Strategies for change

4.1 Introduction

A large number of potential development sites, both allocated and unallocated exist within the Eastern Gate study area (refer to Figure 50). The sites highlighted on the adjacent map are not exhaustive, but serve to provide an overall picture of the areas potential for change. Undoubtedly, these sites present an opportunity to enhance the quality and image of the area, but when considered collectively with the 'lost' and underused spaces in between buildings, an enormous opportunity exists to reshape and repair the urban fabric.

Articulated through a number of high-level strategies, this chapter offers a 'framework for change' – a framework for integrating new development into the existing city fabric; for reconnecting neighbouring communities; and for rediscovering and realising the potential of underused spaces. The framework for change consists of four strategic layers. These are:

- 1. Movement and circulation strategy
- 2. Open space, landuse and activity strategy
- 3. Built form, scale and massing strategy
- 4. Public art strategy

Whilst at this initial stage, the strategies offered are intended to stimulate ideas and discussion, the chapter does however, begin to set out the key qualities and broad development principles that are likely to be required of development. It is intended that as this work is progressed and is refined following consultation with residents, members and key stakeholders, that anyone

considering redevelopment within this area, both private and public sectors, should have regard to the strategies contained within this chapter.

Inevitably there are significant dependencies and interactions between the different strategies and they should therefore not be read in isolation. It must also be noted that the diagrams contained within this chapter should be read in conjunction with the supporting text.

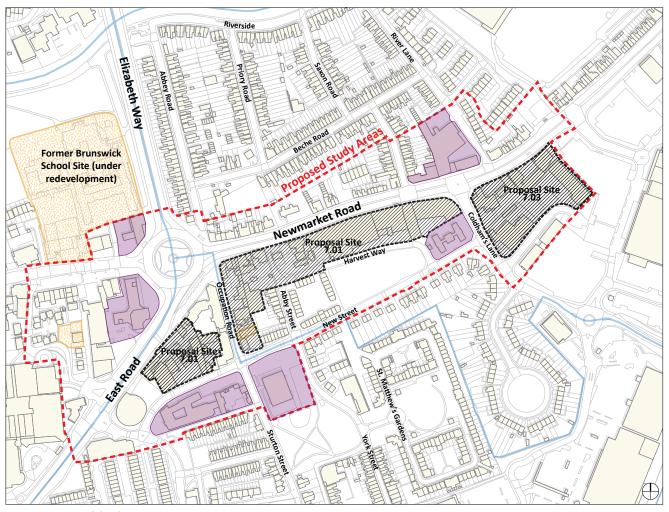


Figure 50 - Potential development sites



Proposal sites identified within the Cambridge Local Plan (2006)



Potential development sites



Sites currently under redevelopment

4.2 Movement and Circulation Strategy

The adjacent plan articulates aspirations for the area in terms of movement and circulation. Key elements of this strategy are outlined below.

Creating safer, more civilised & inclusive streets

The government's *Manual For Streets* (MfS) officially informs us that every street is also a place and that people, not the car, must come first. *'Civilised Streets'*, a recent report from CABE, sets out opportunities for a fresh approach to the design of our streets. It argues that the car still dominates and that our streets will only become more pleasant and more civilised (slower, safer and more sociable) when the needs of pedestrians are prioritised over cars. This strategy identifies streets/spaces within the study area, which require significant improvements. Ideas and measures for 'civilising' the areas identified on the adjacent plan, are explored within chapter 5-key projects.

Block Structure

The adjacent plan promotes an urban structure that:

- Reflects the finer urban grain of the area and reinforces the character of the central conservation area;
- Is permeable, human scaled and walkable on foot i.e. blocks of a scale appropriate to pedestrian movement;
- Could create a more integrated and legible environment through potential new visual connections between neighbourhoods north and south of Newmarket Road.

Remodelling of hostile junctions

A key aspiration of this strategy is to remove Elizabeth Way roundabout pedestrian underpass, remodel the land inefficient junction to allow for pedestrian/cycle movements at grade, and reclaim the lost space around the junction so that built form, rather than highway, defines and encloses this major gateway into the city. Refer to key project 1 for options for Elizabeth Way roundabout.

Improved cycle and pedestrian routes along Newmarket Road

This strategy seeks the improvement of on street cycle routes along both sides of Newmarket Road to form a continuous designated route along the entire stretch and the widening of footways, where appropriate. It is an objective of this strategy to achieve where possible 2 meter wide cycle lanes along Newmarket Road.

Breaking down actual barriers to movement

By exploring the removal of all existing pedestrian guardrailing located along Newmarket Road and East Road, and in particular guardrailing that is located within the median strip. Please note that this strategy is not advocating that this should be undertaken in isolation - the removal of existing guardrailing should only be considered when part of a wider design for the whole of the streetscape.

Responding to natural pedestrian/cycle desire lines

By forming new, wide pedestrian/cycle routes and crossing points that follow natural desire lines, rather than forcing

people to cross at inconvenient formal crossing points.

Improved lighting - this strategy promotes where possible, the improvement of lighting within the area.

Re-establish historic links, re-connect streets and strengthen key strategic routes

An aspiration of the strategy is to re-establish the historic route between Occupation Road and Abbey Road, and strengthen a key north-south strategic route from the Railway Station to Riverside, which is subject to a programme of environmental improvement works. The formation of a new, wide pedestrian/cycle crossing is fundamental to this.

Gateways/Entry points

Emphasising and improving the gateways/entry points to residential neighbourhoods is vital to highlighting the change of context, influencing appropriate speeds and driver behaviour.

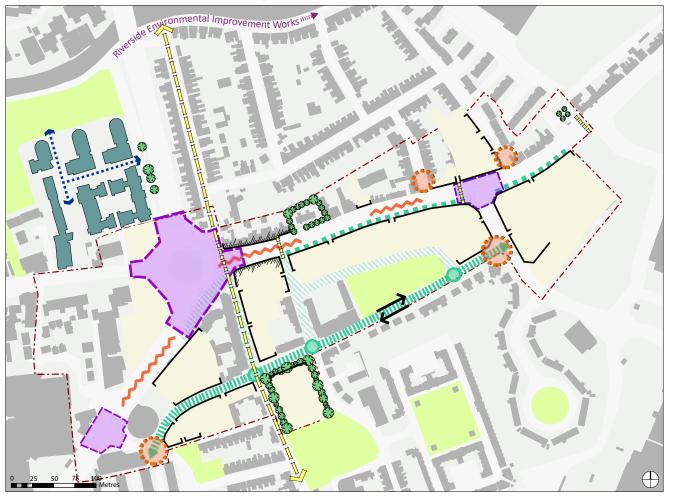
Two-way streets

This strategy promotes the reintroduction of 2-way vehicle movement along New Street and Harvest Way, and traffic calming as part of a wider design for the whole of the streetscape. Please refer to Key Project 5, page 64 & 65.

Cambridge City Council's 'Suburbs & Approaches'

appraisals - In progressing the SPD, due regard will be given to the Council's emerging 'Suburb's and Approaches' study for Newmarket Road, which will provide an assessment and understanding of 'local distinctiveness'.

Figure 51: Movement and circulation strategy







Potential new pedestrian/cycle crossings



Emphasise and improve gateway/entry points into residential neighbourhoods



Re-establish historic link and strengthen key north-south strategic route from the Station to Riverside



Remodelling of hostile junctions



New pedestrian/cycle links



New building line set back by approximately 2m, to provide a strip of land for highway improvements.

(Need established through previous applications)



Streetscape improvements - placemaking at intersections (refer to Key Project 5, page 64)



Streetscape improvements - 'homezone' style approach (refer to Key Project 5, page 64)



Reintroduce two-way vehicle movement along New Street and Harvest Way as part of a wider design for the whole of the streetscape (refer to Key Project 5, page 64)



Breaking down actual barriers to movement - explore the removal of existing pedestrian guardrailing as part of a wider design for the whole of the streetscape.

4.3 Open Space, Landuse and Activity Strategy

Public spaces (streets, parks and squares) provide the setting for everyday life and should be attractive, enjoyable and inclusive places. This means that new development will be expected to improve and enhance the public realm as well as creating new and exciting spaces. A number of key public realm projects are suggested within Chapter 5 of this document.

This section offers aspirations for the area in terms of open space, landuse and activity. Key elements of this strategy are outlined below.

Block Structure

With regards to open space and landuse, figure 55 promotes an urban structure, which seeks to:

- Improve the walkability of the area and access to existing open spaces.
- Create a structure that helps urban activity to evolve, supports a range of uses within the public realm and promotes natural surveillance – making routes and spaces feel safer.
- Improve the relationship between existing small-scale uses on the north and south side of Newmarket Road.

Greening streets and spaces

'Greening' urban spaces can help places adapt to the effects of climate change for example by soaking up/ storing rainwater and cooling the environment. Trees especially bring a number of benefits to the urban landscape environmentally and also have a significant role to play in defining character. The particular benefits that

street trees provide include:

- humanising and softening the urban environment around us;
- promoting a sense of well-being and health by making routes more attractive and enjoyable places to walk and cycle;
- helping to make streets cooler in the summer months;
- helping to cope with climate change and excessive precipitation through water uptake;
- increasing the biodiversity value of an area by providing green corridors for wildlife between open spaces such as parks and allotments; and
- helping to improve air quality and reducing the impact of traffic noise;

Figure 55 indicates routes, which require 'greening'. These include:

- 1. Newmarket Road and East Road it is an aspiration of this strategy that these principal routes become a tree lined approach into the city. Further east of the study area, mature London Planes occupy the median strip of Newmarket Road and it is felt an opportunity exists to extend this area of 'green' character westward. It is vital that as this visioning document is progressed into a Development Framework (SPD) for the area, that this aspiration is tested and developed into a clear and deliverable tree planting strategy for Newmarket Road.
- New Street and Harvest Way This strategy promotes the introduction of street trees along New Street and





Figure 52: Norway Maple (acer platanoides)





Figure 53: Field Maple - Native (acer campestre)



Figure 54: London Plane - Newmarket Road/Stanley Road Junction

Harvest Way not only for townscape value but also to help with traffic calming. Through careful integration, street trees can help lower speeds by disrupting forwards visibility of drivers. It is suggested that our native Field Maple (acer campestre) may be a suitable tree.

3. Green fingers – these links do not provide through routes for vehicles and therefore an opportunity exists to introduce shared surfaces, by blurring the boundary between the highway and footway. Integrating trees within the highway itself will be key to emphasising place and pedestrian priority. The Riverside Environmental Improvement Project has taken this approach. The Norway Maple (acer plantanoides) is suggested as a suitable tree. These streets also provide an opportunity for increasing the biodiversity of the area (see below).

Biodiversity

The built environment has the potential to enhance local biodiversity. New development, open space and public realm improvements should, where appropriate, include new or enhanced habitat, or design (such as green roofs) and landscaping that promotes biodiversity. Options will be site specific but could include for example: the provision of roof gardens; the inclusion of brown or green roofs; tree avenues; hedgerows and designing in bat and bird boxes, in particular for swifts. Layered vegetation and planting under trees with a shrub layer can also promote biodiversity. Native plants are preferable,

although flowering and berry bearing exotics can also add value, for example: Cotoneaster, Sorbus species and Pyracantha. Considered design of SUDs systems can also provide valuable aquatic habitats permeating the built environment.

Improving existing spaces and rediscovering underused areas

Public consultation revealed a strong desire to protect and enhance existing open spaces and improve the links between them. The majority of local residents felt that there was a deficiency of open space within the area and stated that Petersfield has much less public open space per 1000- population than any other ward in Cambridge. There was also grave concern that existing routes between important open spaces were poor and unsafe - Newmarket Road, in particular emerged as a significant barrier to movement. Above all, public consultation revealed an overwhelming aspiration to increase the size of St Matthew's Piece.

This strategy therefore seeks the enhancement of well-loved spaces as well as rediscovering and realising the potential of underused areas. Figure 55 seeks the following:

- The creation of a new and exciting public urban space at a prominent gateway to the city, through the significant remodelling of Elizabeth Way roundabout.
- Exploring the opportunity to increase the size of St Matthew's Piece. Please refer to Built Form, Scale and Massing Strategy (Section 4.4, page 49) for further

- guidance regarding the Howard Mallett Centre.
- 3. Improving the boundary treatment of the allotments and enhancing the small green space adjacent to the eastern entrance.
- Exploring the opportunity to improve the relationship between existing open spaces, in particular St Matthew's Piece and St Matthew's Gardens.

Private Open Space

Private open space is highly valued and should be provided for all houses and flats. Applicants are encouraged to consider the incorporation of private spaces such as roof gardens, balconies and winter gardens. It is essential that these private amenity spaces are well designed and integral to the character of the development, are located where they are comfortable to use and are of a sufficient size to enable them to be used as outside living space. It is therefore expected that private roof gardens, balconies and winter gardens should:

- be large enough to accommodate a table and chairs;
- receive direct sunlight for part of the day; and
- be positioned away from or designed to mitigate sources of noise/poor air quality that would make them unpleasant to use.

Landuse

A large proportion of the study area is allocated within the Cambridge Local Plan 2006 under sites 7.01 and 7.03 of the Proposals Schedule (refer to figure 50), which proposes the following uses:

- Site 7.01 (New Street/Newmarket Road) –
 'Employments, B1, Housing and Student Hostel'.
- Site 7.03 (Coldham's Lane/Newmarket Road) 'Mixed uses including housing and employment B1(a) (not exceeding existing B1 (a) floorspace), hotel, student hostel and A1 non-food retail (not exceeding 50% of the site area)'.

Whilst in planning policy terms, the principle of the above uses on proposal sites 7.01 and 7.03 may be acceptable, it must be noted that some uses, in particular hotels, office development and student hostels present inherent design challenges. Double-banked corridor arrangements are common place and can produce large building footprints, which are tricky in massing terms to integrate within finger-grained contexts. These uses therefore require careful design consideration.

Activity

Unfortunately, many of the potential development sites within the area consist of poor quality buildings, which contribute little to the townscape and public realm. The uses within the buildings generate little activity onto the street and many possess large areas of blank frontage, which create uncomfortable and hostile edges. Too many buildings within the study the area have effectively 'turned their backs' onto the adjacent streets.

Despite this however, remnants of the historic high street still survive to the east of Elizabeth Way roundabout, and despite their tired appearance, they posses a fine grain mix of use, which helps to create activity onto the street.

This strategy encourages uses that will help the proposed development to 'reach out' into the street and create active frontages onto the public realm. An active frontage is one, which allows some kind of movement or visual relationship between the person outside and the activity inside. The adjacent plan highlights areas where active uses at ground floor should be targeted. In doing so, applicants are encouraged to consider the following:

- Mixing complementary uses vertically with different uses on different floors - to help spread activity throughout the day and therefore vitality to the public realm, eg: incorporating residential use above retail enables activity to be extended beyond daytime office and shopping hours.
- Well-defined and transparent edges shop windows, cafes, to allow the activity to be visible from the street, making the public realm feel safer and more welcoming. In the case of commercial buildings this could include hotel receptions and foyers.
- 'Spill out' space include opportunities for activity
 to 'spill out' into pavements. In the case of
 commercial buildings such as hotels, this translates to
 externalising more active uses such as bar/restaurant
 areas.
- Flexible Ground Floor units where 'active' uses may not be currently viable, provision could be made for their introduction in the future. Cambridge City

- Council's Sustainable Design and Construction SPD (2007) encourages the use of increased floor to ceiling heights at the ground floor level to allow for the building to be adapted relativity easily to retail uses.
- Entrances The main entrance into the building should be directly from the street and not solely from car parking at the rear or in a basement.

Car Parking

When considering the appropriate car parking solutions on the site, applicants should ensure that parking does not dominate or detract from the external environment. Poorly designed undercroft or semi-basement parking, which creates dead fronts and divorces the building from the street is not acceptable. In addition, vehicle access should be designed to be as unobtrusive as possible and preferably integrated within the building.

Consultation revealed a strong public concern that future development would exacerbate existing parking pressures within the area, especially along New Street. Therefore given the proximity of the area to the city centre, low car ownership development may be considered appropriate, especially when supplemented through the provision of Car Clubs. This strategy therefore promotes the inclusion of car club spaces within/adjacent to new development.

Figure 55: Open Space, Landuse and Activity Strategy



Potential development sites and suggested block structure.



Indicative building frontages



Extend 'green' character into the study area which exists along Maids Causeway and further east along Newmarket Road.



Streets requiring 'greening' (location of trees indicative only)



Groups of existing mature trees



Green fingers - Homezone style spaces with trees located within the highway . No through routes for vehicles.



Potential to increase the size of St Matthew's Piece.



Improve the boundary treatment of New Street Allotments and enhance the existing 'pocket park' situated at the eastern end.



Opportunity to create a new urban space through significant remodelling of Elizabeth Way roundabout (Refer to Key Project 1).



Primary frontages where active uses at ground floor should be targeted.



Remnants of the historic high street - opportunity to reconnect the two sides of the street through retention of historic street frontage/retention of their essence (use, scale, grain, rhythm etc).



Opportunities for visual links

4.4 Built Form, Scale and Massing Strategy

This section offers guidance on the appropriate form, height, grain (articulation), and the way that new buildings should relate to the street within the area. Key elements of this strategy are outlined below.

Block Structure

With regards to built form, scale and massing, figure 56 promotes an urban structure that seeks to::

- Moderate the mass of new development.
- Encourage new positive views to well loved buildings and spaces – eg. The c13 church of St Andrew-the-Less and the New Street allotments.
- Encourage visual connections between the north and south side of Newmarket Road, helping to visually integrate neighbouring communities.

A variety of building heights

Figure 56 on page 50 sets out the parameters for the scale of new development within the study area. The parameters are intended to generate a variety of building heights to achieve a varied skyline and roofscape, as this is an important feature of the existing streetscape (refer to Figure 57 and 58 on page 51). For most potential development sites, especially those with larger frontages, a range of heights is given. This means that it is expected that the height of buildings should vary along the frontage, to allow the buildings to respond to key contextual factors and good placemaking principles. An indicated half storey is defined as rooms accommodated

within the roof structure.

Massing, overshadowing and building orientation

Great care must be taken over the form and mass of new buildings to avoid unacceptable overshadowing. This also includes giving due consideration to existing renewable energy technologies, notably solar panels. Applicants will be expected to produce shadow studies to demonstrate that their proposal will not unduly impact neighbouring properties.

Block and building orientation can have a significant impact on the energy use and solar potential of a site. Applicants are therefore encouraged to give due consideration to the role of orientation especially in relation to access to daylight and sunlight; passive solar design; natural ventilation; as well as maximising roof space for photovoltaic panels and hot water systems.

Views, Vistas and Skyline

Applicants will be expected to produce 3D computer modelling (such as SketchUp) to inform an appropriate massing of their development proposals and to demonstrate the impact of their development on any key views and vistas. These will be agreed on a site-by-site basis, at pre-application stage, with the City Council. The adjacent map does however, highlight a key positive vista from Elizabeth Way bridge across the roofscape of the 19th Century terrace houses of the Riverside Area, which

falls within the Central Conservation Area (refer to Figure 59).

As highlighted above, this strategy is intended to generate a variety of building heights reponsive to their particular location. This is intended to avoid long unvaried rooflines of large new buildings forming dominant and intrusive horizontal bands on the skyline, that would detract from the roofscape of the conservation area and the skyline of the city. It is therefore essential, that careful consideration must be given to the shoulder height, eaves and ridge levels of new buildings.

Continuity and definition of public realm

The study area suffers from large areas of negative, leftover space, which is ill defined and poorly enclosed. As a result, many spaces feel oppressive and hostile. This strategy seeks to create a coherent urban fabric and repair the gaps in the street frontage that currently disrupts the overall continuity of the urban form. It is fundamental that frontages should make clear the distinction between public and private space, and where appropriate, development should respect existing building lines. The space between the front of the building and the street (the threshold between public and private realm) needs to be carefully designed and managed. Figure 56 highlights indicative frontages for potential development sites.

An active and human scale environment

Pedestrian friendly environments are those that have

a scale, which humans can relate to. This is not an argument against tall or large forms; but more to ensure the scale of the development at the ground floor (the street) feels comfortable. This means that larger buildings, particularly at ground level should be configured to include finer grained and active façades. In order to achieve this applicants are encouraged to consider the following:

- Front doors & entrances: well-defined entrance/ entrances directly from the street can encourage activity within the public realm. Residential units, with individual front doors served directly from the street are encouraged.
- Overlooking: maximise windows to increase natural surveillance. In the case of commercial buildings this translates to having active uses at the ground floor overlooking the public realm;
- End facades and corner buildings: blind facades (passive) at the end buildings are to be avoided.
 Corner buildings must address all streets.
- Balconies: The inclusion of balconies, winter gardens and bay windows, can further enliven frontages and articulate facades.

Visual richness and texture

It is not the intention of this framework to stifle design creativity or prescribe architectural styles. However, it is necessary to begin to suggest some principles/aspirations for the visual performance of new development within the area.

Figure 57 and 58 on page 51 identifies the important visual cues (elements) that we would expect new development to pick up on. Both figures highlight that the existing buildings along both sides of Newmarket Road are largely characterised by an orderly composition and grouping of elements, which creates a strong vertical rhythm. The vertical and horizontal grain of new buildings is particularly important and can be expressed in a variety of ways. eg through projections; changes in roofline; alignment of windows, balconies and downpies; and changes in materials/colours.

It is important to note that this guidance is not implying that new development should slavishly copy the buildings in the immediate context. Excellence in architecture is important - well considered, high quality contemporary architecture is promoted.

Howard Mallett Centre - Development Principles

A key aspiration of the previous Open Space, Landuse and Activity strategy is to enhance existing well-loved spaces as well as rediscovering and realising the potential of underused areas (refer to page 47). St Matthew's Piece is identified as one such opportunity and it is therefore important to establish some guiding principles for the Howard Mallet Centre site, which lies adjacent to the existing open space.

Therefore should the Howard Mallett Centre site come forward for redevelopment, the following key development principles should be applied:

- Explore the opportunity for adaptive reuse of the building.
- Mending the street frontage through the promotion of a building frontage along New Street (refer to figures 51, 55 and 56).
- Improving the relationship with surrounding streets through the promotion of active frontages.
- Minimising the impact on St Matthew's Piece through careful consideration of building heights and building footprint, particularly in relation to existing mature trees.
- Potential to enhance and increase the size of St
 Matthew's Piece through the promotion of a
 reduced building footprint than the existing Howard
 Mallett Centre, and the contribution of S106 monies
 to enhance the existing open space.

Riverside area conservation appraisal - conservation areas. Work is currently underway on the appraisal of the Riverside area, which forms part of the Central Conservation Area. In progressing the SPD for the Eastern Gate area, due regard will be given to the emerging conservation appraisal for Riverside.

Figure 56: Built Form, Scale and Massing Strategy





Potential development sites



Indicative building frontages



Storey heights - maximum storey heights indicated assume residential floor to ceiling height of 2.7m. Overall heights should be inclusive of plant.



Potential for localised increase in height



Existing local landmark



Existing views: (1) Positive view over the roofscape of central conservation area to be enhanced; (2) Where possible, retain view to the Museum of Technology Chimney (Scheduled Ancient Monument).



Explore opportunity to create new visual links



Newmarket Road historic high street frontage - opportunity to reconnect the two sides of the street through retention of historic street frontage/retention of their essence (scale, grain, rhythm etc).



Buildings of architectural interest - retain and enhance their setting.



Level change - land increases in height towards Newmarket Road



Edge issues with neighbouring sensitive uses: (3) Brunswick Nursery (4) Crown Court

Figure 57: Key contextual elements - Newmarket Road frontage, east of Elizabeth Way roundabout (Top image: North side, middle Image: South side)



- Chimneys punctuate roofline creating a varied and interesting roofscape.
- Vertical rhythm reinforced by grouped windows at first floor.
- (3) Retail units create a clearly expressed ground floor.
- The combination of narrow plot widths, frequency and arrangement of windows/entrances, create a strong vertical rhythm



Figure 59: Views over the roofscape of Riverside where chimneys punctuate the skyline

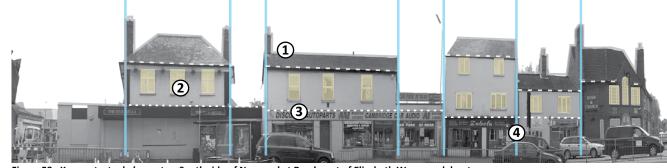


Figure 58: Key contextual elements - South side of Newmarket Road, east of Elizabeth Way roundabout



Figure 60: Views of the Cambridge Museum of Technology Chimney (SAM)

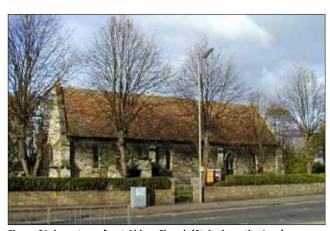


Figure 61: large trees front Abbey Church (St-Andrew-the-Less)

4.5 Public Art Strategy

The City Council's Public Art Supplementary Planning Document (SPD) 2010, encourages public art strategies to be developed for sites, which have a long term programme of development and/or, for areas which are the focus of development interest and activity by pooling S106 Contributions.

The aims of this area to raise the quality of public art proposals by supporting their delivery with a strategic approach rather than have them developed on an adhoc basis and to enhance the wider public benefit. This approach ensures the aims and objectives set out in the SPD are achieved.

The Eastern Gate study area is currently the focus of much development interest, and whilst the individual developments may be capable of supporting substantial on-site public art, greater benefits will be achieved by pooling resources over the whole area to develop an area wide public art Strategy.

The tight grain of the development area, combined with the lack of open space, means that public art proposals must be embedded within the fabric of each individual development. The result being that several individual, unlinked works of art could have an uncoordinated visual impact on the area.

This area already suffers from having a poor public realm and the delivery of an area wide Public Art Strategy will help to mitigate the impact of the combined developments, whilst at the same time help deliver public art which has maximum benefit for the public realm and the community.

The principle of pooling public art S106 contributions in the Eastern Gate area is also supported in the City Council's emerging Public Art Commissioning Strategy.