



# **Squaring the Triangle**

## **A Framework for Evaluating Sustainability Performance on Urban Regeneration Projects**

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# Places of Today

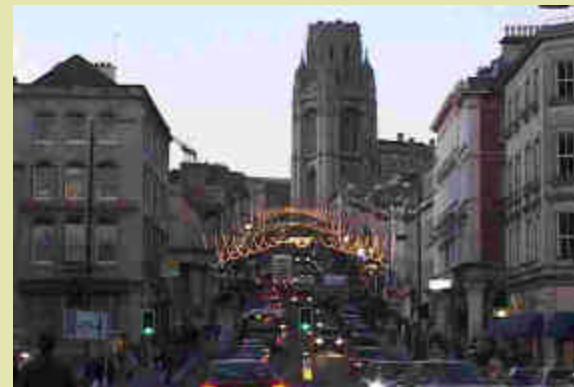
## The Good



**Crickhowell, Main Square**



**Baltic Riverside, Newcastle**



**Park Street, Bristol**

# Places of Today

## The Bad



Everywhere Drive

**“When I Got There, There Was No There There...”**

# Places of Today

## And the Downright Ugly



Not so Poplar Road



# The Future - All **Good** Developments:

- ✓ **Land Use Urban Form and Design**
- ✓ **Transport**
- ✓ **Energy Efficiency**
- ✓ **Impact of Individual Buildings**
- ✓ **Natural Resources**
- ✓ **Ecology**
- ✓ **Community**
- ✓ **Business**

# Land Use Urban Form and Design

- **Site Criteria – Planning Guidance & Constraints**
- **Reusing Sites – Brownfield Rehabilitation**
- **Grain, Layout and Scale - The Heart**
- **Open Space and Landscaping - The Lungs**
- **Mixture of Uses - The Sole**
- **Density – One Shape Doesn't Fit All!**
- **Aesthetics – It Matters to all not just Architects**

# Transport

- **Policy – Strategic Development**
- **Public Transport Provision – Regular and Reliable**
- **Parking – How Much and Where**
- **Pedestrians and Cyclists – Movement Priority**
- **Local Employment – Ratios Matter**
- **Proximity of Local Facilities – No Discrete Zoning**



# Energy and Impact of Individual Buildings

- **Community Energy Production – CHP, Renewables**
- **Street Lighting – Efficiently Lighting Down Not Up**
- **BREEAM – Excellence Pays**
- **EcoHomes - Realistic Targets, Continual Improvement**



# Natural Resources

- **Local Resources - Reclaimed/Green Materials**
- **Air Quality – Protection and Screening**
- **Water Conservation – Grey Water and Rain Water**
- **Refuse Composting – Must be local**

# Ecology

- **Surveys - Sensitivity at the Beginning**
- **Enhancement – Not Only Protection**
- **Planting – Sympathetic and Manageable**

# Community

- **Support – We are all stakeholders**
- **Involvement – Must be Appropriate and Inclusive**
- **Integration – Edges and Enhancement**
- **Householders Pack – Involvement and Ownership**
- **Crime – Defensible and Safe Places**

# Business

- **Enhancement – Build the Local Business Base**
- **Employment – Focus on the Locals**
- **Training – Create opportunities for unemployed**
- **Environmental Jobs – Pride of Place**
- **Social Jobs – Community Development**

# Bloody Obvious!!.....

## .....So Why Are We So Poor at it?




- **Too Tactical - UK Planning**
- **Poor Communications – Tell them what you need to**
- **Rigidity - We shall not be moved**
- **Lack of Vision – We are comfortable with what we know**
- **Short-Term mentality – Quick Win Please**

# One Useful Tool That Might Help



## A Simple Matrix that;




- Puts our cards on table;
- Measures performance;
- Is Totally Transparent; and
- Capable of being Continually updated




**As importantly the matrix allows us to square up to what are often conflicting economic, environmental and social interests**

LAND USE, URBAN FORM & DESIGN	DEFINITION OF BEST PRACTICE (Defined in BRE checklist)  Coed Darcy demonstrates best practice	DEFINITION OF GOOD PRACTICE (Defined in BRE checklist)  Coed Darcy demonstrates good practice	COMMENTS  Coed Darcy proposals not reached this design stage
<b><u>1. Site Criteria</u></b>			
1.1 Does project meet the requirements of the UDP and other strategic planning guidance?	Meets all key requirements well	Meets some key requirements well. Partly meets others.	Project developed as a direct response to key policies and relevant planning guidance
1.2 Is the development area free from planning constraints, including the following:  ❖ Designated flood plain ❖ Conservation Areas, including: - Ancient monuments/buildings - Ancient landscapes - Parks and gardens - SSSIs / AONBs ❖ Landfill sites ❖ Mineral extraction sites	No Planning Constraints.	The development demonstrates how constraints can be addressed such that they:  a) Have little effect on the proposed development;  (b) Cause no damage to existing valued features.	The body of the Environmental statement identifies how all relevant planning constraints have been addressed.
<b><u>2. Reusing Sites</u></b>			
2.1 Does the development reclaim any contaminated land?	Whole site approach to reclamation rather than just development area.	Partial approach to reclamation	Prime Driver for the project
2.2 Is the land decontamination method sustainable option, i.e. not 'dig and dump' or 'cover layer'	In situ or ex situ with no off site disposal.	In situ or ex situ preferred, with some elements of off-site disposal and/or capping systems.	Focus of remediation is on in situ and ex situ treatment, but some limited off site disposal is inevitable given the scale of remediation works.



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2.3 Does the development use any Brownfield land?	Whole development Area is Brownfield Land.	Majority of development area is Brownfield Land.	Route of southern access is in fact the route of the former oil pipeline and pipe bridge, which were core components of the former refinery.
2.4 Does the proposal involve the release of any brown field land for redevelopment?	Significant release of Brownfield land that would not otherwise be made available.	Partial release of Brownfield land that would otherwise not be made available	Prime Driver for the project
<b><u>3. Grain, Layout, Scale</u></b>			
3.1 Is the grain of the development appropriate for needs, and in context with the surroundings?	Well matched for needs and context	Well matched for needs. OK for Context	Masterplan addresses this aspects in detail
3.2 Does the layout of the connecting roads, pavements, and spaces achieve a balance between good access and the provision of interesting and useful spaces?	Good in Both Respects	Good in one respect, but not in the other	Masterplan addresses this aspect in detail
3.3 Is the scale of development proposed appropriate in terms of the height and massing of the buildings?	Good in Both Respects	Good in one respect, but not in the other	Masterplan addresses this aspect in detail
<b><u>4. Open Space and Landscaping</u></b>			
4.1 Have quality green space and landscaping features been provided throughout the development, including boundaries?	Best practicable provision.	Good provision, but some significant opportunities missed.	Formal and informal public open space provision within and around development




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4.2 What % of the homes have access to public green space within 400 m of their door?	Greater than 60% of homes and 30% of other buildings.	50-60% of homes	Formal and informal public open space provision within and around development.
<b><u>5. Density</u></b>			
5.1 What is the dwelling density?	80% over 60 DPH	80% over 40 DPH	Density highest in core of urban area.
5.2 Has the density of the built environment been linked to public transport as recommended in relevant policy guidance	Yes, Meets all requirements	Yes, partly meets requirements	Prime Driver for the project
<b><u>6. Mixes of Use</u></b>			
6.1 Does the mix of uses in the proposed development meet the requirements of the Development Plan?	Fully meets requirements	Meets key requirements, partly meets others	Prime Driver for the project
6.2 Does the % of affordable homes provided meet the requirements of the Development Plan and housing needs surveys?	Well above requirements	Yes within a few %	Project can respond to evolving need
6.3 Has the affordable housing been sensitively integrated with the rest of the development in terms of aesthetics and distribution?	Yes to both aspects	Yes, to one aspect	Integration of tenures is a key design principle
6.4 Has a retail impact study been carried out?	Yes, retail opportunities enhanced	Yes, largely unaffected	Submitted with the planning application




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6.5 What is the percentage of flexible buildings (out of the total number of buildings)?	Over 25%	10% - 25%	Masterplan addresses this aspect in detail
<b><u>7. Aesthetic Aspects</u></b>			
7.1 Is the appearance of the development, in relation to the detailed building elements (e.g. roofscapes, window details etc), both attractive and in context?	Very carefully considered	Carefully considered	Masterplan and town code address this aspect in detail
7.2 Is the appearance of the development (in terms of the choice of building materials, ie colour, form, variety and durability), both attractive and in context?	Attractive in both context and local surroundings	Attractive and in context	Masterplan and town code address this aspect in detail

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<b><u>1. General Policy</u></b>			
1.1 Does the development meet the requirement of the Local Transport Plan?	Meets all key requirements	Partly meets key requirements	Transport (and reduced reliance on the car) are central to the project
1.2 What is the percentage of the development footprint within an existing transport corridor, growth point or node?	More than 80%	More than 30%	Coed Darcy is a growth point, linked to major transport corridor
1.3 Have travel surveys been carried out to research existing travel patterns and increase the understanding of travel needs?	Yes meets requirements well	Meets key requirements partly meets others	New development – TA covers wider context
1.4 Has a Traffic Impact Assessment been carried out, and were the results beneficial?	Benefits outweigh impacts	Benefits balance impacts	TA completed as part of the scheme
<b><u>2. Public Transport Provision</u></b>			
2.1 What is the distance from a major fixed public transport node (train, tube, tram), or regular link (every 10 to 15 mins.) to a major fixed public transport mode, for 50% of the footprint?	1 km	1-2km	Public transport provision is central theme for the development
2.2 What is the distance from the bus stop or other public transport node (new or existing), providing a regular service (80% of the development to fall within this)?	≤ 500m	≤ 1km	New bus routes to serve development



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2.3 Has provision been made for a comfortable/safe bus shelter or waiting room near local activities?	Over 80% served by convenient bus shelters	60-80% served by convenient bus shelters	Coed Darcy not reached the level of design at present. These issues will be considered during detailed design
2.4 What percentage of the bus stops and shelters have real time info. system?	Over 80%	60-80%	Coed Darcy not reached the level of design at present. These issues will be considered during detailed design
2.5 Has provision been made for environmentally friendly public transport (frequent service) to the city/town centre (bicycle, gas bus, etc)?	More than 25% provision	Serves 10% to 25% of the development	Coed Darcy not reached the level of design at present. These issues will be considered during detailed design
<b><u>3. Parking</u></b>			
3.1 Have the transport needs of different users been provided for by balancing the availability/charging of car parking with adequate public transport?	Needs have been fully considered	Partly considered or provided	Parking and reduced car reliance central themes in Masterplan
3.2 How do the car parking standards for the development compare with the Local Authority requirements?	Equal to LA minimum	Less than LA maximum	Parking and reduced car reliance central themes in Masterplan
3.3 What % of car parks have been designed to be flexible?	More than 20% are flexible	10-20% are flexible	Parking and reduced car reliance central themes in Masterplan
3.4 Will there be a reduction of the visual impact of parking by screening?	Yes in > than 50% of car parking	Yes in 30-50% of car parking areas	Parking and reduced car reliance central themes in Masterplan
3.5 Has provision been made for off-road HGV unloading spaces or alternatives?	More than 80% of cases	HGV unloading spaces in more than 60% of cases	Coed Darcy not reached the level of design at present. This issue will be considered during detailed design

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<b><u>4. Facilities for Pedestrians/Cyclists</u></b>			
4.1 Will there be a network of safe pavements around site and to local facilities?	Full provision to the development	Partial provision	Central aspects of the proposals (see Masterplan for further details)
4.2 Has provision been made for safe crossing points over all major roads near to facilities and at strategic points?	Full provision on all major roads	Partial only	Central aspects of the proposals (see Masterplan for further details)
4.3 Is there a network of safe bicycle routes <sup>7</sup> to local facilities near to, and overlooked by, roads and pavements?	Yes full provision	Meets key requirements others only partial	Central aspects of the proposals (see Masterplan for further details)
4.4 Has provision been made for safe bicycle storage at all local facilities and at strategic points?	Full provision	Meets requirements well partly meets others	Coed Darcy not reached the level of design at present. This issue will be considered during detailed design
<b><u>5. Provision of Local Employment</u></b>			
5.1 For a development providing significant numbers of housing, what is the ratio (in %) of land occupied by easily accessible (within 1 km radius) employment sites; housing?	More than 31%	25% to 30%	Central aspects of the proposals (see Masterplan for further details)
<b><u>6. Proximity of Local Facilities</u></b>			
6.1 Which of the following are within 500m of the development:	All of those listed	Some of those listed	Schools and amenity areas have been considered in detail as part of the Masterplan and proposals.

IMPACT OF INDIVIDUAL BUILDINGS	DEFINITION OF BEST PRACTICE (Defined in BRE checklist)  Coed Darcy demonstrates best practice	DEFINITION OF GOOD PRACTICE (Defined in BRE checklist)  Coed Darcy demonstrates good practice	COMMENTS  Coed Darcy proposals not reached this design stage
<b><u>1. Meeting Specified BREEAM Rating</u></b>			
1.1 What is the BREEAM rating for the proposed buildings?	Very Good SF = 0.75, Excellent SF = 1.0	Good SF = 0.5	Masterplan and Town Code Require excellent rating
<b><u>2. Building Types not Covered by BREEAM</u></b>			
2.1 What are the CO <sub>2</sub> targets for the proposed buildings?	20% better than DETR Good Practice	10% better than DETR Good Practice	Ecohomes and NHER guidelines specified in Masterplan (Excellent Standard). Design Spec. for Area 1 set the baseline standard.
2.2 What is the predicted use of low environmental impact building materials:	More than 90% of buildings of this type	80% to 90% of buildings of this type	All developments to employ recycled and locally sourced materials where possible. Timber to be from Forestry Stewardship Council accredited renewable sources.. Design Spec. for Area 1 set the baseline standard.
2.3 What is the predicted water consumption?	Low flush WCs plus spray taps plus auto leak detector plus water recycling	Low flush WCs plus spray taps plus auto leak detector	Should evolve to best practice as specifications become developed for specific area of the site. Spec. for Area 1 sets baseline standard.



# Llandarcy As It Was



# Llandarcy As it is Today





# And As it Will Be



# What Has the Matrix Done

- **Assisted us throughout the planning and design Process**
- **Made it Clear where we were falling short**
- **Managed Our Conflicts**
- **Helped Plan our Emerging Priorities**
- **Demonstrate our Sustainable Credentials**

**In Summary - Its Helped Us Deliver an Exemplar of Sustainable Development**