



Trafford Design Code Viability Assessment

for

Trafford Council (Local Planning Authority)

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Inspiring Built
Environments

Viability in Planning
Development Management
Regeneration
Planning Consultancy

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1. Overview

Trebbi Continuum (hereafter “TC”) have been instructed on behalf of Trafford Council to undertake a viability review of the effects of Trafford Council’s new Design Code on residential development in Trafford. This report tests the ability of residential development in Trafford to viably comply with the new Design Code.

The report accounts for the impact of Trafford’s current planning obligations, and the assessment has been produced in line with the requirements of the National Planning Policy Framework (NPPF, 2023), the Planning Practice Guidance (PPG) on Viability, the Local Housing Delivery Group guidance ‘*Viability Testing Local Plans: Advice for planning practitioners*’ (2012) and RICS Guidance Note: *Assessing viability in planning under the National Planning Policy Framework 2019* (2021).

1.1 Methodology

The methodology adopted involves first analysing the new Design Code in order to understand which codes have an impact on viability (mainly through cost increases). This impact is then tested through residual appraisal assessments. The methodology adopted uses Residual Land Values (RLVs) as a comparison metric when assessing the Design Code and calculates different RLVs for multiple sites and development typologies in Trafford. The appraisals produced allows for the comparison between the RLVs generated by the typology assessment when applying the Design Code, to a policy compliant Benchmark Land Value (BLV). The schemes tested through the typology assessment incorporate Trafford Council’s full policy requirements (including affordable housing) and CIL (adopted in 2014). If the appraisals which incorporate the uplift in costs due to the Design Code generate a higher RLV than the estimated BLV, it is concluded that the scheme is viable and deliverable with Trafford’s new Design Code. It is incumbent on developers in Trafford to reflect policy requirements (incl. the new Design Code) in their bids for sites as required by the PPG (2019).

The residual method used to calculate the land value (RLV) of each potential typology scheme in this report is also used by developers when assessing the appropriate amount to bid for land. The residual methodology comprises assessing the value of a completed scheme then subtracting both development costs and developer’s profit. The sum left after the appropriate deductions have been made is the residual amount, this value then guides a developer in determining an appropriate offer price for a site.

Property markets are inherently cyclical, and the Council is testing the viability of the Design Code at a specific point in time. The appraisals are all based on December 2023 costs and values with no growth or cost inflation included in the appraisals.

Presently, 2023 has been a more challenging year for the Trafford residential market when compared to the substantial growth seen between 2021 and 2022. However, the Trafford residential market has remained resilient with the Land Registry House Price Index for Trafford showing a small reduction of -1.89% in sale values between the highs of November 2022 and latest August 2023 figure. The reduction in values has been caused by high inflation and the subsequent increase in the Bank of England interest rates which saw a substantial increase in mortgage rates. However, the critical lack of supply of housing in the UK and stringent lending requirements has meant that sale values have not drastically decreased as was predicted in Q4 2022 and seen during the 2008 financial crisis. The outlook for 2024 for the residential housing market is more positive, with the Bank of England freezing interest rate rises, inflation starting to come under control and mortgage rates starting to decrease.

The expectation by the end of 2024 is that the Bank of England will start to reduce interest rates and that further mortgage rate decrease will follow.

To account for the cyclical nature of residential development, a sensitivity analysis has been undertaken on sales values and standard build costs. This will allow an assessment of the potential improvement of viability that may result from growth as well as the effects of downturns. The sensitivity analysis is indicative and intended to assist Trafford Council to understand the financial viability of the Design Code on a high-level basis, both based on today's metrics and also those of the future.

1.1 Key Findings

From analysis of Trafford's Design Code, TC believe the following codes will have an impact on viability, especially in relation to cost increases when compared to standard development:

Design Code	Cost Uplift Estimated by TC
NDSS	No cost uplift but all schemes in the appraisal are NDSS compliant which is the norm usually seen in the marketplace.
M4(2) Compliance	£1,650 per unit for all schemes
Street Trees and Bigger Plants / Trees on Planting	£180 per unit for 6+ storey apartment schemes £300 per unit for 3-5 storey apartment schemes £2,700 per unit for estate housing schemes
Additional Landscaping Area	£1,000 per unit for estate housing schemes
Brick Walls to Garden Boundaries	£3,000 per unit for estate housing schemes
Bay Windows	£5 per sq ft for estate housing schemes
Detailing & Articulation	£1 per sq ft for all schemes
Deep Window Reveals for Apartments	£2.41 per sq ft for apartment schemes
Requirement for Aluminium Windows for Apartments	£1.08 per sq ft for apartment schemes

TC would note that some elements above may likely already be accounted for in the BCIS cost figures used to assess base build costs. For example, detailing & articulation, deep window reveals and aluminium windows for apartments, are most likely already accounted for in the BCIS base build cost as many residential developments already include these design requirements. TC's assessment of these elements of the Design Code can therefore be seen as conservative and this has been considered in TC's concluding analysis of the Design Code.

Other elements of the Design Code such as allowing the required space for parking and landscaping areas (mainly estate housing schemes) has been taken into consideration when estimating scheme densities and mixes.

TC have tested the above Design Code impacts on different development typologies across Trafford. TC have tested 13 development typologies. The typologies are based on different market locations (similar banding of locations as Trafford's affordable housing policy) and different development types.

The following typologies have been tested:

Location	Type	Units	Gross Area ha	Net Area ha
Hot	Estate Houses	30	1.20	0.96
Hot	Estate Houses	100	4.00	2.40
Hot	Apartments Storeys	3-5 30	0.30	0.30
Hot	Apartments Storeys	3-5 100	0.67	0.67
Moderate	Estate Houses	30	0.86	0.69
Moderate	Apartments Storeys	3-5 30	0.30	0.30
Moderate	Apartments Storeys	3-5 100	0.67	0.67
Cold (Old Trafford)	Apartments Storeys	3-5 30	0.30	0.30
Cold (Old Trafford)	Apartments Storeys	3-5 100	0.67	0.67
Cold (Old Trafford)	Apartments Storeys	6+ 100	0.59	0.59
Cold (Partington/Carrington)	Estate Houses	30	0.86	0.69
Cold (Partington/Carrington)	Estate Houses	100	4.00	2.40
Cold (Partington/Carrington)	Apartments Storeys	3-5 30	0.30	0.30

The findings of the detailed residual appraisal assessment of the Design Code have found that all typologies (apart from traditional 3-5 storey apartments in Partington/Carrington) are viable with the full Design Codes and policy compliance. This is shown in the results of the appraisal below:

Location	Type	Viability Surplus per HA	Viable
Hot	Estate Houses	£4,630,540	Yes - also viable with brownfield BLV
Hot	Estate Houses	£6,117,099	Yes - also viable with brownfield BLV
Hot	Apartments Storeys	3-5 £2,366,063	Yes
Hot	Apartments Storeys	3-5 £4,474,290	Yes
Moderate	Estate Houses	£3,488,357	Yes - also viable with brownfield BLV

Moderate	Apartments Storeys	3-5	£59,280	Yes
Moderate	Apartments Storeys	3-5	£230,587	Yes
Cold (Old Trafford)	Apartments Storeys	3-5	£1,717,133	Yes
Cold (Old Trafford)	Apartments Storeys	3-5	£1,592,650	Yes
Cold (Old Trafford)	Apartments 6+ Storeys		£1,217,888	Yes
Cold (Partington/Carrington)	Estate Houses		£1,065,678	Yes - also viable with brownfield BLV
Cold (Partington/Carrington)	Estate Houses		£1,509,462	Yes - also viable with brownfield BLV
Cold (Partington/Carrington)	Apartments Storeys	3-5	-£5,145,923	No - 100% market apartments with zero design code uplift costs and S106 contributions is not viable in this area

The majority of the typology assessments output a significant per ha viability surplus. This means that the majority of typologies in Trafford should be supported by a reasonable viability buffer if the Design Codes were adopted. The only typology which Trafford Council should monitor in terms of viability and Design Codes is the small 3-5 storey apartments in the cold market Partington/Carrington location (though traditional 3-5 storey apartment developments in Partington/Carrington would not be viewed as deliverable or sustainable development, with the expectation of apartments delivered through mixed use schemes as cottage/town house style apartments).

In Partington/Carrington, TC would usually only expect apartments delivered through mixed estate housing led schemes where the apartments are designed as cottage/town house style buildings which have a similar cost to estate houses. Apartments delivered on this basis have a similar cost as estate houses and a more efficient gross to net ratio than traditional apartments. As a result of this, cottage/town house style apartments would be viable with the full Design Codes. Traditional 3-5 apartment schemes would not be optimal development in this location and is not deliverable/sustainable.

TC would add that it is very likely that BCIS base build cost utilised in this assessment includes for costs for basic detailing and articulation such as window heads and sills, string courses including eaves details, window reveals up to the length of a full brick, and aluminium windows. For example, when assessing sale value comparables, the majority of apartment scheme windows are aluminium. It is also noted that developers have always been able to deliver detailing and articulation without having to use more expensive specialist bricks, for example for example through the use of different brick bonds and patterns, textured detailing, corbelling detail, and the more basic specialist bricks.

TC would add that the assessment undertaken did not account for any increase in values attributable to the delivery of better designed homes and places as a result of more stringent Design Code requirements. The assessment is therefore conservative as it does not apply any Design Code premium that could be generated from higher quality development. Currently, there is limited data in relation to how Design Codes affect sale values, however, with Garden Villages across the country, high quality

(and well designed) schemes have achieved a premium (circa. 15%) over standard new build development (see Knight Frank research Cost and Value for Building Better, Building Beautiful, 2020). Any design premium caused by the Design Code would therefore improve viability.

Overall, TC believe the new Trafford Design Code should be viable for the majority of developments across the Borough (incl. apartments cottage/town house style apartments in Partington/Carrington). For the small cases of schemes that are not viable, the PPG allows for the viability of these schemes to be tested at the decision-making stage on site-specific basis.

2. Introduction

TC have been instructed on behalf of Trafford Council to undertake a viability review of the effects of Trafford Council's new Design Code on residential development in Trafford. This report tests the ability of residential development in Trafford to viably comply with the new Design Code.

Work on the Trafford Design Guide started in 2019, with the commissioning of LDA Design to draft the Guide. This work included a series of consultation 'design days' and workshops across the Borough, attended by various interested parties and stakeholders, culminating in a well-attended Design Symposium held at Trafford Town Hall in January 2020. This consultation informed the initial draft stage of the Trafford Design Guide, the Covid-19 pandemic led to the work being paused before the document reached completion.

Work on the Design Guide recommenced in spring 2021 and in July 2021 the Government announced their intention to run what eventually became the Design Code Pathfinders Programme. Trafford Council Officers saw an opportunity to obtain funding to build on the work on the Trafford Design Guide and in February 2022 and following a competitive process, the Council was selected as one of the Pathfinders and one of only five Local Planning Authorities awarded the maximum Section 31 grant. In total, twenty-five Local Planning Authorities and neighbourhood groups have taken part in the Pathfinder Programme, which commenced in May 2022.

In June 2023 the Council's Executive approved the consultation draft Trafford Design Code. Public consultation on the document followed, with the need to viability test the Design Code emerging as a common theme.

2.1 National Planning Policy Framework

The most recent iteration of the National Planning Policy Framework ('NPPF') was published in December 2023.

The two key policies in the NPPF (2023) are included in paragraph 34 and 58, respectively.

Paragraph 34 relates to development contributions and states:

"Plans should set out the contributions expected from development. This should include setting out the levels and types of affordable housing provision required, along with other infrastructure (such as that needed for education, health, transport, flood and water management, green and digital infrastructure). Such policies should not undermine the deliverability of the plan."

Paragraph 58 of the NPPF (2023) sets out the recommended approach to viability assessments at the plan making and decision taking stage. The framework states:

"All viability assessment, including any undertaken at the plan-making stage should reflect the recommended approach in national planning guidance, including standardised inputs, and should be made publicly available."

2.2 Planning Practice Guidance

The National Planning Practice Guidance ('PPG') on Viability was revised in May and September 2019.

The PPG (2019) provides thorough guidance for the setting out of contributions expected from development. Contributions should include the levels and types of affordable housing alongside infrastructure.

The role of viability assessment is primarily at the plan making stage. It is the responsibility of plan makers in collaboration with the local community, developers, and other stakeholders to create policies that are iterative and informed by landowners and infrastructure providers and affordable housing providers.

The guidance states that a typology approach should be followed when undertaking the plan making process to ensure that policies are created that are deliverable based on the sites that will come forward through the life of the plan.

The PPG (2019) recommends that plan makers engage with landowners, developers, and infrastructure and affordable housing providers to ensure all costs and values are established by a collaborative process. TC have utilised information contained within FVA's submitted by developers in support of planning applications received by Trafford Council as well as feedback provided by developers during the Trafford Civic Quarter Area Action Plan Viability Assessment.

Where up-to-date tested policies set out the required contributions from a development any planning application that is fully compliant should be considered viable. It is up to the applicant to demonstrate whether particular circumstances justify the need for viability assessment at the application stage.

The PPG also sets out the standardisation of inputs for viability assessments. The guidance provides advice on how to estimate Gross Development Value (GDV), what costs should be included in appraisals and how to estimate the Benchmark Land Value (BLV), which should be based on the PPG's required Existing Use Value plus premium (EUV+) methodology.

2.3 RICS Guidance

Guidance prepared by Royal Institution of Chartered Surveyors (RICS) has been taken in account in the preparation of this report with particular reference to the following documents:

- RICS Professional Statement: Financial Viability in Planning – Conduct and Reporting (2019).
- RICS Guidance Note: Assessing viability in planning under the NPPF (2019) for England (1st Ed) (March 2021).

The RICS professional statement (2019) sets out mandatory requirements to be followed by RICS professionals regarding to conduct and reporting in relation to FVAs for planning in England. **Appendix 1** confirms that this report is in accordance with the requirements set out within the Professional Statement. The RICS Guidance Note (2021) sets out best practise on viability in planning to be followed by RICS members and has been followed.

This report does not constitute a formal valuation, as such, the guidance included in this report is exempt from regulations set out in the RICS Valuation Professional Standards (the Red Book) (2019).

2.4 CIL Policy Context

The Trafford Council CIL Charging Schedule was formally approved at Full Council on 26 March 2014 and came into effect on 7 July 2014. The following table sets out the applicable residential CIL charging rates:

Use	2014 CIL Charge per m2
Market Houses – Cold Charging Zone	£20
Market Houses – Moderate Charging Zone	£40
Market Houses – Hot Charging Zone	£80
Market Apartments – Cold Charging Zone	£0
Market Apartments – Moderate Charging Zone	£0
Market Apartments – Hot Charging Zone	£65

2.5 Local Policy Context

Policy requirements set out within the Core Strategy (2012) relating to design and specification are embedded in standard build costs for schemes which include but are not limited to; design, landscaping, amenity space, national space standards, car parking, and waste storage. As such, TC consider it unnecessary to establish the costs of all existing policy requirements relating to design and specification.

Trafford adopted their Core Strategy in January 2012. The Planning Obligations SPD was adopted in July 2014 and provided further guidance regarding the application of policies concerning planning contributions.

Policy L2 sets out the Council’s requirements with regard to meeting the Borough’s housing needs. It states that all new residential development proposals will be assessed for the contribution that will be made to meeting the Councils housing needs and the wider aspirations of the Council’s Sustainable Community Strategy.

Policy L2 states that in order to meet the identified housing need within the borough that the Council will seek to achieve a target split of 60/40 between market and affordable housing.

Policy L2 splits the Borough into three broad market locations:

- “cold” – being the Old Trafford, Carrington and Partington “Places”;
- “moderate” – being Urmston, Stretford, and Sale “Places”; and
- “hot” – being in Altrincham, the Mersey Valley and Rural Communities “Places”.

Paragraph 12 of Policy L2 goes on to set the affordable housing requirements and reads as follows:

“Under normal market conditions a geographically variable target, based on “cold”, “moderate” and “hot” market locations, will be applied to all qualifying developments, (except residential care homes) to assess the appropriate level of affordable housing contribution as follows:

- *Within “cold” market locations, a 5% contribution will be sought;*

- Within “moderate” market locations, a 20% contribution will be sought;
- Within “hot” market locations, a 40% contribution will be sought; and
- In those parts of Trafford Park identified for residential development, or in areas where the nature of the development is such that, in viability terms, it will perform differently to generic developments within a specified market location the affordable housing contribution will be determined via a site specific viability study, and will not normally exceed 40%.”

The minimum threshold for sites that will require affordable housing are 5 residential units in the Borough’s “hot” and “moderate” market locations and 15 within the Borough’s “cold” market locations.

The Planning Obligations SPD (2014) made provision for affordable housing requirements to rise in market locations when the Borough is operating in “good” market conditions, and should the Borough be experiencing “poor” market conditions then the affordable housing requirements would reduce (apart from in the hot market location). The SPD therefore requires the following affordable housing requirement in different market conditions:

Sub Market	Poor	Normal	Good	Sub Market
Cold	0%	5%	10%	Cold
Moderate	10%	20%	25%	Moderate
Hot	40% or decreased as is deemed necessary on an individual site basis	40%	45%	Hot

TC undertook a review of market conditions in Trafford in the form of the production of the “State of the Economy Housing Market Conditions” study in 2018 analysing the housing development market to inform the affordable housing requirements in the Borough. This updated a similar study undertaken by Peter Brett Associates in 2015. This study sets the state of the housing market in Trafford, where it concluded Trafford was operating under “good” market conditions.

Trafford Council adopted the Civic Quarter Area Action Plan (CQAAP) in 2023. The CQAAP provides a statutory policy framework in order that transformational change is delivered appropriately and managed effectively in the Civic Quarter situated in northern Trafford.

Policy CQ2 (Housing) and CQ11 (Infrastructure and Obligations) of the CQAAP requires a minimum of 25% affordable housing onsite in the Civic Quarter. Policy CQ11 adopts a roof tax approach to S106 contributions and adopts a financial sum to addressing the following within the strategic area for residential development:

- Public realm and environmental upgrades (including hostile vehicle mitigation to provide enhanced security within public and pedestrianised spaces);
- Green space and sports facilities;
- Education;
- Health; and
- Utility upgrades.

The residential financial contribution payable under Policy CQ11 is £141.81 per m2 (subject to future indexation from January 2021).

Greater Manchester is in the process of adopting the emerging Places for Everyone spatial framework which is a long-term plan of nine Greater Manchester districts (Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford and Wigan) for jobs, new homes, and sustainable growth. The plan is a joint development plan of the nine districts which will determine the kind of development that takes place in their boroughs, maximising the use of brownfield land and urban spaces while protecting Green Belt land from the risk of unplanned development.

The plan sets out:

- how the nine boroughs should develop up until 2037;
- identifies the amount of new development that will come forward across the 9 districts, in terms of housing, offices, and industry and warehousing, and the main areas in which this will be focused;
- supports the delivery of key infrastructure, such as transport and utilities;
- protects the important environmental assets across the city region;
- allocates sites for employment and housing outside of the existing urban area; and
- defines a new Green Belt boundary for Greater Manchester.

TC understand that Place for Everyone requires the strategic sites in the Partington and Carrington area (“Cold” market location) to provide a minimum of 15% affordable housing across the whole allocation. It is possible that some parts of the allocation will need to deliver a higher proportion of affordable housing than others. This will be considered as part of the preparation of the masterplan and delivery strategy.

Trafford Council have informed TC that a new Local Plan will re-assess the affordable housing policy and its viability across the Borough in due course. It is anticipated that many of the cold market areas affordable housing policy requirements will change as a result of successful regeneration in the areas causing values to increase which has created more viable developments (as seen in Old Trafford). TC have therefore been requested to test higher affordable housing targets for the “cold” market areas.

TC have adopted the following affordable housing contribution for each of the market locations in this report:

Market Area	Affordable Housing Percentage
Partington/Carrington – Cold Market Area	15%
Civic Quarter – Cold Market Area	25%
Moderate Market Area	25%
Hot Market Area	45%

In 2021 the PPG on First Homes was published which requires at least 25% of all affordable housing units to be First Homes. Due to the introduction of this policy, Trafford Council have informed TC that their affordable housing tenure mix is now the following:

- 25% First Homes

- 37.5% Shared Ownership
- 37.5% Affordable/Social Rented

3. Confidentiality

This viability report is confidential to Trafford Council as the Client, and their advisors. It has been prepared in accordance with TC's terms of engagement.

This viability assessment has been prepared on the basis that it will be made publicly available should our Client, Trafford Council, require it to be as under our terms of engagement.

No party other than the Client is entitled to rely on this report for any purpose whatsoever and we accept no responsibility or liability to any other party other than the client in respect of the contents of this report. This report must not, save as expressly provided for in our terms of engagement, be recited or referred to in any document, or copied or made available (in whole or in part) to any other person without our express prior written consent.

5. Trafford's Design Code

5.1 Design Code Definition and Policy

5.2 What is a Design Guide?

Design is a key element of sustainable development and being clear about design expectations, and how these will be tested, is essential for achieving this. Paragraph 133 of the National Planning Policy Framework (NPPF) states that to provide maximum clarity about design expectations at an early stage, all local planning authorities should prepare design guides or codes consistent with the principles set out in the National Design Guide and National Model Design Code. Paragraph 134 of the NPPF states that design guides and codes can be prepared at an area wide, neighbourhood or site-specific scale and to carry weight in decision making should be produced either as part of a plan or as supplementary planning documents.

Design guides and design coding are distinct approaches, albeit much of the baseline work can be utilised as an evidence base for both. Often design guidance underpins a Design Code and provides the vision for it, with the code building in detailed requirements on top of guidance, which is the approach officers have taken here. A Local Planning Authority may have either adopted design guidance or coding or both (or coding only in relation to specific sites), but in order to underpin robust planning decision making and deliver quality places, full coverage with both is desirable and will become increasingly necessary in the light of emerging legislation and policy.

A design guide is a document which sets out the general design principles and standards that development proposals should follow in the area, building on policies in the development plan. Good local design guides are concise, positive documents which are accessible and use tools such as illustrations and checklists to highlight key design issues and possible solutions. They are most effective when used alongside other relevant design tools (e.g. codes).

5.3 What is a Design Code?

A Design Code is a set of simple, concise, illustrated design requirements that are clear, specific, visual and numerical wherever possible to provide detailed parameters for the physical development of a site or area. Design Codes can provide a more specific steer on what is acceptable when they are visual and numerical, rather than relying on detailed policy wording, as well as being easier to engage with. They can also give developers greater certainty about what may be acceptable when seeking planning permission and can help lead to faster decisions based on whether a proposal complies with a code, which can help to speed up the delivery of development. The content and level of detail in Design Codes will vary according to the scale at which a code is applied. Borough-wide Design Codes are likely to be less numerical in nature.

It is intended that the Trafford Design Code will be adopted as a Supplementary Planning Document and will be a material consideration in the determination of planning applications. The Code will therefore need to have clear links to the adopted Core Strategy (particularly Policy L7 – Design) and to the adopted Civic Quarter Area Action Plan (CQAAP) (particularly Policies CQ6 – High Quality Design, CQ6.1 – Tall Buildings and CQ7 – Public Realm Principles), although other Core Strategy and CQAAP policies will be relevant. The Code will also need to hook from the Places for Everyone development plan which will also contain relevant design policies. The emerging Trafford Local Plan will need to follow on with a consistent approach and locally specific policy.

The Code focuses on new development. It is not intended to provide guidance on retrofit for buildings or streets – for example climate change mitigation installed on existing buildings or measures to improve the accessibility of existing public realm. It also does not cover householder development and SPD4 – A Guide for Designing House Extensions and Alterations which will continue to remain in force.

5.4 The Coding Process

The Trafford Design Code has been drafted in accordance with the principles and processes set out in the National Model Design Code (NMDC). The purpose of the NMDC is to provide detailed guidance on the production of Design Codes, guides and policies to promote successful design. The NMDC forms part of national planning practice guidance and the government recommends that the advice in the guidance on how to prepare design guides and codes should be followed. The NMDC sets out a three stage, 6 step process for preparing a local Design Code, as follows:

Stages	Steps
1	Analysis
2A	Design Vision
2B	Coding Plan
2C	Master Planning
3A	Guidance for Area Types
3B	Code Wide Guidance

5.5 The Design Codes and Viability

A key requirement of the Design Code is that they are viable and will not impede residential development. Trafford Council have therefore undertaken an initial assessment of which particular aspects of the Code might affect the viability of development by adding additional cost over the ‘standard’. Many of the design aspects listed below are details that have been required on developments in Trafford for many years, such as well landscaped developments including context appropriate boundary treatment, trees in gardens, architectural detailing and articulation, and deep window reveals. Some are now national policy requirements such as street trees, whilst other are set to become policy requirements through PfE such as NDSS and M4(2). Below is the list of Codes, Trafford Council believe *may* have an impact on viability:

- Nationally Described Space Standards (NDSS).
- M4(2)
- Minimise north facing units
- Landscaping (more land will need to be devoted to it and some larger plants required)
- Street trees and bigger plants/trees on planting.
- Space required for parking, side parking and landscaped boundaries
- Detailing and articulation
- Window reveals in apartment blocks required to be a minimum of a full brick depth, and on larger apartment buildings, closer to 300mm on some buildings.
- Every apartment needs its own balcony or private amenity garden space at ground floor or on a roof terrace.
- Brick walls to garden boundaries to the public realm will be required, and not fences

- Requirement for aluminium windows rather than high end uPVC in large apartment schemes.
- Substation to be sited in basement of large apartment schemes.
- Minimum floor to ceiling height on apartments and houses to be 2.5m rather than 2.4m.

TC have undertaken a full qualitative analysis of the Design Code which outlines areas which could affect viability and to be analysed further through a quantitative assessment if possible. This analysis can be found at **Appendix 2**.

6. Methodology and Appraisal Approach

The methodology adopted involves first analysing the new Design Code in order to understand which codes have an impact on viability (mainly through cost increases). This impact is then tested through residual appraisal assessments. The methodology adopted uses Residual Land Values (RLVs) as a comparison metric when assessing the Design Code and calculates different RLVs for multiple site and development typologies in Trafford. The appraisals produced allows for the comparison between the RLVs generated by the typology assessment when applying the Design Code, to a policy compliant Benchmark Land Value (BLV). The schemes tested through the typology assessment incorporate Trafford Council's full policy requirements (including affordable housing) and CIL (adopted in 2014). If the appraisals which incorporate the uplift in costs due to the Design Code generate a higher RLV than the estimated BLV, it is concluded that the scheme is viable and deliverable with Trafford's new Design Code. It is incumbent on developers in Trafford to reflect policy requirements (incl. the new Design Code) in their bids for sites as required by the PPG (2019).

The residual method used to calculate the land value (RLV) of each potential typology scheme in this report is also used by developers when assessing the appropriate amount to bid for land. The residual methodology comprises assessing the value of a completed scheme then subtracting both development costs and developer's profit. The sum left after the appropriate deductions have been made is the residual amount, this value then guides a developer in determining an appropriate offer price for a site.

6.1 National Planning Guidance

The National Planning Policy Framework (NPPF) was revised in December 2023 and sets out the government's overarching approach to planning policies. The National Planning Policy Guidance (PPG) on Viability was revised in September 2019 and provides guidance to ensure the Framework is implemented effectively.

The NPPF (2023) recommends the following approach to viability:

"All viability assessments, including any undertaken at the plan-making stage, should reflect the recommended approach in national planning guidance, including standardised inputs, and should be made publicly available."

National planning policy regarding viability in planning fundamentally changed following the revision of both the NPPF (2023) and PPG (2019). Any reference to "competitive returns" included in previous iterations of guidance has been removed and replaced by an imperative to "strike a balance" between the aspirations of developers and landowners, in terms of returns against risk and the achievement of maximum benefits in the public interest through planning contributions.

The methodology proposed uses of up-to-date information sourced from; viability appraisals submitted in support of planning applications received by Trafford Council, the BCIS, the Land Registry House Price Index (HPI) amongst other sources of contemporary information. The use of up-to-date tested information enables this study to make an accurate representation of financial viability for residential development in Trafford.

Identification of site-specific costs is considered an obligation for promoters of the individual sites as per paragraph 12 of the PPG (2019). In Trafford site promoters and landowners should identify during

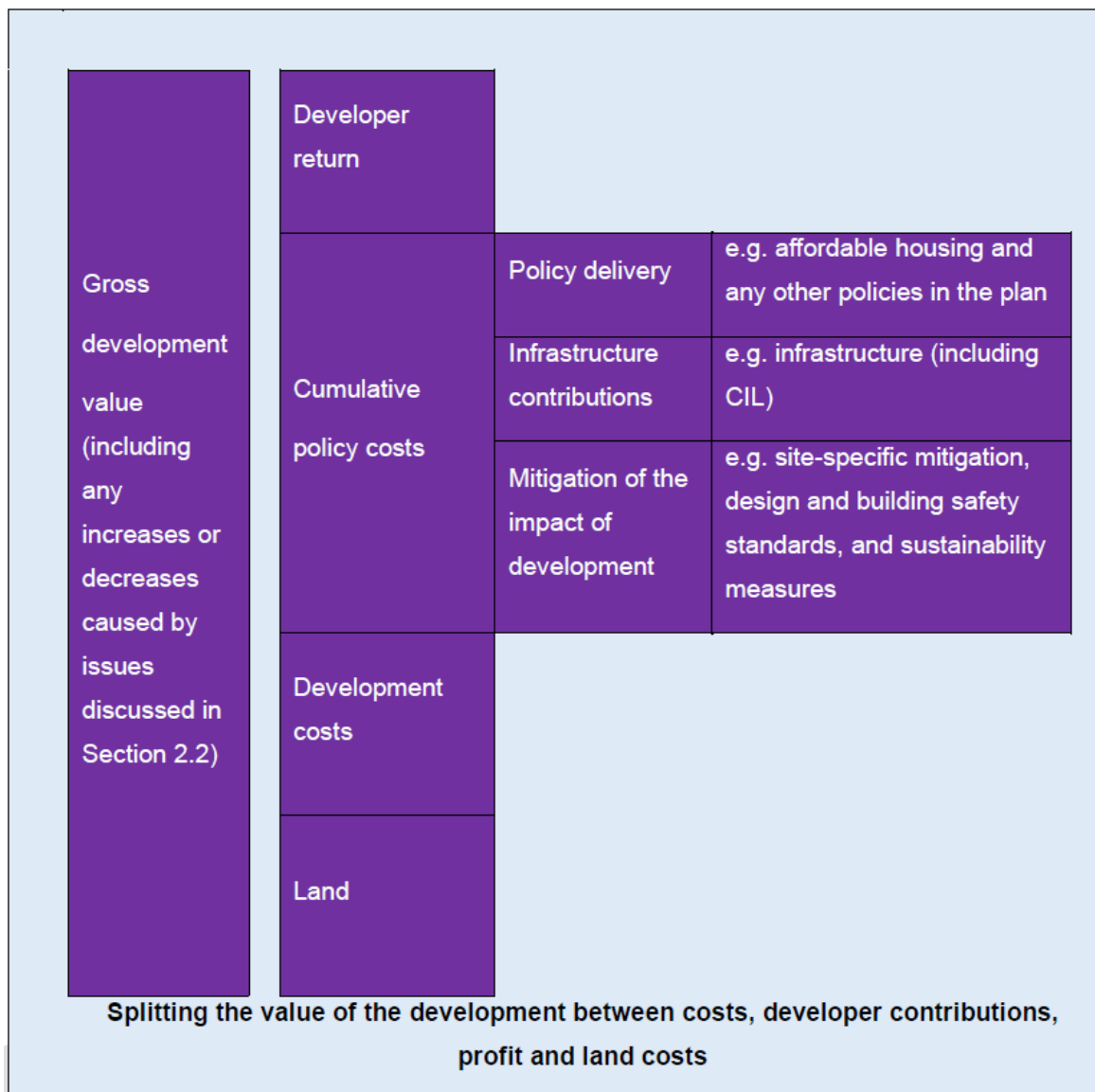
the consultation stage where there are potential site-specific issues, such as significant potential abnormal costs, poor ground conditions, and high demolition costs.

6.2 Viability Testing Methodology

For the purpose of the viability testing within this study, TC have used the residual model. The model is summarised in the figure below. The total scheme value (GDV) based on total sales, including affordable (usually registered provider payment) and private housing is shown in the left-hand bar.

Following the establishment of the GDV, total costs are then deducted. Total costs include, but are not limited to; build costs, professional fees, finance costs, planning obligations, CIL and developer’s profit.

After the total costs have been deducted from the GDV, the remaining amount is referred to as the “residual”, the residual represents the value that a landowner would receive for their land. The figure below demonstrates this methodology:



Source: Royal Institution of Chartered Surveyors 2021.

The Residual Land Value (RLV) alongside developers return (profit) and contributions in the public interest (planning obligations) determine whether a scheme will proceed. If the aspirations of developer and landowner are met in terms of risk adjusted return and a sufficient contribution is made in the form of planning obligations, a scheme will be implemented. If these are not met, then a proposal will not go ahead unless there are alternative sources of funding to backfill the viability gap (for example Homes England grants).

In order to undertake viability appraisals using the residual method, several assumptions need to be made regarding the variables. TC have highlighted the key challenges with establishing appropriate assumptions below:

- Many of the brownfield sites in Trafford are previously developed commercial land, as such there are likely to be “abnormal” costs such as decontamination. It is difficult to accurately assess the extent of these costs before detailed site surveys have been undertaken.
- Risk adjusted return has been assumed on a typology basis for the purpose of viability testing based on a standardised percentage of GDV. The return on risk will be different for each individual development given potential end sales risk. The approach set out in the PPG for the plan making stage is to provide a guide for standardisation to risk adjusted returns. The PPG states a range of 15-20% may be considered a suitable return for developers for establishing development plan policies. A lower profit margin may be considered for affordable housing.
- 2023 was a unique year for residential development with the rising of Bank of England interest rates causing the market to stagnate, though overall the Trafford residential market remained resilient. TC have estimated finance costs based on higher finance rates than those seen from 2012 to 2022. It is anticipated that finance rates could reduce in 2025 and beyond. The sale periods are based on current slower sale rates, though there is an expectation that by 2025 sale periods would be back to normal conditions.

The landowner, using the EUV+ methodology, should identify a premium above existing use that reflects an appropriate incentive to promote their land for development. This is with the qualification as set out in the PPG (2019) that it will be the minimum return for a landowner acting reasonably, assessed against other options available and for a scheme providing full policy compliance.

Due to the challenges that have been identified with making assumptions for the purpose of viability testing, TC have undertaken sensitivity analyses based upon sales values and standard build costs.

TC have made an assumption around residential S106 contributions (Education, health, public open space and sports facilities) based on assumption used during the Places for Everyone viability assessment (apart from for the CQAAP developments).

TC have adopted costs in relation to Biodiversity Net Gain (BNG), in order to ensure all developments are compliant with the new BNG policy.

TC have adopted new affordable housing contribution targets for some areas in the cold market areas based on advice from Trafford Council.

Viability Benchmarking

The NPPF (2023) states the following in paragraph 34:

“Plans should set out the contributions expected from development. This should include setting out the levels and types of affordable housing provision required, along with other infrastructure (such as that needed for education, health, transport, flood and water management, green and digital infrastructure). Such policies should not undermine the deliverability of the plan.”

As has been tested in the GLA CIL charging schedule and as recommended by the PPG (2019), the Local Housing Delivery Group and RICS Guidance, the market value approach to land has not been utilised.

The use of a market value approach to land would mean a reliance on historic transactions. This is a fundamentally flawed approach given that the offers made for sites may have been made based upon current planning policy requirements. As such, using market values as a benchmark would fail to tell the Council about the potential of developments to accommodate the proposed draft policies.

It is accepted that the imposition of planning obligations and CIL will result in an impact upon land values. As such, any benchmark must consider the minimum a reasonable landowner will accept.

There is not a specific set BLV at which a landowner will be incentivised to promote land for development. The promotion of land will be dependent on the type of owner, the operation of the site and the demand for the site in comparison to other sites. Additionally, the owner’s perception of value will influence their appropriate BLV.

The PPG (2019) promotes the use of standardised inputs in the preparation of viability assessments at the plan making stage. TC have followed a standardised model for assessing financial viability.

TC have estimated the BLV based on the PPG’s (2019) required EUV+ methodology.

The EUV is the value of land in its existing use and is not the price paid for land and should disregard hope value for change of use.

The premium reflects the minimum return at which it is considered that a reasonable landowner would be willing to release their land for development. The premium should allow for a sufficient contribution to fully comply with planning policies.

Should a change of use of the site not be proposed, it is considered that a premium is not required to incentivise a landowner to release their land for development. It is the change of use to a higher value use, such as agricultural to residential or industrial to residential, that demands a premium. If there is no change of use, no premium is required. Should the use remain the same, the value for the site will incorporate any hope value for increased densification given the principle of the existing use.

If a developer has already purchased a site for the purpose of development, it is not considered appropriate to apply a premium under the EUV+ method. A developer does not need to be incentivised through land value enhancement to develop a site they already own.

Risk adjusted return for development has been applied on a standardised percentage model as per the PPG (2019). The guidance sets out an appropriate range for plan making which is considered to be suitable to establish viability for plan policies.

For the purpose of viability testing a lower percentage figure has been used to reflect the risk adjusted return for affordable housing. This follows national guidance and is considered appropriate given the guaranteed end sale of the proposed affordable units to a registered provider (RP).

Abnormal costs have become an established component within viability appraisals. Abnormal costs are inherently site specific and given this assessment is at the plan making stage, detailed site investigations are not possible. As such, TC have adopted standardised typologies which includes abnormal costs on an average per hectare and per sq ft basis.

6.3 Typologies Assumed

Para. 3 of the PPG (2019) explains that the viability of plans does not require individual testing of every site or assurance that individual sites are viable. Plan makers can use site typologies to determine viability at the plan making stage. This is called the typology approach where plan makers group sites by shared characteristics such as location, whether brownfield or greenfield, size of site and current and proposed use or type of development.

The typology assessment is then based on average costs and values for each typology in order to understand how the viability of each type of site would be affected by all relevant policies.

On consultation with Trafford Council, TC have grouped sites into four individual areas within Trafford Borough. TC have then grouped sites further by the type of development in these four areas. The sites typologies adopted are as follows:

Location	Type	Units
Hot	Estate Houses	30
Hot	Estate Houses	100
Hot	Apartments 3-5 Storeys	30
Hot	Apartments 3-5 Storeys	100
Moderate	Estate Houses	30
Moderate	Apartments 3-5 Storeys	30
Moderate	Apartments 3-5 Storeys	100
Cold (Old Trafford)	Apartments 3-5 Storeys	30
Cold (Old Trafford)	Apartments 3-5 Storeys	100
Cold (Old Trafford)	Apartments 6+ Storeys	100
Cold (Partington/Carrington)	Estate Houses	30
Cold (Partington/Carrington)	Estate Houses	100
Cold (Partington/Carrington)	Apartments 3-5 Storeys	30

TC typology assessment has created 13 distinct typologies. It should be noted that the estate housing typologies are based on greenfield sites (though the uses are also assessed on brownfield sites basis) and the apartment typologies are based on brownfield sites.

TC would highlight that the typologies have been selected in order to assess a wide variety of market locations and housing types. TC believe the above housing types will behave similar to most housing developments within Trafford Borough.

7. Appraisal Assumptions and Inputs

7.1 Proposed Site Density and Mix

TC have estimated the typologies site density and mix based on comparable schemes in Trafford while also taking into account the effects the Design Code will have on land gross to net ratios, dwelling density and dwelling mix.

All dwelling types assumed in the study are compliant with Nationally Described Space Standards (NDSS). The NDSS provides the minimum Net Sale Area (NSA) for each dwelling on a per m² basis. The NSA required is based on the number of bedrooms, bed spaces (persons) and dwelling storeys. The table below outlines the NDSS types utilised in this report:

Number of Bedrooms (b)	Number of bed spaces (p)	Dwelling Storey	NSA m ²	NSA sq ft
1b	2p	1	50	538
2b	3p	1	61	657
2b	4p	1	70	753
3b	5p	1	86	926
3b	6p	1	95	1,023
2b	4p	2	79	850
3b	4p	2	84	904
3b	5p	2	93	1,001
4b	6p	2	106	1,141
4b	7p	2	115	1,238

In order to work out the site density and mix, TC first selected the different types of developments to be analysed. The types of development were split into three uses as follows:

- Estate housing
- Apartment 3-5 storey
- Apartment 6+ storey

TC have then estimated the total number of dwellings for each of the different typology uses. TC have selected different unit amounts per each typology use in order to allow for an assessment of small major development and medium to large major development for each use (the 6+ storey apartment use only focused on a medium to large major development as it is unlikely you would get a small major development at 6+ storeys in height). The following dwelling amounts were then assumed:

- Small major development – 30 dwellings
- Medium to large major development – 100 dwellings

TC have not undertaken an assessment of very large strategic developments which would typically be around over 350 dwellings. This is because these developments (especially estate housing type

developments) are usually delivered in phases of around 100 to 200 dwellings and therefore the medium to large major development use would cover the strategic development use.

TC have tested the following development uses for each of the areas based on the make-up of the areas and anticipated development in those areas. For example, the cold market Old Trafford area is mainly apartment led, whereas the cold market Partington/Carrington area is mainly estate housing led. Taller apartment development uses (6+ storeys) have only been tested in Old Trafford (cold market) as this is the main location for tall apartment developments in Trafford. The table below outlines the site typologies adopted per each area:

Location	Type	Units
Hot	Estate Houses	30
Hot	Estate Houses	100
Hot	Apartments 3-5 Storeys	30
Hot	Apartments 3-5 Storeys	100
Moderate	Estate Houses	30
Moderate	Apartments 3-5 Storeys	30
Moderate	Apartments 3-5 Storeys	100
Cold (Old Trafford)	Apartments 3-5 Storeys	30
Cold (Old Trafford)	Apartments 3-5 Storeys	100
Cold (Old Trafford)	Apartments 6+ Storeys	100
Cold (Partington/Carrington)	Estate Houses	30
Cold (Partington/Carrington)	Estate Houses	100
Cold (Partington/Carrington)	Apartments 3-5 Storeys	30

7.1.1 Small Estate Housing (Cold and Moderate)

TC have estimated the site density per gross ha for the small estate housing scheme based on comparable developments within Trafford. The following comparable schemes were assessed in order to estimate site density:

Scheme	Units	Gross Area	Site	NSA (sq ft)	Dwellings per gross ha	NSA per gross ha
Land North of Oak Rd, Partington	75	1.95		59,224	38.5	30,371
Mill Bank, Lock Lane, Partington	156	4.29		142,173	36.4	33,174
Heath Farm, Partington (Phase 1)	148	3,71		136,285	39.9	36,764

TC have estimated an average dwelling per gross ha density for the small estate housing schemes in cold and moderate locations at 35 dwelling per gross ha. This is slightly lower than the above comparable schemes (and therefore more conservative), but this is due to the Design Code requiring more landscaping areas, larger separation distances between dwellings and space required for parking, side parking and landscaped boundaries. TC have then targeted an NSA per gross ha of around 30,000 to 32,500 sq ft which should allow for good sized garden plots.

TC would add that the densities are on a per gross ha basis which is different to the Places for Everyone density requirements which are on a net ha basis.

Based on the above, the small estate housing scheme (cold and moderate) of 30 dwellings has a gross area of 0.86 ha. TC have estimated the site gross to net would be 80% based on Land North of Oak Rd and Mill Bank, Lock Lane means the total net area is 0.69 ha.

In terms of dwelling mix, TC have assumed the following:

- 2 bed – 30%
- 3 bed – 50%
- 4 bed – 20%

Based on this mix, TC proposed the following scheme mix for the small estate housing scheme (cold and moderate):

Type	Type	NDSS Type	M2	Sq ft	Units	Total Sq ft
2 bed	Semi/mew	2B3P	70	753	9	6,781
3 bed	Semi	3B4P	84	904	10	9,042
3 bed	Detached	3B5P	93	1,001	5	5,005
4 bed	Detached	4B6P	106	1,141	6	6,846
Total					30	27,674

7.1.2 Small Estate Housing (Hot)

For the small estate housing scheme in hot market locations, TC have estimated a lower dwelling per ha density of 25 dwellings per ha. This is because this area generally sees developments that mainly consist of larger detached homes. The sites are also more likely to be affected by design and layout context considerations requiring low densities to minimise the impact of development on the character of the area. TC have then targeted an NSA per gross ha of around 25,000 to 28,000 sq ft which should allow for good sized garden plots.

TC would add that the densities are on a per gross ha basis which is different to the Places for Everyone density requirements which are on a net ha basis.

Based on the above, the small estate housing scheme (hot) of 30 dwellings has a gross area of 1.20 ha. TC have estimated the site gross to net would be 80% based on Land North of Oak Rd and Mill Bank, Lock Lane which means the total net area is 0.96 ha.

In terms of dwelling mix, TC have assumed the following:

- 2 bed – 30%
- 3 bed – 50%
- 4 bed – 20%

Based on this mix, TC proposed the following scheme mix for the small estate housing scheme (hot):

Type	Type	NDSS Type	M2	Sq ft	Units	Total Sq ft
2 bed	Semi/mew	2B3P	70	753	6	5,102
3 bed	Detached	3B5P	93	1,001	15	15,016
4 bed	Detached	4B7P	115	1,238	9	11,141
Total					30	31,259

7.1.3 Large Estate Housing (Cold & Hot)

For the large estate housing scheme TC have estimated a low dwelling per ha density of 25 dwellings per ha. This is because large developments usually offer more public open space on site and this assumption allows for a more conservative assessment of the Design Code requirements. TC have then targeted an NSA per gross ha of around 24,000 to 26,000 sq ft which should allow for good sized garden plots.

TC would add that the densities are on a per gross ha basis which is different to the Places for Everyone density requirements which are on a net ha basis.

Based on the above, the large estate housing scheme of 100 dwellings has a gross area of 4 ha. TC have estimated the site gross to net would be 60% based on the larger areas allowed for public open space which means the total net area is 2.40 ha.

In terms of dwelling mix, TC have assumed the following:

- 2 bed – 30%
- 3 bed – 50%
- 4 bed – 20%

Based on this mix, TC proposed the following scheme mix for the large estate housing scheme:

Type	Type	NDSS Type	M2	Sq ft	Units	Total Sq ft
2 bed	Semi/mew	2B3P	70	753	30	25,511
3 bed	Semi	3B4P	84	904	15	13,563
3 bed	Detached	3B5P	93	1,001	35	35,037
4 bed	Detached	4B7P	115	1,238	20	24,757
Total					100	98,867

7.1.4 Small Apartment 3-5 Storeys

TC have estimated the site density per gross ha for the small apartment 3-5 storey scheme based on comparable developments within Trafford. The following comparable schemes were assessed in order to estimate site density:

Scheme	Gross Site Area ha	Units	Height	Dwellings per Gross ha
Mayfield Houses	0.26	29	4	112
Old Crofts Bank	0.24	24	3	99
Railway Street	0.27	29	4	107

TC have estimated an average dwelling per gross ha density for the small apartment schemes at 100 dwelling per gross ha based on the comparables above.

Based on the above, the small apartment scheme of 30 dwellings has a gross area of 0.30 ha. TC have estimated the site gross to net would be 100% based on it being a town centre location type development.

In terms of dwelling mix, TC have assumed the following:

- 1 bed – 40%
- 2 bed – 50%
- 3 bed – 10%

Based on this mix, TC proposed the following scheme mix for the small apartment scheme:

Type	Type	NDSS Type	M2	Sq ft	Units	Total Sq ft
1 bed	Apt	1B2P	50	538	12	6,458
2 bed	Apt	2B3P	61	657	8	5,253
2 bed	Apt	2B4P	70	753	7	5,274
3 bed	Apt	3B5P	86	926	2	1,851
3 bed	Apt	3B6P	95	1,023	1	1,023
Total					30	19,860

TC have estimated the standard industry gross to net ratio of 80% in order to work out the GIA which is 24,824 sq ft.

7.1.5 Large Apartment 3-5 Storeys

TC have estimated the site density per gross ha for the large apartment 3-5 storey scheme based on comparable developments within Trafford. The following comparable schemes were assessed in order to estimate site density:

Scheme	Gross Site Area ha	Units	Height	Dwellings per Gross ha
Warwick Rd South	0.36	126	4 to 5	350
Itron*	2.91	282	2 to 5	97

*This development included some houses which would reduce the density per gross ha.

TC have estimated an average dwelling per gross ha density for the large apartment 3-5 storey schemes at 150 dwelling per gross ha based on the comparables above and when taking into account Place for Everyone minimum density requirements per net ha.

Based on the above, the large apartment 3-5 storey scheme of 100 dwellings has a gross area of 0.67 ha. TC have estimated the site gross to net would be 100% based on it being a town centre location type development.

In terms of dwelling mix, TC have assumed the following:

- 1 bed – 40%
- 2 bed – 50%
- 3 bed – 10%

Based on this mix, TC proposed the following scheme mix for the larger 3-5 storey apartment scheme:

Type	Type	NDSS Type	M2	Sq ft	Units	Total Sq ft
1 bed	Apt	1B2P	50	538	40	21,528
2 bed	Apt	2B3P	61	657	25	16,415
2 bed	Apt	2B4P	70	753	25	18,837
3 bed	Apt	3B5P	86	926	5	4,629
3 bed	Apt	3B6P	95	1,023	5	5,113
Total					100	66,522

TC have estimated the standard industry gross to net ratio of 80% in order to work out the GIA which is 83,152 sq ft.

TC have assumed that the 100 dwelling scheme is split into two distinct apartment blocks of 50 units which would be built out in phases.

7.1.6 Large Apartment 6+ Storey

TC have estimated the site density per gross ha for the large apartment 6+ storey scheme based on comparable developments within Trafford. The following comparable schemes were assessed in order to estimate site density:

Scheme	Gross Site Area ha	Units	Height	Dwellings per Gross ha
Botanical Houses	0.40	149	6 to 13	368
No. 1 Old Trafford	0.7	354	15 and 18	506
94A Talbot Rd	0.22	102	12	464
Trafford Plaza	0.57	174	12 to 16	305
Elsinore Rd*	1.14	380	6 to 11	333

*This development included some houses which would reduce the density per gross ha.

TC have discussed the above schemes with Trafford Council who have stated that The Draft Wharfside Masterplan (which will likely see the tallest and highest density development in the Borough) suggests limited site area coverage for building footprint as set out below:

- Lower rise apartments, building footprint should be 50% of site area, with the other 50% private open space.
- Tall towers alone on a site, building footprint 30% of site area, with the other 70% private open space.
- Mix of tall tower and lower rise apartment 65% building footprint and 35% private open space.

Trafford Council explain that the density of these schemes will depend on height, which could be considerable in Wharfside and therefore 350 dwellings per ha is likely to be achievable on some plots. However, across the rest of the Borough, schemes at 6 – 10 storeys would not be acceptable at this higher dwelling per ha.

Trafford Council have noted that the minimum density requirements set out in Places for Everyone could be a good starting point for densities, which requires the following in places with tall buildings:

- Wharfside, Pomona & Trafford Waters 200 dwellings per net ha (ie all the places where the highest apartment towers will be located).
- Civic Quarter 170 dwellings per net ha

In order for the assessment to be conservative, TC have estimated an average dwelling per gross ha density for the large apartment 6+ storey schemes at 170 dwelling per gross ha.

Based on the above, the large apartment 6+ storey scheme of 100 dwellings has a gross area of 0.29 ha. TC have estimated the site gross to net would be 100% based on it being a town centre location type development.

In terms of dwelling mix, TC have assumed the following:

- 1 bed – 40%
- 2 bed – 50%
- 3 bed – 10%

Based on this mix, TC proposed the following scheme mix for the larger 6+ apartment scheme:

Type	Type	NDSS Type	M2	Sq ft	Units	Total Sq ft
1 bed	Apt	1B2P	50	538	40	21,528
2 bed	Apt	2B3P	61	657	25	16,415
2 bed	Apt	2B4P	70	753	25	18,837
3 bed	Apt	3B5P	86	926	5	4,629
3 bed	Apt	3B6P	95	1,023	5	5,113
Total					100	66,522

TC have estimated the standard industry gross to net ratio of 80% in order to work out the GIA which is 83,152 sq ft.

7.2 Standard Cost Inputs

7.2.1 Base Build Costs

Base build costs have been estimated based on a range of sources including the RICS Building Cost Information Service (BCIS), applicant's submitted Financial Viability Appraisals (FVAs) in Trafford and TC's internal cost database.

The base build costs have been estimated based on the following assumptions:

- Standard substructure (strip foundations);
- Standard superstructure for the relevant building type compliant with current building regulations;
- Standard internal finishes and fittings;
- Standard roof tiles;
- Standard preliminary and running costs; and
- Overhead and Profit at a standard rate (apartments only).

When utilising BCIS data, the data has been rebased to Trafford. The BCIS data set that has been used is dated December 2023. Where possible, the maximum age of results has been set at 5 years. This is consistent with the recent planning appeal decision in respect of Land next to School Lane, Milford on Sea, Lymington (APP/B1740/W/18/3209706, decision date April 2019), where the Planning Inspector favoured the use of the 5-year position compared to the BCIS default of 15 years due to the shorter period better reflecting current build costs. If the sample set is too low at the 5-year position, the 10-year position has been used in order to have a significant sample set.

The table below outlines the BCIS costs rebased to Trafford for each property type and the maximum age of result and sample size for each BCIS cost (Dec 2023). The costs have been converted to £ per sq ft:

Type	Max Age of Result	Sample	Quartile	£/ sq ft
Estate Housing 2-storey	5 years	181	LQ	£115.66
Apartments 3-5 storey	5 year	132	Median	£150.97
Apartments 6+ storey	10 years	50	Median	£163.97

Estate Housing:

For the estate houses, TC have adopted base build costs based on adjusting the Lower Quartile (LQ) BCIS figure. It has become standard practice amongst many of the consultants who use BCIS figures for housing costs to apply a deduction due to housebuilders tending to carry out the contractor's role themselves and therefore the cost of main contractor's profit and overheads is deemed to be included in the developer's gross development profit. The deduction also reflects the cost efficiencies of housebuilders. Anecdotal evidence about BCIS data has stated that the majority of the estate housing build cost data comes from contractors who work for Registered Providers (RPs). The anecdotal evidence also states that regional and national housebuilders tend not to supply any or limited data to the BCIS services (see Rossendale Local Plan Viability Assessment, 2019).

In order for the base build cost to better reflect the market, an adjustment to the LQ BCIS costs has been applied, firstly by stripping out the embedded contractors overhead and profit (at 7.5%) and secondly by reducing the cost further to reflect housebuilder efficiencies. This approach adopted is similar to that during the Warburton Lane Appeal (APP/Q4245/W/19/3243720).

TC have adopted two different estate housing costs, one reflecting a small housebuilder's cost (30 dwelling typology) and the other a regional to national housebuilder's cost (100 dwelling typology). The tables below outline the estimated estate housing base build costs on £/ sq ft basis.

Small Housebuilders:

BCIS LQ	£115.66
OH&P Strip (7.5%)	£107.59
House Builder Efficiencies (2.5%)	£104.97

Regional to National Housebuilders:

BCIS LQ	£115.66
OH&P Strip (7.5%)	£107.59
House Builder Efficiencies (10%)	£97.81

Apartments:

TC have adopted different base build costs for apartments depending on building heights. TC have adopted the median BCIS figure for the two apartment development types that are tested, these are:

- 3-5 storey apartments; and
- 6+ storey apartments (limited to 14 storeys).

TC have adopted the following base build costs for the apartment types on a £/ sq ft basis:

Apartments 3-5 Storey Median	£150.97
Apartments 6+ Storey Median	£163.97

7.2.2 External Works

In addition to the base build cost, an allowance for external works has been assumed based on different percentages of base build for different property types/heights. The external works have been estimated based on the following assumptions:

- Standard Sustainable Urban Drainage;
- Service Connections;
- Standard adoptable roads, footpaths and sewers;
- Foul water sewers;
- Shared drives and car parking;
- Garages, and;
- Standard landscaping.

Standard industry assumptions have been adopted for external work costs. The table below outlines the external works cost percentage adopted for each property type:

House Type	Cost %
Estate Houses	15%
Apartments 3-5 Storeys	5%
Apartments 6+ Storeys	3.50%

7.2.3 Part L Uplift

BCIS costs do not currently account for Part L regulation costs within the base build cost. TC have estimated an uplift in cost to reflect Part L based on research by DLUHC, FVAs and Local Plan Viability Assessments. TC have adopted the following Part L uplift costs:

House Type	Cost £/ sq ft
Estate Houses	£4.50
Apartments 3-5 Storeys	£3.50
Apartments 6+ Storeys	£3.50

7.2.4 Total Adopted Standard Build Cost

The total standard build cost includes base build, externals and Part L uplift. TC have adopted the following standard build costs for each development type on £/ sq ft basis:

House Type	Cost £/ sq ft
Estate Houses (Small)	£125.21
Estate Houses (Regional to National)	£116.73
Apartments 3-5 Storeys	£162.01
Apartments 6+ Storeys	£173.21

7.2.5 Abnormal Costs

Abnormal costs are those that the developer perceives to be in addition to 'normal' cost that would be expected to be incurred in the delivery of development. The abnormal element will be a treatment over and above standard, primarily to deal with difficult ground conditions.

It has been generally accepted by most cost and viability consultants that the BCIS data includes an allowance for some abnormal costs, such as abnormal foundations. This includes the cost consultant at the Rossendale Local Plan Viability Assessment (2019) and the viability consultant at the London Borough of Lambeth Local Plan and Community Infrastructure Levy Viability Review (2019).

For the purpose of plan making, in some cases viability consultants have not adopted abnormal costs, this approach can have an adverse impact on the viability study as it misses a key cost.

TC have adopted a typology assessment to abnormal costs based on a low to medium level. For the estate housing schemes, TC have adopted an abnormal figure of £500k per net ha. For the apartment schemes TC have adopted the abnormal costs at £3.75 per sq ft based on the input adopted in the

CQAAP which was based on comparable apartment schemes in Old Trafford. The table below outlines the apartment abnormal costs on a per net ha basis:

Location	Type	Dwellings	Net Ha	Total £	£ per net ha
Hot	Apartments 3-5 Storey	30	0.30	93,092	£310,306
Hot	Apartments 3-5 Storey	100	0.67	311,820	£467,729
Moderate	Apartments 3-5 Storey	30	0.30	93,092	£310,306
Moderate	Apartments 3-5 Storey	100	0.67	311,820	£467,729
Cold (Old Trafford)	Apartments 3-5 Storey	30	0.30	93,092	£310,306
Cold (Old Trafford)	Apartments 3-5 Storey	100	0.67	311,820	£467,729
Cold (Old Trafford)	Apartments 6+ Storey	100	0.59	311,820	£530,093
Cold (Partington/Carrington)	Apartments 3-5 Storey	30	0.30	93,092	£310,306

A non-exhaustive list of the abnormal costs that are generally seen are as follows:

- Retaining walls;
- Demolition;
- Site preparation and enabling works;
- Over and above standard external landscaping and public realm works;
- Abnormal drainage; and
- Abnormal foundations.

The PPG (2019) provides guidance for how abnormal costs should be considered for the purpose of viability assessments:

“abnormal costs, including those associated with treatment for contaminated sites or listed buildings, or costs associated with brownfield, phased or complex sites. These costs should be taken into account when defining benchmark land value”

The PPG (2019) states that costs associated with the land should be reflected in the Benchmark Land Value (BLV). The BLV's estimated in this document have been assessed based on the estimated abnormal costs. If a site has higher abnormal costs, the BLV would be lower than that estimated in the document as the site value would need to reflect the additional abnormal costs.

7.2.6 Contingency

Contingency reflects the level of construction risk. TC have adopted a standard industry contingency assumption of 3% of total build costs for all typologies.

7.2.7 Professional Fees

For estate housing projects, TC typically see professional fees range from 5% to 7% of total build costs, depending on the size of and type of development. For apartment projects, professional fees range from 7% to 8% of build costs, depending on the size and type of development. TC have adopted the following professional fees for the relevant house types:

House Type	Units	Professional Fee %
Estate Houses	30	6%
Estate Houses	100	5%
Apartments (3-5 storeys)	30	8%
Apartments (3-5 storeys)	100	7%
Apartments (6+ storeys)	100	8%

7.2.8 Sales and Marketing

TC have adopted the industry standard assumption for sales and marketing fees of 2.5% of the total sale revenue (not including the shared ownership, affordable rent or car parking elements). This is the same rate agreed during the Former B&Q Appeal (APP/Q4245/W/20/3258552) in Trafford.

7.2.9 Legal Fees

TC have adopted industry standard assumptions in relation to legal fees:

House Type	Units	Legal Fee £ per unit
Estate Houses	30	£750
Estate Houses	100	£500
Apartments (3-5 storeys)	30	£750
Apartments (3-5 storeys)	100	£500
Apartments (6+ storeys)	100	£500

7.2.10 Finance Rate

It is standard practice in viability in planning to assume schemes are 100% debt funded, whereas in reality, schemes are rarely 100% funded by loans.

TC have assumed a blended finance cost which allows for arrangement and exit fees, as well as the cost of borrowing through the development period. TC have adopted the following finance rate for the relevant typologies:

House Type	Units	Finance Rate %
Estate Houses	30	7.5%
Estate Houses	100	6.5%
Apartments (3-5 storeys)	30	7.5%
Apartments (3-5 storeys)	100	7%
Apartments (6+ storeys)	100	7%

2023 was a unique year for residential development with the rising of Bank of England interest rates causing the market to stagnate, though overall the Trafford residential market remained resilient. TC have estimated finance costs based on higher finance rates that were seen from 2012 to 2022. It is anticipated that finance rates could reduce in 2025 and beyond. The sale periods are based on current slower sale rates, though there is an expectation that by 2025 sale periods would be back to normal conditions.

7.2.11 Development Period

TC have assumed the following pre-construction and construction period for each development type:

Use	Pre-Construction	Construction
Small Estate Houses (30)	4 months	Sale period plus 5 months
Large Estate Houses (100)	6 months	Sale period plus 5 months
Small Apartment 3-5 Storey (30)	4 months	12 months
Large Apartment 3-5 Storey (100)	6 months	15 months per each block (21 months in total due to phasing)
Large Apartment 6+ Storey (100)	6 months	18 months

In terms of market and First Homes sale period, TC have assumed the following:

Use	Sale
Small Estate Houses (30)	2.5 units a month
Large Estate Houses (100)	2.5 units a month
Small Apartment 3-5 Storey (30)	3 units a month with 50% pre-sales
Large Apartment 3-5 Storey (100)	4 units a month with 50% pre-sales
Large Apartment 6+ Storey (100)	4 units a month with 50% pre-sales

The sale period assessment is on the conservative side due to 2023 being a unique year for residential development with the rising of Bank of England interest rates causing the market to stagnate, though overall the Trafford residential market remained resilient. The sale periods are based on current slower sale rates, though there is an expectation that by 2025 sale periods would be back to normal conditions.

In terms of the shared ownership and affordable rent units, it has been assumed this will be sold on a Gold Brick/development contract basis with a RP. The sale period has been assumed as follows for these affordable units:

- 25% start of construction
- 50% over construction
- 25% at practical completion

For the estate housing schemes, it has been assumed the affordable units would be delivered early on in the developments with a shorter construction period than the market and First Home units.

7.2.12 Land Acquisition Costs

Stamp Duty Land Tax (SDLT) has been assumed at the UK prevailing rate for all housing types. In addition, a 1% site agent fee and 0.5% site legal fee have been included which reflect industry standard assumptions.

7.2.13 Natural Stone and Natural Slate

For estate housing in hot market locations, TC have assumed an uplift in cost for natural stone cladding to the façade and for natural slate roofs. This is to reflect the house types in this area and the high sale values achieved in the hot market locations. The estimated cost is as follows:

- Natural Stone Cladding – £2.00 per sq ft
- Natural Slate Roof – £2.25 per sq ft

7.2.14 EV Charging Points

TC have assumed EV Charging Point cost at £850 per unit based on the Three Dragons Teignbridge District Council Local Plan Viability Assessment (2023).

7.2.15 Biodiversity Net Gain

TC have included an allowance for Biodiversity Net Gain (BNG). The cost is based on DLUHC government impact assessment and figure adopted by Three Dragons for the Place for Everyone viability assessment. TC have uplifted these costs to December 2023 prices. For greenfield sites (estate housing schemes) TC have adopted a cost of £1,400 per unit and for brownfield sites (apartment schemes) a cost of £270 per unit.

It should be noted that many of the Design Code aspects in relation to landscaping would most likely reduce the BNG cost per unit and the cost could likely be close to zero for most sites as it is costed elsewhere in the appraisal.

7.2.16 S106 Contributions and CIL

TC have included an allowance for S106 contributions on a £ per unit basis. TC have adopted a cost of £5,250 per unit for all location apart from the cold market Old Trafford area. The £5,250 per unit figure is the same assumption used by Three Dragons for the Places for Everyone viability assessment.

For the cold market Old Trafford typologies, it is assumed these developments are located in the Civic Quarter AAP and therefore the CQ11 S106 contributions applies instead which equates to the following:

CQ11 S106	Figure
Civic Quarter AAP CQ11 S106	£145.81 per m2
CIL Index 2021	333
CIL Index 2023	355
2023 CQ11 S106	£155.44 per m2

CIL costs have been adopted based on the CIL charging schedule updated to 2023 figures using the RICS CIL index.

7.3 Design Code Costs

TC have estimated the following Design Code uplift in costs:

Design Code	Cost Uplift	Justification
NDSS	No cost uplift	All schemes in the appraisal are NDSS compliant which is the norm usually seen in the marketplace.
M4(2) Compliance	£1,650 per unit for all schemes	Cost based on DLUHC research in September 2020, Raising accessibility standards for new homes: summary of consultation responses and government response. The estimated cost has been increased to reflect December 2023.
Street Trees and Bigger Plants / Trees on Planting	£100 per unit for apartment schemes £150 per unit for estate housing schemes	Uplift cost per tree is estimated at £100 based on the difference between the cost of a standard tree (£150) compared to the required extra heavy standard tree (£250). The following number of trees have been estimated: <ul style="list-style-type: none"> • Estate houses – 1.5 extra heavy standard tree per dwelling which includes garden and street trees • Apartments – 1 extra heavy standard tree per dwelling
Additional Landscaping Area	£600 per unit for estate housing schemes	TC have made an allowance for additional landscaping areas created for the estate housing schemes. Trafford Council have stated that the additional landscaping area is likely to include on average a 15m length of hedging to front gardens with hedge plants to be either bare rooted at 0.75 m height or a 10 litre pot grown hedging plant (or 10m length of hedging at 1m high and 5m long railing with 6 climbing plants such as ivy). Rear garden planting only likely to include climbing plants to fences with a maximum of 10 in total. Tree cost is covered above. TC have therefore estimated cost per dwelling as follows: <ul style="list-style-type: none"> • Hedging at £30m at 15m = £450 • 10 climbers at £15 per plant = £150 • Total = £600 per unit This cost would most likely offset against any BNG cost.

Brick Walls to Garden Boundaries	£300 per unit for estate housing schemes	<p>The average cost of a fence (1.8m) is circa. £50 per m and a wall (1.8m) £200 per m. This means the uplift in cost (1.8m) is £150 per m.</p> <p>Trafford Council have stated that most houses will only require a 0.7m high brick wall to the front boundary for a typical length of 4m. This is a standard cost already accounted for in the external works.</p> <p>Only corner plots will require a 1.8m high wall to the public facing side of the rear garden and this would be around 8 to 10m in length. Trafford Council believe around 15 to 20% of unit would be corner plots.</p> <p>TC have therefore assumed only 20% of units will be corner plot units and estimate the uplift in cost per unit as follows:</p> <ul style="list-style-type: none"> • Uplift in cost for 10m wall = £1,500 • 20% of £1,500 = £300 per dwelling
Bay Windows	£2 per sq ft for estate housing schemes	<p>Estimated cost for bay windows for an average 1,000 sq ft property is around £2,000 which equates to £2 per sq ft uplift. This is the cost uplift when compared to standard windows (incl. additional brick and roofing work).</p> <p>Some detached estate housing products do include bay windows, so this is a conservative estimate.</p>
Detailing & Articulation	£0.70 per sq ft for all schemes	<p>Estimated cost for brick detailing and articulation which could require some higher quality bricks. This is a conservative assumption as, developers could achieve detailing and articulation without having to use more expensive bricks, for example they could rotate bricks in order to achieve a detailing/articulation pattern. It is also likely that this cost is already accounted for in the BCIS base build cost figure.</p>

<p>Deep Window Reveals for Apartments (6+ storey only)</p>	<p>£0.48 per sq ft for apartment schemes</p>	<p>From discussion with Trafford Council, TC understand that 3-5 storey apartments would require window reveals of a 'half brick' (the short length of a brick) which does not add any extra cost and that 'full brick' reveals (the length of a brick) again are not difficult and commonly delivered on apartment schemes. For 3-5 storey apartments it is therefore assumed that the cost of window reveals required by the design code is already accounted for in the BCIS base build cost and no uplift is required.</p> <p>For taller apartments deeper reveals may be required (over 200mm) which can require additional steel & cladding work and therefore a cost uplift has been estimated for 6+ storey apartments.</p> <p>The estimated cost of deep window reveals (over 200mm) is £100 per window which has been applied to 4 windows per apartment (due to balcony windows being excluded). This equates to circa. £0.48 per sq ft. This is a conservative assumption as the cost could already be accounted for in the BCIS base build cost figure.</p>
<p>Requirement for Aluminium Windows for Apartments</p>	<p>£1.08 per sq ft for apartment schemes</p>	<p>Average uplift in cost for aluminium windows over uPVC is circa. £150 per window. Based on 6 windows per flat this equates to £900 per apartment and therefore average cost of circa. £1.08 per sq ft. This is a conservative assumption as it is likely that this cost is already accounted for in the BCIS base build cost figure. For example, when assessing sale value comparables, the majority of apartment scheme windows are aluminium.</p>

TC would note that some elements above are likely already be accounted for in the BCIS cost figures used to assess base build costs. For example, detailing & articulation, deep window reveals and aluminium windows for apartments, are most likely already accounted for in the BCIS base build cost as many residential developments already include these design requirements. TC's assessment of these elements of the Design Code can therefore be seen as conservative and this has been considered in TC's concluding analysis of the Design Code.

Other elements of the Design Code such as allowing the required space for parking and landscaping areas (mainly estate housing schemes) have been taken into consideration when estimating scheme densities and mixes.

7.4 Developers Profit

Developers profit reflects the risk adjusted return that a proposed scheme needs to make. Simply, the greater the risk, the higher the required profit level. The increase in profit level serves to mitigate the risk.

The PPG (2019) states:

“For the purpose of plan making an assumption of 15-20% of gross development value (GDV) may be considered a suitable return to developers in order to establish the viability of plan policies.”

TC believe that given the general nature of the assessment and due to the testing over the lifetime of the Design Code, a moderate risk adjusted return for the market units should be assumed. Therefore, a profit margin of 17.5% on GDV has been adopted in regard of the proposed market housing. This falls within the midpoint of the range as set out in paragraph 18 of the PPG on Viability (2019) which is considered a suitable return for developers.

A profit margin of 17.5% on GDV has been used in the Places for Everyone Local Plan Viability Assessment undertaken by Three Dragons and the CQAAP Local Plan Viability Assessment.

This profit margin assumption has been supported by the following Trafford Appeal decisions:

- Former B&Q (APP/Q4245/W/20/3258552)
- Old Crofts Bank (APP/Q4245/W/21/3279610)

A profit margin of 6% on GDV has been adopted for the affordable housing element. A lower return is adopted as there is limited sales risk on these units for the developer; there is often a pre-sale of the units to a registered provider prior to commencement. Any risk associated with take up of affordable housing is borne by the acquiring registered provider, not by the developer. This is reflected by the PPG on Viability (2019) which states:

“A lower figure [profit margin] may be more appropriate in consideration of delivery of affordable housing in circumstances where this guarantees an end sale at a known value and reduces risk.”

The 6% affordable housing profit margin is again supported by the Trafford Appeal decisions and Three Dragons Local Plan Viability Assessment and CQAAP Local Plan Viability Assessment.

7.5 Benchmark Land Value

The NPPF (2019) states the following in paragraph 34:

“Plans should set out the contributions expected from development. This should include setting out the levels and types of affordable housing provision required, along with other infrastructure (such as that needed for education, health, transport, flood and water management, green and digital infrastructure). Such policies should not undermine the deliverability of the plan.”

As has been tested in the GLA CIL charging schedule (Greater London Authority, Mayoral CIL Examination, 2012) and as recommended by the PPG (2019) and the Local Housing Delivery Group, the market value approach to land has not been utilised.

The use of a market land value approach would mean a reliance on historic transactions. This is a fundamentally flawed approach given that the offers made for sites may have been made based upon current planning policy requirements. As such, using market values as a benchmark would tell the Council minimal amounts about the potential of developments to accommodate the proposed draft policies.

It is accepted that the imposition of planning obligations and CIL (as well as some Design Code requirements) will result in an impact upon land values. As such, any benchmark must consider the minimum a reasonable landowner will accept. The minimum land value will be a site’s Existing Use Value (EUV) plus a premium (EUV+).

There is not a specific set Benchmark Land Value (BLV) at which a landowner will be incentivised to promote land for development. The promotion of land will be dependent on the type of owner, the operation of the site and the demand for the site in comparison to other sites. Additionally, the owner’s perception of value will influence their appropriate BLV.

The PPG (2019) promotes the use of standardised inputs in the preparation of viability assessments at the plan making stage. TC have followed a standardised model for assessing financial viability.

For the purpose of viability testing TC have assumed BLVs on a standardised typology basis adopting a similar approach as Three Dragons did for Greater Manchester’s Places for Everyone (formerly known as Greater Manchester Spatial Framework) viability assessment.

The PPG (2019) states that BLV should be estimated using the Existing Use Value Plus (EUV+) a premium methodology. The PPG (2019) states that BLV should:

- *“be based upon existing use value;*
- *allow for a premium to landowners; and*
- *reflect the implications of abnormal costs; site-specific infrastructure costs; and professional site fees.”*

Provision is made in the PPG (2019) for the estimation of BLV to reflect the cost of compliance with adopted planning policies.

The PPG (2019) states that abnormal costs and site-specific infrastructure costs should be reflected in the estimation of BLV.

The EUV is the value of land in its existing use and is not the price paid for land and should disregard hope value for change of use.

The premium reflects the minimum return at which it is considered that a reasonable landowner would be willing to release their land for development. The premium should allow for a sufficient contribution to fully comply with planning policies.

Should a change of use not be proposed, it is considered that a premium is not required to incentivise a landowner to release their land for development. It is the change of use to a higher value use, such as agricultural to residential or industrial to residential, that demands a premium. If there is no change of use, no premium is required. Should the use remain the same, the value for the site will incorporate any hope value for increased densification given the principle of the existing use.

If a developer has already purchased a site for the purpose of development, it is not considered appropriate to apply a premium under the EUV+ method. A developer does not need to be incentivised through land value enhancement to develop a site they already own.

7.5.1 Existing Use Value

The first component of the EUV+ methodology is the Existing Use Value (EUV). The PPG (2019) states that this is the value of land in its existing use and should disregard hope value.

When assessing the BLV for developments, it has been assumed that the EUV of the land, irrespective of the buildings on the site, will be less than the value of land should planning permission be granted for change of use. The reason for this core principle is that should sites come forward where the EUV is greater than the value established through change of use then the development by its nature will be unviable.

It is considered that the Residual Land Value (RLV) needs to be greater than the EUV for a site to be considered deliverable in the short term (0-5 years). Sites that are developable (6-15 years) become more financially viable as a result of changing market dynamics and building obsolesce amongst other factors that may lead to the value of one land use growing and the other diminishing (see NPPG para. 69).

This is a similar principle that was outlined in the recent London Borough of Lambeth: Local Plan and Community Infrastructure Levy Viability Review undertaken by BNP Paribas in 2019.

TC have estimated the EUV on a standard typology basis for the following uses:

- greenfield (bare agricultural with no buildings)
- brownfield (cleared site)

TC have estimated the greenfield EUV based on analysis of agricultural land value indexes and reports. The Knight Frank Farmland Index Q3 2023 estimated the average English farmland at £22,118 per ha. Savills in their recent March 2023 assessment of rural land values, estimate North of England values at £17,915 per ha and Great Britain values at £19,768 per ha. Carter Jonas Farmland Market Update Q3 2023 estimates the average arable land in England and Wales at £23,517 per ha and pastureland at £18,985 per ha.

Taking the above research into account, TC have estimated the bare greenfield EUV at £20,000 per ha.

TC have estimated the brownfield EUV based on a similar approach adopted by Three Dragons for the Places for Everyone (formerly known as the Greater Manchester Strategic Framework) viability assessment. In this viability assessment, Three Dragons assessed the EUV of the brownfield sites based on the Valuation Office Agency (VOA) estimates of land value for policy purposes (2019).

TC have therefore also assessed the cleared brownfield EUV based on the VOA estimated of land value for policy purposes (2019). The VOA in land value estimates for policy purposes (2019) establishes values for commercial and industrial land based upon hypothetical sites. The two value estimates relevant for Trafford are the following:

- Bolton Office Edge of Central Business District (CBD) – £865,000 per ha
- Trafford Industrial – £850,000 per ha

The VOA estimates industrial land values for the Trafford market, whereas the edge of CBD office land values is only estimated for the city of Manchester and Bolton. In the Place for Everyone viability study, Three Dragons adopted the Bolton office values for Trafford and for the purposes of this viability study TC have followed the same approach.

TC have increased the above EUV by the GDP deflator in order to estimate a December 2022 value. The GDP deflator estimates inflation at 10.36% and TC have uplifted the two land values as follows:

- Bolton Office CBD – £954,620 per ha
- Trafford Industrial – £938,066 per ha

Based on the above data, TC have adopted the brownfield EUV at £950,000 per ha.

TC would highlight that the brownfield EUV is based on a clear brownfield site. Brownfield land is by its nature heterogeneous and different land will have different EUVs. Some sites for development in Trafford may have higher or lower EUVs when compared to that assumed in this report. However, TC would add that when assessing the BLV, it has been assumed that the EUV of the land, irrespective of the buildings on the site, will be less than the value of land should planning permission be granted for change of use. The reason for this core principle is that should sites come forward where the EUV is greater than the value established through change of use then the development by its nature will be unviable.

The adopted EUVs in this viability assessment for Trafford are as follows:

USE	Per Ha
Greenfield	£20,000
Brownfield	£950,000

7.5.2 Premium

The second component of the EUV+ methodology is the premium. The premium reflects the minimum return at which it is considered that a reasonable landowner would be willing to release their land for development. The premium should allow for a sufficient contribution to fully comply with planning policies and taken into account abnormal costs.

The Greater London Authority (GLA) set an appropriate premium for brownfield land in their 2017 SPD Homes for Londoners at between 10-30%. This range has been referenced within numerous appeal decision and represents an industry standard. The Three Dragons assessment for Greater Manchester adopted a premium of 20%, though their assessment did not adopt abnormal costs.

TC have adopted a premium of 15% which reflects the abnormal cost of circa. £300k to £1.1m per net ha adopted in the appraisals for the brownfield apartment typologies (based on £3.75 per sq ft).

For the greenfield sites the premium is usually based on a multiplier approach. The multiplier can range from as low as 4 times to as high as 25 times (see the Great Bricett Business Park (APP/W3520/W/22/3297920) and Warburton Lane (APP/Q4245/W/19/3243720) Appeals). The multiplier premium level generally depends on the amount of abnormal costs a development has.

TC have taken into consideration the typical multiplier premiums and based on the adoption of abnormal cost at £500,000 per net ha, TC have adopted a premium multiplier of 15 times.

The above premiums reflect the minimum incentive require for the landowner to release their land for development while taking into consideration policy compliance and abnormal costs.

7.5.3 Benchmark Land Value

TC have adopted the BLVs on a per net ha basis. The BLVs adopted by TC in this assessment are as follows:

Use	EUV per Ha	Premium	BLV per net Ha
Greenfield	£20,000	15 times (net ha basis)	£400,000
Brownfield	£950,000	15%	£1,092,500

TC would highlight that the above BLVs are based on abnormal costs at a certain level. If a scheme has higher abnormal costs, then the BLV would be lower than that assumed, as abnormal costs need to be reflected in the BLV.

7.6 Assessment of Value

7.6.1 Market Sales

TC have undertaken comparable research analysis across the 4 separate tested areas being Carrington/Partington (cold market area), Old Trafford (cold market area), moderate market area (Urmston/Sale) and hot market area (Altrincham/Hale/Timperley/Countryside). TC have prioritised new build sale data as per RICS Guidance (Comparable Evidence in Real Estate) in order to provide the most relevant comparable evidence.

7.6.2 Carrington/Partington

Comparable Sold Evidence:

TC would highlight that all new build sold price data has been sourced from Land Registry from the period of October 2022 to present. The data is as follows:

Address	Date sold	Floor area m ²	Floor area sq ft	Sold price	Price per m ²	Price per sq ft	Comments
13, Lapwing Close, Partington, Manchester, Greater Manchester M31 4RS	31/10/2022	118	1,274	£304,995	£2,542	£239	New Build - Detached
16, Lapwing Close, Partington, Manchester, Greater Manchester M31 4RS	31/10/2022	71	760	£181,995	£2,563	£239	New Build - Semidetached
17, Lapwing Close, Partington, Manchester, Greater Manchester M31 4RS	28/10/2022	71	760	£181,995	£2,563	£239	New Build - Semidetached
15, Lapwing Close, Partington, Manchester, Greater Manchester M31 4RS	28/10/2022	71	760	£181,995	£2,563	£239	New Build - Semidetached

14, Lapwing Close, Partington, Manchester, Greater Manchester M31 4RS	28/10/2022	71	760	£181,995	£2,563	£239	New Build - Semidetached
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TC would highlight there is a lack of sold comparable evidence for houses within the Carrington/Partington area with only one relevant comparable development located in the area. All new build comparable units assessed range between 760 sq ft to 1,124 sq ft and provide a value of £239 psf.

Comparable Asking Price Data:

TC have provided further asking price comparable evidence in order to better inform the value assumptions made for the Carrington/Partington area. The data is as follows:

Name	Beds	Floor Area m2	Floor Area Sq ft	Price per sq ft	Price per m2	Price per sq ft	Comments
Bowmont, Partington Countryside Scheme - Millbank Lock, Lock Lane	3	117	1,262	£399,995	£3,412	£309	Detached new build – garage included
New Ashbourne, Partington Countryside Scheme - Millbank Lock, Lock Lane	3	92	991	£324,995	£3,530	£320	Detached new build – garage included
Weaver, Partington Countryside Scheme - Millbank Lock, Lock Lane	3	79	850	£259,995	£3,292	£298	Semidetached new build
Irwell, Partington Countryside Scheme - Millbank Lock, Lock Lane	2	62	662	£219,995	£3,577	£324	Semidetached new build

Again, there appear to be a lack of comparable evidence within the area in relation to new build developments currently being marketed. The most relevant comparable development was the Partington Countryside Scheme, Millbank. Consequently, the comparable data shows an average value of circa £316 psf which is significantly higher than the achieved new build values in the location.

TC's Commentary:

From review of the comparable data, there are limited new build estate housing developments in the Carrington/Partington area, with average values between £239 psf to £316 psf. The more recent asking price sales are significantly higher than the values recorded in 2022 which highlights a growth in the market over the 2023 period.

In terms of new build apartments, there appears to be little demand for this use with zero new build comparables.

7.6.3 Old Trafford

TC would highlight that all new build sold price data has been sourced from Land Registry from the period of September 2022 to present. The data is as follows:

Address	Date sold	Floor area m ²	Floor area sq ft	Sold price	Price per m ²	Price per sq ft
Flat 701, 1f, Spinners Way, Manchester, Greater Manchester M15 4UZ	08/09/2022	65	700	£346,000	£5,323	£495
Flat 104, 7, Spinners Way, Manchester, Greater Manchester M15 4UU	13/10/2022	64	689	£250,000	£3,906	£363
Apartment 308, Ariel Apartments, Ottinger Close, Salford, Greater Manchester M50 3AJ	09/12/2022	59	635	£224,400	£3,803	£353

Flat 124, 7, Spinners Way, Manchester, Greater Manchester M15 4UU	10/11/2022	56	603	£234,600	£4,189	£389
Flat 313, 7, Spinners Way, Manchester, Greater Manchester M15 4UU	26/10/2022	55	592	£245,000	£4,455	£414
202, Chester Road, Manchester, Greater Manchester M15 4JE	30/09/2022	41	441	£175,000	£4,268	£397
Flat 604, 1f, Spinners Way, Manchester, Greater Manchester M15 4UZ	20/09/2022	40	431	£227,500	£5,688	£528
Flat 701, 1f, Spinners Way, Manchester, Greater Manchester M15 4UZ	08/09/2022	65	700	£346,000	£5,323	£495

TC have assessed sold flats within Old Trafford which is the most common house type within the area. There are a range of values shown within the comparable data with more expensive units, such as Spinners Way, located closer to Manchester City Centre. The unit sizes range between 431 sq ft 700 sq ft providing an average value of £420 psf.

TC have also had access to the achieved new build sales of the new Trafford Plaza development (data not currently on Land Registry). The average achieved price was circa. £372psf with units reserved in 2021 to 2022.

Comparable Asking Price Data:

TC have provided further asking price comparable evidence in order to better inform the value assumptions made for the Old Trafford area. The data is as follows:

Address	Beds	Floor area m ²	Floor area sq ft	Price	Price per m ²	Price per sq ft
Talbot Rd	3	85	915	£399,995	£4,705.82	£437.18
Talbot Rd	2	75	807	£350,000	£4,666.67	£433.54
Talbot Rd	2	73	786	£325,000	£4,452.05	£413.61
Talbot Rd	2	70	753	£300,000	£4,285.71	£398.15
Talbot Rd	2	70	753	£299,995	£4,285.64	£398.15
Talbot Rd	2	63	678	£275,000	£4,365.08	£405.53
Talbot Rd	2	57	614	£250,000	£4,385.96	£407.47
Talbot Rd	2	55	592	£240,000	£4,363.64	£405.39
Talbot Rd	1	51	549	£230,000	£4,509.80	£418.97
Talbot Rd	1	48	520	£220,000	£4,551.10	£422.81
Talbot Rd	1	44	471	£210,000	£4,794.52	£445.42
Talbot Rd	1	43	457	£200,000	£4,705.88	£437.19
Talbot Rd	1	43	457	£199,995	£4,705.76	£437.18
Talbot Rd	1	40	425	£175,000	£4,430.38	£411.59
Talbot Rd Conversion	1	42	453	£182,000	£4,333.33	£401.77
Talbot Rd Conversion	1	45	480	£191,500	£4,255.56	£398.96

The average asking price for the apartments in Old Trafford is £417psf. The Old Trafford market is strong and has seen substantial growth over the last 5 years.

TC's Commentary:

Old Trafford area has had significant regeneration since the adoption of the Core Strategy (2012), with values higher than that of the moderate market locations. TC's analysis of the apartment sale values in Old Trafford shows that sale values within the area are influenced by the proximity to Manchester City Centre. The comparable evidence assessed provides an average achieved sale value of £420 psf which is greatly influenced by the development Spinners Way causing an inflation in value. This average price is further supported by asking price comparable evidence.

7.6.4 Hot Market Location

TC would highlight that all new build sold price data has been sourced from Land Registry from the period of November 2022 to present. The data is as follows:

Address	Date sold	Floor area m ²	Floor area sq ft	Sold price	Price per m ²	Price per sq ft
Apartment 22, Ashley House, 30, Ashley Road, Altrincham, Greater Manchester WA14 2YL	09/12/2022	41	441	£224,950	£5,487	£510
Apartment 5, Ashley House, 30, Ashley Road, Altrincham, Greater Manchester WA14 2YL	04/11/2022	45	484	£224,950	£4,999	£464
Apartment 12, Ashley House, 30, Ashley Road, Altrincham, Greater Manchester WA14 2YL	04/11/2022	41	441	£219,950	£5,365	£498

The average value of the above comparables is circa. £490psf for apartments.

TC have also had access to the achieved new build sales of the new Regent Road development (data not currently on Land Registry). The average achieved price was circa. £495psf for the apartments with units reserved in 2021 to 2022.

Comparable Asking Price Data:

There appears to be a lack of new build comparable house sale data listed on such sources as Land Registry. Therefore, TC have provided further asking price comparable evidence in order to better inform the value assumptions made for the hot market area. The data is as follows:

Houses

Address	Beds	Floor area m ²	Floor area sq ft	Price	Price per m ²	Price per sq ft	Comments
Oldfield Road, Altrincham, WA14 4BJ	5	207	2,233	£1,300,000	£6,267	£582	New Build Detached House
Oldfield Road, Altrincham, WA14 4BJ	5	205	2,203	£1,150,000	£5,619	£522	New Build Detached House

Apartments

Address	Floor area m ²	Floor area sq ft	Asking price	Price per sq ft	Comments
Wharf Rd, Timperley, WA14 1AP	61	659	£292,500	£443.85	2nd floor with parking, Juliet balcony
Wharf Rd, Timperley, WA14 1AP	46	491	£217,950	£443.89	3rd floor with parking, Juliet balcony
Wharf Rd, Timperley, WA14 1AP	68	730	£280,000	£383.56	4th floor with parking, Juliet balcony
Wharf Rd, Timperley, WA14 1AP	61	659	£292,500	£443.85	2nd floor with parking, Juliet balcony
The Downs Quarter, The Blok, Altrincham	84	903	£490,000	£543	parking space extra at £10k per space
The Downs Quarter, The Blok, Altrincham	69	738	£400,000	£542	parking space extra at £10k per space

The Downs Quarter, The Blok, Altrincham	64	689	£380,000	£552	parking space extra at £10k per space
The Downs Quarter, The Blok, Altrincham	60	648	£380,000	£586	parking space extra at £10k per space
The Downs Quarter, The Blok, Altrincham	51	550	£290,000	£527	parking space extra at £10k per space
The Downs Quarter, The Blok, Altrincham	47	504	£275,000	£546	parking space extra at £10k per space

For houses in the hot market location, achievable values are in excess of £500psf.

In terms of apartments, in Altrincham and higher value areas, values are again in excess of £500psf. However, in the lowest value area in the hot market location, values are around £443psf.

TC's Commentary:

The hot market location achieves very strong sale values which in most areas are well in excess of £500psf. It should however be noted, that the fringes of the hot market location do achieve lower values, with apartment scheme in Timperley achieving values just shy of £450psf.

7.6.5 Moderate Market Location

Comparable Sold Evidence:

TC would highlight that all new build sold price data has been sourced from Land Registry from the period of November 2022 to present. The data is as follows:

Address	Date sold	Floor area m ²	Floor area sq ft	Price £	Price per m ²	Price per sq ft	Comments
Apartment 34, 1, Park Avenue, Sale, Greater Manchester M33 6AH	08/12/2022	133	1,432	£380,000	2,857	£265	New build flat

Apartment 35, 1, Park Avenue, Sale, Greater Manchester M33 6AH	22/12/2022	117	1,259	£370,000	3,162	£294	New build flat
Apartment 4, Windsor Apartments, 7, Crossford Court, Sale, Greater Manchester M33 7BZ	03/10/2022	60	646	£215,000	£3,583	£333	New build flat
Apartment 12, Windsor Apartments, 7, Crossford Court, Sale, Greater Manchester M33 7BZ	18/11/2022	64	689	£236,000	3,688	£343	New build flat

In reference to the apartment schemes assessed the comparable evidence shows a range in values of between £265 psf to £342 psf. The average value psf for comparable apartments within the area equates to £309 psf. However, two of the comparables consist of significantly large units which reduce the sale value on a £ per sq ft level. The average value of the normal sized apartments is £339psf. These comparable are over a year old.

Comparable Asking Price Data:

TC highlight there is a lack of sold comparable evidence for houses and apartments when assessing the land registry data obtained. TC have provided further asking price comparable evidence in order to better inform the value assumptions made for moderation market location. The data is as follows:

Address	Floor area m ²	Floor area sq ft	Asking price	Price per sq ft	Comments
Yew Tree Drive, Sale	173	1,862	£875,000	£458	New Build Detached house
Marsland Road, Sale, Greater Manchester, M33	178.2	1,918	£850,000	£432	New Build Detached house

Westbourne Park, Urmston, Manchester, M41	166	1,787	£650,000	£355	New Build Detached house
Lowry, Varsity Quarter, Sale Rd, Northenden, Manchester, Miller Homes	118	1,270	£529,995	£407	New build detached integral garage
Winterson. Varsity Quarter, Sale Rd, Northenden, Manchester, Miller Homes	110	1,184	£479,995	£395	New build detached integral garage
Joule, Varsity Quarter, Sale Rd, Northenden, Manchester, Miller Homes	108	1,158	£434,995	£366	New build detached
Joule, Varsity Quarter, Sale Rd, Northenden, Manchester, Miller Homes	108	1,158	£429,995	£362	New build detached
Burgess, Varsity Quarter, Sale Rd, Northenden, Manchester, Miller Homes	119	1,280	£426,995	£325	New build semi detached 3 storey
Burnett, Varsity Quarter, Sale Rd, Northenden, Manchester, Miller Homes	110	1,181	£406,995	£336	New build semi detached 3 storey
Burnett, Varsity Quarter, Sale Rd, Northenden, Manchester, Miller Homes	110	1,181	£406,995	£336	New build semi detached 3 storey
Turing, Varsity Quarter, Sale Rd, Northenden, Manchester, Miller Homes	87	940	£379,995	£394	New build semi detached

On review of the above asking price data, it is clear that house prices within the area achieve high values. The average value of the comparables assessed equates to £379 psf for houses.

TC's Commentary:

When assessing the comparable data, it appears the moderate market location achieves lower values than Old Trafford for apartments, with the average value estimated at around £350psf. However, for houses, the average £ per sq ft level is higher, with the average value around £379psf.

7.7 Gross Development Value

Based on the most relevant comparable evidence analysed in section 7.6, TC estimated the market values for each unit.

7.7.1 Affordable Housing Values

In terms of the affordable houses values, TC have adopted a percentage of Open Market Value to each tenure based on standard rates applied in Trafford during viability assessments. The affordable values are as follows:

- First Homes (70% OMV)
- Shared Ownership (70% OMV)
- Affordable Rent (50% OMV)

7.7.2 Partington/Carrington

The table below outlines the estimated GDV for the Partington/Carrington typologies:

Estate Housing (30 units):

Type	Sq ft	Units	Total Sq ft	Unit £	£/ sq ft	Total £
2 bed SO	753	1	753	£145,045	£193	£145,045
2 bed AR	753	2	1,507	£103,604	£138	£207,207
2 bed	753	6	4,521	£207,207	£275	£1,243,242
3 bed FH	904	2	1,808	£174,054	£193	£348,108
3 bed	904	8	7,233	£248,648	£275	£1,989,187
3 bed	1,001	5	5,005	£275,289	£275	£1,376,447
4 bed	1,141	6	6,846	£313,771	£275	£1,882,624
Total		30	27,674		£260	£7,191,859

The assessment of market value is based on a conservative assumption £275psf which is lower than the current asking price comparables which are in excess of £300psf.

Estate Housing (100 units):

Type	Sq ft	Units	Total Sq ft	Unit £	£/ sq ft	Total £
2 bed SO	850	5	4,252	£163,694	£193	£818,468
2 bed AR	850	6	5,102	£116,924	£138	£701,544
2 bed	850	19	16,157	£233,848	£275	£4,443,110
3 bed FH	904	4	3,617	£174,054	£193	£696,216
3 bed	904	11	9,946	£248,648	£275	£2,735,132
3 bed	1,001	35	35,037	£275,289	£275	£9,635,126
4 bed	1,238	20	24,757	£340,412	£275	£6,808,230
Total		100	98,867		£261	£25,837,825

The assessment of market value is based on a conservative assumption £275psf which is lower than the current asking price comparables which are in excess of £300psf.

3-5 Storey Apartments (30 units)

Type	Sq ft	Units	Total Sq ft	Unit £	£/ sq ft	Total £
1 bed SO	538	1	538	£94,185	£175	£94,185
1 bed AR	538	2	1,076	£67,275	£125	£134,550
1 bed	538	9	4,844	£134,550	£250	£1,210,950
2 bed FH	657	2	1,313	£114,906	£175	£229,811
2 bed	657	6	3,940	£164,151	£250	£984,906
2 bed	753	7	5,274	£188,370	£250	£1,318,590
3 bed	926	2	1,851	£212,912	£230	£425,824
3 bed	1,023	1	1,023	£235,193	£230	£235,193
Total		30	19,860		£233	£4,634,010

Due to the lack of apartment comparables, TC have estimated the new build apartment market value based on a reduction to the estate housing values.

7.7.3 Old Trafford

3-5 Storey Apartments (30 units):

Type	Sq ft	Units	Total Sq ft	Unit £	£/ sq ft	Total £
1 bed SO	538	3	1,615	£146,929	£273	£440,786
1 bed AR	538	3	1,615	£104,949	£195	£314,847
1 bed	538	6	3,229	£209,898	£390	£1,259,388
2 bed FH	657	2	1,313	£176,955	£270	£353,910
2 bed	657	6	3,940	£252,793	£385	£1,516,755
2 bed	753	7	5,274	£286,322	£380	£2,004,257
3 bed	926	2	1,851	£342,510	£370	£685,021
3 bed	1,023	1	1,023	£378,355	£370	£378,355
Total		30	19,860		£350	£6,953,318

The apartment market values for the 3-5 storey apartments have been assumed at a lower level than the comparable evidence to allow for a more conservative assumption and take into consideration that floor height premium do not apply at the same level for buildings of this height.

TC have seen in Old Trafford car parking spaces values attracting a price of around £20,000 per unit. The total value of the assumed 30 car parking spaces (small schemes usually provided 100% parking) is £600,000.

3-5 Storey Apartments (100 units):

Type	Sq ft	Units	Total Sq ft	Unit £	£/ sq ft	Total £
1 bed SO	538	9	4,844	£146,929	£273	£1,322,357
1 bed AR	538	9	4,844	£104,949	£195	£944,541
1 bed	538	22	11,840	£209,898	£390	£4,617,756
2 bed FH	657	7	4,596	£176,955	£270	£1,238,683
2 bed	657	18	11,819	£252,793	£385	£4,550,266
2 bed	753	25	18,837	£286,322	£380	£7,158,060
3 bed	926	5	4,629	£342,510	£370	£1,712,552
3 bed	1,023	5	5,113	£378,355	£370	£1,891,773
Total		100	66,522		£352	£23,435,989

The apartment market values for the 3-5 storey apartments have been assumed at a lower level than the comparable evidence to allow for a more conservative assumption and take into consideration that floor height premium do not apply at the same level for buildings of this height.

TC have seen in Old Trafford car parking spaces values attracting a price of around £20,000 per unit. The total value of the assumed 20 car parking spaces (minimum number of spaces required by planning) is £400,000.

6+ Storey Apartments (100 units):

Type	Sq ft	Units	Total Sq ft	Unit £	£/ sq ft	Total £
1 bed SO	538	9	4,844	£154,463	£287.00	£1,390,171
1 bed AR	538	9	4,844	£110,331	£205.00	£992,979
1 bed	538	22	11,840	£220,662	£410.00	£4,854,564
2 bed FH	657	7	4,596	£186,147	£283.50	£1,303,031
2 bed	657	18	11,819	£265,925	£405.00	£4,786,643
2 bed	753	25	18,837	£301,392	£400.00	£7,534,800
3 bed	926	5	4,629	£356,396	£385.00	£1,781,980
3 bed	1,023	5	5,113	£393,693	£385.00	£1,968,467
Total		100	66,522		£370.00	£24,612,634

The apartment market values for the 6+ storey apartments have been assumed at a lower level than the comparable evidence in order to allow for a more conservative assumption. The assessment of value allows for floor height premiums for buildings of this height.

TC have seen in Old Trafford car parking spaces values attracting a price of around £20,000 per unit. The total value of the assumed 20 car parking spaces (minimum number of spaces required by planning) is £400,000.

7.7.4 Hot Market Location

Estate Housing (30 units):

Type	Sq ft	Units	Total Sq ft	Unit £	£/ sq ft	Total £
2 bed SO	850	1	850	£297,625	£350	£297,625
2 bed AR	850	5	4,252	£212,589	£250	£1,062,945
2 bed	850	0	0	£425,178	£500	£0
3 bed FH	1,001	4	4,004	£350,368	£350	£1,401,473
3 bed	1,001	4	4,004	£350,368	£350	£1,401,473
3 bed	1,001	7	7,007	£500,526	£500	£3,503,682
4 bed	1,238	9	11,141	£618,930	£500	£5,570,370
Total		30	31,259		£423	£13,237,567

The assessment of market value is based on a conservative assumption £500psf which is lower than the comparable evidence which is in excess of £500psf.

Estate Housing (100 units):

Type	Sq ft	Units	Total Sq ft	Unit £	£/ sq ft	Total £
2 bed SO	850	13	11,055	£297,625	£350	£3,869,120
2 bed AR	850	17	14,456	£212,589	£250	£3,614,013
2 bed	850	0	0	£425,178	£500	£0
3 bed FH	904	12	10,850	£316,462	£350	£3,797,539
3 bed	904	3	2,713	£316,462	£350	£949,385
3 bed	1,001	35	35,037	£500,526	£500	£17,518,410
4 bed	1,238	20	24,757	£618,930	£500	£12,378,600
Total		100	98,867		426	£42,127,067

The assessment of market value is based on a conservative assumption £500psf which is lower than the comparable evidence which is in excess of £500psf.

3-5 Storey Apartments (30 units):

Type	Sq ft	Units	Total Sq ft	Unit £	£/ sq ft	Total £
1 bed SO	538	5	2,691	£169,533	£315	£847,665
1 bed AR	538	5	2,691	£121,095	£225	£605,475
1 bed	538	2	1,076	£242,190	£450	£484,380
2 bed FH	657	4	2,626	£206,830	£315	£827,321
2 bed	657	4	2,626	£295,472	£450	£1,181,887
2 bed	753	7	5,274	£339,066	£450	£2,373,462
3 bed	926	2	1,851	£393,424	£425	£786,848
3 bed	1,023	1	1,023	£434,597	£425	£434,597
Total		30	19,860		£380	£7,541,635

The apartment market values have been assumed at the lowest level seen in the hot market location and based on the Timperley values. In Altrincham and Hale, apartment values are in excess of £500psf.

For the small 3-5 storey apartment scheme in the hot market location, TC have assumed the sale value price allows for a car parking space to all units.

3-5 Storey Apartments (100 units):

Type	Sq ft	Units	Total Sq ft	Unit £	£/ sq ft	Total £
1 bed SO	538	16	8,611	£169,533	£315.00	£2,712,528
1 bed AR	538	17	9,149	£121,095	£225.00	£2,058,615
1 bed	538	7	3,767	£242,190	£450.00	£1,695,330
2 bed FH	657	12	7,879	£206,830	£315.00	£2,481,963
2 bed	657	13	8,536	£295,472	£450.00	£3,841,133
2 bed	753	25	18,837	£339,066	£450.00	£8,476,650
3 bed	926	5	4,629	£393,424	£425.00	£1,967,121
3 bed	1,023	5	5,113	£434,597	£425.00	£2,172,983
Total		100	66,522		£381.93	£25,406,323

The apartment market values have been assumed at the lowest level seen in the hot market location and based on the Timperley values. In Altrincham and Hale, apartment values are in excess of £500psf.

For the large 3-5 storey apartment scheme it has been assumed only 20 car parking spaces will be provided (minimum number of spaces required by planning). Due the scarcity of space and based on comparables, the value per parking space has been assumed at £10,000 per unit which equates to a total value of £200,000.

The assumption around car parking is based on a town centre location site and conservative assumption around car parking spaces. It is anticipated that town centre sites in this location would deliver more car parking spaces which would increase the GDV. Sites that are not located in the town centre would most likely deliver 100% car parking spaces and again potentially increase the GDV.

7.7.5 Moderate Market Location

Estate Housing (30 units):

Type	Sq ft	Units	Total Sq ft	Unit £	£/ sq ft	Total £
2 bed SO	753	3	2,260	£197,789	£263	£593,366
2 bed AR	753	3	2,260	£141,278	£188	£423,833
2 bed	753	3	2,260	£282,555	£375	£847,665
3 bed FH	904	2	1,808	£237,346	£263	£474,692
3 bed	904	8	7,233	£339,066	£375	£2,712,528
3 bed	1,001	5	5,005	£375,395	£375	£1,876,973
4 bed	1,141	6	6,846	£427,869	£375	£2,567,214
Total		30	27,674		£343	£9,496,270

The assessment of market value is based on a conservative assumption £375psf which is lower than the some of the comparable evidence which is in excess of £400psf.

3-5 Storey Apartments (30 units):

Type	Sq ft	Units	Total Sq ft	Unit £	£/ sq ft	Total £
1 bed SO	538	3	1,615	£131,859	£245	£395,577
1 bed AR	538	3	1,615	£94,185	£175	£282,555
1 bed	538	6	3,229	£188,370	£350	£1,130,220
2 bed FH	657	2	1,313	£160,868	£245	£321,736
2 bed	657	6	3,940	£229,811	£350	£1,378,868
2 bed	753	7	5,274	£263,718	£350	£1,846,026
3 bed	926	2	1,851	£305,482	£330	£610,965
3 bed	1,023	1	1,023	£337,451	£330	£337,451
Total		30	19,860			£6,303,398

The apartment market values have been assumed at the lowest level seen in the moderate market location and based on the Urmston values. In Sale, apartment values are higher.

TC have seen car parking space values range from £10,000 to £20,000 in the moderate market location. TC have therefore assumed the total value of the 30 car parking spaces (small schemes usually provided 100% parking) at £300,000.

Apartments (100 units):

Type	Sq ft	Units	Total Sq ft	Unit £	£/ sq ft	Total £
1 bed SO	538	9	4,844	£131,859.00	£245.00	£1,186,731.00
1 bed AR	538	9	4,844	£94,185.00	£175.00	£847,665.00
1 bed	538	22	11,840	£188,370.00	£350.00	£4,144,140.00
2 bed FH	657	7	4,596	£160,867.98	£245.00	£1,126,075.86
2 bed	657	18	11,819	£229,811.40	£350.00	£4,136,605.20
2 bed	753	25	18,837	£263,718.00	£350.00	£6,592,950.00
3 bed	926	5	4,629	£305,482.32	£330.00	£1,527,411.60
3 bed	1,023	5	5,113	£337,451.40	£330.00	£1,687,257.00
Total		100	66,522			£21,248,836

The apartment market values have been assumed at the lowest level seen in the moderate market location and based on the Urmston values. In Sale, apartment values are higher.

For the large 3-5 storey apartment scheme it has been assumed only 20 car parking spaces will be provided (minimum number of spaces required by planning). Due the scarcity of space and based on

similar schemes in this location, the value per parking space has been assumed at £20,000 per unit which equates to a total value of £400,000.

The assumption around car parking is based on a town centre location site and conservative assumption around car parking spaces. It is anticipated that town centre sites in this location would deliver more car parking spaces which would increase the GDV. Sites that are not located in the town centre would most likely deliver 100% car parking spaces and again potentially increase the GDV.

7.7.6 Gross Development Value Summary

The table below outlines all of the policy compliant GDVs assumed for the typologies:

Location	Type	Units	GDV
Hot	Estate Houses	30	£13,237,567
Hot	Estate Houses	100	£42,127,067
Hot	Apartments 3-5 Storeys	30	£13,237,567
Hot	Apartments 3-5 Storeys	100	£25,606,324
Moderate	Estate Houses	30	£9,496,270
Moderate	Apartments 3-5 Storeys	30	£6,603,398
Moderate	Apartments 3-5 Storeys	100	£21,648,835
Cold (Old Trafford)	Apartments 3-5 Storeys	30	£7,553,319
Cold (Old Trafford)	Apartments 3-5 Storeys	100	£23,835,988
Cold (Old Trafford)	Apartments 6+ Storeys	100	£25,012,635
Cold (Partington/Carrington)	Estate Houses	30	£7,191,859
Cold (Partington/Carrington)	Estate Houses	100	£25,837,825
Cold (Partington/Carrington)	Apartments 3-5 Storeys	30	£4,634,010

The above assessment of GDV is based on a conservative level with many areas achieving values in excess of what has been assumed. This allows the appraisals to include a viability buffer.

8. Appraisal Outputs

Argus Developer has been used to undertake appraisals for each of the typologies, this software is used throughout the property industry and is accepted as a standard model for preparing viability appraisals.

All appraisals are based on a policy compliant scheme with full planning obligations including affordable housing and BNG. All appraisals also adopted CIL chargers as per Trafford Council's adopted CIL Charging Schedule (2014).

The appraisals are based on December 2023 costs and values. No growth or cost inflation has been included.

The output of the appraisal is the Residual Land Value (RLV), after all costs and profit margins have been deducted from the Gross Development Value (Total Revenue). This output RLV is then compared against the policy compliant BLVs in order to understand whether a scheme is viable.

The objective of the appraisal assessment is to understand how the new Design Code affects the viability of residential development in Trafford. This report has tested the following Design Codes which TC and Trafford Council believe would affect the viability of schemes. The table below outlines each Design Code tested and the cost uplift (if any associated):

Design Code	Cost Uplift
NDSS	No cost uplift
M4(2) Compliance	£1,650 per unit for all schemes
Street Trees and Bigger Plants / Trees on Planting	£100 per unit for apartment schemes £150 per unit for estate housing schemes
Additional Landscaping Area	£600 per unit for estate housing schemes
Brick Walls to Garden Boundaries	£300 per unit for estate housing schemes
Bay Windows	£2 per sq ft for estate housing schemes
Detailing & Articulation	£0.70 per sq ft for all schemes
Deep Window Reveals for Apartments (6+ storey only)	£0.48 per sq ft for apartment schemes
Requirement for Aluminium Windows for Apartments	£1.08 per sq ft for apartment schemes

TC would note that some elements above may likely already be accounted for in the BCIS cost figures used to assess base build costs. For example, detailing & articulation, deep window reveals and aluminium windows for apartments, are most likely already accounted for in the BCIS base build cost as many residential developments already include these design requirements. TC's assessment of these elements of the Design Code can therefore be seen as conservative and this has been considered in TC's concluding analysis of the Design Code.

Other elements of the Design Code such as allowing the required space for parking and landscaping areas (mainly estate housing schemes) have been taken into consideration when estimating scheme densities and mixes.

The table below outlines the appraisals RLV outputs compared to the estimated BLVs for each typology assessment:

Location	Type	Units	Gross Area ha	Net Area ha	RLV	RLV per Net Ha	BLV per net Ha	Viability Surplus per HA	per	Viable
Hot	Estate Houses	30	1.20	0.96	£4,829,318	£5,030,540	£400,000	£4,630,540		Yes - also viable with brownfield BLV
Hot	Estate Houses	100	4.00	2.40	£15,641,037	£6,517,099	£400,000	£6,117,099		Yes - also viable with brownfield BLV
Hot	Apartments 3-5 Storeys	30	0.30	0.30	£1,037,569	£3,458,563	£1,092,500	£2,366,063		Yes
Hot	Apartments 3-5 Storeys	100	0.67	0.67	£3,711,193	£5,566,790	£1,092,500	£4,474,290		Yes
Moderate	Estate Houses	30	0.86	0.69	£2,666,302	£3,888,357	£400,000	£3,488,357		Yes - also viable with brownfield BLV
Moderate	Apartments 3-5 Storeys	30	0.30	0.30	£345,534	£1,151,780	£1,092,500	£59,280		Yes
Moderate	Apartments 3-5 Storeys	100	0.67	0.67	£882,058	£1,323,087	£1,092,500	£230,587		Yes
Cold (Old Trafford)	Apartments 3-5 Storeys	30	0.30	0.30	£842,890	£2,809,633	£1,092,500	£1,717,133		Yes
Cold (Old Trafford)	Apartments 3-5 Storeys	100	0.67	0.67	£1,790,100	£2,685,150	£1,092,500	£1,592,650		Yes
Cold (Old Trafford)	Apartments 6+ Storeys	100	0.59	0.59	£1,359,052	£2,310,388	£1,092,500	£1,217,888		Yes
Cold (Partington/Carrington)	Estate Houses	30	0.86	0.69	£1,005,036	£1,465,678	£400,000	£1,065,678		Yes - also viable with brownfield BLV
Cold (Partington/Carrington)	Estate Houses	100	4.00	2.40	£4,582,709	£1,909,462	£400,000	£1,509,462		Yes - also viable with brownfield BLV

Cold (Partington/Carrington)	Apartments 3-5 Storeys	30	0.30	0.30	-£1,216,027	-£4,053,423	£1,092,500	-£5,145,923	No - 100% market apartments with zero design code uplift costs and S106 contributions is not viable in this area
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From the detailed appraisal analysis, all (apart from one) typologies are viable with the full Design Codes and policy compliance. The only typology that is not viable is the 30 dwelling 3-5 storey apartment typology in Partington/Carrington.

Due to the 3-5 storey apartment typology in the cold market Partington/Carrington location not being viable, further sensitivity testing was undertaken. This analysis found that 3-5 storey apartment schemes in this location are not viable on a 100% market housing basis with zero Design Code uplifts and zero planning obligations. TC would not expect traditional 3-5 storey apartment developments in this location due to viability issues.

In Partington/Carrington, TC would usually only expect apartments delivered through mixed estate housing led schemes where the apartments are designed as cottage/town house style buildings which have a similar cost to estate houses. Apartments delivered on this basis have a similar cost as estate houses and a more efficient gross to net ratio than traditional apartments. As a result of this, cottage/town house style apartments would be viable with the full Design Codes. Traditional 3-5 apartment schemes would not be optimal development in this location and is not deliverable/sustainable.

TC would add that it is very likely that BCIS base build cost utilised in this assessment includes for costs for basic detailing and articulation such as window heads and sills, string courses including eaves details, window reveals up to the length of a full brick, and aluminium windows. For example, when assessing sale value comparables, the majority of apartment scheme windows are aluminium. It is also noted that developers have always been able to deliver detailing and articulation without having to use more expensive specialist bricks, for example for example through the use of different brick bonds and patterns, textured detailing, corbelling detail, and the more basic specialist bricks.

The estate housing schemes were assessed on a greenfield typology basis. TC have assessed the RLV outputs against the higher brownfield BLV for the estate housing typology assessments and the conclusion from this analysis is that all estate housing typologies are viable on a brownfield land basis (this assessment did not take into consideration the reduction in BNG costs for brownfield sites which would improve viability further).

The majority of the typology assessments output a significant per ha viability surplus. This means that the majority of typologies in Trafford should be supported by a reasonable viability buffer if the Design Codes were adopted. The only typology which Trafford Council should monitor in terms of viability and Design Codes is the small 3-5 storey apartments in the cold market Partington/Carrington location (though traditional 3-5 storey apartment developments in Partington/Carrington would not be viewed as deliverable or sustainable development, with the expectation of apartments delivered through mixed use schemes as cottage/town house style).

TC have undertaken further sensitivity assessment of all the appraisals (see **Appendix 3**) based on increasing and decreasing values by 2.5% and increasing and decreasing standard build costs by 2.5%. Overall, most of the schemes have a significant viability buffer and therefore the Design Code should be viable over the lifetime of the policy.

All typologies assessment adopted a low to medium level of abnormal costs which has been taken into consideration in the BLV's premium. Should schemes have higher abnormal costs than what has been assumed, then the BLV's premium would need to reflect this high cost and be reduced.

Finally, TC would highlight that the brownfield EUV is based on a cleared brownfield site. Brownfield land is by its nature heterogeneous and different land will have different EUVs. Some sites for

development in Trafford may have higher or lower EUVs when compared to that assumed in this report. However, TC would add that when assessing the BLV, it has been assumed that the EUV of the land, irrespective of the buildings on the site, will be less than the value of land should planning permission be granted for change of use. The reason for this core principle is that should sites come forward where the existing use is greater than the value established through change of use then the development by its nature will be unviable.

It is therefore considered that the RLV needs to be greater than EUV for a site to be considered deliverable in the short term (0-5 years). Sites that are developable (6-15 years) become more financially viable as a result of changing market dynamics and buildings obsolesce amongst other factors that may lead to the value of one land use growing and the other diminishing (see NPPF para. 69).

This is a similar principle that was outlined in the recent London Borough of Lambeth: Local Plan and Community Infrastructure Levy Viability Review undertaken by BNP Paribas in 2019.

9. Conclusion

TC have been instructed on behalf of Trafford Council to undertake a viability review of the effects of Trafford Council’s new Design Code on residential development in Trafford. This report tests the ability of residential development in Trafford to viably comply with the new Design Code.

The report accounts for the impact of Trafford’s current planning obligations, and the assessment has been produced in line with the requirements of the National Planning Policy Framework (NPPF, 2023), the Planning Practice Guidance (PPG) on Viability, the Local Housing Delivery Group guidance ‘*Viability Testing Local Plans: Advice for planning practitioners*’ (2012) and RICS Guidance Note: Assessing viability in planning under the National Planning Policy Framework 2019 (2021).

From analysis of Trafford’s Design Code, TC believe the following codes will have an impact on viability, especially in relation to cost increases when compared to standard development:

Design Code	Cost Uplift
NDSS	No cost uplift
M4(2) Compliance	£1,650 per unit for all schemes
Street Trees and Bigger Plants / Trees on Planting	£100 per unit for apartment schemes £150 per unit for estate housing schemes
Additional Landscaping Area	£600 per unit for estate housing schemes
Brick Walls to Garden Boundaries	£300 per unit for estate housing schemes
Bay Windows	£2 per sq ft for estate housing schemes
Detailing & Articulation	£0.70 per sq ft for all schemes
Deep Window Reveals for Apartments (6+ storey only)	£0.48 per sq ft for apartment schemes
Requirement for Aluminium Windows for Apartments	£1.08 per sq ft for apartment schemes

TC would note that some elements above may likely already be accounted for in the BCIS cost figures used to assess base build costs. For example, detailing & articulation, deep window reveals and aluminium windows for apartments, are most likely already accounted for in the BCIS base build cost as many residential developments already include these design requirements. TC’s assessment of these elements of the Design Code can therefore be seen as conservative and this has been considered in TC’s concluding analysis of the Design Code.

Other elements of the Design Code such as allowing the required space for parking and landscaping areas (mainly estate housing schemes) has been taken into consideration when estimating scheme densities and mixes.

TC have tested the above Design Code impacts on different development typologies across Trafford. TC have tested 13 development typologies. The typologies are based on different market locations (similar banding of locations as Trafford’s affordable housing policy) and different development types. The following typologies have been tested:

Location	Type	Units	Gross Area ha	Net Area ha
Hot	Estate Houses	30	1.20	0.96
Hot	Estate Houses	100	4.00	2.40
Hot	Apartments Storeys	3-5 30	0.30	0.30
Hot	Apartments Storeys	3-5 100	0.67	0.67
Moderate	Estate Houses	30	0.86	0.69
Moderate	Apartments Storeys	3-5 30	0.30	0.30
Moderate	Apartments Storeys	3-5 100	0.67	0.67
Cold (Old Trafford)	Apartments Storeys	3-5 30	0.30	0.30
Cold (Old Trafford)	Apartments Storeys	3-5 100	0.67	0.67
Cold (Old Trafford)	Apartments Storeys	6+ 100	0.59	0.59
Cold (Partington/Carrington)	Estate Houses	30	0.86	0.69
Cold (Partington/Carrington)	Estate Houses	100	4.00	2.40
Cold (Partington/Carrington)	Apartments Storeys	3-5 30	0.30	0.30

The findings of the detailed residual appraisal assessment of the Design Code have found that all typologies (apart from traditional 3-5 storey apartments in Partington/Carrington) are viable with the full Design Codes and policy compliance. This is shown in the results of the appraisal below:

Location	Type	Viability Surplus per HA	Viable
Hot	Estate Houses	£4,630,540	Yes - also viable with brownfield BLV
Hot	Estate Houses	£6,117,099	Yes - also viable with brownfield BLV
Hot	Apartments 3-5 Storeys	£2,366,063	Yes
Hot	Apartments 3-5 Storeys	£4,474,290	Yes
Moderate	Estate Houses	£3,488,357	Yes - also viable with brownfield BLV
Moderate	Apartments 3-5 Storeys	£59,280	Yes
Moderate	Apartments 3-5 Storeys	£230,587	Yes
Cold (Old Trafford)	Apartments 3-5 Storeys	£1,717,133	Yes
Cold (Old Trafford)	Apartments 3-5 Storeys	£1,592,650	Yes
Cold (Old Trafford)	Apartments 6+ Storeys	£1,217,888	Yes
Cold (Partington/Carrington)	Estate Houses	£1,065,678	Yes - also viable with brownfield BLV
Cold (Partington/Carrington)	Estate Houses	£1,509,462	Yes - also viable with brownfield BLV
Cold (Partington/Carrington)	Apartments 3-5 Storeys	-£5,145,923	No - 100% market apartments with zero design code uplift costs and S106 contributions is not viable in this area

The majority of the typology assessments output a significant per ha viability surplus. This means that the majority of typologies in Trafford should be supported by a reasonable viability buffer if the Design Codes were adopted. The only typology which Trafford Council should monitor in terms of viability and Design Codes is the small 3-5 storey apartments in the cold market Partington/Carrington location (though traditional 3-5 storey apartment developments in Partington/Carrington would not be viewed as deliverable or sustainable development, with the expectation of apartments delivered through mixed use schemes as cottage/town house style apartments).

In Partington/Carrington, TC would usually only expect apartments delivered through mixed estate housing led schemes where the apartments are designed as cottage/town house style buildings which have a similar cost to estate houses. Apartments delivered on this basis have a similar cost as estate houses and a more efficient gross to net ratio than traditional apartments. As a result of this, cottage/town house style apartments would be viable with the full Design Codes. Traditional 3-5 apartment schemes would not be optimal development in this location and is not deliverable/sustainable.

TC would add that it is very likely that BCIS base build cost utilised in this assessment includes for costs for basic detailing and articulation such as window heads and sills, string courses including eaves details, window reveals up to the length of a full brick, and aluminium windows. For example, when assessing sale value comparables, the majority of apartment scheme windows are aluminium. It is also noted that developers have always been able to deliver detailing and articulation without having to use more expensive specialist bricks, for example for example through the use of different brick bonds and patterns, textured detailing, corbelling detail, and the more basic specialist bricks.

TC would add that the assessment undertaken did not account for any increase in values attributable to the delivery of better designed homes and places as a result of more stringent Design Code requirements. The assessment is therefore conservative as it does not apply any Design Code premium that could be generated from higher quality development. Currently, there is limited data in relation to how Design Codes affect sale values, however, with Garden Villages across the country, high quality (and well designed) schemes have achieved a premium (circa. 15%) over standard new build development (see Knight Frank research Cost and Value for Building Better, Building Beautiful, 2020). Any design premium caused by the Design Code would therefore improve viability.

Overall, TC believe the new Trafford Design Code should be viable for the majority of developments across the Borough (incl. apartments cottage/town house tyle apartments in Partington/Carrington). For the small cases of schemes that are not viable, the PPG allows for the viability of these schemes to be tested at the decision-making stage on site-specific basis.