

# **Whole Plan Viability Assessment**

**Construction Cost Study** 

Newark & Sherwood District Council Gleeds Cost Management Limited NTQS1398

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### **DOCUMENT CONTROL**

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# Contents

## **Executive Summary**

1.0	Proj	ect Description	6
2.0	Basi	is of Cost Study	6
	2.1	Base Date	8
	2.2	Procurement	8
	2.3	Scope of Development Types	8
	2.4	Basis of Costs	8
	2.5	Assumptions/Clarifications	9
	2.6	Exclusions	10
3.0	Deta	niled Construction Cost Study	13

# **Executive Summary**

### 1. The Project

This Cost Study provides an estimate of construction costs over a range of development categories, to support a Whole Plan Viability Assessment.

### 2. Allowances

The Estimate includes on-cost allowances for the following:

- Consultants
- Building Regulations and Planning fees
- NHBC Insurance where applicable

### 3. Basis of Estimate

The basis of the Estimate is in Section 2 of this report.

### 4. Detailed Construction Cost Study

The detailed Cost Study is given in Section 3 of this report.

### 5. Risk Allowance

A Risk Allowance of 5% of construction cost is recommended

**Project Description** 

# 1.0 Project Description

NCS have been appointed by Newark and Sherwood District Council for the production of the Council's Whole Plan Viability Assessment, through to adoption.

Gleeds are acting as part of the NCS team, to provide indicative construction costs, over the range of development categories, to inform the Appraisal.

The range of development categories are as agreed with NCS.

# Basis of Cost Study

# 2.0 Basis of Cost Study

### 2.1 Base Date

Rates for Construction Costs in the Estimate have been priced at a Base Date of 1<sup>st</sup> quarter (January to March) 2024. Allowances must be made for inflation beyond this date dependent on the mid-point date of construction.

### 2.2 Procurement

The costs included in this Estimate assume that procurement is to be achieved on a single stage competitive tender basis, from a selected list of Contractors.

### 2.3 Scope of Development Types

The scope of development types within the various categories varies between categories, this is reflected within the range of construction values stated for a particular category.

For the purposes of undertaking the Viability Appraisal, average rates for construction have been given for each development category; the range of values have also been stated.

### 2.4 Basis of Costs

The following benchmarking data was used in the preparation of the estimate:

- 1. Analysis of construction costs over a range of projects within the Gleeds Research and Development Data Base.
- 2. Where insufficient data is available within any particular category cross-reference is also made to BCIS construction cost information.
- 3. The rates adopted in the study are based on research of local construction projects to the region, the costs associated with these and Gleeds own national database of construction costs by construction type. The report recognises that different types of construction company incur different levels of costs due to differences in buying power, economies of scale etc. The rates assume that substantial new residential development (House and Bungalows) will be undertaken primarily by regional and national house builders and the adopted rates reflect this. The adopted rates therefore tend to fall below median BCIS construction rates which cover building cost information from all types of construction company to individual builders, BCIS does not capture data from regional and national housebuilders. This is considered to be a more realistic approach than the adoption of median general rates, to reflect the mainstream new build residential development particularly since smaller schemes undertaken by smaller scale construction companies will enjoy exemption from zero carbon and affordable housing requirements.

All construction costs have been adjusted for Location Factor (Newark and Sherwood District Council).

Note: the cost allowances are based on current building regulations.

### 2.5 Assumptions/Clarifications

The following assumptions/clarifications have been made during the preparation of this Estimate:

- The costs included in this Estimate assume that competitive tenders will be obtained on a single stage competitive basis.
- There are no allowances in the Estimates for Works beyond the site boundary.
- All categories of development are assumed to be new build unless stated otherwise.
- It is assumed development takes place on green or brown field prepared sites, i.e. no allowance for demolition etc.
- All categories of development include an allowance for External Works inc drainage, internal access roads, utilities connections (but excluding new sub-stations), ancillary open space etc
- Site abnormal and facilitating works have been excluded and are shown separately.

### **Access Standards**

### Category 2

Costs in respect of meeting Category 2 Standards have been considered within the report.

Category 2 dwellings are in essence very similar to Lifetime Homes with a couple of minor enhancements such as step free access, a minimum stair width of 850mm and amendments to WC layouts to ensure no obstructed access.

The design solutions (And therefore cost) of meeting Category 2 standards will vary from site to site and will potentially range from relatively small on a good site with some innovative design to between 1% and 2% on a less favourable site which includes apartments. There is potentially a more significant impact on the cost of apartments due to the requirement for a lift but again this can be minimised through design, the accessible units may be allocated on the ground floor for example thus negating the need for a lift.

Some of the requirements impact on actual size of the dwelling, our costs are provided on a £/m² basis so any increase in dwelling size is automatically picked up within the rate.

For the purpose of the assessment we would recommend an uplift of 1% across the board (Except bungalows) on all residential costs be applied in order to meet Category 2 standards.

### Category 3 Adaptable

Costs in respect of meeting Category 3 Adaptable Standards have been considered within the report.

Category 3 dwellings are suitable or potentially suitable through adaptation, to be occupied by wheelchair users. Issues which need to be considered include wheelchair storage space, maximum inclines of ramps, provision of services for power assisted doors (Developments with communal entrances), room sizes, provision for a through floor lift including power, kitchen design, bedroom ceilings being capable of taking the load of a hoist, door entry system connected to main bedroom and lounge.

The design solutions (And cost) for meeting category 3 standards will also vary from site to site, some of the requirements will be dealt with by increasing the area of the dwellings, the cost of this will therefore be picked up in the GIFA used and will not affect the overall £/m².

There are some specific requirements that will directly impact on costs such as power for assisted doors, provision for through floor lifts, door entry systems, kitchen designs and ceiling loadings. For the purpose of this assessment we would recommend an uplift of 9% be applied in order to meet category 3 adaptable standards for houses, 6% for apartments and 2% for bungalows.

### Part L 2021

Part L 2021 proposes an interim reduction in carbon emissions for dwellings, paving the way for greater reductions and the Future Homes Standard. The initial changes to Part L target a 31% reduction in carbon emissions and how this is achieved will vary depending on the house type and the specific development.

As the methods used in achieving the reduction will vary, so will the cost of meeting the new standards, the general consensus in the industry is that the costs will range from £3,000 to £5,000 per residential property, this will also differ depending on the type of Client,

We are suggesting that a percentage uplift of 3% be applied to dwelling costs to capture the changes to Part L. As an example, for a typical house of say  $100m^2$  ( $100m^2$  @ £1,269/m² = £126,900) the uplift would be £3,807. For a typical low rise apartment of say  $60m^2$  ( $60m^2$  @ £1,862 = £111,720) the uplift would be £3,352. Utilising a percentage rather than an actual figure will naturally account for the differences in costs of say a volume housebuilder achieving the standards compared to a typical developer utilising a traditional main contracting procurement route.

### 2.6 Exclusions

The Order of Cost Study excludes any allowances for the following:

- Value Added Tax
- Finance Charges
- Unknown abnormal ground conditions including:
  - Ground stabilisation/retention
  - Dewatering
  - Obstructions
  - Contamination
  - Bombs, explosives and the like
  - Methane production
- Removal of asbestos
- Surveys and subsequent works required as a result including:
  - Asbestos; traffic impact assessment; existing buildings
  - Topographical; drainage/CCTV; archaeological
  - Subtronic
- Furniture, fittings and equipment

- Aftercare and maintenance
- Listed Building Consents
- Service diversions/upgrades generally
- Highways works outside the boundary of the site

Project number: NTQS1398/ Version: 1 / Issue date: 22/02/20244

3

**Detailed Construction Cost Study** 

### **Detailed Construction Cost Study** 3.0

Development Type, to achieve Breeam Excellent	Construction Cost (£/m²)		
Executive	Min	Max	Median
Residential, Bungalows	1,386	1,610	1,459
Additional cost for Cat 2 accessible dwellings			-
Additional cost for Cat 3 wheelchair adaptable			29
Additional cost for Part L 2021			44
Residential, 2-5 bed	1,205	1,400	1,269
Additional cost for Cat 2 accessible dwellings			13
Additional cost for Cat 3 wheelchair adaptable			114
Additional cost for Part L 2021			38
Low Rise Apartments	1,696	2,667	1,862
Additional cost for Cat 2 accessible dwellings			19
Additional cost for Cat 3 wheelchair adaptable			112
Additional cost for Part L 2021			56
High Rise Apartments	1,621	4,102	2,144
Additional cost for Cat 2 accessible dwellings			21
Additional cost for Cat 3 wheelchair adaptable			129
Additional cost for Part L 2021			64
Office to residential conversion	773	2,008	1,771
Care Homes	1,564	2,262	1,726

Extra Care (Sheltered Housing)	1,333	2,460	1,546
General Retail, shell finish	915	1,325	1,253
Food Retail supermarket, shell finish	1,066	1,756	1,426
Retail Refurbishment	697	1,183	835
Food Retail Refurbishment	810	1,598	955
Hotels, 2,000m² mid-range, 3* inc. F&Ftgs	1,875	2,395	1,947
Offices, Cat A fit-out	1,674	3,266	1,981*
Industrial, general shell finish	713	1,329	954
Institutional / Community D7 (museums, library, public halls, conference)	2,854	3,709	3,363
Leisure D5 (cinema, bowling alleys, shell)	1,189	1,340	1,264**
Agricultural shells	469	1,467	946
SUI Generis			
Vehicle Repairs	1,504	2,195	1,762
Vehicle Showrooms	1,803	2,664	1,988
Builders Yard	651	1,810	1,236

### Note:

- \* Offices, Cat A are based on speculative office development, of cost-efficient design
- \*\* Leisure D5 development is based on shell buildings (bowling alleys, cinemas and the like) and exclude tenant fit-out

### **On-costs**

Professional fees

Consultants (excluding legals) 7.25%Surveys etc 0.75% 8%

Planning / Building Regs

Statutory Fees 0.6%

NHBC / Premier warranty (applies only to Residential

and Other Residential) 0.5%

Contingency / Risk Allowance 5%

### Abnormal Site Development Costs, Newark and Sherwood District Council.

Budget Cost £/Hectare

Abnormal Costs, by their very nature, vary greatly between different sites.

Budget figures are given, for typical categories relevant to the study area.

The Budgets are expressed as costs per hectare of development site.

Archaeology 18,000

Typically, Archaeology is addressed by a recording / monitoring brief by a specialist, to satisfy planning conditions.

Intrusive archaeological investigations are exceptional and not allowed for in the budget cost.

### **Site Specific Access Works**

35,000

New road junction and S278 works; allowance for cycle path linking locally with existing

Major off-site highway works not allowed for.

### Site Specific Biodiversity Mitigation / Ecology

Allow for LVIA and Ecology surveys and mitigation and enhancement allowance.

35,000

### **Flood Defence Works**

Allowance for raising floor levels above flood level, on relevant sites

40,000

Budget £2,200 per unit x 35 units, apply to 1 in 3 sites.

### **Utilities, Gas, Electric**

Allowance for infrastructure upgrade

120,000

### **Land Contamination**

Heavily contaminated land is not considered, as remediation costs will be reflected In the land sales values 40,000

Allow for remediation/removal from site of isolated areas of spoil with elevated levels Of contamination

### **Ground Stability**

Allow for raft foundations to dwellings on 25% of sites

Budget £3,500 x 35 units x 25%

30,625