



VIABILITY IN PLANNING

Seminar for the Irish Planning Institute

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OUTLINE

- Viability in Planning
- Key Concepts
- Development Economics – The Basics
- Viability in
 - Development Plans
 - Master Plans – Clonburris SDZ Experience
 - Development schemes

VIABILITY IN PLANNING

- Assist in the formulation of policy
 - Part V thresholds per area
 - Impact of Section 48, 49 contributions schemes
 - Review policies on density, open space, exceptional development costs
- Support the preparation of master plans
- Inform development management decisions
- Assist in local authority own development
- Debate on areas that local authorities should focus on

VIABILITY - KEY CONCEPTS

- Viability
- Feasibility
- Affordability
- Market Value & Rental Value
- Yields
- Margins & Profits
- Gross Development Value
- Residual and Threshold Values
- Methods of Valuation (comparison, traditional investment, DCF, residual, profits, cost)

VIABILITY CONCEPT

Planning Policy Statement (DECLG, 2015)

- *“Planning must proactively drive and support sustainable development, integrating consideration of its economic, social and environmental aspects at the earliest stage to deliver the homes, business and employment space, infrastructure and thriving urban and rural locations in an **economically viable** manner that will sustain recovery and our future prosperity.”*

VIABILITY CONCEPT (CONT.)

- *“An individual development can be said to be viable if, after taking account of all costs, including central and local government policy and regulatory costs, and the cost and availability of development finance, the scheme provides a competitive return to the developer to ensure that development takes place, and generates a land value sufficient to persuade the land owner to sell the land for the development proposed.”* Harman Report 2012
- Being able to sell development for more than it costs to build (including land, financing, construction costs, selling costs, profit)

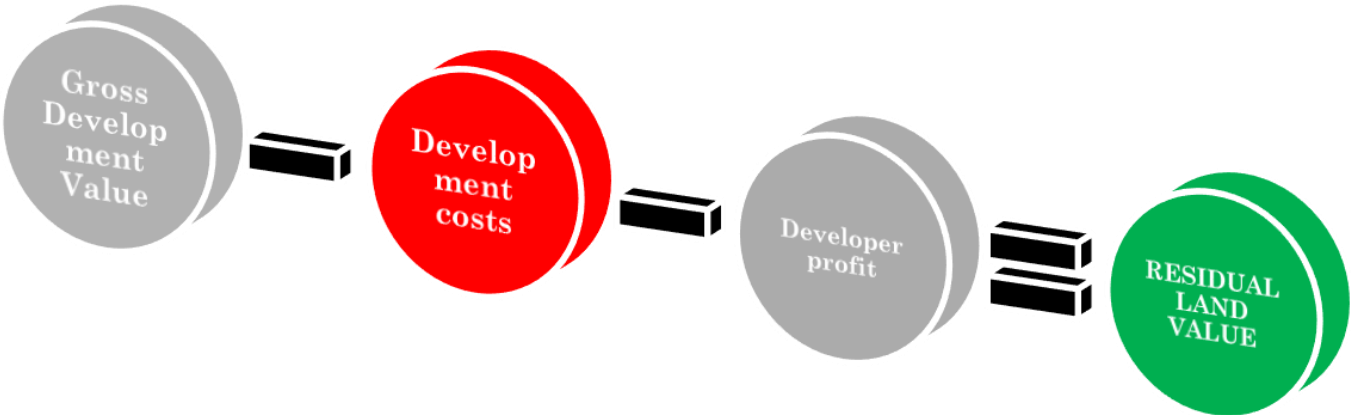
OTHER KEY CONCEPTS

- **Feasibility** – Consideration of all financial, legal, property rights of constructing individual development.
- **Affordability** - The measure of net income required to service a particular mortgage or rent.
- **Market Value** - Price a willing buyer and a willing seller agree in an arm's length transaction
- **Yield** - Rental return expressed as a percentage of money invested.
- **Margin/Profits** – Difference between costs and receipts
- **Gross Development Value** – The estimated value that a property or new development would fetch on the open market if it were to be sold in the current economic climate
- **Residual Value** - Gross development value less development costs (including developers margin)
- **Threshold/Benchmark Value** - Value at which a typically willing landowner is likely to release land for development before taxes.

METHODS OF VALUATION

- **Comparison** - Used as a basis in all methods of valuation and compares like with like.
- **Profits** - applied when no comparable rental/sale transactions are available (e.g. pubs, hotels, nursing homes), monopoly, lack of comparables
- **Contractors** – last resort, when other methods cannot be used. Cost equals value (e.g. hospitals, community infrastructure)
- **Residual** – used to value development land
- **Investment** - determine the market value of a freehold or leasehold interest in property from its potential to generate future income. *Traditional and Discounted Cashflow*

KEY CONCEPT – RESIDUAL VALUE



DISCOUNTED CASHFLOW

All future cash flows are estimated and discounted by using cost of capital to give their present values.

Net Present Value (NPV): The sum of all future cash flows, both incoming and outgoing, is the net present value (NPV)

$$\frac{1}{(1+i)^n}$$

Used to calculate value of the site

Internal Rate of Return (IRR): Actual return on capital, where discount rate which produces a nil NPV

Used where site value is fixed

DEVELOPMENT SECTORS - HOUSEBUILDERS

- Pre-order, deferred payments, options and cashflow (process)
- Single client for each unit
- Gearing, debt exposure (smaller builders use more debt, vulnerable)
- Land banking – 5 to 7 years supply
- Completions & capacity
- Margins – 15-20%
- Apartment vs Houses – different funding models
- Build to Rent – akin more to commercial developers
- Scheme considerations – density, contributions, Part V, ease of development, with permission, services

DEVELOPMENT SECTORS - COMMERCIAL DEVELOPERS

- Completed development leased or sold to investor seeking return from rental income
- Pension funds, hedge funds, REITS end owners
- Seeking to create asset value. Priority on functional aspects to create value
- Higher risk, bankrupt more easily
- Construction costs and value engineering key

DEVELOPMENT PROCESS – KEY FACTORS

- Funding & Financing
- Timing
- Risk

DEVELOPMENT PROCESS - FUNDING

- **NAMA** – funds selected established developers, or alternatively support receivers who have taken over the assets of liquidated companies.
- **Local authorities** – (Social Housing Investment Programme (SHIP)). Local Infrastructure Housing Activation Fund
- **LDA** - Central government funding, rental market, mixed tenure leveraging state land
- **Approved Housing Bodies (AHP)** – secure grant and loan funding from central government through SHIP and loan finance through HFA.
- **Private Equity Companies**– Oaktree, Kennedy Wilson, M&G Investments, Lotus operate through an Irish based developer or act directly as developers themselves. Access to UK or US based funds.
- **Stock Exchange** – include IPOs such as Cairn Plc and REITs (Green, Hibernian and IRES).
- **Banks** –will not currently lend more than 70% of development costs on a scheme and will only lend for prime development sites. Developers then have to seek to make up the balance of 30%.
- **Cash** – reserves of cash can be used to fund development.

DEVELOPMENT PROCESS – IMPACT OF LOAN FUNDING

Example without loan funding

Receipts : € 250,000

Less: Costs

- Land € 50,000
- Construction €150,000

Total Project Costs €200,000

Margin on Cost **€50,000**

Example with loan funding

Receipts : € 250,000

Less: Costs

- Land € 50,000
- Construction €150,000
- Interest (1 year loan of €150,000 @ 10%) €15,000

Total Project Costs €215,000

Margin on Cost **€35,000**

DEVELOPMENT PROCESS – IMPACT OF TIME

Example of 2 year loan

Receipts : € 250,000

Less: Costs

- Land € 50,000
- Construction €150,000
- Interest (2 year loan of €150,000 @ 10%) €30,000

Total Project Costs €230,000

Margin on Cost **€20,000**

DEVELOPMENT PROCESS – IMPACT OF RISK

Principal Risks

- Overestimating what the completed development might be worth or how long it will take to let/sell
- Underestimating costs, missing some costs altogether, or unforeseen events.
- Paying too much for the site.
- Delays

Underestimated Costs

Receipts : € 237,000

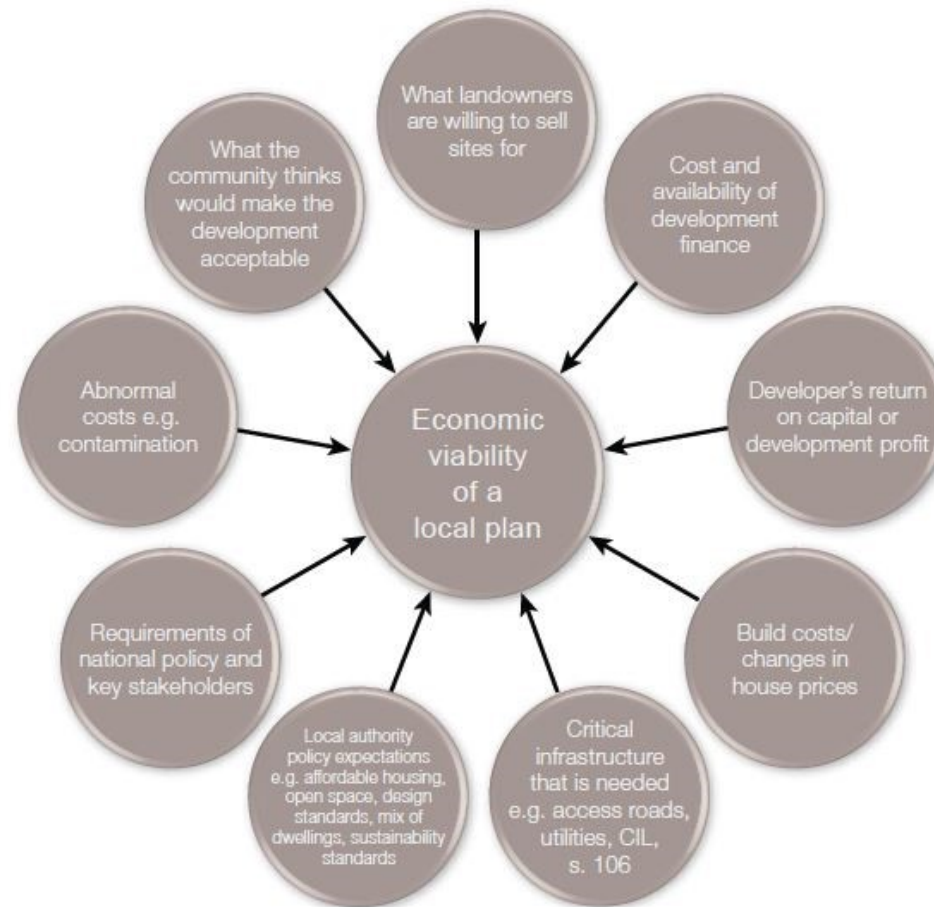
Less: Costs

- Land € 50,000
- Construction €157,000
- Interest (2 year loan of €157,000 @ 10%) €31,500

Total Project Costs €239,000

Margin on Cost **€1,500 Loss**

VIABILITY IN DEVELOPMENT PLAN POLICY - FACTORS



BENEFITS OF VIABILITY TESTING

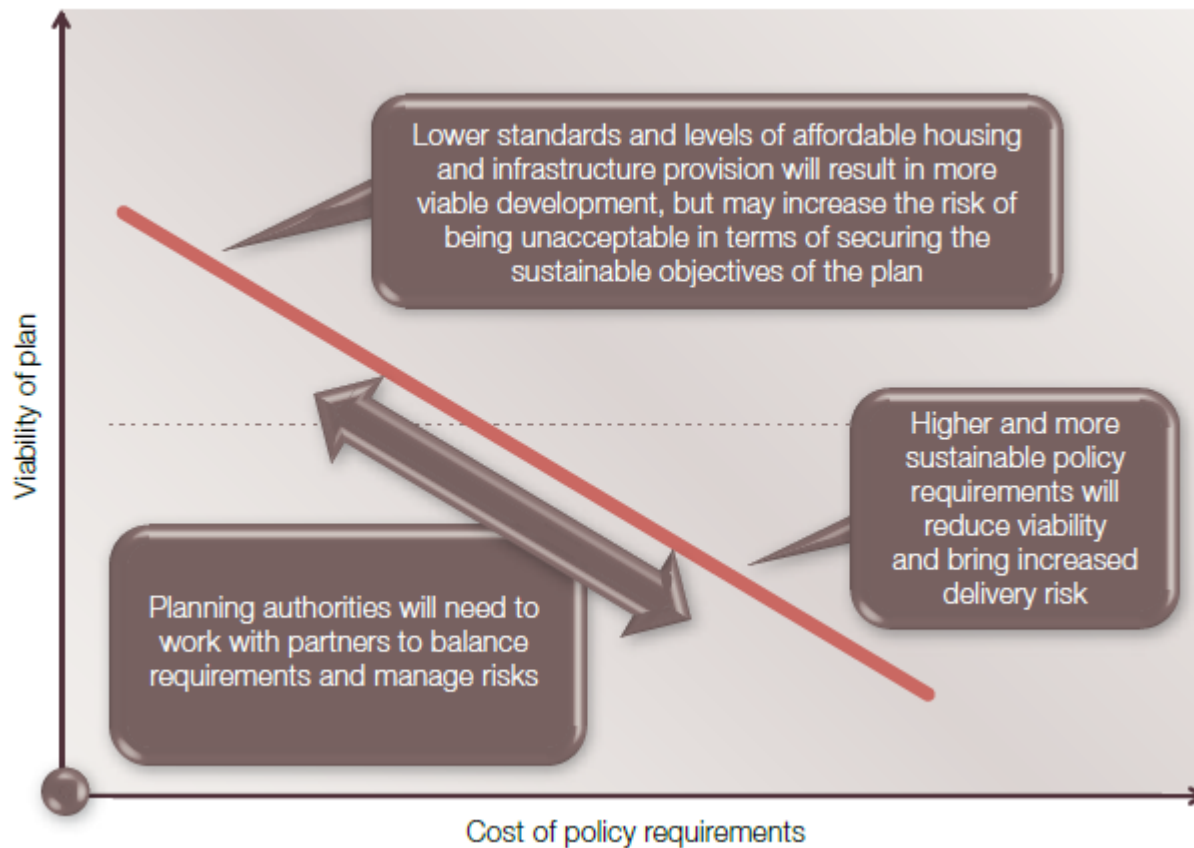
- Considers cumulative effects
- Balances risks
- Iterative tool to inform policy
- Collaborative
- Allows for spatial and temporal variation of policy
- Ensures that the plan is implementable in a market economy

VIABILITY TESTING – CUMULATIVE APPROACH

Example of Cumulative Approach

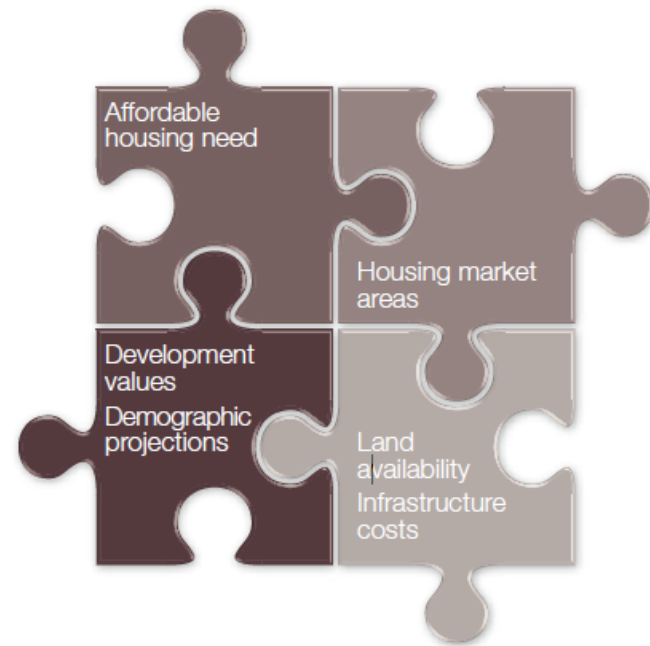
- Policy Layer 0 - No Part V housing, Section 48 contributions or other policy costs
- Policy Layer 1 – **Part V housing**, no Section 48 contributions or other policy costs
- Policy Layer 2 – **Part V housing, Section 48 contributions** and no other policy costs
- Policy Layer 3 – **Part V housing, Section 48 contributions and specific density policy**
- Policy Layer 4– **Part V housing, Section 48 contributions, density policy and apartment size policy**

VIABILITY IN PLANS – BALANCING RISKS



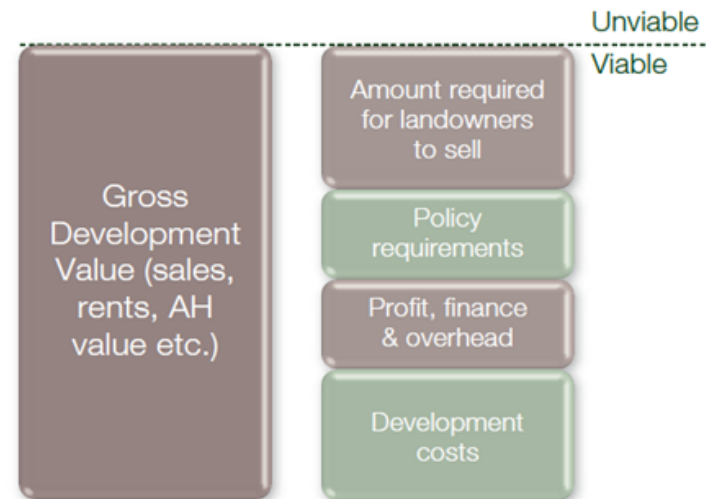
VIABILITY TESTING OF PLANS – STEP 1

Review existing evidence
and consider scope for
alignment of assessments



VIABILITY TESTING OF PLANS – STEP 2

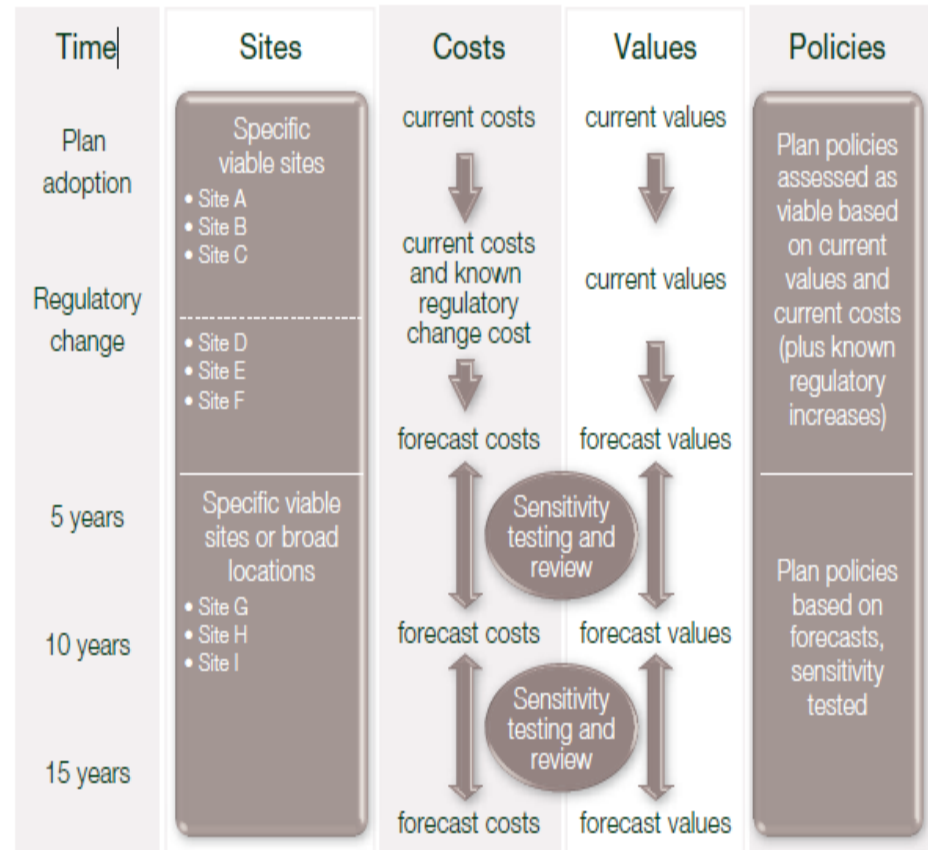
Agree the appraisal methodology, assumptions and information to be used



VIABILITY TESTING OF PLANS – STEP 3

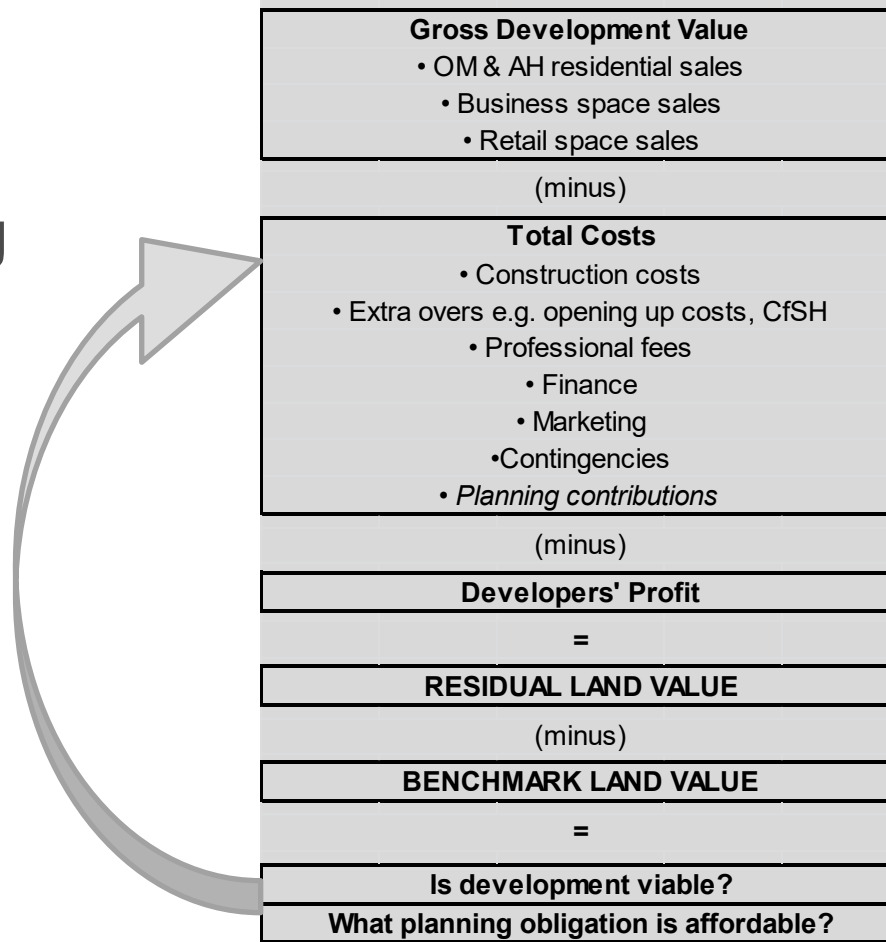
Gathering Costs and Information:

- Sales values
- Constructions costs
- Legal costs
- Financing costs



VIABILITY TESTING OF PLANS – STEP 4

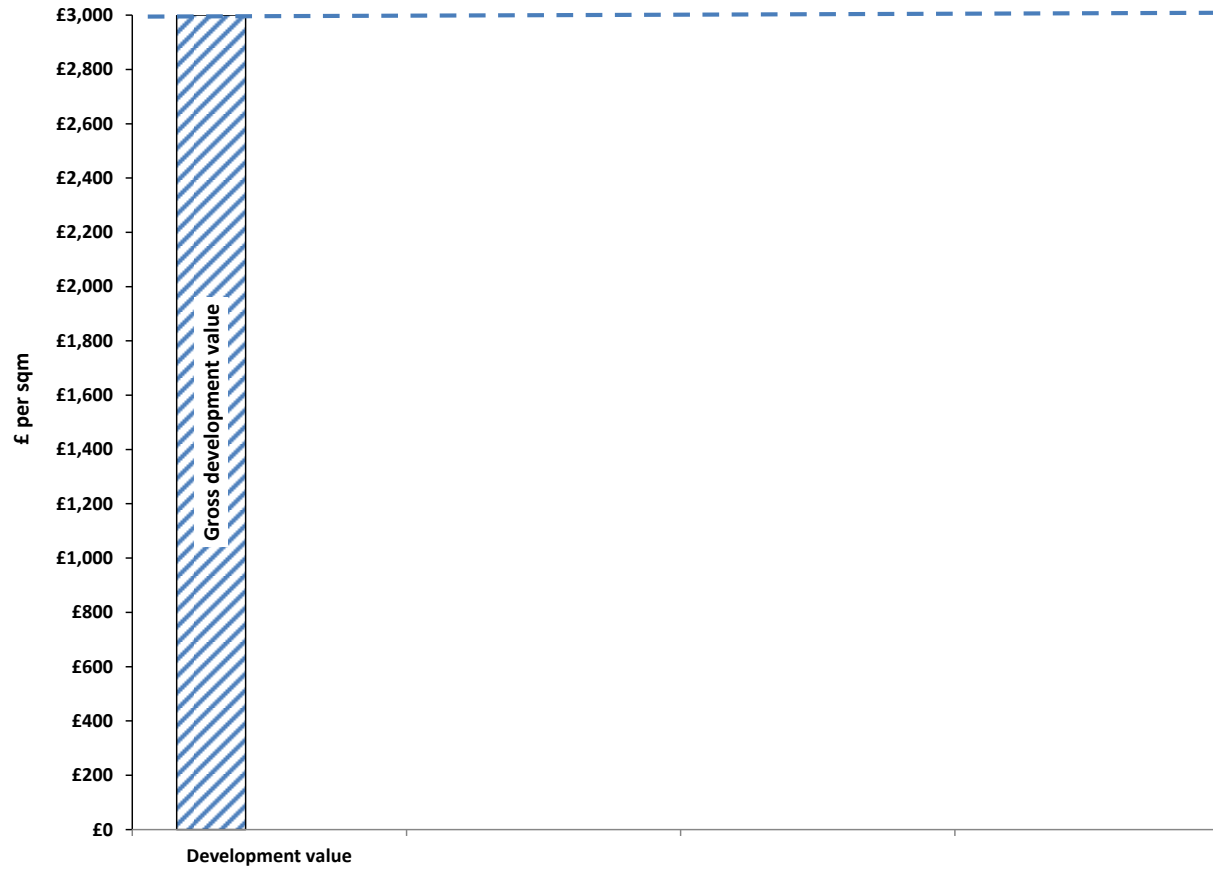
Viability Modelling
– An Iterative
Approach



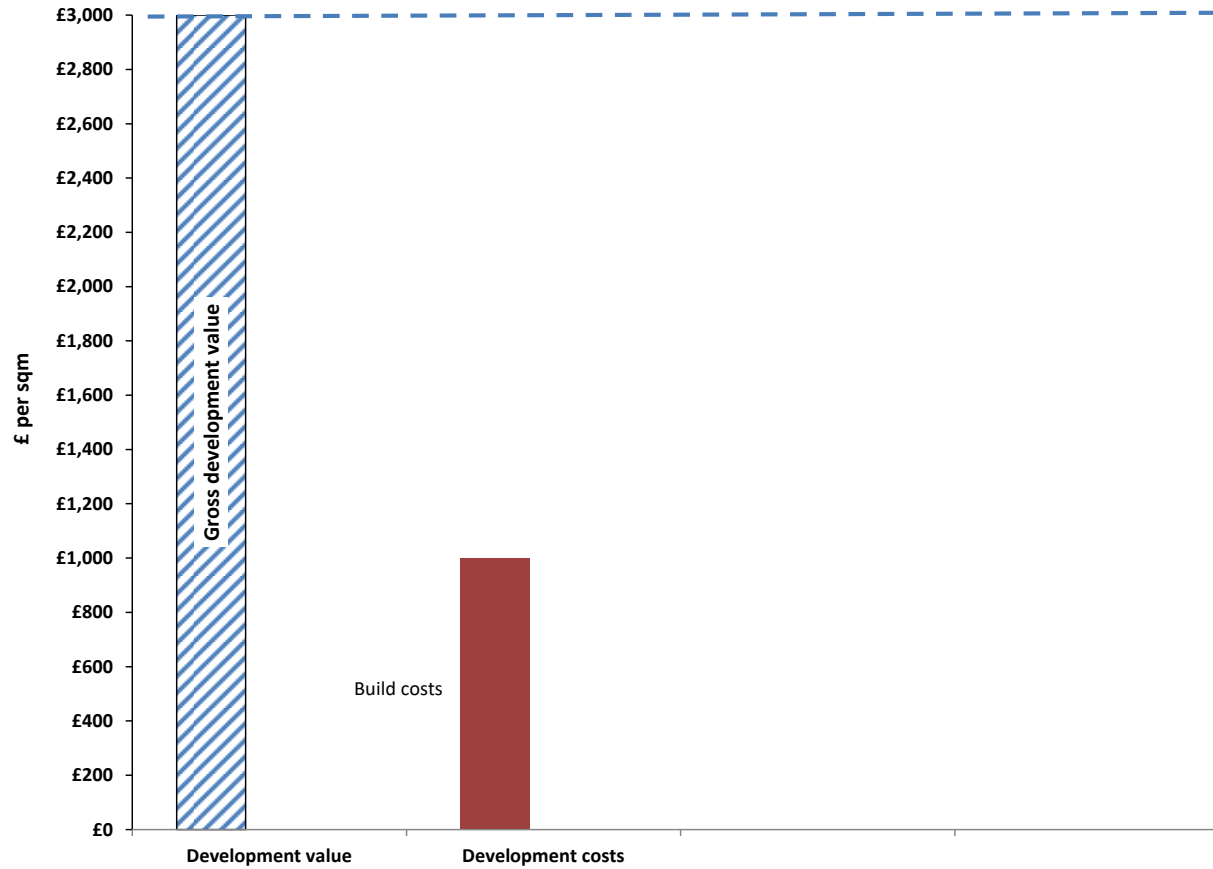
VIABILITY TESTING OF PLANS – STEP 5

- Recommendations
- Sensitivity Tests

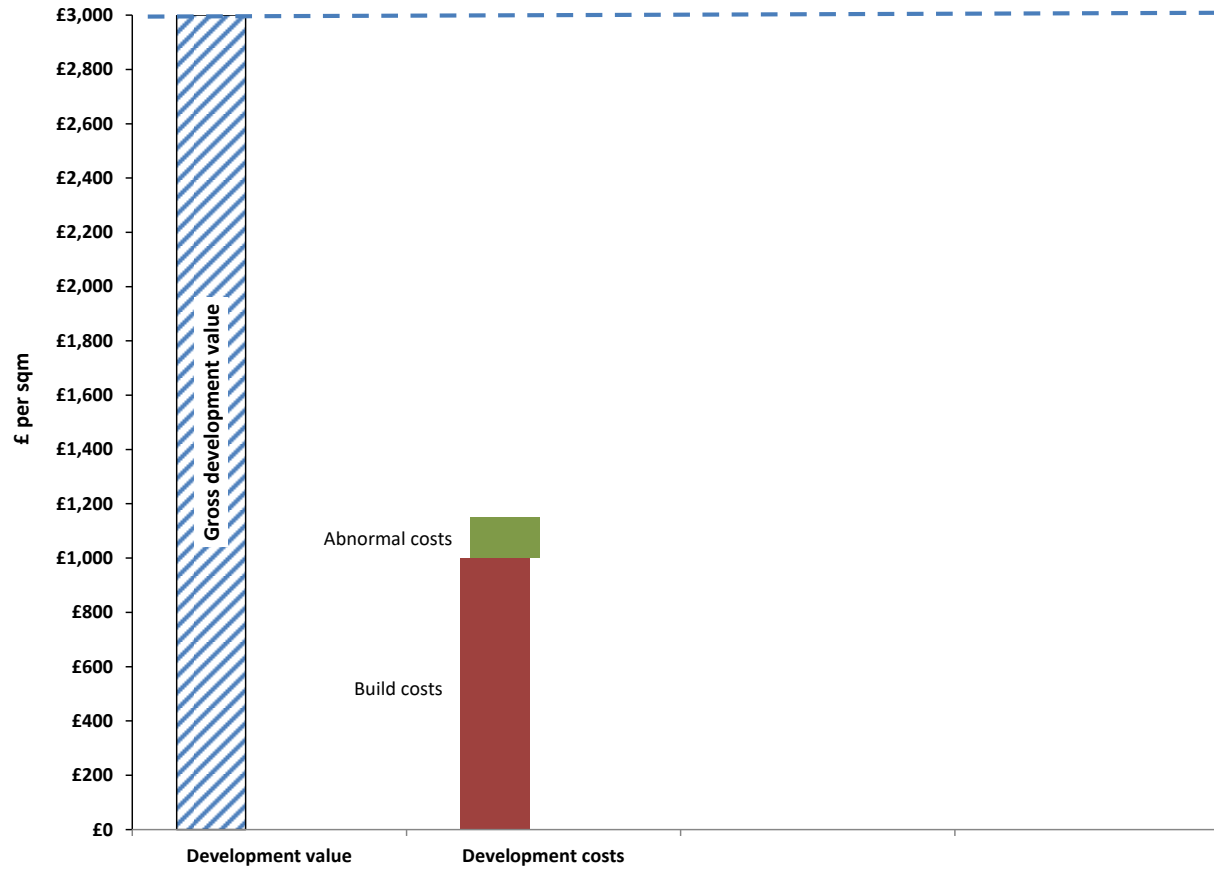
VIABILITY – THE MARGINS



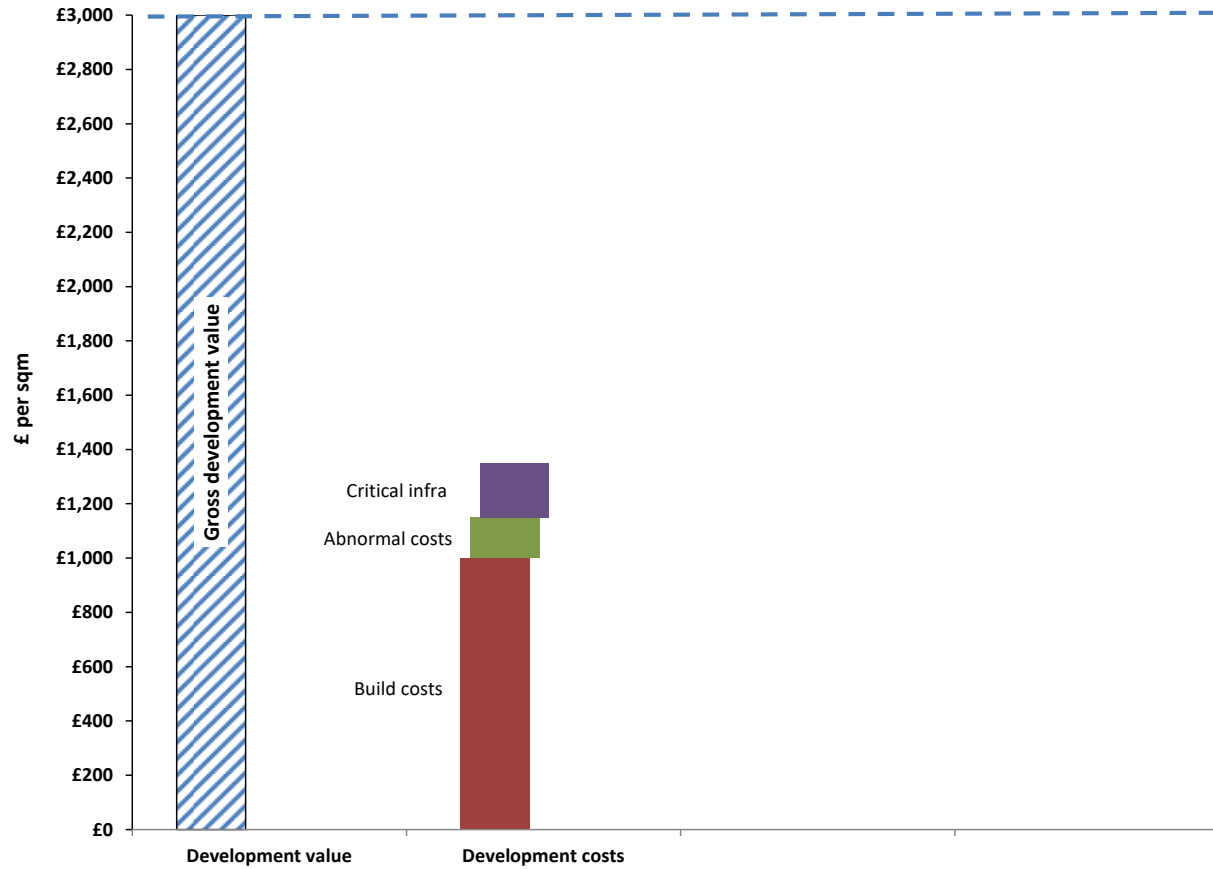
VIABILITY – THE MARGINS



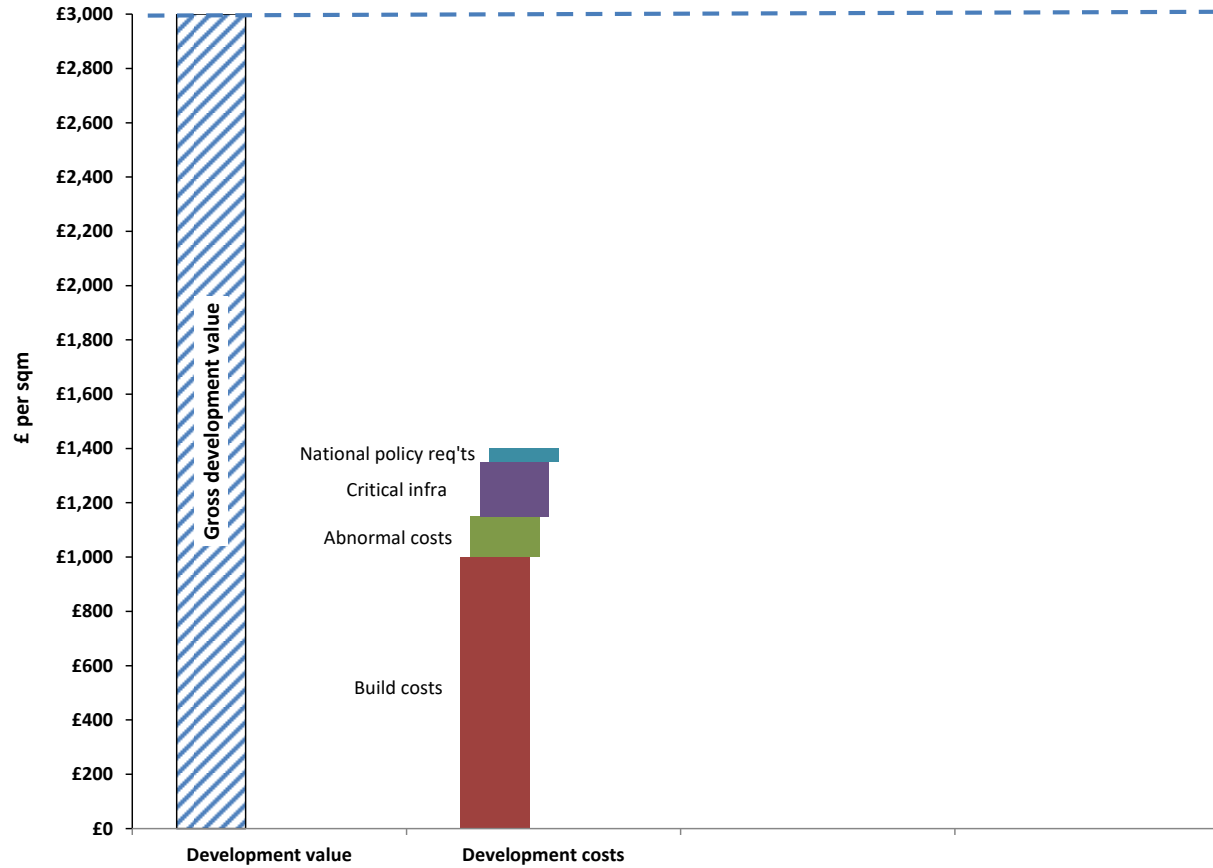
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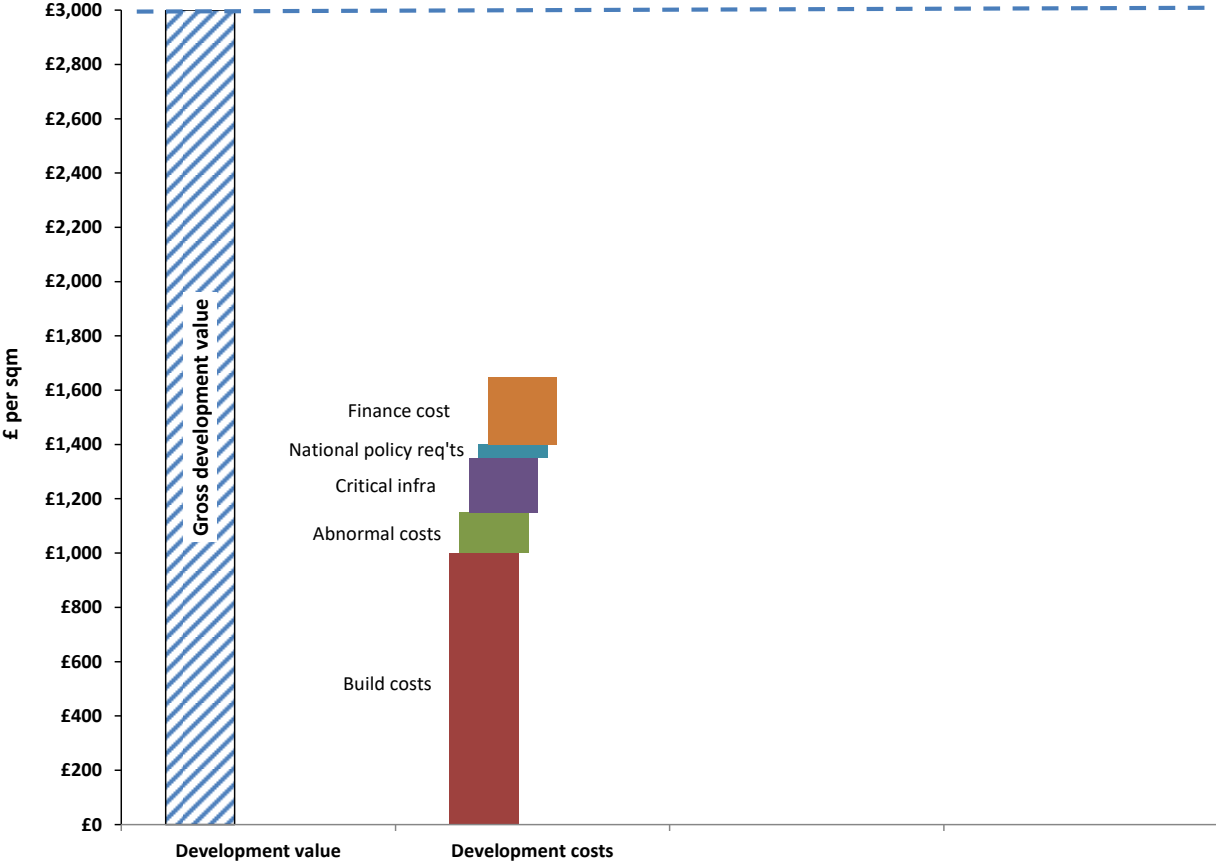
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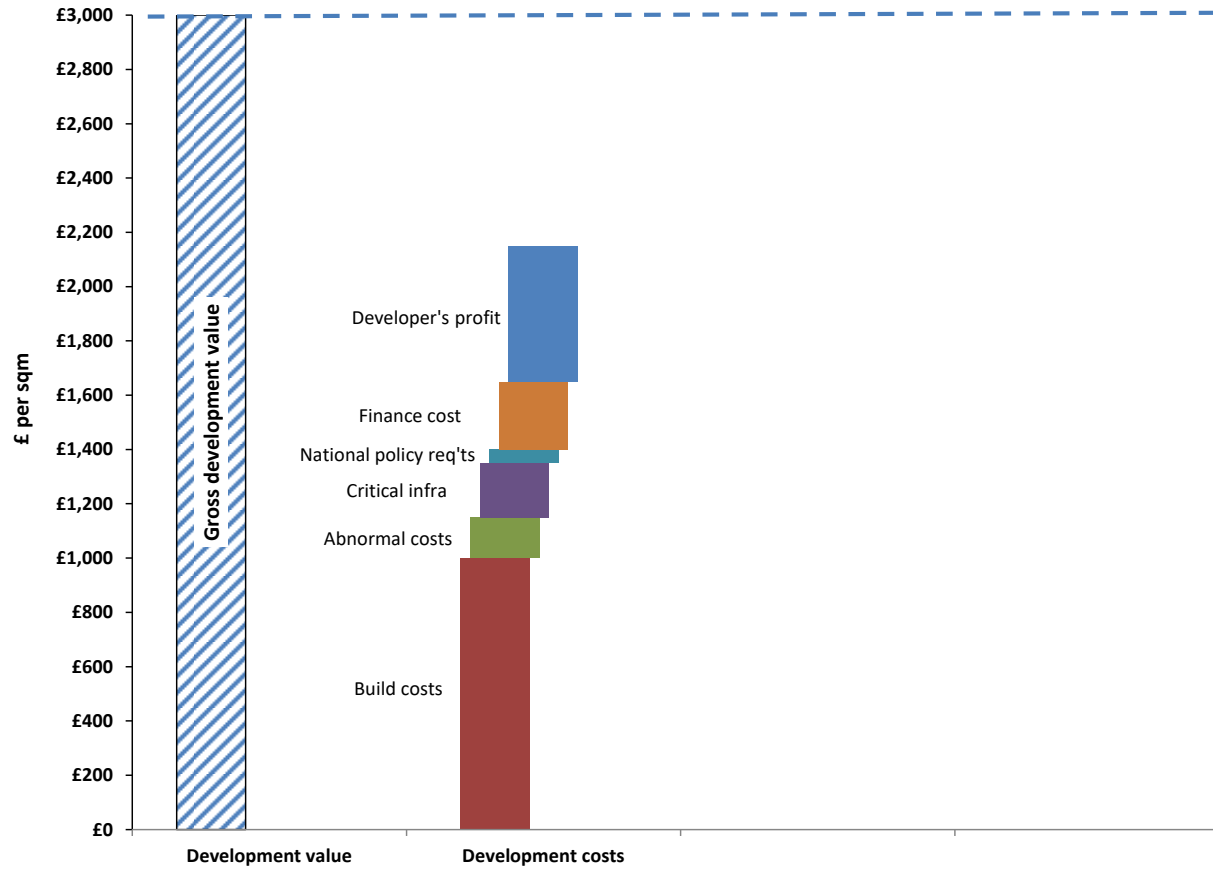
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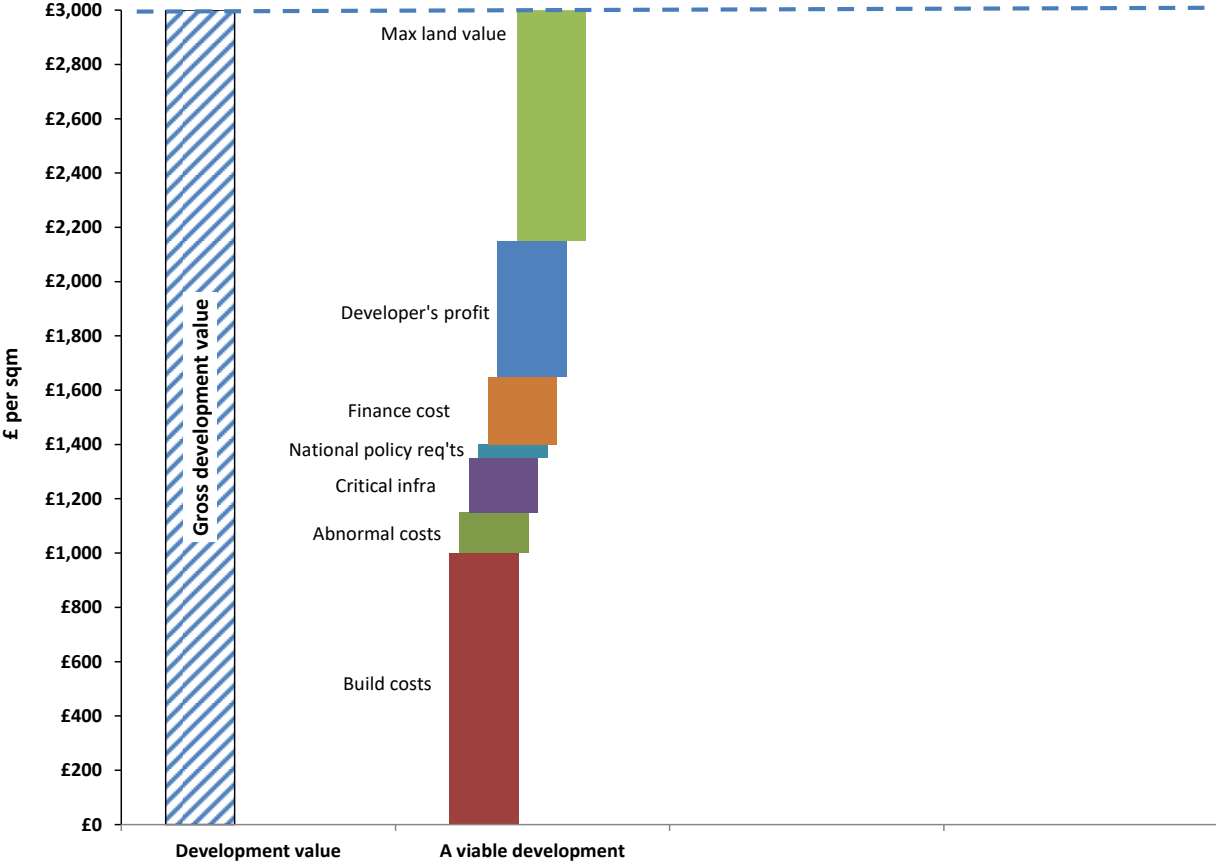
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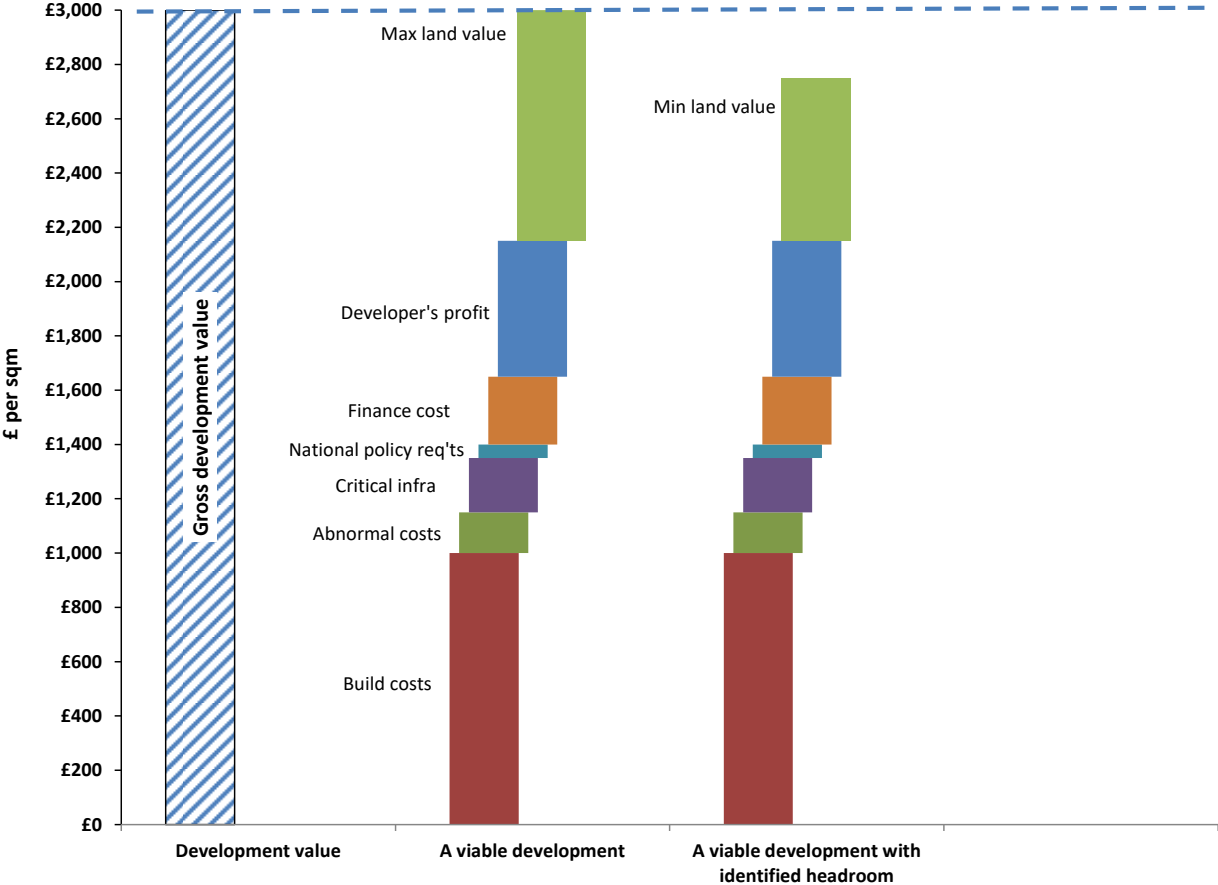
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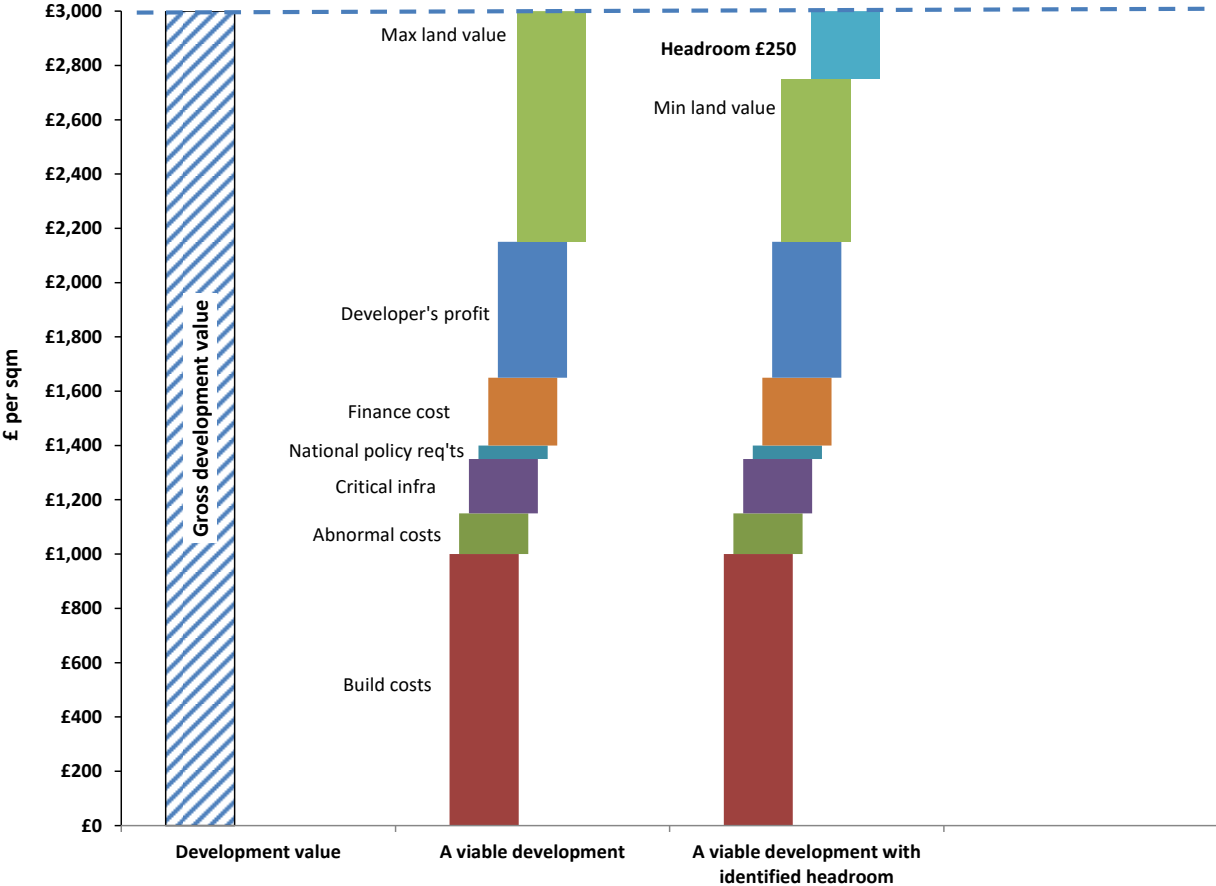
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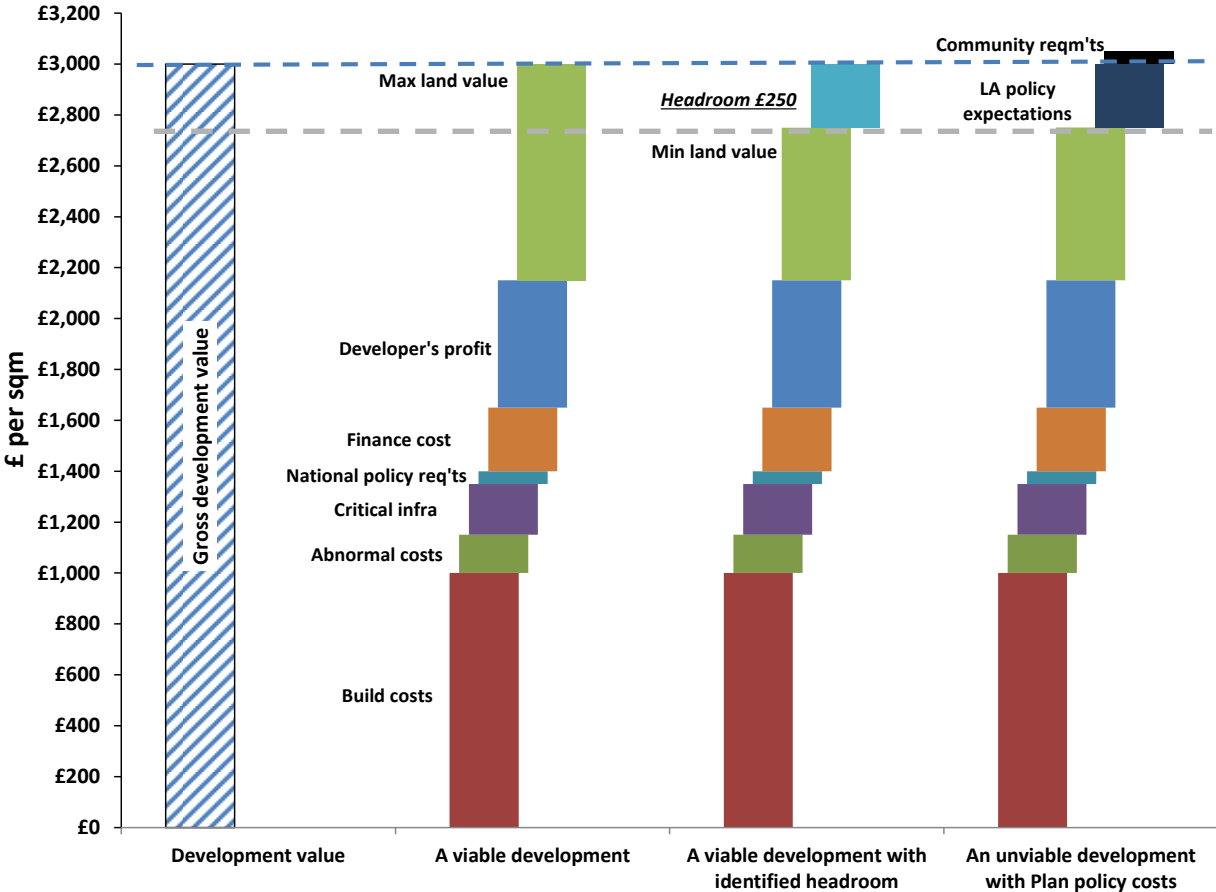
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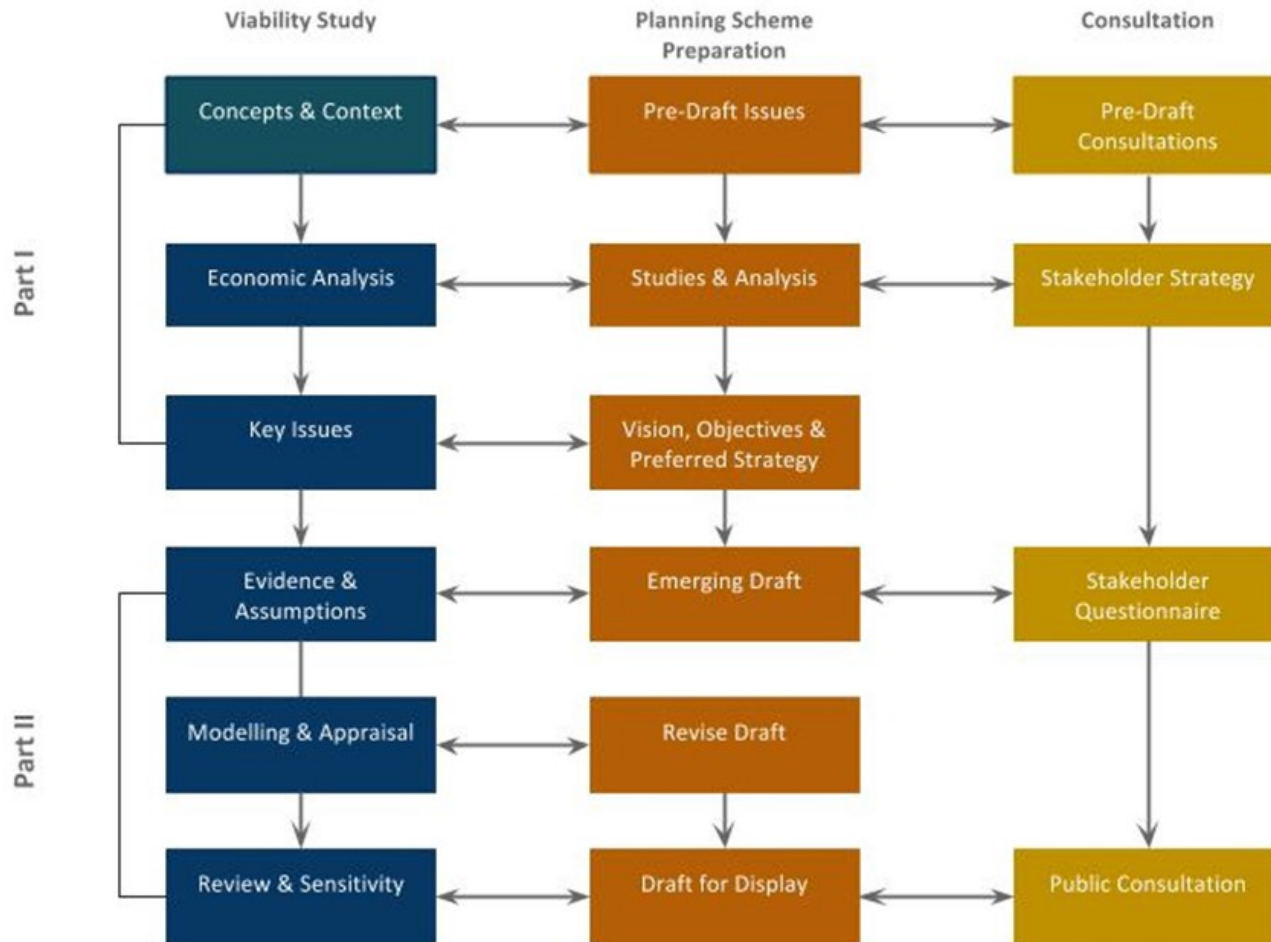
VIABILITY – THE MARGINS



CASE-STUDY - CLONBURRIS SDZ



CLONBURRIS SDZ – VIABILITY PROCESS



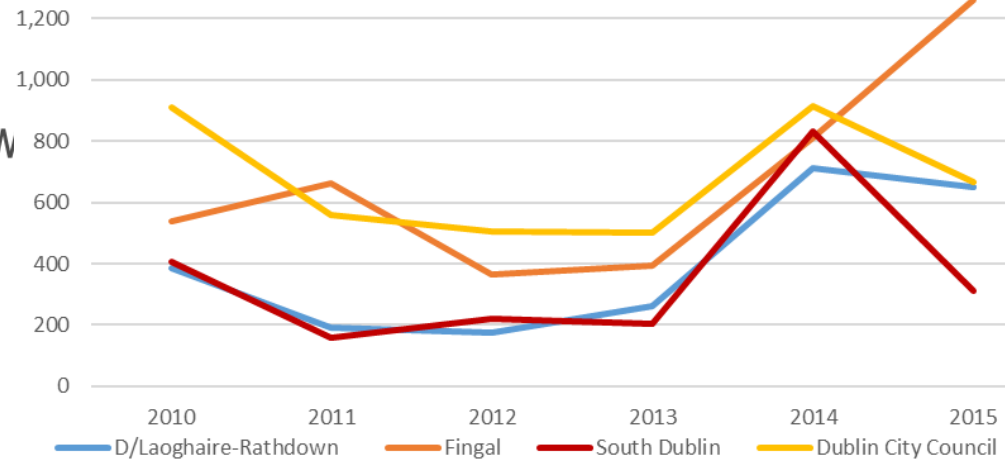
SUPPLY & DEMAND ISSUES

Development Land

- 2,812 ha of residentially zoned land in GDA
- Values range from €0.5m/ha to €7m/ha

Residential

- CS 5,300 units/annum
- Completions low
- Lack of development in low value areas
- Median price
 - Lucan €265,000
 - Clondalkin €190,000
- Strong rental growth
- Affordability issues



SUPPLY & DEMAND ISSUES

Retail

- Separate study undertaken
- Total of 21,455 sqm of retail and retail services required

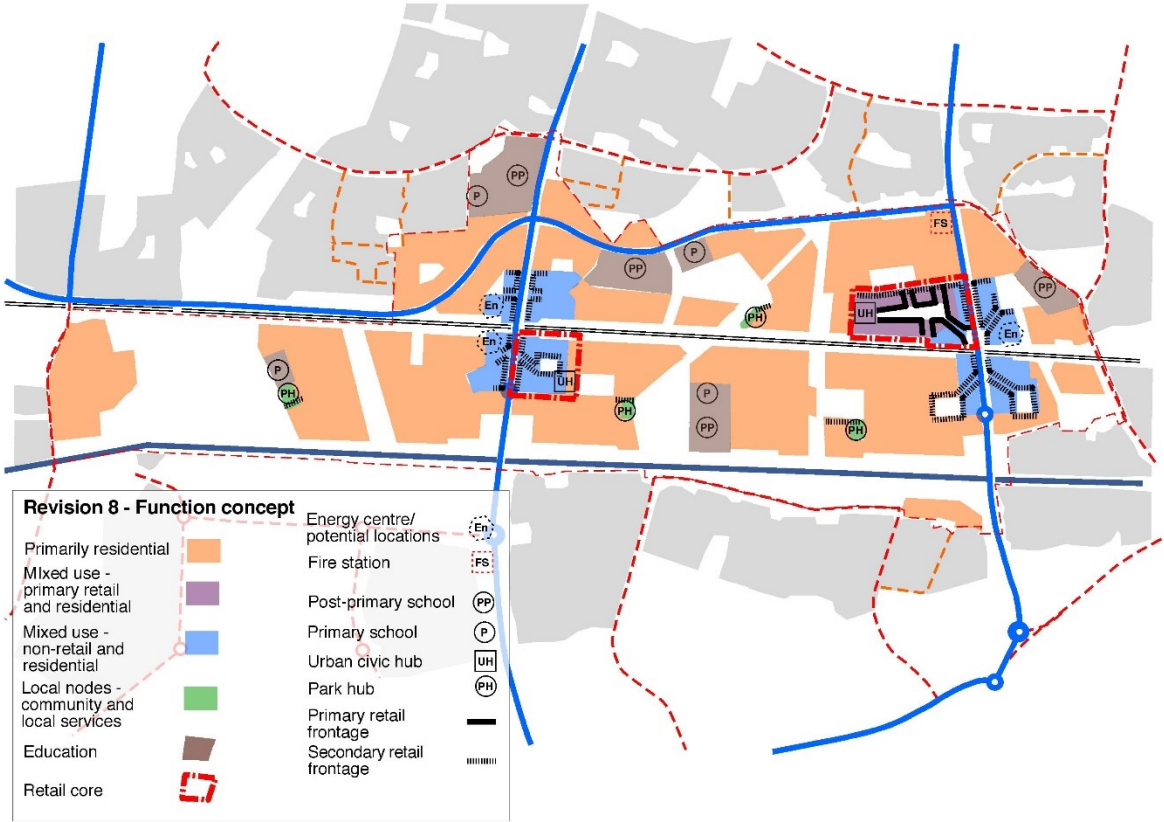
Office/Commercial

- Separate study undertaken
- Potential for between 30,000 to 40,000 sqm of non retail commercial

MASTER PLAN ISSUES

- General Viability
- Density
- Typologies
- Employment uses
- Infrastructure costs and contributions
- Changing the value profile of an area

REVIEW OF EMERGING SCHEME



PLANNING SCHEME ASSUMPTIONS

Planning Scheme Assumptions							
Plan Area & Land Use Mix							
	<i>% of GDA</i>	<i>HA</i>					
Gross Plan Area (GPA)	109%	281					
Strategic Corridors (existing railway, arterial routes, canal)		22.6					
Gross Development Area (GDA)	100%	258.4					
less open space/essential infrastructure/schools, etc)		107.63					
Net Developable Area (NDA) - Total	58%	150.77					
Residential							
Total number of residential units	8420						
Gross Density (based on GDA)	33	per ha					
Net Density (based on NDA - total)	56	per ha					
House:Apartment mix	<i>Apartments</i>	<i>Houses</i>					Total
% Type	30%	70%					100%
Units numbers	2526	5894					8420
Unit Mix	<i>Studio</i>	<i>1 bed</i>	<i>2 bed</i>	<i>3 bed</i>	<i>4 bed</i>	<i>5+ bed</i>	
% Apartment Mix	10%	20%	55%	15%			100%
% Housing				65%	30%	5%	100%
Number of apartments mix	253	505	1389	379			2526
Number of houses mix				3831	1768	295	5894
gross internal floor area (sqm)	40	45	73	90	100	116	
netgross external residential floor area	117%	117%	117%	117%	117%	117%	
gross external floor area (sqm)	47	53	85	105	117	136	
Total floor area (sqm)	11822	26599	118660	443313	206879	39997	847270
Assumed affordable housing share (%)	10%						
Commerical							
	<i>gross (sqm)</i>	<i>Plot Ratio</i>					
Retail	21,520						
Non-retail commercial	31,115						
Total commercial	52,635	#REF!					
Community							
Civic, leisure, cultural	7,300						
Traveller accommodation	0						
Total	7,300	#REF!	#REF!				
Levies & Infrastructure							
Contributions	<i>County S48</i>	<i>S49</i>					
Applied Yes/No	No	No					
Exceptional infrastructure costs	No						
Phasing & Delivery							
	2025	2030	2035				
Delivered by indicated year			100%				



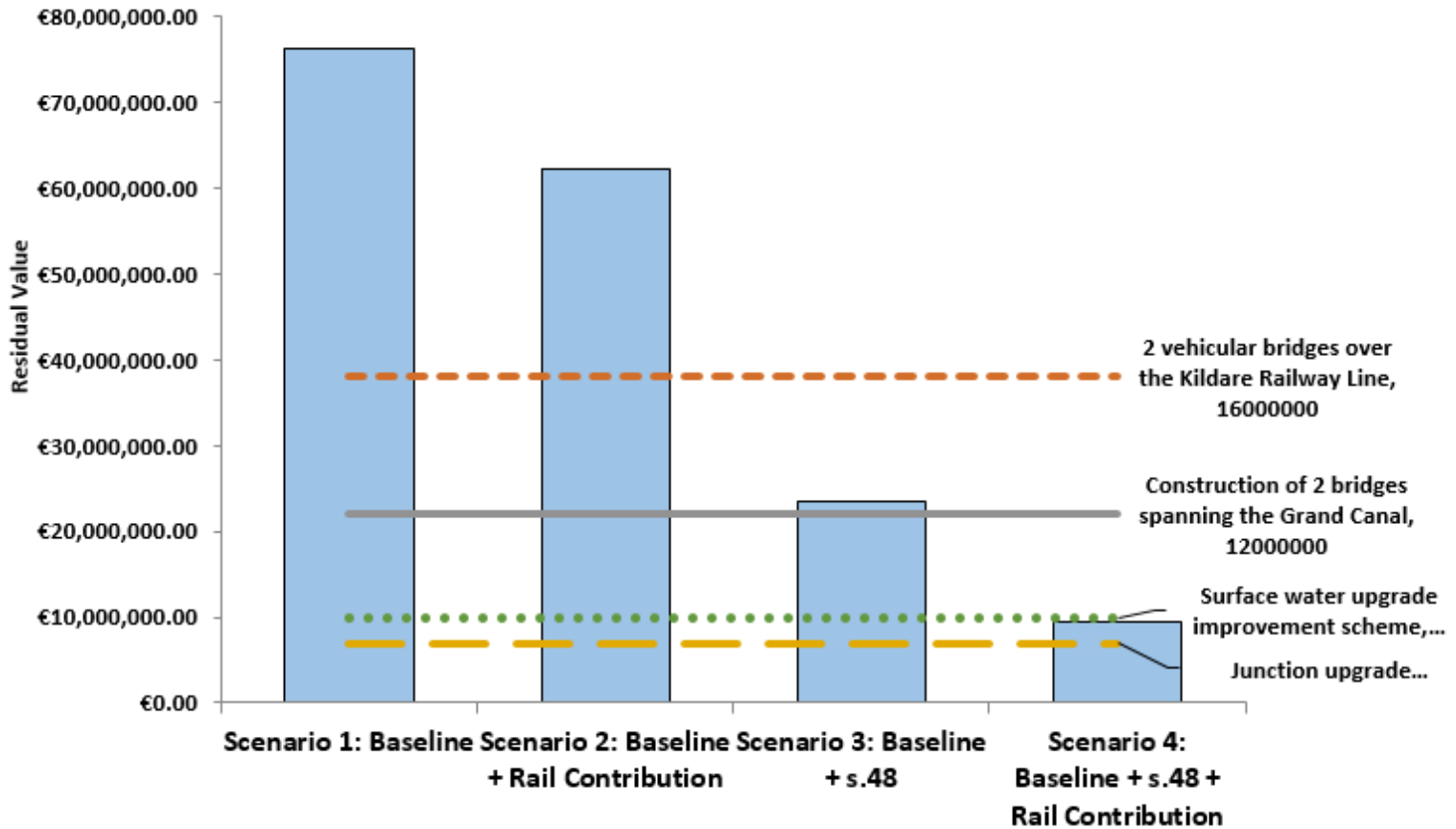
VALUE ASSUMPTIONS

Values		
Existing land value for existing use (€ per net developable ha)	€13,736	ha
Minimum purchase land (threshold) value (€ per net developable ha)	€320,000	ha
Development sales values	Apartments - € per sqm	€2,996
	Houses - € per sqm	€2,583
	<i>Other uses (list) - € per sqm</i>	
	Retail	€3,333
	Suburban Offices (natural ventilation)	€800

COST ASSUMPTIONS

Build costs			
Standard build costs			
Build cost (incl: prelims, but excl: externals, professional fees and contingency)	Apartments - € per sqm	€1,600	
	Houses - € per sqm	€1,170	
	<i>Other uses (list) - € per sqm</i>		
	Retail	€1,200	
	Suburban Offices (natural ventilation)	€1,600	
	Community	€1,000	
List any abnormal costs (or estimate € per net developable ha), such as:			
SUDS (if applicable)	€200,000	per ha	
Sum total	€200,000	per ha	<i>or</i> € per net ha
List any site opening costs (or estimate € per net developable ha), such as:			
Sum total	€500,000	per ha	<i>or</i> € per net ha
Other Assumptions - if you disagree with any please comment below:			
External works at 10% of build cost	Yes		
Contingency at 4% of build cost & external works	Yes		
Professional fees at 8% of build cost & external works	No. 5%		
Sales and marketing costs at 3% of development value	Yes		
Finance costs at 6.5% of development cost	Yes		
Developer profit at 17% of development value (GDV)	No. 15%		
VAT @13.5%	NEW ASSUMPTION		

FINDINGS



LESSONS FROM CLONBURRIS

- Assumptions sensitive
- Iterative process
- Overall viability of scheme
- Cumulative impacts of policy
- Policy choices – not all policies can be incorporated
- Viability of employment uses
- Need to build a different value profile that immediately adjoining social housing areas for market housing
- Timeframe of development needed to be extended out
- Recommendations on density, kick starter development
- Question of how infrastructure would be delivered (equalisation, contributions, LIAF)

VIABILITY FOR INDIVIDUAL SCHEMES

- Purpose of assessment?
- Either DCF or residual method used
- Software (e.g. Argus, spreadsheet)
- Assumptions sensitive
- Dependent upon circumstances of developer (equity, debt profile, cost of land holding)
- Potential JVs between local authorities and developers
- Role of AHBs

CONCLUSIONS

- General awareness of viability issues
- Need clarity on what viability testing is being used for
- Cumulative impact of policy in Development Plans
- Enhancing value of area through Master Planning

Questions