling stakeholder input. Team members can come from a variety of professional backgrounds, ranging from housing management and community development to surveying and architecture. This variety can be of huge benefit. Where development teams have less design expertise, they may need support in managing design quality from several parties. Development team role profiles and annual targets should set out quality expectations (potentially measured through post-occupancy feedback) as well as quantitative delivery targets.

### **Development Team – design and delivery split**

Development teams are often split into two: first, a land and design team which takes schemes to a planning consent; second, a delivery team which leads a scheme through tender and construction stages. This split must be managed carefully, as quality can be lost where design stage sign-offs are not well recorded. This is explored further in section 4.8.

### **Landlord Team**

This term is used throughout to include all organisation teams that look after the buildings, spaces and residents long-term. This encompasses at least asset management (including fire, building services, building safety), repairs and maintenance, housing management, voids and lettings and community safety.



# 1.6 DESIGN SCRUTINY – MINIMUM RESOURCE

L1

Is there adequate internal and external design scrutiny resource?



Scrutiny of design quality from concept to completion needs many participants to succeed. Typical design scrutiny resources are listed below. Design scrutiny resource will vary between organisations, depending on the size of the programme and the capacity of in-house teams. It is considered the minimum resource would be:

## In-house

- Development team: (as above) this team is the central point of coordination for all design management activity.
- Landlord team: (as above) as the managers of the homes and spaces in perpetuity, the landlord team's scrutiny is critical to long term quality.

## External

- Employer's Agent (EA): an EA will not only provide cost advice, but also buildability and other technical expertise, contributing to quality outcomes.
- Planning authority: planning teams may include in-house urban design and conservation expertise.
- Design review panel: now commonly used to supplement planning capacity (and are mandatory for AHP schemes over 50 homes). If councils do not have a design review panel (DRP), the Mayor's London Review Panel can be used
- Community: local people can be engaged both directly by the development team and via the formal planning processes.
- Site Inspector (on site): site Inspectors can be in-house or externally appointed, carrying out regular inspections to check workmanship and specification.

- Warranty Providers/Building Control (on site): independent inspection services to assure compliance with Building Regulations and third party warranty requirements.
- Design team (on site): appointed to the contractor or client (see Procurement section for pros and cons of post-planning design scrutiny options).

**'We expect all of our Development Managers to review their schemes from a design point of view. You'll know that one of your colleagues has a lot of experience in say conservation – so we do try to use each other as much as possible'**

London Borough of Camden

# 1.7 DESIGN SCRUTINY – ADDED RESOURCE

Is quality being visibly encouraged & incentivised  
Is additional design scrutiny resource in place  
for more complex programmes?

L3



Many organisations with larger or more complex programmes supplement their design and technical scrutiny capacity. They do this at a ratio of roughly one member of staff per 300 homes delivered per year. Additional design scrutiny options which some housing delivery organisations have used are:

- An in-house design, technical or quality team: some housing providers have found it beneficial to have a dedicated internal team to support the development managers. Many organisations are now using Public Practice associates within such teams.

| DEVELOPMENT DIRECTOR  |   | HOUSING/OPERATIONS DIRECTOR  |
|---|---|--|
| <b>QUALITY/TECHNICAL TEAM</b><br>Head of Design/Quality/<br>Technical<br>May manage officers with expertise in setting standards for and scrutinising: <ul style="list-style-type: none"> <li>- Design generally</li> <li>- Standards compliance</li> <li>- Fire safety</li> <li>- Building safety</li> <li>- M&amp;E Engineering</li> <li>- Sustainability</li> <li>- Construction/Buildability</li> <li>- Workmanship (SI)</li> </ul> | <b>DEVELOPMENT TEAM</b><br>Development Manager<br>Coordinates all scrutiny input<br>(Other development officers may be able to contribute specialist knowledge) | <b>LANDLORD TEAMS</b><br>Asset Management<br>Maintenance<br>Lettings<br>Fire Safety<br>Sales |

A dedicated team of this nature can perform a number of functions, including:

- Creating and updating brief and standards documents
- Leading on post-occupancy evaluation and feeding lessons back into standards documents
- Ensuring individual schemes meet the standards documents

- Critiquing individual schemes overall from a design, technical, safety and buildability viewpoint
- Providing particular expertise and scrutiny on the technical elements of delivering sustainable development
- Leading on design team procurement
- Framework consultants: if an organisation has a framework of design team consultants, they can act as third-party critical friends and advisors to peer schemes. This can be helpful where some design teams are more experienced than others
- External design scrutiny panel: some organisations have appointed external design scrutiny panels, formed of expert (and sometimes local) designers
- Specialist site inspectors: It can be helpful to have dedicated inspectors for mechanical and electrical (M&E), energy performance and fire performance.

**'The Design and Technical team includes three design quality managers with an architectural background, one technical manager (a façade engineer), one sustainability-focused technical coordinator and one other technical manager with main contracting experience. There is also the procurement coordinator, focused on making sure that VfM is well-managed and people are asking themselves the right questions in terms of achieving that balance [between short and long term cost].'**

Peabody

## GOOD PRACTICE EXAMPLE: LONDON BOROUGH OF HACKNEY

**LB Hackney uses both internal and external parties to scrutinise design up to planning:**

- Development Management staff are a mix of 'design qualified' and not. The design qualified staff will assist others with design review as needed.
- Pre-application meetings are held with the in-house planning team as usual; Design Review Panels are also convened for most schemes via the planning team.
- A Design Manager will critique schemes regularly as they evolve, and also undertake 'gateway reviews' to achieve sign-off as part of formal project governance.
- An external panel of architects, the Regeneration Design Advisory Group (RDAG), also critiques larger schemes at key moments. This group is separate from the Design Review Panel used by the planners. The RDAG panel also runs workshop sessions to deal with particular design themes like landscape.



**Public Practice - Generally**

**Public Practice - Culture and People:  
People**

**Home Delivery**

**Pathways to climate action**



# 1.8 QUALITY-BASED TRAINING

Is the development team benefiting from continual quality-based training from appropriately qualified in-house or third-party providers?

L2



All development teams (as well as planners, landlord teams and resident groups) will require training and refresher courses in both quality and quality management. There are a number of ways in which this can be delivered:

- Third-party training: New London Architecture, Urban Design London and Future of London run high-quality events focused on the design and commissioning of model housing schemes.
- Design team insights: framework or project design team members can bring external scheme insights through talks or visits.
- In-house visits: development and landlord teams should regularly visit schemes together post-completion to hear and see post-occupancy experiences and share learning on key themes.



[Network and training - Future of London](#)

[Network and training - New London Architecture](#)

[Network and training - Urban Design London](#)

**'We did a lunch and learn on Passivhaus – 40 staff attended, and the feedback was brilliant. So now when housing officers are being consulted on schemes, there's an understanding of what we are doing overall.'**

Phoenix Community Housing



Image courtesy of Phoenix Community Housing - Hazelhurst by Levitt Bernstein

# **THEME 2: BRIEF AND STANDARDS**

**“We shall be judged for a year or two by the number of houses we build; we shall be judged in 10 years’ time by the type of houses we build.” - Nye Bevan**

## **ESTABLISHING A SET OF BRIEF AND STANDARDS WHICH SHOW CLEARLY AND COMPREHENSIVELY THE QUALITY STANDARD WHICH IS SOUGHT**

**This section shows how delivery organisations can describe the quality which they want to achieve at various levels of detail. A good brief allows design teams and contractors to respond with creativity, innovation and efficiency and should go beyond planning and building regulations. It should describe with clarity to the design team what the delivery organisation and their residents will expect.**



## Prompt Questions Summary

| No       | Topic                       | Questions   | Priority              |                       |                       |
|----------|-----------------------------|---|-----------------------|-----------------------|-----------------------|
|          |                             |   | L1                    | L2                    | L3                    |
| <b>2</b> | <b>BRIEF AND STANDARDS</b>  |   |                       |                       |                       |
| 2.1      | Vision document             | Is there a vision document, inclusively authored and agreed at corporate level, setting out the partner's quality ambitions?                  | <input type="radio"/> |                       |                       |
| 2.2      | Value for money             | Is there enough budget to secure long term quality including build and on costs, and is that budget being targeted for quality?               |                       | <input type="radio"/> |                       |
| 2.3      | Planning policy             | Has planning policy been used at local level to secure good design standards? (Applies to councils only)                                      |                       |                       | <input type="radio"/> |
| 2.4      | Design Standards            | Is there a clear, coherent and up-to date-set of Design Standards which are informed by colleague and resident feedback?                      |                       | <input type="radio"/> |                       |
| 2.5      | Sustainability              | Is there a clear sustainability policy and standard which covers all areas of sustainable development, and informs scheme budgets?            |                       | <input type="radio"/> |                       |
| 2.6      | Building Safety             | Do standards documents capture building safety obligations, including consideration of BIM to fulfil these?                                   |                       | <input type="radio"/> |                       |
| 2.7      | ERs – creation and updates  | Has the full delivery organisation and its residents been involved in creating the ERs (or equivalent specification document)?                |                       | <input type="radio"/> |                       |
| 2.8      | ERs – structure and content | Is there a clear set of Employer's Requirements (or similar) which sets high expectations for quality management and technical specification? | <input type="radio"/> |                       |                       |
| 2.9      | Project Brief               | Is there a clear, consistent and evolving project brief for each project setting out quality aspirations with community input?                | <input type="radio"/> |                       |                       |
| 2.10     | Surveys                     | Are appropriate surveys carried out early enough to inform and improve the design process?  |                       | <input type="radio"/> |                       |
| 2.11     | Post-completion feedback    | Are Design Standards and Employer's Requirements documents being regularly updated using feedback from residents and landlord?                |                       | <input type="radio"/> |                       |
| 2.12     | Developer design brief      | Is there a clear design brief for developers delivering via DA and/or Section 106?  |                       |                       | <input type="radio"/> |

## 2.1 VISION DOCUMENT

Is there a vision document, inclusively authored and agreed at corporate level, which sets out the quality ambitions?



Delivery organisations set out medium and long-term missions, visions and values to guide the work which happens under their corporate canopy. The qualitative ambition of any new-build housing programme by a council or housing association must be anchored to these corporate documents. A stand-alone 'vision document' should describe how the delivery organisation will go beyond planning and regulatory standards. This vision is best created via a dedicated organisation-wide exercise (including residents) to define the standard of housing which the organisation wants to achieve.



[Vision Document – London Borough of Southwark](#)



Image courtesy of Matt Hall - Slingsby Place by Proctor and Matthews Architects

**'We did a piece of co-production with a selection of customers about what really matters – we facilitated it with an architect and an artist and then that led to a design checklist. We were trying to show how our houses deliver on our social purpose in specific ways. We share that with all our architects, and we've got a landscape design code showing the expectation for our public realm.'**

South Yorkshire Housing Association



## 2.2 VALUE FOR MONEY

Is there enough budget to secure long-term quality including build and on-costs, and is that budget being targeted for quality?

L2



Value for money (VfM) is a critical metric for delivery organisations, and is one they must report on to their boards, cabinets and residents. What is less often explored is what 'value for money' means in terms of new build housing development. There can be a heavy focus on initial capital cost at the expense of a longer-term view. There is very little robust data on the total cost of long-term management of housing schemes. This lack of data may lead organisations to measure a more tangible benchmark – the capital cost of consultant fees, surveys, planning applications and construction. Some Victorian public housing in London still retains much of its original external fabric, representing exceptional value for money to the landlord, and hence to the public purse. Investing upfront in design coordination and efficiency alongside robust specification of key items reduces programme risk and cost as the design develops.

Delivery organisations will all have their own appraisal models as well as cost assumptions which have been developed over time to suit their risk appetite. Assumptions around future costs should be increased if cheaper components are used.





Image courtesy of Jack Hobhouse - Agar Grove by Hawkins\Brown

**'We are going to be landlord forever – we are not selling the freehold – it's important from a longevity and a whole life cost point of view. Capital cost could be down, but we could be causing a lot of problems for revenue budgets in the future'**

**London Borough of Camden**

**‘You have to boil it down to longevity and robustness and return on investment – you need to be very explicit about how you are spending money judiciously, so you are not being extravagant on things that aren’t important. It’s not gold taps – it’s not architectural extravagance – every pound is being spent on something that will make these buildings last longer and improve people’s lives’**

## London Borough of Camden



### **Capital investment which adds to long-term value**

A number of capital cost items, if adequately funded, can add to long-term value, including:

- Design team members and fees: using high quality design team members will add value (and avoid late coordination) through early design integration, better layouts, smarter densities and well-targeted robust specification (see also sections 3.2-3.7 in Procurement).
- Build cost – materials: investing judiciously in key fabric components (like lifts and windows) will add life to the building and save on continual asset management spend.
- Build cost – sustainability: high sustainability standards will cost more at the outset but will make homes easier to let as fuel costs rise. The workmanship needed to achieve higher sustainability standards will also lead to a better quality standard.
- Build cost – labour: investing in quality workmanship from key subcontractors will add life to the fabric as above (see also section 3.11 in Procurement).

## 2.3 PLANNING POLICY

Has planning policy been used at local level to secure good design standards? (Applies to councils only)



London Plan policy on design and housing is now published and secures many aspects of design quality for housing. The draft housing design supplementary planning guidance (SPG): Good Quality Housing for All Londoners, amplifies London Plan policy and protects quality to a greater degree. Councils' local planning policy documents relating to design and housing vary widely, but must be in conformity with the London Plan. Some councils have gone further than the London Plan (for example, requiring all homes to be at least dual aspect unless exceptional circumstances prevent that). This is something councils can do if they wish to secure even higher standards both for their own programme and third-party developments.

### i

#### Quality documents – overview

Organisations vary in their approach to documents which describe the quality standards they wish to see in their new homes. The types of document most frequently used are:

- Corporate Vision/Strategy Documents (see section 2.1) - for example, Climate Emergency Strategy, Housing Strategy
- Design Standards (including outline specifications) - higher level descriptive standards aimed at design teams and including specific sustainability standards (see sections 2.4- 2.6)
- Third party standards - for example Secured by Design, Habinteg Wheelchair standards, the Mayor's AHP 21-26 standards, warranty standards for example National House Builders Council (NHBC)
- Baseline Employer's Requirements (or equivalent contract information) - detailed specifications and project management processes aimed at contractors (see sections 2.7 – 2.8)

- Project-specific briefs - individual project-level briefs typically including vision, site analysis, accommodation requirement, project delivery requirements (see section 2.9)
- Project-specific tender information (see section 3.10)



It is common to see over-complicated design standards or briefs which have evolved over time by accretions of other documents, showing conflicts internally or with planning policy. High-performing organisations refresh design standards often and ensure that design teams and contractors have a clear sight of quality standards. The diagram above sums up the hierarchy of quality documents typical to most organisations, and how they are assembled into a project brief for an individual scheme.



## 2.4 DESIGN STANDARDS

Is there a clear, coherent and up-to-date set of Design Standards which are informed by colleague and resident feedback?

L2



Housing providers often set further standards (over and above planning policy) for the homes they develop and manage. These standards are usually set by architects, with detailed contributions from residents and wider staff teams, including for example development, housing management, asset management and customer service. Care must be taken to avoid conflict with planning policy, and to update standards as regulation and planning policy evolves. If delivery organisations also want to use third party standards, these should be listed at the start of their own design standards document.



[Design Principles – TfL](#)

[Design Standards – Homes for Lambeth](#)

[Building for a Healthy Life](#)

[Habinteg Wheelchair Housing Design Guide](#)

[Secured By Design](#)

**‘The Pocket product or flat-type has been developed over the years and now is very well defined and robust. We have a standard briefing document that captures all the aspects of design and specification in the flat, and other ERs that define our external and communal spaces. Any consultant or architects’ team that is new to our framework is taken to a show flat so that they are absolutely aware of what it is we want them to deliver.’**

Pocket Living





Image courtesy of Edmund Sumner - Mapleton Crescent by Metropolitan Workshop



## 2.5 SUSTAINABILITY

Is there a clear sustainability policy and standard which covers all areas of sustainable development, and informs scheme budgets?

L2



Many housing delivery organisations have declared a climate emergency and have set out high level ambitions to address climate change through their corporate activities. New build programmes can be carbon intensive, especially where demolition is involved. Building Regulations stipulate a relatively high standard for sustainability (and the London Plan targets net zero for major applications). However, there may still be a gap between this standard and the delivery organisation's aspirations. Some organisations engage design and engineering consultants to propose viable benchmarks across all categories of sustainability, which increase in degree over time. There are several existing and emerging energy standards which should be reviewed, and then secured, as appropriate, in standards documents. These include Passivhaus, the London Energy Transformation Initiative (LETI), and the Future Homes Standard. Alongside energy efficiency, the delivery organisation's sustainability standards should include items relating to the following, both on site and long-term:

- Circular economy/waste
- Transport
- Biodiversity
- Food growing
- Climate change adaptation
- Sustainable Urban Drainage
- Water efficiency
- Embodied carbon

## GOOD PRACTICE EXAMPLE: NORWICH CITY COUNCIL

Norwich City Council's Goldsmith Street project (winner of the Stirling Prize 2019) targeted Passivhaus. The Council made sure this standard was delivered by taking the following steps:

- Council members (across parties) prioritised solving fuel poverty for their residents.
- Council members and officers visited completed Passivhaus schemes to speak to residents about their experience.
- A clear and simple brief was written, referred to as 'exemplar' by the architects.
- Every component was sourced by the design team to suit both budget and carbon targets.
- Passivhaus was cited in the build contract negotiations as a clear 'red line' & payments were linked to building performance evidence.





'If you want to do Passivhaus, embed it from day one. You'll probably save some money by every decision you are thinking about, having that in the back of your mind. To me, Passivhaus is a quality framework – not having that performance gap at the end of the day. We tested airtightness at three stages and linked payments to the contractor on that.'

Norwich City Council



[Home Quality Mark – technical manual](#)

[Passivhaus - definition](#)

[Passivhaus – capital cost](#)

[Building the Case for Net Zero – UK Green Building Council](#)

[Future Homes Standard – Government Consultation Version](#)

[London Energy Transformation Initiative \(LETI\) - primers:](#)

[CEDG](#)

[ECP](#)

[Energy Performance – Public Practice – Notes:](#)

[On target](#)

[Making net zero happen](#)

## 2.6 BUILDING SAFETY

Do standards documents capture building safety obligations, including consideration of BIM to fulfil these?

L2



Building Safety is fundamental to achieving good building design and quality, as well as keeping Londoners safe in their homes. Further regulation is emerging to safeguard its delivery, with a focus on the competence of key roles and dutyholders during the design, construction and occupation of buildings.

Many client organisations now use Building Information Modelling (BIM) systems to secure the following:

- Design coordination from all design team members (also securing quality more generally)
- The definition of services and requirements needed throughout a building's lifecycle, for example in relation to development, safety, compliance, asset management and repairs
- A golden thread of design decisions and changes throughout a project's life
- A complete and easily accessible record of built assets for use by the landlord team, that can:
  - include standardised datasets to assist with reporting and regulatory compliance
  - support an informed organisational client function
  - assist engagement and communication with residents and other building occupiers.



**Building Information Modelling (BIM) – UK BIM Alliance**

**BIM for Housing Associations**

**Built Environment Competence Standards**

**Building Safety Competence Framework**

## 2.7 ERs – CREATION & UPDATES

L2

Has the full delivery organisation & its residents been involved in the creation of the Employer's Requirements (or equivalent specification document)?



In-house teams are vital to the creation and updating of the ERs. It is beneficial to hold a number of workshops with all in-house teams involved in future management of the new build homes and open space. Compromise is often necessary, both from the landlord teams and the development team; the most robust lift, for instance, may not meet a visual standard which residents find acceptable. Resident feedback on previous new homes is also a key part of any update process. Workshop participation and detailed comments on drafts is usually gained from:

- Asset Management including maintenance, fire safety, mechanical and electrical
- Neighbourhood Management
- Lettings and Sales
- Community Safety
- Residents (often in the form of bespoke consultative groups).

i

### **Employer's Requirements - overview**

Employer's Requirements (ERs), or equivalent contract documents, describe the delivery organisation's technical requirements for both product and project management. As such, they are critical quality documents. Organisations typically have a 'baseline' set of ERs which details all of their non-project-specific requirements; such documents need updating at least every year to pick up changes in external regulations as well as feedback from the buildings in use. ERs form a large part of the contract documents between the delivery organisation and their contractors. They are 'complete' for a project once the project-specific information (see 3.10) has been added.



Image courtesy of Pocket Living - Gainsford Road by Gort Scott

**'We believe that good design does not need to be expensive. Costs are always a source of debate, given our limited budget and we are very keen that it is spent sensitively. All departments are privy to the conversation including the customer care team and the sales and marketing teams.'**

**Pocket Living**



## 2.8 ERs – STRUCTURE & CONTENT

L1

Is there a clear set of Employer's Requirements (or similar) which sets high expectations for quality management and technical specification?

A good, concise and well-structured set of ERs gives contractor candidates confidence about the delivery organisation's competence. It also allows contractors to see clearly the quality priorities and the extent of involvement in post-contract detailed design sign-off. ERs can be structured differently depending on preference, but there are critical aspects which impact on quality. There are two key areas within typical ERs where quality is secured: the process and the product.

### Process

- Consultant design services: the instructions to the contractor about whether and how the original design team will be retained, on what scope of service and for what fee.
- Drawn information: a description of the drawings and specification forming the contract drawings (see 'Product' bullet below and section 3.10); instructions as to what further detailed drawings are to be developed by the contractor and to what standard; instructions as to what Employer sign-offs will be required for that further detail including sample panels; change control requirements; linking of contractor technical submittals to scheduled payments.
- Management of works: including how residents will be engaged; what social value requirements apply, such as apprenticeships or equality, diversity and inclusion requirements.
- Building manual and home user guide: a description of the handover information to be provided to the landlord and residents. Clarity in these documents can make a major impact on the future maintenance of the building and hence its long-term robustness. This should include the use of BIM (see section 2.6).

## **Product**

- Technical specification: performance specification criteria for numerous building components which are not specific to the project. This includes named specification of any components critical to the Employer - key items are often mechanical and electrical items.

Project-specific information will be added to the 'baseline' ERs for each project; this is discussed further in the Procurement section.



## **Modern Methods of Construction (MMC)**

MMC encompasses a range of building approaches spanning off-site, near-site and on-site pre-manufacturing, process improvements and technology applications. If homes are to be built using an MMC approach, then a different discipline around standards will be required, as well as procurement (see also Procurement section). The vision and standards documents will still set out the delivery organisation's overall quality requirements. However, depending on the system used, more detailed technical specifications and processes (usually contained in the Employer's Requirements) may need to be co-created with the MMC supplier and design team. This needs to happen right at the start of any individual project, because systems are likely to come with certain constraints around overall dimensions, component dimensions and weights as well as specifications.

## 2.9 PROJECT BRIEF

Is there a clear, consistent and evolving project brief for each project setting out quality aspirations with community input?

L1



Having assembled a good set of standard requirements as above, creating the project-specific brief is the final step. The brief is a key document which describes to consultants what the delivery organisation requires on a particular scheme. It also incorporates the strategic documents above. The project brief will evolve once the design team is on board and following further site analysis and resident and stakeholder engagement. Organisations vary in the extent to which they set out detailed analysis and requirements in their project brief. Design teams are usually more focused and creative when given a relatively detailed brief which may include:

- Site analysis - for example history, constraints, heritage, community, surveys, legals
- Site capacity - study done by the organisation to determine a baseline number of homes which may be targeted for the site
- Quality requirements - strategic documents as in sections 2.4 and 2.7
- Spatial requirements - for example number, type and tenure of homes, amount of community or retail space, amount and nature of public realm
- Delivery requirements - for example engagement, social value, planning and construction strategies

Local involvement in brief-making (not just co-design) is critical to achieving quality outcomes. Briefs are likely to be created in at least two steps. Community engagement usually happens at the start or just after an initial baseline brief has been drawn up. Local input and insights are fundamental to brief-making, including understanding local needs, connections, barriers and sensitivities. Project briefs are living documents and must be updated to capture community insights as well as discoveries via survey or design. This allows the delivery organisation, external design team and community to see what has been captured and agreed.



Image courtesy of Jack Hobhouse - Agar Grove by Hawkins\Brown

**'Public realm and landscaping is something that links all of the buildings – how it stitches back into the wider area – so it's really important to get that right. It can sometimes be the thing that's value engineered at the end so it's trying to enshrine that in the scheme and make sure it doesn't get whittled down over time.'**

**London Borough of Camden**



**'There is something about giving space on each project to creatively come up with design quality ideas that people can own and be proud of because they created it on that project. So we set social impact objectives at the beginning of each project with each community group; for example one group specifically set an objective that there should be a plan for how community spirit will be generated and how design will affect community spirit.'**

## London CLT



Image courtesy of Archio - Brasted Close

## 2.10 SURVEYS

Are appropriate surveys carried out early enough to inform and improve the design process?

L2



All projects require many site surveys which can be physical or social in nature. Examples include topography, trees, biodiversity, social infrastructure or environmental conditions. These surveys are sometimes seen as a necessity of the planning process rather than an inspiration for design ingenuity. However, the best quality schemes take their cue from the existing environmental and social ecology. As such, there are major benefits from seeking pre-design surveys very early to allow the data to inform the designs.



Image courtesy of Haworth Tompkins - Meeting House Lane



## 2.11 POST-COMPLETION FEEDBACK

Are Design Standards and Employer's Requirements documents being regularly updated using feedback from residents and landlord?

L2



The Design Standards and ERs documents require at least annual updates, because of regulatory change or live feedback from completed schemes. Delivery organisations usually have a person or team responsible for sifting and sharing feedback. Any proposed changes are then discussed in a cross-team meeting, before a formal change is made to the standards documentation.

### **GOOD PRACTICE EXAMPLE: LONDON BOROUGH OF SOUTHWARK**

LB Southwark created a set of Design Values and Design Standards in 2015, involving all landlord teams and residents. It refreshed these (as well as its Employer's Requirements) in 2019, with the following process:

- All recent resident post-occupancy feedback collated and distilled into change proposals
- Full landlord team participation in workshops with line-by-line critique of each standards clause
- Sections added on community engagement, site analysis, rooftop homes and building fabric performance
- Reconciliation with local planning standards and Building Regulation updates

## 2.12 DEVELOPER DESIGN BRIEF

Is there a clear design brief for developers delivering via DA and/or Section 106?



Delivery by a third party may bring benefits, but it also means ceding some control over how a project is designed and delivered. Delivery organisations may procure a developer on the basis of a Development Agreement (DA) or enter into a Joint Venture (JV). In such instances, the quality requirements (design, specification and design management) must be as clear and detailed as possible within the tender documents. There is a tendency (as with the contractor tender documents above) to include multiple standards documents as appendices to the DA, in a bid to cover all qualitative bases. This can cause conflicts and militate against the delivery of quality: clarity of quality intent is critical. See the Procurement section for more detail on design management under a DA or JV.

There is often very little opportunity to influence the internal or external specification for homes delivered via Section 106 agreements. It is vital for the receiving organisation to demand a good specification up front for homes delivered this way, and if possible, make it a requirement of such acquisition.



# **THEME 3: PROCUREMENT**

**'The bitterness of poor quality remains long  
after the sweetness of low price is forgotten'  
– Ben Franklin**

## **USING A CREATIVE, EFFICIENT AND DIVERSE SUPPLY CHAIN OF DESIGNERS AND CONTRACTORS**

**This section deals with the procurement of the two key external supply chain resources needed to deliver new homes – design teams and contractors (or combined as developer). When any third party is brought in to help deliver a project, there is both an influx of expertise and a loss of project control. The client's skill is to allow the design and construction supply chain to bring all of their creativity and efficiency to the project, whilst eliminating design complexity and preventing unconsidered cost-cutting. Selecting and then working with design teams, contractors or developers should be an intensive and rewarding process for all. These parties will have a huge influence on whether a good quality outcome is achieved.**

## Prompt Questions Summary

| No       | Topic                                    | Questions   | Priority              |                       |                       |
|----------|--|---|-----------------------|-----------------------|-----------------------|
|          |  |   | L1                    | L2                    | L3                    |
| <b>3</b> | <b>PROCUREMENT</b>                       |   |                       |                       |                       |
| 3.1      | Programme and resource                   | Has the full forward pipeline programme and in-house capability been analysed, and is it informing procurement strategy?                        |                       | <input type="radio"/> |                       |
| 3.2      | Design team requirement                  | Are the right consultant disciplines being procured and appointed from the outset to provide adequate input and coordination prior to planning? |                       | <input type="radio"/> |                       |
| 3.3      | Employer's Agent requirement             | Are Employer's Agents providing a service which is aligned with the organisation's quality aims?  |                       |                       | <input type="radio"/> |
| 3.4      | Scopes of service                        | Do design team scopes of service extend to the full project lifetime, with clear descriptions of the services required at each stage?           | <input type="radio"/> |                       |                       |
| 3.5      | Design team retention                    | Is the original architect being kept through to completion on contractor or client side, with a full remit to monitor quality to completion?    | <input type="radio"/> |                       |                       |
| 3.6      | Procurement aims                         | Have 'added value' criteria been factored into any design team procurement exercise?  |                       | <input type="radio"/> |                       |
| 3.7      | Selection criteria and evaluation        | Are design quality, sustainability & social value given appropriate weight in design team selection, with fee evaluations scored fairly?        | <input type="radio"/> |                       |                       |
| 3.8      | Micro practices                          | Are small and micro-practices able to bid for design team opportunities?  |                       | <input type="radio"/> |                       |
| 3.9      | Competitions                             | Are competitions being used for high-profile projects or to seek new talent?  |                       |                       | <input type="radio"/> |
| 3.10     | Tender Documents                         | Do tender documents secure design quality for key fabric items and details?   | <input type="radio"/> |                       |                       |
| 3.11     | Tender conduct and evaluation            | Are quality ambitions clear in the overall tender documentation and process, with the design team involved in contractor evaluation?            |                       | <input type="radio"/> |                       |
| 3.12     | Dialogue and Value Engineering           | Does the design team scrutinise any Value Engineering proposals during the dialogue process to ensure no quality loss?                          |                       | <input type="radio"/> |                       |
| 3.13     | Developer Procurement                    | Do developer selection criteria include meaningful quality factors which ensure retention of design quality?                                    |                       | <input type="radio"/> |                       |
| 3.14     | Joint Venture and Development Agreements | Do Joint Venture and Development Agreements secure the opportunity to comment on and monitor quality as the project progresses?                 |                       | <input type="radio"/> |                       |





Image courtesy of Jim Stephenson - Kings Crescent by Karakusevic Carson Architects



## 3.1 PROGRAMME & RESOURCE

Has the full forward pipeline programme and in-house capability been analysed, and is it informing procurement strategy?

L2



There is no one-size-fits-all strategy for procuring design and construction resource. The key is for organisations to assess the following for their own programmes:

- Overall programme objectives and risk appetite
- Use of modern methods of construction (MMC)
- Programme size and phasing/parceling - number of homes, number of schemes
- Programme complexity - risks and challenges of sites, need for specialisms such as refurbishment or Passivhaus
- In-house clienting skill - experience and ability in challenging design and construction teams
- In-house resource and funding for procurement - people and budget available for procurement exercises

All further procurement decisions will flow from this analysis, including:

- Direct delivery or indirect delivery via a developer
- Appropriate number, size and risk profile of consultant and contractor organisations
- Procurement systems such as frameworks, dynamic purchasing systems, etc.
- Consideration of batches or lots based on geography, experience, etc.

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### **Direct delivery vs arms-length delivery**

The earliest strategic procurement decision is whether to deliver the programme directly or through developers. This can be either via Joint Ventures, Development Agreements or Section 106 acquisitions. The arms-length delivery route effectively combines the procurement of design and construction into a single party, which impacts how quality management is done. The quality management implications of working with developers both in partnership arrangements, as well as through Section 106 acquisitions, are dealt with separately below.

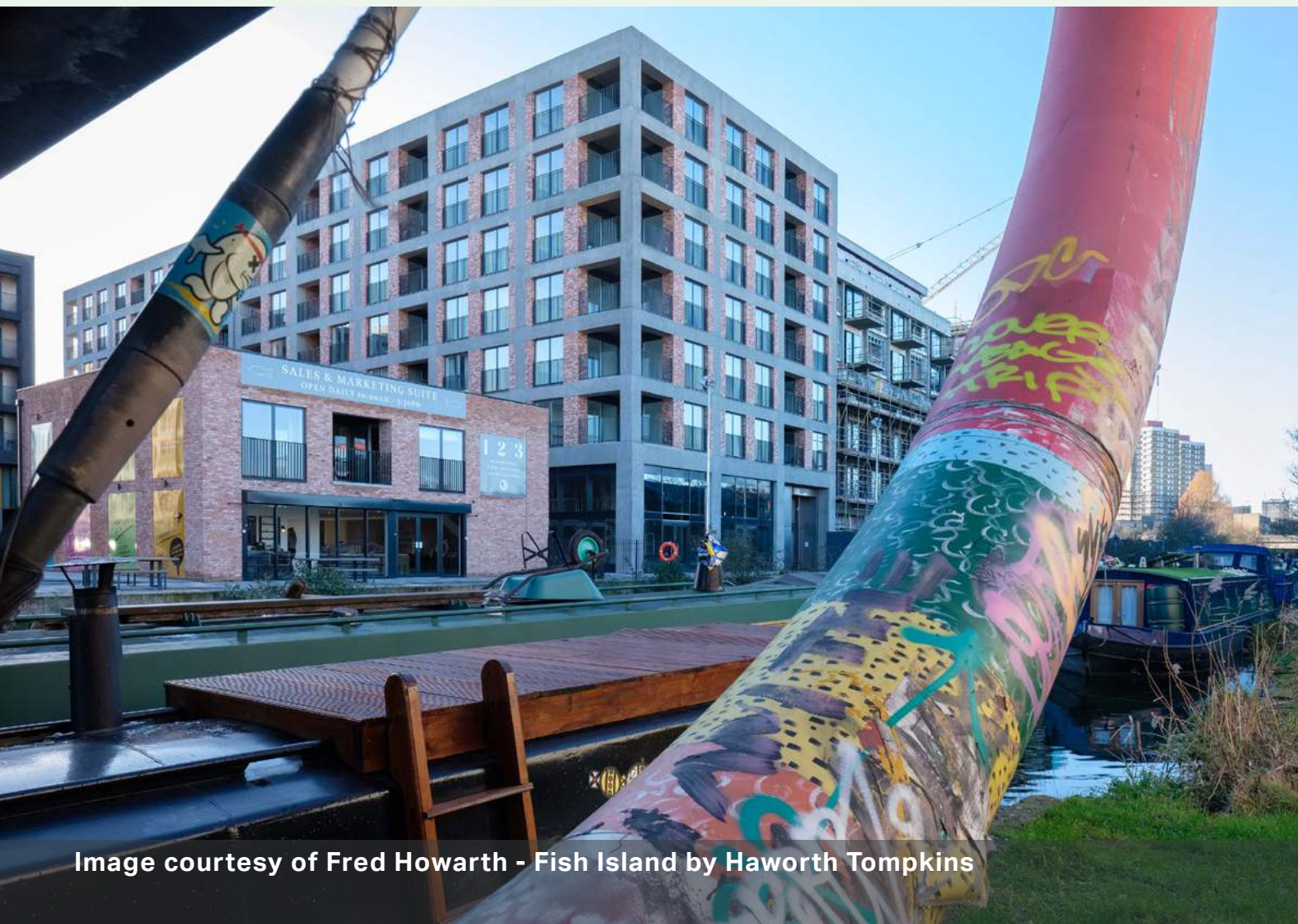


Image courtesy of Fred Howarth - Fish Island by Haworth Tompkins

## 3.2 DESIGN TEAM REQUIREMENT

Are all of the right consultant disciplines being procured & appointed from the outset to provide adequate input & coordination prior to planning?

L2



Several consultant disciplines are required for the design of new homes. Each one can be introduced at different stages, according to the level of certainty reached for any given project. Most projects will require the following headline design disciplines:

- Architect
- Building Services Engineer (including specific sustainability analysis and compliance activity)
- Structural/Civil/Transport Engineer
- Landscape Architect

Using all the right design disciplines as early as possible in the project has an impact on quality outcomes. Early appointments save a lot of effort and cost - through early design coordination - in the later detailed design and construction process.

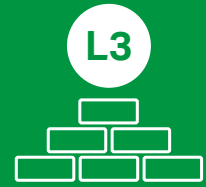
**'We know how a good architect can really drive value in the scheme – so trying to get the best design team for a scheme is really important. The cost difference – if someone's more expensive – can be quite small in the grand scheme of things compared to the value they can add. They only need to add 1% to GDV and they have paid for their fee.'**

London Borough of Camden



## 3.3 EMPLOYER'S AGENT REQUIREMENT

Are Employer's Agents providing a service which is aligned with the organisation's quality aims?



The role and cultural alignment of the Employer's Agent (EA) (or equivalent role helping with cost control and contract management) is key to achieving quality. The best EAs will continually challenge the design team on cost and buildability, finding efficiencies in areas which are not priorities for investment and reserving budget for those areas which matter. They will not just seek cost savings at the expense of quality. Their role in drawing up tender documents which reflect the quality aims is also critical. The role and approach of the EA in design management is explored later in this section and in the Stewardship section.



Image courtesy of Jack Hobhouse - Agar Grove by Hawkins\Brown



## 3.4 SCOPES OF SERVICE

Do design team scopes of service extend to the full project lifetime, with clear descriptions of the services required at each stage?

L1



Procuring the right design team members is only a first step to achieving quality. The detail and duration of their scopes of service also strongly impact on quality outcomes. A fully coordinated design can be a good upfront investment, leading to a smaller risk premium being applied by contractors at tender stage.

The three key project stages where the design team must describe or scrutinise design quality are:

- Design to planning consent
- Planning consent to on-site
- On-site to post-completion

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### **RIBA stages**

There is some ambiguity in the exact definition of the scope of work within the work stages set out in the RIBA Plan of Work. This is particularly the case for RIBA Stages 3 and 4, which span planning and technical design. Clients and their design teams often disagree about the level of work required within these stages. As such, and to avoid dispute or confusion, the RIBA stages have not been referenced in this document.

It can be helpful to set out all design team and site inspector scopes of service into a design and monitoring responsibility matrix so that all components and activities are covered. It is also important to continually update all scopes of service as lessons are learned on projects. Engaging the design team, or at least their architect, for all three stages can transform the quality outcomes.

Issues to consider (which affect quality) when drawing up scopes of service at each stage are:

Design to planning consent - scopes of service should allow for:

- Thorough site and feasibility analysis
- A number of design iterations
- Intensive engagement with all stakeholders (see section 1.6 and 1.7)
- Use of BIM (see section 2.6)

Planning consent to on site - the detailed design work done by the design team is critical to describe quality in enough detail. This service needs to be described and priced accordingly. Scopes of service should include:

- Tender information production (see also section 3.10)
- Tender evaluation (see also section 3.11)
- Interviewing contractors, including visits to reference sites
- Value engineering scrutiny

On site - design team members can be novated or appointed to the contractor (see 3.5 below). In either case, their scope of service should include:

- A clear schedule of design development drawings
- A requirement for fabrication drawing scrutiny

- Monthly design team reports throughout the contract
- A requirement to participate in defect resolution
- Post-occupancy review participation, including suggestions for changes to standard quality documents

Where design team members act in a monitoring capacity (client-side and sometimes called a design guardian), that scope of service should also be explicit. Site Inspectors will also be required at the on-site stage, with a thorough scope of service. More complex schemes may need specialist site inspection resource such as fire, M&E or building safety inspection.



Design Responsibility Matrix - RIBA

## **GOOD PRACTICE EXAMPLE: LONDON COMMUNITY LAND TRUST**

London Community Land Trust (CLT) develops homes for community groups. It chooses and evaluates both architects and contractors in a collaborative way:

- Social impact objectives are set in the initial brief and design teams need to respond to those.
- Architects are chosen by local communities after literally 'setting out their stall' at a public meeting before any design work starts.
- Design and Build contractors are asked to appoint the planning stage architect through to completion.
- Several meetings are held during the pre-contract period. These meetings highlight different design aspects and seek the contractor's response while also allowing them to show value.





Image courtesy of Jack Hobhouse - St Johns Hill by Hawkins\Brown

'The worst-case scenario is if you don't ask your design team to do enough design prior to contract and then the builder brings in their new set of designers and then you also have to retain the old set of designers in a design champion role – and what that says is that really we didn't make enough decisions prior to contract. We're then policing others' decisions that we could and should have made ourselves.'

Peabody



## 3.5 DESIGN TEAM RETENTION

Is the original architect being kept through to completion on contractor or client-side, with a full remit to monitor quality to completion?

L1



A key aspect of the design team scope of service as set out in section 3.4 is design scrutiny beyond planning. There are three main ways to keep design team members (the architect or all four design team members mentioned in 3.2) through to completion:

- Novating existing consultant appointments to the contractor at contract let.
- Seeking new consultant appointments to the contractor, ensuring scope of service includes attendance at meetings on site. There must be a clear remit to flag up loss of quality due to any proposed substitutions or detail changes.
- Appointing design team members through to contract let only, and creating new appointments post-contract to act on the delivery organisation's behalf. The design team role is then to check that the detailed design (by the contractor) conforms with the ERs. This appointment and the checking activity must have enough weight and enforceability with the contractor. This option allows the least client control.

The Stewardship section explains this post-contract design development/monitoring in more detail.

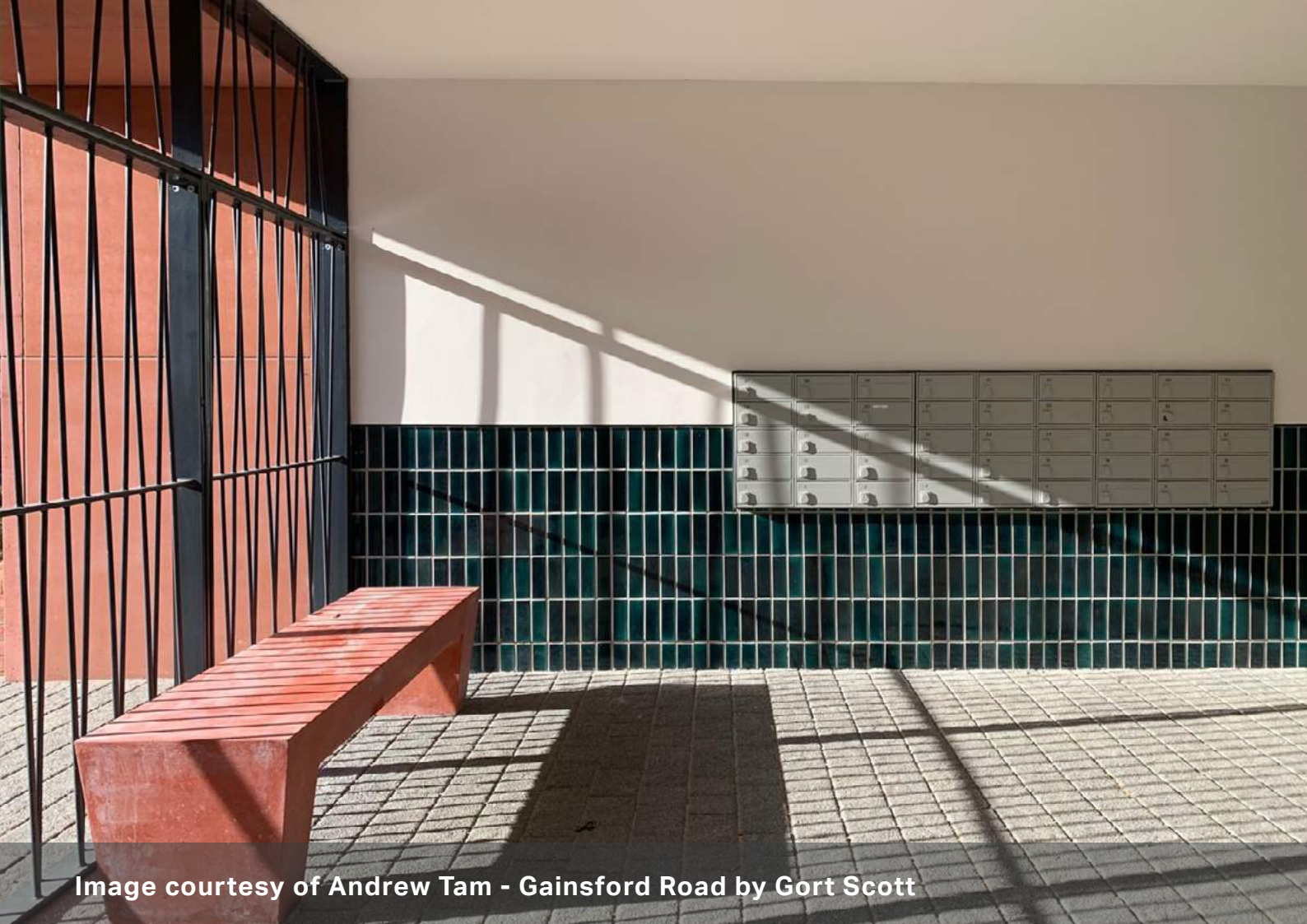


Image courtesy of Andrew Tam - Gainsford Road by Gort Scott

**'Our architects are part of the entire design and delivery process: we don't change architects post-planning because they are part of the entire journey and understand our brief and know how to deliver it.'**

Pocket Living

## 3.6 PROCUREMENT AIMS

Have 'added value' criteria been factored into any design team procurement exercise?

L2



The first three aims of any design team procurement should be:

- **Appropriateness** – selecting the right mix of practices with the right skills to meet the programme and projects.
- **Efficiency** – ensuring that the procurement and any call-off processes are streamlined for both the client and their supply chain.
- **Value for money** – optimising fee bids to balance cost, resourcing and other offers by the design team.

Procuring design teams also presents important opportunities to achieve value in further qualitative areas. Clients should consider the extent to which these wider aims apply to their programmes, and tailor their procurement strategy accordingly:

- **Value Add** – for example, creating a group culture between the client body and their suppliers and contractors which enables learning and standardisation through repeat commissions.
- **Innovation and Dynamism** – allowing new organisations the opportunity to bring in fresh ideas.
- **Social Value** – ensuring that the procurement creates value to the local economy and community including underrepresented groups.



### **Supply chain profile - architects**

Before starting any procurement exercise, it is worth considering what the 'housing design supply chain' looks like. Organisations are likely to need a variety of practice types and sizes to meet their programme requirements. Analysis of London's architectural practices, for instance, shows there are over 800 practices capable of designing housing, split into four categories:

- 0-4 staff: (45%)
- 5-19 staff: (32%)
- 20-125 staff: (17%)
- 125+ staff: (6%)

Organisations should broaden out their potential supply chain as far as possible to take advantage of innovation, expertise and diverse perspectives. In some cases, smaller practices may have substantial experience, and will offer director-level attention to schemes. Conversely, larger practices may choose to work on smaller schemes where they have very specialist expertise, such as older people's housing.





Image courtesy of Karakusevic Carson Architects - Meridian Four

**'Our influence is our buying power, so I want Enfield Council to send a clear message to architects and the public sector that we should stop spending public sector money on organisations that don't value diversity.'**

**London Borough of Enfield**



## Procurement strategy

London's public authorities use a wide variety of systems to procure design teams. The main types are:

- Individual tenders – one-off tender exercises for individual projects
- Intermediary systems – appointing sub-consultants to a pre-procured multi-disciplinary consultant, for example: Scape, Crown Commercial Service.
- Frameworks (own or third party) – a pool of consultants or contractors procured in a single procurement event, for example: the Mayor's forthcoming Architecture + Urbanism Panel.
- Dynamic Purchasing Systems (DPS) (own or third party) – a supplier pool system where suppliers can qualify and gain entry to the DPS provided certain minimum criteria are met, for example: Bloom.

It is worth considering how much control any of these systems provides over design team choice and scope of service as both may have an impact on quality. The procurement stages each of these systems need are as follows:

| PROCUREMENT STAGES | SELECTION QUESTIONNAIRE | INVITATION TO TENDER  | CALL OFF PROCESS/ MINI-COMPETITION |
|--------------------|-------------------------|-----------------------|------------------------------------|
| INDIVIDUAL TENDERS | <input type="radio"/>   | <input type="radio"/> |                                    |
| INTERMEDIARY       |                         |                       | <input type="radio"/>              |
| OWN FRAMEWORK      | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/>              |
| OTHERS' FRAMEWORK  |                         |                       | <input type="radio"/>              |
| OWN DPS            | <input type="radio"/>   |                       | <input type="radio"/>              |
| OTHERS' DPS        |                         |                       | <input type="radio"/>              |

## 3.7 SELECTION CRITERIA & EVALUATION

L1

Are design quality, sustainability & social value given appropriate weight in design team selection, with fee evaluations scored fairly?



Choosing a good quality design team is one of the most important decisions an organisation can make to ensure the delivery of a quality housing scheme. Organisations which choose to create a framework of design team suppliers should carefully consider the selection criteria and the way they are weighted and judged in order that quality is given its due weight. The selection process also needs to be appropriate to the supply chain profile, allowing in bids from a range of appropriate suppliers.

Most public procurement processes involve a first stage process, which is a selection questionnaire (SQ) looking at organisational capacity and experience. The second stage is often an Invitation to Tender (ITT) where fee bids and further responses are sought. The ITT response relates to the candidate's approach to the client's programme and likely projects. The final stage (for frameworks and DPS systems) is a call-off process, which should echo the ITT process in terms of evaluation. (A call-off is the process by which a supplier is selected from a framework, which may involve a mini-competition based on quality and fee.) Considerations relating to quality during these three processes are:

### Selection Questionnaire

- Evaluation questions should be appropriate to the envisaged size of practice/project. For example, previous projects sought should be similar in size to envisaged projects, and quality assurance systems sought should be appropriate to a small practice.
- Minimum criteria for insurances, turnover and liquidity need to reflect the typical supplier profile and not unduly exclude smaller practices.

### Invitation to Tender or Call-off

- The quality percentage should form at least 70% of the marks.
- The 70% allotted to quality criteria should give enough weight to 'design quality' itself, rather than, for example, project management method or programme.

- Approach to sustainability needs weight and should be evaluated as a standalone item.
- Social Value and Equality, Diversity and Inclusion (EDI) criteria need due weight and an appropriate requirement for the project size.
- Quality submissions should be marked by appropriately qualified people.
- For fee evaluation, the 'narrow mean average' system should be considered rather than 'lowest price gets full marks' scoring regimes (which tend to drive unsustainable fee bids and deter smaller practices).
- Fee assumptions should be realistic for the service required, and any unsustainable fee bids rejected.



### **The tender documents**

Where a tender is for design teams seeking to gain entry to a DPS or framework, the documents should contain the client's vision statement (see section 2.1) as well as details of their upcoming programme. Where a tender is being undertaken for a single project, tender documents for design team members should comprise the project brief (see section 2.9) as well as the scopes of service (see section 3.4) and form of appointment.



## GOOD PRACTICE EXAMPLE: GLA A+U FRAMEWORK

The Architecture + Urbanism (A+U) Framework replaces Architecture Design and Urbanism Panel (ADUP) in January/February 2022 as the GLA / TfL procurement framework for architecture and urbanism design services. As with ADUP it will be freely available to public commissioning authorities including housing associations and all London boroughs.

The A+U Framework supports quality in the built environment through a range of features. These include:

- Evaluation criteria weighted towards quality, with increased weighting for Social Value and EDI – at mini competition stage 75% of marks are awarded for quality (of which 10% are for Social Value and 5% for EDI qualitative assessment), 20% of marks are for cost and 5% for EDI Policy. *The Mayor has developed a Process Note to support this work: Maximising Social Value and EDI Through the Procurement of Design Teams.*
- ITT specifically promoted to micro-practices and diverse professional networks to help address under-representation of women and people from minority groups in public procurement and promote equality of opportunity in accessing public sector work.
- Reserved space on the A+U Framework for micro-practices, and Selection Questionnaire requirements that are proportionate to the size of the supplier applying.
- Reduced resource burden on suppliers bidding for small commissions through a Direct Appointment mechanism for contracts under £75k. This helps ensure better engagement from suppliers over the course of the framework.



### **In-house design teams**

There are some councils that have internal architectural expertise, but this is rare. Islington's in-house architectural practice is seen as an asset by Members and the development team. They design some of Islington's new schemes, and know the Borough well, having worked for many years on the existing stock. One of their first schemes won a Housing Design Award. They also act as design champions where the development team uses a Design and Build contract and needs client-side design scrutiny.



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**Mean Narrow Average Calculator – Russell Curtis**

**Social Value and EDI through Procurement – GLA**

**A+U framework – GLA**

**'They [candidate architects] are thrown into a community hall for a couple of hours, and any members of the public who turn up vote for what they want. We make a real effort to ask them not to do any design work. From that moment on, that community group calls them 'our architect' and the kind of relationship you can build with neighbours to the site I don't think could be done without that explicit selection moment. I don't know why more people don't do that!'**

**London CLT**

# 3.8

## MICRO-PRACTICES

Are small and micro-practices able to bid for design team opportunities?

L2



Micro-practices (those with fewer than 10 staff) are a likely part of any new-build programme for two key reasons:

- Public commissioners wish to add Social Value through their procurement, supporting small, diverse and/or local practices as part of their procurement.
- Many sites are likely to comprise fewer than 20 homes - a scheme size less likely to be attractive to larger firms.

The procurement exercise therefore should allow for micro-practice participation within acceptable risk parameters. Many smaller architectural firms have extremely good credentials and offer a highly tailored service where directors are able to devote more attention to a scheme. More experienced delivery organisations have supported smaller practices over time as their own in-house skills in managing design teams has grown. Strategies used include:

- Nurturing newer micro-practices through conversation over time, with occasional high-profile competitions being run for smaller sites.
- Subcontracting newer micro-practices to larger framework practices, including peer mentoring and design review, allowing both parties to benefit from the collaboration.



Image courtesy of Andrew Tam - Gainsford Road by Gort Scott

**'We are always open to giving opportunities to small practices or ones that are just starting out, we're willing to take a chance on them. What's important for us is the quality and the out-of-the-box thinking that a practice can demonstrate.'**

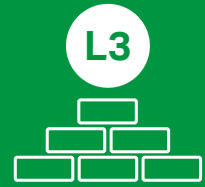
**Pocket Living**



## 3.9

### COMPETITIONS

Are competitions being used for high-profile projects or to seek new talent?



Competitions are a good way of seeking new talent and/or innovation in the supply chain. They can be run for very large projects (where a bespoke or international consortium may be desired). They can also be used for small projects, where emerging talent is sought at relatively low risk. Third parties (such as RIBA or Architecture Foundation) can be used to run competitions, creating a good brief, reaching out to the supply chain and getting high quality entries from a wide cohort.

**'[We went] with an RIBA competition to select architects – it was about opening up to different ideas perhaps. The Design & Conservation Officer [in planning] wrote the design brief. We set parameters around value, and I think we set a maximum level for the percentage of architects fees. But the focus was very much around quality and one of the benefits of the RIBA system is that you can focus on that – they lead you through it and you have a leading architect who sits alongside you.'**

Norwich City Council



### **Direct delivery – contractor procurement**

There is a range of systems used to procure construction services. The key differences lie in whether the constructor is engaged earlier or later in the development process, and the level of information available to the contractor when tendering. The risks and opportunities for retaining quality and the quality management controls needed under various contractor procurement routes are explored below. These are:

- Design and Build (single or two stage, open tender or from a framework) – a type of building contract made between a client (The Employer) and a contractor (The Contractor). This type of contract is often used by public authorities when building new homes.
- Traditional – a type of building contract made between a client and a contractor where design and costing work is done in full before tender.
- Construction Management – a building contract where the employer appoints separate trade contracts to do the works, and a separate construction manager to oversee and coordinate those works.

There is also a requirement to consider how quality is achieved where some MMC systems are being procured. Procurement of a volumetric MMC system is likely to happen before any other development activity, and has its own design and quality discipline which is explored below.



## 3.10 TENDER DOCUMENTS

Do tender documents secure design quality for key fabric items and details?

L1



The period between a planning consent and start on site is the 'golden hour' for quality, which is often retained or lost during this transition phase. Carving out the time and budget to create a good set of tender documents after a planning consent is a necessity to achieve good quality outcomes. Delivery bodies and their Employer's Agents and design teams should draw and specify the quality items which are essential, leaving space for contractors to bring innovation and efficiency where it is appropriate. The suggested information to supplement a planning drawing set (including architecture, landscape and engineering), which also completes the Baseline ERs, includes:

- Specification of critical items (for example bricks, windows, landscape)
- Coordination generally including M&E and rooftop arrangement
- Design intent drawings (showing setting out and how key materials are distributed)
- Supplementary detail drawings (showing key external wall junctions)



MMC definition framework – Cast



### **Design and Build (D&B) tender**

Most local authorities and housing associations currently use Design and Build contracts to contract with the construction supply chain, the main reason being the transfer of risk and liability to a single, easily identifiable entity: the contractor. Transferring risk within a D&B environment can occur at the expense of control over quality. This should not happen if the client captures both the built quality requirements and desired scrutiny processes within the tender documentation.

### **Single or two-stage tender**

Delivery organisations will make their own decisions about whether to conduct tenders in one or two stages. Early involvement of a contractor can help both in programme terms, and in securing efficiencies and buildability improvements before investing in abortive design work. However, the two stage processes can cause a loss of both quality and value for money in between the two stages. This is because the scope of the project is not well defined at the first stage and the client has little control over the design development. This can be mitigated by allowing an adequate budget envelope at the outset as well as setting out a very transparent subcontractor tender process.

### **Traditional contracts**

Some public authorities are now exploring 'traditional' contracts. Such contracts can lead to good quality outcomes because of the level of prescription and control in the contract documentation. The architects need to be fully skilled in managing the contract on site.

### **MMC - system/supplier procurement**

A strategic decision for some organisations is the extent to which they will use MMC in their programme. Some MMC systems are fundamental to the construction of the homes (usually the more volumetric systems which comprise whole homes). This means that their use should prompt an early system/supplier procurement process before any design work commences on an individual project. This kind of early supplier/system procurement has its own discipline, requiring specialist advice to ensure that the qualitative requirements (product and process) are captured.





Image courtesy of Jack Hobhouse - St Johns Hill by Hawkins\Brown

'At tender, we looked at certain items that we really cared about – façade and M&E for example – we provided a bit more information on that so we're locking in the quality we wanted there. We're OK with the contractor taking some opportunity where we don't feel it would hurt the design and where it will allow us to get to a more competitive price; but we have learned from our resident satisfaction scores where if we don't get it right, that will cause issues.'

Peabody

# 3.11 TENDER CONDUCT AND EVALUATION

Are quality ambitions clear in the overall tender documentation and process, with the design team involved in contractor evaluation?



The conduct of a tender process between tender issue and start on site can have a major impact on the quality outcomes for new build homes. Inevitably, contractor choice will always be a balanced trade-off between price, programme and quality. This section aims to highlight ways to protect quality outcomes. The delivery organisation and their Employer's Agent, through both tender documentation and contact with the tendering parties throughout the tender process, should consider the following actions:

## Overall

- Providing clarity on the overall vision and priorities for the project
- Providing clear instructions about where the Employer welcomes variation offers from the tenderer, and where they have qualitative 'red lines'
- Providing clear requirements for the Employer and their agents to sign off key design development and change proposals
- Making clear the continuing role of the original design team members, and any requirement to novate or otherwise appoint them to the contractor (see Stewardship section for more detail)

## Selection Questionnaire (SQ) stage

- Ensuring qualitative questions seek evidence of good quality outcomes on previous projects, with an opportunity to visit reference sites if possible

### **Invitation To Tender (ITT) stage**

- Including qualitative criteria in evaluation. This includes understanding of Employer quality requirements, quality of value engineering proposals (showing an understanding of the client's quality priorities), quality of subcontractors on key fabric packages, social value offers
- Involving the design team in any mid-tender discussions, qualitative scoring and candidate interviews
- Asking for key site personnel and subcontractors to be included in interviews, particularly the intended site and/or design manager.

**'Those contractors who regularly work with us, we know who their design coordinators are – and we ask for named design coordinators on certain jobs, and we're very aware of how much of their time they make available to us.'**

**London Borough of Islington**





Image courtesy of Steve Bainbridge - Centurion Close by Islington Architects



## 3.12 DIALOGUE AND VALUE ENGINEERING

Does the design team scrutinise any Value Engineering proposals during the dialogue process to ensure no quality loss?



Integral to most tender processes for D&B is a period of dialogue with one or two preferred bidders where intelligent compromises can be negotiated between parties to secure viability without loss of quality. Value Engineering (VE) can be a necessary and helpful process, as the contractor can bring alternatives which create savings without undue loss of quality. However, the design team needs to be involved in making value judgments about those alternatives, comparing contractor suggestions against the Employer's Requirements or equivalent.

**'Rather than it just being 'decisions to save money', we were testing every one of those decisions with drawings, in 3D modelling, and we were making sure that they weren't detrimental – that there was a process we were going through which was design focused as well as financially focused. Through all of it there were red lines and one of them was that Passivhaus had to be achieved, another one was longevity of products as well – we were concerned with future maintenance.'**

Norwich City Council

# 3.13 DEVELOPER PROCUREMENT

Do developer selection criteria include meaningful quality factors which ensure retention of design quality?



Public authorities may choose private sector development entities to deliver their new homes (via Development Agreements (DA) or Joint Ventures (JV)). However, doing so can reduce their ability to choose or manage the design team. This does not necessarily mean that the organisation has no agency. Rather, it should consider what its qualitative requirements are (both product and processes) and the weight given to those factors when evaluating developer candidates. There are multiple decision criteria to be taken into account, of which quality will form an important, but not necessarily majority part. Seeking and evaluating the following design quality requirements in SQ and ITT processes, should be considered. Any resulting commitments will then need to be sealed into the DA or JV Agreement.

- Quality of previous developer schemes evidenced by site visits
- Quality of design team members proposed for project
- Proposed regime for design development and quality management, including design team scopes of service and the ability to monitor and agree detailed design and changes. This should include the stewardship processes set out in 4.11 – 4.16
- Example of design development (some design and specification work, for example the detailed design and specification of a typical bay of one of the buildings)

# 3.14 JOINT VENTURE AND DEVELOPMENT AGREEMENTS

Do Joint Venture and Development Agreements secure the opportunity to comment on and monitor quality as the project progresses?



Joint Venture and Development Agreements and their appendices are likely to include some or all of the below opportunities to secure and retain quality. These requirements should be set out in the tender documentation, especially in DAs where there is likely to be less control than in a JV:

- Vision and Project Brief
- Outline Planning Consent and associated conditions, section 106 obligations (key to ensuring a basic level of quality in terms of layout, massing)
- Minimum Standards document (a short summary of red line delivery commitments)
- Affordable Housing specification (likely to be the Design Standards and some of their ERs – see Brief and Standards section)
- Developer bid commitments (items proposed by the developer in response to the tender document, which may include fabric specifications, design team, etc.)
- Quality sign-off rights (critical to allow scrutiny of the Reserved Matters Application (RMA) design and detailed design)

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## Section 106 Acquisitions

S106 homes are affordable homes delivered by private developers and typically bought by housing associations or local authorities at an agreed price. Acquiring organisations often have little scope for setting standards or specification other than that the homes must comply with basic requirements of planning and Building Regulations. Negotiation to secure quality should take place as early as possible and as far as possible.





Image courtesy of Tim Crocker (c) 2019 - Goldsmith Street by Mikhail Riches



# **THEME 4: STEWARDSHIP**

**'Uncontrolled variation is the enemy  
of quality'  
- W Edwards Deming**

## **CREATING AND ACTIVELY MANAGING THE DESIGN SCRUTINY PROCESSES CARRIED OUT THROUGHOUT A PROJECT'S LIFE**

**This section will deal with how quality is governed, showing what procedures are needed to monitor and retain a golden thread of design quality through the project process. It cannot be overstated how vital this thread is, including in ensuring compliance with regulation and policy. However, it is easily lost through missed or poorly managed processes between concept and completion.**

## Prompt Questions Summary

| No       | Topic                             | Questions   | Priority              |                       |                       |
|----------|-----------------------------------|---|-----------------------|-----------------------|-----------------------|
|          |                                   |   | L1                    | L2                    | L3                    |
| <b>4</b> | <b>STEWARDSHIP</b>                |   |                       |                       |                       |
| 4.1      | Development Manual                | Is there a 'Development Manual' with design management activities embedded?   |                       | <input type="radio"/> |                       |
| 4.2      | Project Leadership                | Is project leadership undertaken by development staff with sufficient expertise to manage and reconcile both cost and quality?              |                       | <input type="radio"/> |                       |
| 4.3      | Community Engagement              | Are diverse local communities involved in co-design in a meaningful way from the outset of a project?                                       |                       | <input type="radio"/> |                       |
| 4.4      | Landlord Scrutiny                 | Are appropriate in-house teams involved in regular scrutiny of all new schemes, with their feedback influencing scheme evolution?           |                       | <input type="radio"/> |                       |
| 4.5      | Technical scrutiny                | Are development and external design teams checking compliance with standards, and seeking regular cost and buildability feedback?           | <input type="radio"/> |                       |                       |
| 4.6      | Pre-application planning scrutiny | Are schemes undergoing regular pre-application and Design Review Panel sessions?  |                       | <input type="radio"/> |                       |
| 4.7      | Planning Submission               | If required, do planning submissions show indicative details and specifications which seal in quality for critical items?                   |                       |                       | <input type="radio"/> |
| 4.8      | Internal handover                 | Does any internal handover make clear the qualitative red lines for the delivery team?  |                       | <input type="radio"/> |                       |
| 4.9      | Early on site culture             | Are there early stage site visits and workshops to engage the wider contractor team in understanding and achieving quality priorities?      |                       |                       | <input type="radio"/> |
| 4.10     | Planning condition discharge      | Are planning conditions being discharged with appropriate scrutiny such that detailed design intent is being preserved? (for councils only) |                       | <input type="radio"/> |                       |
| 4.11     | Sample panels                     | Are sample panels of key materials and assemblies being requested and then scrutinised by all appropriate parties?                          |                       |                       | <input type="radio"/> |
| 4.12     | Design development drawings       | Are appropriate parties scrutinising and commenting on design development drawings?   |                       | <input type="radio"/> |                       |
| 4.13     | Change proposals                  | Are major change proposals being flagged and scrutinised by appropriate parties before sign off?  | <input type="radio"/> |                       |                       |

| No   | Topic                     | Questions   | Priority              |                       |    |
|------|---------------------------|---|-----------------------|-----------------------|----|
|      |                           |   | L1                    | L2                    | L3 |
| 4    | <b>STEWARDSHIP</b>        |   |                       |                       |    |
| 4.14 | Site inspections          | Are there frequent visits by site inspectors and others from the client team to inspect quality?                                  | <input type="radio"/> |                       |    |
| 4.15 | Completion and Handover   | Are commissioning and handover processes robust, ensuring that residents and landlord can steward buildings well into the future? |                       | <input type="radio"/> |    |
| 4.16 | Post Occupancy Evaluation | Is post occupancy evaluation undertaken with residents and landlord teams, with results feeding back into documents?              |                       | <input type="radio"/> |    |



Housing Forum:  
Quality Counts  
Building Homes Better





Image courtesy of Phoenix Community Housing - Hazelhurst by Levitt Bernstein

## 4.1 DEVELOPMENT MANUAL

Is there a 'development manual' with design management activities embedded?

L2



The stewardship activities detailed here set out the key moments in a project lifetime where the scheme quality must be scrutinised and signed off. This multi-party scrutiny will only happen if it is embedded into development manuals. These manuals describe the full cost, viability, programme and legal activities required to manage risk across a development programme.



Plan of Work – RIBA

Good Practice Guide to Estate Regeneration - GLA

Monitoring Design Quality – Public Practice – Note

**'In our development reports now, we have all the commitments on each scheme that were made to residents so they can be monitored for the life of the scheme. So people can come and go, but those [commitments] are in those reports, and every two months we can say – yes we have provided more bike storage – or whatever it is.'**

**Phoenix Community Housing**

## **Design stewardship – resourcing and stages**

The previous two sections explored how to create a good locally-guided brief, set clear standards and budget, and appoint a high quality design team. They are a pre-requisite for what follows in this section, which is the intelligent editing and shaping of a scheme design to reconcile the needs of multiple stakeholders.

The development team should hold the quality vision from project brief through to practical completion, coordinating design scrutiny activity from many parties. As outlined in the Culture and People section, some or all of these scrutineers are required to monitor quality:

### **Internal**

- Development team
- Quality/technical/design team
- Landlord team (asset management, maintenance, fire, safety, lettings)

### **Consultants**

- Other framework design team members
- Employer's Agent
- Site Inspector
- Design Team (if not appointed to contractor)

### **Stakeholders**

- Planners including Design Review Panel
- Community





Image courtesy of Rory Gardner - Fish Island by Lyndon Goode & Pitman Tozer



These various scrutineers will be needed to varying degrees throughout any given project's life. It is important to ensure, as far as possible, that scrutiny is carried out by the same people throughout the project life, not devolved to third parties after a planning consent. Below is a summary of a comprehensive design management regime, including project stages, scrutineers, and the nature of their scrutiny.

| STAGE                         | DESIGN LEAD                                     | SCRUTINY                             |   |  |   |  |   |   |   |
|-------------------------------|---|--------------------------------------|---|--|---|--|---|---|---|
|                               |   | COMMUNITY                            | DEVELOPMENT   | TECHNICAL  | QS/EA   | EXT.DES.TEAM                           | LANDLORD  | PLANNING  | SITE INSPECTOR                                    |
| CONCEPT TO PLANNING           | DESIGN TEAM<br>Architect<br>Landscape Engineers | Overall quality<br>Impact on amenity | Overall quality<br>Buildability<br>Planning<br>Design standards | Buildability<br>Regulatory<br>Compliance<br>ER alignment               | Value for money<br>Buildability                   |  | Manageability<br>Lettability<br>Long term<br>VFM        | Overall quality<br>Policy compliance<br>inc. GLA, DRP |   |
| TENDER INFORMATION PRODUCTION | DESIGN TEAM<br>Architect<br>Landscape Engineers |                                      | Overall quality<br>Buildability<br>Planning<br>Design standards | Buildability<br>Regulatory<br>Compliance<br>ER alignment               | Value for money<br>Buildability                   |  |   |   |   |
| CONTRACTOR NEGOTIATION        | CONTRACTOR Proposals                            | Evaluation (if appropriate)          | Evaluation<br>Change proposals                                  | Evaluation<br>Change proposals   | Evaluation<br>Value for money<br>Change proposals | Evaluation<br>Change proposals         |   |   |   |
| ON SITE                       | CONTRACTOR Detailed drawings                    | Impact on amenity                    | Sample panels<br>Change proposals                               | Sample panels<br>Buildability<br>Regulatory compliance<br>ER alignment | Compliance with ERs/<br>Regulation                | If client side:<br>Compliance with ERs | Compliance with landlord<br>Regulation<br>Commissioning | Sample panels<br>Condition sign off                   | Compliance with ERs/<br>Regulation<br>Workmanship |





Image courtesy of Jack Hobhouse - St Johns Hill by Hawkins\Brown



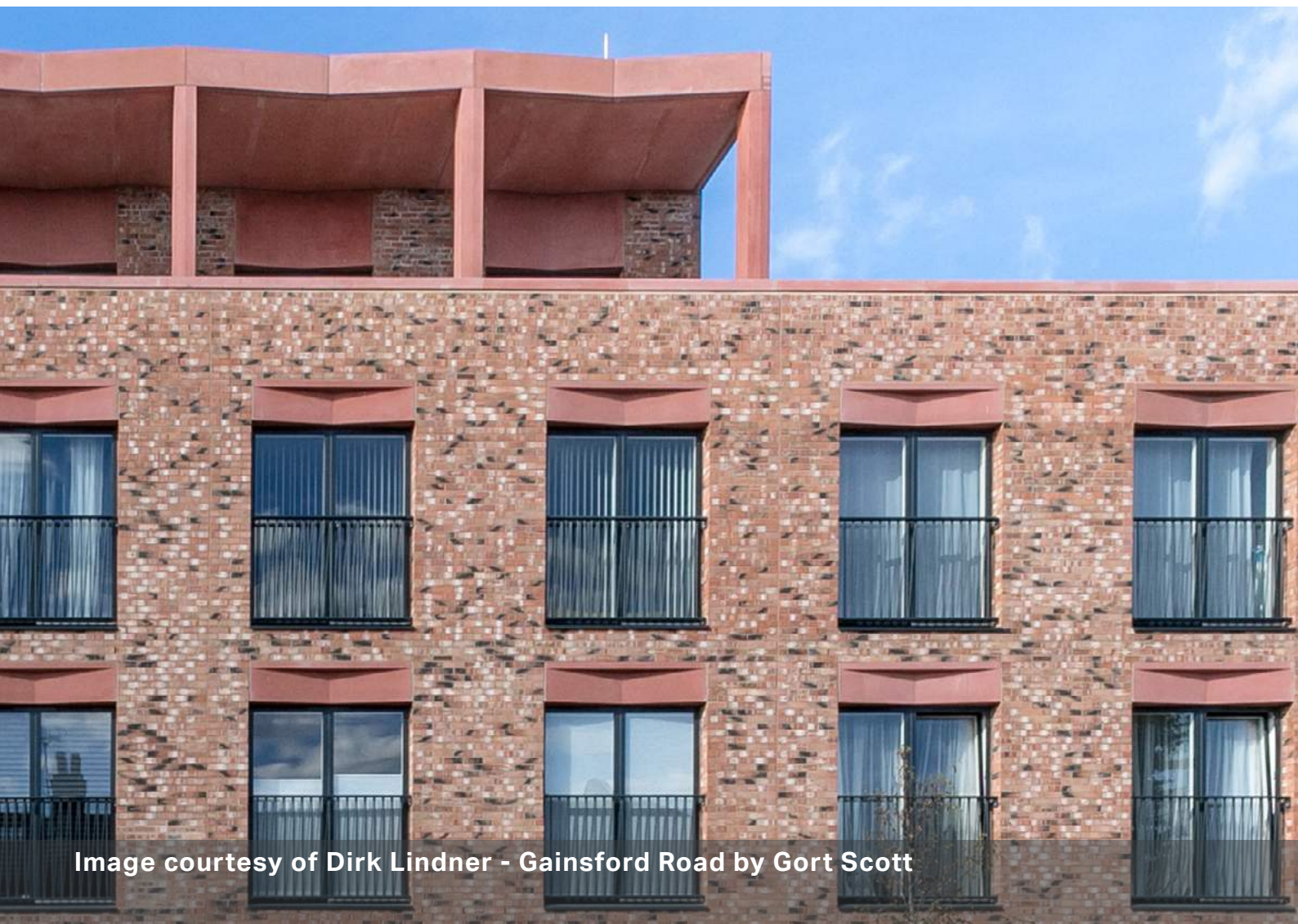
## 4.2 PROJECT LEADERSHIP

Is project leadership undertaken by development staff with sufficient expertise to manage and reconcile both cost and quality?

L2



The issue of who leads the above 'editing and shaping' process is a key point. Some development staff take a very central and active role, for example chairing design team and all other meetings, and driving the programme forward. In some organisations, perhaps where there is less experience, Employer's Agents, external Project Managers or design team members may lead design team meetings. Generally, the in-house development manager should lead the project in order to fulfil the brief while also balancing the creative tension between quality and budget parameters.



## 4.3 COMMUNITY ENGAGEMENT

Are diverse local communities involved in co-design in a meaningful way from the outset of a project?

L2



Engaging local communities in co-design – the collaborative brief-making and design process between delivery organisations, their design teams and local stakeholders – is critical. Local communities, including all under-represented groups, must be involved in scheme design from the start. Scheme quality will be enhanced substantially through a deep understanding of (inter alia) movement patterns, local social intelligence and historical insights. This is something which only communities can give. Development managers will need to build trust through an open approach, showing how various stakeholder needs must be met and where trade-offs and compromises have to be made.



Image courtesy of Archio - Brasted Close



## **GOOD PRACTICE EXAMPLE: BRASTED CLOSE ARCHIO'S RESIDENT ENGAGEMENT PROCESS**

London CLT's ambition is to build trust and community buy-in for new homes through the way residents are engaged, going as far as delegating key decisions to them. Co-design highlights include:

- "Pick an Architect" workshop culminating in a vote by residents for Archio
- Formation of a resident steering group meeting monthly with the design team
- An initial three-day co-design workshop using a temporary office in one of the site's empty garages
- Further on-site design workshops with the community using questionnaires, written and filmed testimonials



Image courtesy of Archio - Brasted Close

- Joint foam model making and drawing, speed-cardboard-box-workshop with children from the neighbouring primary school
- Invitations into homes of neighbours to the site to determine proposal impacts
- 'Landscape walkaround' to talk about how the new public space could best serve community needs.

The culmination of this community-led planning process was when the community and campaigners hand-delivered plans to the Mayor of Lewisham. The planning application received an unprecedented 107 letters of support.



**Community Engagement – Public Practice - Notes:**  
**Setting up structures**

**Planning with young people**

**Making participation happen**

## 4.4 LANDLORD SCRUTINY

Are appropriate in-house teams involved in regular scrutiny of all new schemes, with their feedback influencing scheme evolution?

L2



For a given project, regular meetings should be set up to allow in-house receiving teams to scrutinise the design evolution. Many organisations instigate a weekly standing meeting where landlord teams are invited to review a number of development projects at various project stages. Colleague feedback should be recorded in a tracker in order to monitor resolution of issues or any derogations. The meetings can also be used for in-house teams to sign off schemes at formal commitment stages such as submitting a planning application. Councils will have easier access to highways and waste teams, who can be consulted through the planning process or as part of a more integrated colleague scrutiny regime. Councils with wholly owned delivery companies will also need to reserve the opportunity (via an internal service level agreement or board/committee membership) to scrutinise quality.

**'The Operational Design Panel (ODP) is a weekly slot blocked out in diaries for scheme review – it's chaired by a design and quality manager and has all of the landlord team contributing – people change over time so it's good to have a record of why decisions were made.'**

Peabody



## GOOD PRACTICE EXAMPLE: PEABODY

Peabody has developed clear processes to scrutinise design development both before and after contractor involvement:

- A design and technical team has staff from architectural, engineering, sustainability and contracting backgrounds
- A member of the design and technical team chairs the Operational Design Panel (ODP) which meets weekly to review emerging schemes
- The ODP also discusses and agrees any changes to the baseline design standards and ERs documents, taking a balanced view of landlord and other feedback
- In-house construction inspectors are used to achieve maximum commitment to long-term quality as well as external M&E inspectors.



## 4.5 TECHNICAL SCRUTINY

Are development and external design teams checking compliance with standards, & seeking regular cost and buildability feedback?

L2



Several scrutineers, including the EA, technical team, landlord team and development manager should continually analyse scheme cost and buildability. This will ensure investment is targeted at the priority areas to achieve quality and value, and not wasted on less critical areas. The EA and development manager should work with technical colleagues to challenge and edit the design team output throughout the planning stage. This will help to achieve efficiency as well as quality. Formal tracking of the organisation's design standards as well as other priority items in the project brief is key in this respect. This tracking can be done by the development team, design and quality team, external design team or EA.

i

### **Design Development - MMC**

Some MMC systems require rigour during the design development process to ensure the emerging designs align with system constraints (usually around dimensions, weight and standard components). Where such a system is used, the development team and external design team will need regular check-in meetings with the supplier to ensure that the scheme is developing in line with system requirements.



## 4.6 PRE-APPLICATION PLANNING SCRUTINY

Are schemes undergoing regular pre-application and Design Review Panel sessions?

L2



The role played by local authority planning teams in both encouraging and safeguarding quality should not be underestimated. Authorities are likely to be resourced very differently to one another, with some having in-house urban design and conservation teams, and others having no design-qualified staff. Councils may be able to take advantage of regular design review from planning colleagues, especially design-trained ones. All delivery organisations should have regular pre-application sessions as well as Design Review Panel (DRP) sessions where available. Where Design Review Panels are not available, organisations can use the London Review Panel.



Design Review Principles - CABE



Image courtesy of Simon Kennedy - Mapleton Crescent by Metropolitan Workshop



## 4.7 PLANNING SUBMISSION

If required, do planning submissions show indicative details and specifications which seal in quality for critical items?

L3



The planning submission is a pivotal moment in a scheme's evolution where a level of quality can be secured, if parties choose to do this. Planning drawings can include items of detail and specification which the eventual delivery team must comply with (or seek a consent to change). Detail and specification are often left to planning conditions but these conditions can be vulnerable both to planning team capacity and contractor choices. The quality of critical items – for example, brick or window spec, key external wall details – can be secured in the planning application. This may be most relevant if a scheme is going to be delivered by another party post-planning where control is diminished. Equally, the client can leave flexibility in the planning application if they will be instructing a detailed set of supplementary information to be produced for tender (see Procurement Section 3.10).

i

### **Architect retention clauses**

The London Plan now allows planning authorities to insert an architect retention clause as a planning condition. This will mandate that the original architect is retained (either client-side or appointed to the contractor) to complete the design. The issue of design team retention post-planning is a key decision which is explored in detail in the Procurement section.



Image courtesy of Jim Stephenson - Kings Crescent by Karakusevic Carson Architects

'To build exemplary housing schemes, you need to work really hard at all stages of the process and a lot of that hard work comes after you've got planning permission and it's a labour of love, all the way through.'

London Borough of Hackney

### **From planning consent to technical design and start on site**

It is vital to note here that safeguarding design quality does not stop at planning. The period between planning consent and start on site is when the architectural quality may be won or lost. With the right client-side expertise and robust documentation, the client team can define and seek the quality it wants from the contractor. Below is a summary of quality management activity required in this period:

- Tender documents created by design team with clear priorities and red lines shown for investment in quality
- Documentation checked by development, technical and landlord teams for compliance with regulations, planning consent and Design Standards alongside general buildability and VfM
- Evaluation of contractor candidates by design team and in-house teams (and local community members if applicable)
- Evaluation of any change or VE proposals from contractors and sign-off if changes agreed by design team and in-house teams
- Elimination of unspecified major items or provisional sums in the build contract where those items are critical to the quality of the finished product

See Procurement sections 3.10 – 3.12 for more detail of securing and scrutinising quality during this period.



## 4.8 INTERNAL HANDOVER

Does any internal handover make clear the qualitative red lines for the delivery team?

L2



Development teams are often split into two: a land and design team takes schemes to a planning consent, and a delivery team leads a scheme through tender and construction stages. Handover between teams can lead to a loss of quality. The delivery team should be involved from the outset in scrutinising design decisions. The land and design team should summarise qualitative priorities when projects are handed over, including governance sign-off. If there is a separate internal design and quality team, they can act as a bridge between the two teams. This is because they are more likely to be involved with schemes throughout their lives.

**'We have a process in place which includes a delivery manager attending the pre-planning [design scrutiny] session – we want to make sure the new business team isn't just incentivised by achieving the deal or the planning consent – we want them to address key issues early.'**

Peabody

The following sections assume a Design and Build contract, though many of the provisions apply across contract types. The Procurement section more fully explores potential contract types and their implications for site-stage quality management.

### **Detailed design and build stewardship**

Post-contract design development and change control processes and sign-offs are a key part of quality management once a construction contract has been signed. These processes should be described to the contractor in the preliminaries section of the Employer's Requirements. For more detail, see the Brief and Standards section. The delivery organisation and its consultants and in-house teams must scrutinise and sign-off the following processes/items once the construction contract is let. They should continually assess compliance with the ERs including:

- Planning condition discharge
- Sample panels
- Design development and fabrication drawings
- Change proposals
- Workmanship inspections including mechanical and electrical installations
- Third party warranty and Building Control inspections
- Commissioning
- Snagging
- Landlord inductions

## 4.9 EARLY ON SITE QUALITY CULTURE

Are there early stage site visits and workshops to engage the wider contractor team in understanding and achieving quality priorities?

L3



The contractor's team - including site manager, design manager, in-house surveyor and all subcontractors – is key to achieving a high-quality result. Some organisations find it beneficial to sit down at an early stage on site with the contractor and design team to go through drawings and specifications and draw out the most important quality items. Whilst a tender set may be clear, there is no substitute for engaging face to face with the people who will be putting the buildings together.



### **Contractor buy-in and trust**

The EA is often key to achieving contractor buy-in to the quality ambition of the delivery organisation and technical competence of the design team. They can do this through a good quality tender process and a creative three-way negotiation on cost and buildability efficiencies which do not compromise quality. Those relationships and trust are vital to collaborative working – and hence quality retention – during the on-site period where compromise and change is inevitable.



## 4.10 PLANNING CONDITION DISCHARGE

Are planning conditions being discharged with appropriate scrutiny such that detailed design intent is being preserved? (for councils only)

L2



Planning authorities may have varying capacity to assess detailed design drawings. It is therefore important for the development team (and relevant appointed consultants) to reserve and exercise the right to sign off planning condition discharge drawings and specifications.

**'We fund planning officers to support our programme, including planning condition and detail material discharges and minor amendments, because so much of the work happens then – even after the main approval takes place.'**

London Borough of Islington





Image courtesy of Steve Bainbridge - Ponder Street by Islington Architects



## 4.11 SAMPLE PANELS

Are sample panels of key materials and assemblies being requested and then scrutinised by all appropriate parties?

L3



Sample panels of critical external wall elements should be requested either through planning conditions, the Employer's Requirements, or both. Delivery organisations should take the opportunity to seek sample panels and ensure they can challenge if those panels fail to meet expectations. Completed homes can also be a useful benchmark and training tool for internal finishes.



Image courtesy of Haworth Tompkins/Alex Johnstone



## 4.12 DESIGN DEVELOPMENT DRAWINGS

Are appropriate parties scrutinising and commenting on design development drawings?



In a Design and Build scenario, there is always some design development to take place post-contract. Where the original design team is client-side, the comment and sign-off process for detailed drawings must happen in a careful and timely fashion so that the contractor can progress. Where design team members are appointed to the contractor, they must be empowered to flag any deviations of design detail or specification from the ERs to the client. This is often a challenge. Trust and openness must be established early between the EA, client and contractor to ensure transparency of design development and change.

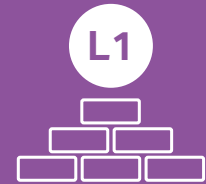
### **GOOD PRACTICE EXAMPLE: LONDON BOROUGH OF HACKNEY**

Hackney puts a lot of effort into the management of the project once on site to ensure no loss of quality during that stage:

- A dedicated 'design team' checks every contractor change proposal, reviews drawings, and has license to challenge contractor proposals if necessary
- A comprehensive scope of services for the Site Inspector has been developed over time. This includes a site inspection schedule, benchmark units and sample panels
- The design specification has been updated five times since inception, based on internal and resident feedback.

## 4.13 CHANGE PROPOSALS

Are major change proposals being flagged and scrutinised by appropriate parties before sign off?



Changes are inevitable on site, for example because of unforeseen material supply issues, problems in the ground or a change in legislation or internal strategy. The process by which changes are proposed, checked against qualitative benchmarks, priced and signed off needs to be clear and to involve the relevant technically qualified staff from the delivery team. Many change proposals may have implications for sustainability, longevity or appearance and must be scrutinised carefully to avoid quality loss.

**'We have a very clear change control process – every change that comes through from the contractor has to be signed off by our Design Manager . We also have a comprehensive scope for our Clerk of Works, an extensive site inspection schedule with benchmark units and sample panels.'**

London Borough of Hackney

## 4.14 SITE INSPECTIONS

Do site inspectors and others in the organisation's delivery team visit often to inspect quality?

L1



The action of site inspectors and others is critical to achieving a good quality finished product. On more complex projects, some delivery staff spend up to half the week based on site. This helps them to build relationships and awareness of activity and challenges. A site inspection service is sometimes performed by an in-house team which has a strong incentive to pick up items which will cause future problems to the organisation. Some organisations now also choose to have dedicated inspectors for M&E, fire engineering and sustainability, including airtightness.

i

### **Building control, warranties and building safety**

All developments will be subject to both building control and third party warranty inspections such as National House Builders Council (NHBC). These ensure both statutory compliance and third party warranties to be activated, and are another route to achieving a quality product. The Passivhaus standard provides additional safeguards to achieving a high energy efficiency standard as well as good workmanship more generally, and requires its own inspection regime.

For building safety, a site inspector should be employed to monitor material use so that approved design solutions and high-quality workmanship are delivered. Compliance with fire safety requirements is also necessary, supported by accurate record keeping. This can be reinforced through techniques like electronic material tagging, independent certification and assurance (where building products and systems are relied on for life safety). Additionally, organisations should commit to the achievement of zero defects. This approach will help provide long-term value for building owners throughout the building lifecycle. It will also support compliance with forthcoming regulatory requirements and ensure high quality and safe homes for Londoners.







Image courtesy of Jack Hobhouse - St Johns Hill by Hawkins\Brown

'The reason quality didn't suffer was because of the site inspections, just constantly being there; I too based myself down on site at certain stages, and that way you're a lot closer to it and I think that helps.'

Peabody

## 4.15 COMPLETION AND HANDOVER

Are commissioning and handover processes robust, ensuring that residents and landlord can steward buildings well into the future?

L2



Most of the processes which ensure that good design and quality build is achieved will have been set in train prior to completion. Despite this, the last few weeks on site and the first few months of occupation can be a time where quality can be compromised. This guidance cannot set out a full handover process in detail, but key quality management considerations at this stage are:

- The M&E commissioning process is critical for building performance and safety, and should not be underestimated. A commissioning schedule should be agreed in advance by the client and be witnessed by the landlord team or independent third party.
- Defining snagging items and undertaking pre-inspections prior to handover are vital to ensure that defects are not just accepted in the rush to complete.
- A well-resourced after-care team is vital to ensure that residents can operate their homes satisfactorily and that defects are fixed in a timely manner.
- If possible, residents need an induction to using their home, not just once on moving in, but again after, say, 6-8 weeks. Resident manuals should be online and as user-friendly as possible. Resident Home User Guides need to be clear and engaging, fostering a sense of pride.
- Operation and Maintenance manuals not only need a clear structure, but must also be as simple and searchable as possible. It is suggested that a specialist company is employed to compile the manuals for the contractor so that they meet landlord asset management needs.
- The roles and responsibilities during the first year in management need to be set out clearly in the Employer's Requirements. This ensures that the building will be properly maintained in that key first year and does not degrade through lack of attention or misuse.





Image courtesy of Pete Landers - Colville Estate by Karakusevic Carson Architects

'There's a huge amount of feedback that goes back into the process. We're on version 6 of our design specification.'

London Borough of Hackney



# 4.16

## POST-OCCUPANCY EVALUATION

Does the organisation carry out post-occupancy evaluation with residents and landlord teams, with results feeding back into documents?

L2



The principle of post-occupancy evaluation (POE) is that it enables the organisation to feed back changes into their design standards and Employer's Requirements documents regularly. POE should try to encompass the views of residents, the landlord team and other external experts. Standardisation of questions allows comparison between schemes. It is good practice to create the question set with the advice of research experts to avoid bias or inconsistency. Typical areas where feedback is currently sought include:

- Overall satisfaction with the home
- Home layout
- Fixtures and fittings
- Comfort and control (M&E systems)

Richer data should be sought some years after completion on social and environmental performance, such as:

- Energy bills, overheating, occupant behaviour on M&E systems
- Continual building maintenance
- Diversity of species observed
- Social connections and community cohesion.



[Plan For Use – Post Occupancy Evaluation – RIBA](#)

[Quality of Life Foundation – Post Occupancy Framework](#)

## CONTRIBUTORS AND THANKS

This handbook has been prepared by Claire Bennie, a Mayor's Design Advocate, in close liaison with the Mayor's Housing and Land Team.

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London Borough of Enfield: Peter George, Emma Beardmore

London Borough of Hackney: Rachel Bagenal

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London CLT: Calum Green, Rupesh Varsani

Norwich City Council: Andrew Turnbull

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Pocket Living: Tina John, Nick Williams

South Yorkshire Housing Association: Miranda Plowden

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### **Graphic Design**

Lucy Smith, HTA Design LLP

**CASE  
STUDY  
PROFILES**



## LONDON BOROUGH OF CAMDEN

|                                  |  |
|----------------------------------|--|
| Key Development Staff            | Neil Vokes, Director of Development<br>Michelle Christensen, Technical Design Manager<br>Kate Cornwall-Jones, Head of CIP Development<br>Steve Downes, Head of CIP Development<br>Jeremy Shapiro, Head of CIP Programme Office |
| <b>Existing stock</b>            |  |
| Number of homes                  | 33,000   |
| Urban or suburban                | Urban  |
| <b>Development programme</b>     |  |
| Annual number of homes delivered | 145<br>Over 1,000 homes completed to date  |
| Number of staff in development   | 50   |
| Build contract typically used    | Design and Build   |
| Any MMC?                         | A pilot project (not yet built)  |
| Best sustainability standard?    | Passivhaus   |
| Typical sqft values OMV          | High   |

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**Exemplar scheme(s)**

---

|  |   |
|--|---|
| Name                                       | Agar Grove Estate<br>Flats 1-38, 14-16 Wrotham Road, London,<br>NW1 0RE |
| Architect, Landscape Architect, Contractor | Hawkins\Brown, Grant Associates, Hill Partnerships Limited              |
| Photo credits                              | Jack Hobhouse   |



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**Exemplar scheme(s)**

---

|  |  |
|--|--|
| Name                                       | Bourne Estate<br>Flats 1-27 Dobson Court, Portpool Lane,<br>London, EC1N 7AA & 1-48, Equiano Court,<br>Baldwins Gardens, London, EC1N 7A |
| Architect, Landscape Architect, Contractor | Matthew Lloyd Architects, Dally Henderson Landscape Architects, Higgins  |
| Photo credits                              | Benedict Luxmoore  |



## LONDON BOROUGH OF ENFIELD

|                                  |   |
|----------------------------------|---|
| Key Development Staff            | Sarah Cary, Executive Director of Place<br>Peter George, Programme Director,<br>Meridian Water<br>John Reid, Delivery Director<br>Lisa Woo, Head of Placemaking,<br>Meridian Water<br>Emma Beardmore, Senior Development<br>Manager, Meridian Water |
| <b>Existing stock</b>            |   |
| Number of homes                  | 846   |
| Urban or suburban                | Urban   |
| <b>Development programme</b>     |   |
| Annual number of homes delivered | Project Launch 2021, start on site 2024   |
| Number of staff in development   | 14 (Meridian Four)  |
| Build contract typically used    | Design and Build  |
| Any MMC?                         | Approach to MMC to be determined in RIBA stages 1-2   |
| Best sustainability standard?    | Targeting 45% on-site reduction in regulated carbon dioxide emissions beyond Part L 2013  |
| Typical sqft values OMV          | Subject to design and subsequent pricing  |



**Exemplar scheme(s)**

|  |   |
|--|---|
| Name                                       | Meridian Water Phase 2 - Meridian Four  |
| Architect, Landscape Architect, Contractor | Karakusevic Carson Architects, Maccreanor Lavington, Mary Duggan, Wallace Liu, Architecture Doing Place, Al-Jawad Pike, Office Sian, Sahara Hersi, Studio ONB, Townsend |
| Image credits                              | Karakusevic Carson  |



## LONDON BOROUGH OF HACKNEY

|                                  |  |
|----------------------------------|--|
| Key Development Staff            | Chris Trowell, Director of Regeneration<br>Rachel Bagenal, Head of Housing Supply<br>Jane Havemann, Head of Estate<br>Regeneration<br>Ken Rorrison, Head of Strategic Design |
| <b>Existing stock</b>            |  |
| Number of homes                  | 30,000   |
| Urban or suburban                | Urban  |
| <b>Development programme</b>     |  |
| Annual number of homes delivered | 500  |
| Number of staff in development   | 70   |
| Build contract typically used    | Design and Build   |
| Any MMC?                         | No   |
| Best sustainability standard?    | Building Regulations   |
| Typical sqft values OMV          | Medium - High  |



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**Exemplar scheme(s)**

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|  |  |
|--|--|
| Name                                       | Kings Crescent Estate<br>Green Lanes N4                  |
| Architect, Landscape Architect, Contractor | Karakusevic Carson and Henley Halebrown,<br>Muf, Higgins |
| Photo credits                              | Jim Stephenson, Lewis Ronalds                            |



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**Exemplar scheme(s)**

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|  |   |
|--|---|
| Name                                       | Colville Estate<br>Hoxton N1  |
| Architect, Landscape Architect, Contractor | Karakusevic Carson, David Chipperfield,<br>Muf, Periscope, Vogt, Wates, Higgins |
| Photo credits                              | Pete Landers  |





## LONDON BOROUGH OF ISLINGTON

|                                  |  |
|----------------------------------|--|
| Key Development Staff            | Jed Young, Director (New Build)<br>Alistair Gale, Head of Programming, Design and Customer Care (New Build)<br>David Ronan, Head of Development & Delivery (New Build)<br>Stephen Nash, Head of Strategic Development & Delivery (New Build) |
| <b>Existing stock</b>            |  |
| Number of homes                  | 400  |
| Urban or suburban                | Urban  |
| <b>Development programme</b>     |  |
| Annual number of homes delivered | 40 (rising to 200)   |
| Number of staff in development   | 30 (rising to 45)  |
| Build contract typically used    | Design and Build, and Traditional  |
| Any MMC?                         | Not yet  |
| Best sustainability standard?    | Building Regs Plus<br>Passivhaus and net zero targeted for future  |
| Typical sqft values OMV          | High   |

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**Exemplar scheme(s)**

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|  |   |
|--|---|
| Name                                       | Centurion Close<br>41 Ponder Street, Islington N7 |
| Architect, Landscape Architect, Contractor | LB Islington Architects / Quadrillion             |
| Photo credits                              | Steve Bainbridge                                  |



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**Exemplar scheme(s)**

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|  |  |
|--|--|
| Name                                       | Vaudeville Court<br>Prah Road and St. Thomas's Road,<br>Islington N4 |
| Architect, Landscape Architect, Contractor | Levitt Bernstein Architects / Roof Ltd                               |
| Photo credits                              | Tim Crocker  |



# NORWICH CITY COUNCIL

|  |  |
|--|--|
| Key Development Staff                      | Andrew Turnbull, Interim housing Development Manager |
| <b>Existing stock</b>                      |  |
| Number of homes                            | 14,656   |
| Urban or suburban                          | Urban and Suburban                                   |
| <b>Development programme</b>               |  |
| Annual number of homes delivered           | 75 (projected)                                       |
| Number of staff in development             | 6 (more projected)                                   |
| Build contract typically used              | Design and Build, and Traditional                    |
| Any MMC?                                   | Components and Panellised – looking at Volumetric    |
| Best sustainability standard?              | Passivhaus   |
| Typical sqft values OMV                    | Low - Medium   |
| <b>Exemplar scheme(s)</b>                  |  |
| Name                                       | Goldsmith Street<br>Norwich, NR2 4AQ                 |
| Architect, Landscape Architect, Contractor | Mikhail Riches/BBUK/RG Carter Ltd                    |
| Photo credits                              | Mikhail Riches/© Tim Crocker 2019                    |





# SOUTH YORKSHIRE HOUSING ASSOCIATION

|                       |  |
|-----------------------|--|
| Key Development Staff | Miranda Plowden, Business Development Director<br>Natalie Newman, Head of Development & Assets |
|-----------------------|--|

## Existing stock

|                   |                    |
|-------------------|--------------------|
| Number of homes   | 6000               |
| Urban or suburban | Urban and Suburban |

## Development programme

|                                  |                                       |
|----------------------------------|---------------------------------------|
| Annual number of homes delivered | Up to 100                             |
| Number of staff in development   | 10                                    |
| Build contract typically used    | Design and Build                      |
| Any MMC?                         | Closed panel timber frame, Volumetric |
| Best sustainability standard?    | AECB                                  |
| Typical sqft values OMV          | Low                                   |

## Exemplar scheme(s)

|  |  |
|--|--|
| Name                                       | Slingsby Place<br>Manor Park, Sheffield S2 1AF                 |
| Architect, Landscape Architect, Contractor | Proctor + Matthews – architect<br>PlanIT – landscape architect |
| Photo credits                              | South Yorkshire Housing Association                            |



## PEABODY

|                                  |   |
|----------------------------------|---|
| Key Development Staff            | Dick Mortimer, Executive Director<br>(Development and Sales)<br>Angela Wood, Deputy Executive Director<br>(Development and Sales)<br>David Stronge, Assistant Director, Design<br>and Technical |
| <b>Existing stock</b>            |   |
| Number of homes                  | 66,000  |
| Urban or suburban                | Urban and Suburban  |
| <b>Development programme</b>     |   |
| Annual number of homes delivered | 1500 (maximum)  |
| Number of staff in development   | 167   |
| Build contract typically used    | Design and Build  |
| Any MMC?                         | 6 of the 7 categories currently under construction<br>80% of schemes using at least one of the seven categories   |
| Best sustainability standard?    | Building Regs Plus<br>Passivhaus pilot  |
| Typical sqft values OMV          | Medium - High   |

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**Exemplar scheme(s)**

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|  |  |
|--|--|
| Name                                       | St John's Hill<br>Danvers Avenue, London SW11 1AJ        |
| Architect, Landscape Architect, Contractor | Hawkins\Brown, Farrer Huxley Associates, John Sisk & Son |
| Photo credits                              | Jack Hobhouse  |



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**Exemplar scheme(s)**

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|  |   |
|--|---|
| Name                                       | Fish Island<br>Hackney Wick, London E3 2PL  |
| Architect, Landscape Architect, Contractor | Haworth Tompkins, Pitman Tozer, Lyndon Goode; Place Design and Planning (landscape); Hill Partnerships (construction) |
| Photo credits                              | Rory Gardiner/Fred Howarth  |





## PHOENIX COMMUNITY HOUSING

|                                  |   |
|----------------------------------|---|
| Key Development Staff            | Lesley Johnson, Director Property and New Business<br>Angela Hardman, Head of Development |
| <b>Existing stock</b>            |   |
| Number of homes                  | 6,277   |
| Urban or suburban                | Urban   |
| <b>Development programme</b>     |   |
| Annual number of homes delivered | 50  |
| Number of staff in development   | 6   |
| Build contract typically used    | Design and Build  |
| Any MMC?                         | Timber Frame/CLT  |
| Best sustainability standard?    | Code level 4<br>Future - Passivhaus (Net Zero Carbon 2021-26)                             |
| Typical sqft values OMV          | Medium  |

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**Exemplar scheme(s)**

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Name

Hazelhurst Extra Care  
Beckenham Hill Road, Catford, London, SE6  
3AGArchitect, Landscape  
Architect, Contractor

Levitt Bernstein

Photo credits

Phoenix Community Housing



## POCKET LIVING

|                                  |   |
|----------------------------------|---|
| Key Development Staff            | Tina John, Creative and Architectural Design Manager<br>Thomasin Renshaw, Development Director<br>Nick Cuff, Chief Commercial Officer |
| <b>Existing stock</b>            |   |
| Number of homes                  | 1,198   |
| Urban or suburban                | Urban   |
| <b>Development programme</b>     |   |
| Annual number of homes delivered | 427   |
| Number of staff in development   | 30  |
| Build contract typically used    | Design and Build  |
| Any MMC?                         | Components   Pods   Volumetric  |
| Best sustainability standard?    | Building Regs Plus<br>Passivhaus and Zero Carbon being targeted for 'future' projects   |
| Typical sqft values OMV          | Medium - High   |



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**Exemplar scheme(s)**

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|  |  |
|--|--|
| Name                                       | Gainsford Road<br>47 Gainsford Road, London, E17 6QB |
| Architect, Landscape Architect, Contractor | Gort Scott, JCLA, PDR                                |
| Photo credits                              | Dirk Lindner   |



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**Exemplar scheme(s)**

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|  |  |
|--|--|
| Name                                       | Mapleton Crescent<br>11 Mapleton Crescent, London SW17 4GY |
| Architect, Landscape Architect, Contractor | Metropolitan Workshop, Donban Contracting                  |
| Photo credits                              | Edmund Sumner, Simon Kennedy                               |



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