UK GREEN BUILDING COUNCIL

Project Case Study Template
St Paul's Square

KEY FACTS

Location: **Old Hall Street and Pall Mall, Liverpool**

Classification: **Large scale community infrastructure**

Type: **Mixed-use**

Size: **400,000 sq ft**

Total Capital Cost: **£150 million**

Client: **English Cities Fund**

Project team details

Architect: **RHWL**
M&E Engineers: **Buro Happold (phase 1), Hannan Associates (phases 2 &3)**
Structural Engineer: **Buro Happold**
Contractor: **Shepherd Construction**

Third party certification: **Phase 1 and 2 office buildings secured BREEAM 'Very Good'**
Phase 3 office building secured BREEAM 'Excellent'

PROJECT SUMMARY

St Paul's Square, Liverpool is a 400,000 sq ft mixed-use development centred on Old Hall Street and Pall Mall. The development comprises five buildings overlooking a stunning landscaped public square which, in itself, has become a new inner-city destination.
The first phase comprised 125,000 sq ft of prime office space, 50 apartments, a restaurant and a 400 space car park, all overlooking a new public square. Phase 2 provided 133,000 sq ft of Grade A office accommodation. The third and final phase, No.4 St Paul's Square, is an office building of 109,000 sq ft.
St Paul's Square was developed by Muse as development manager (and partner) in English Cities Fund (ECf), a delivery vehicle created by government in December 2001 to identify and break through the barriers to securing institutional investment and pave the way for higher levels of private investment in the re-shaping of our towns and cities.

ENVIRONMENTAL IMPACTS

Building orientation/site issues:

The site is immediately adjacent to the Liverpool Maritime Mercantile City UNESCO World Heritage Site and also the Castle Street Conservation Area. Through the planning process extensive consultation was undertaken with a number of statutory bodies and stakeholder groups including English Heritage, CABE, Liverpool Urban Design and Conservation Advisory Panel and Liverpool Commercial District Partnership. High quality public realm has created a new destination towards which the city's business community has gravitated.

Transport:

St Paul's Square is located in central Liverpool and is well served by the city's public transport system, which includes train, bus and ferry services. The number of car parking spaces has been minimised and secure bike storage facilities were provided for both the residential and office buildings. A green travel plan has been developed for the operation of No 4 St Paul's Square and, during construction, the main contractor put in place car sharing and public transport notices for site workers.

Energy Efficiency:

Energy efficiency in the office buildings is addressed by high specification ground water heating and cooling systems delivering up to 30% savings. The final building, No 4 St Paul's Square, achieved BREEAM Excellent despite being an all glass building. Its combination of 26% energy savings, rigorous waste management programme, bio-diverse green roof, strict water saving specification and a commitment to the Considerate Contractors scheme helped the building achieve a score of 77 BREEAM points.

Water Efficiency:

No 4 St Paul's Square achieved 85% net water efficiency, compared with the benchmark of 5.5m3 per person, through the use of auto shut-off wash basin taps, 6/4 litre dual flush toilets and showers with a flow rate of between 9 and 15 litres per minute. Leak detection and proximity detection shut-offs were provided and, during construction, targets for water consumption were set, monitored and reported on.

Materials:

Materials used throughout reflect the heritage of the city. The design approach to the 400 space car park, especially in the façade, is the hallmark of the scheme's attitude to sustainability: galvanised panels carry Cumaru timber slats. This FSC-certified timber was selected because of its durability in marine conditions, reducing the need for cleaning and maintenance and providing long life.

Indoor environmental quality:

The scheme sets the highest standards in terms of architecture, design and specification, complementing the architectural language which underpins so many of Liverpool's buildings.

Phases 2 and 3 were constructed in high quality glazed curtain walling, orientated to minimise solar gain, with brise soleil to limit heat gain further. Building 3 has a bio-diverse green roof, low energy lighting technology and a strict water saving specification.

Operations and maintenance:

The buildings have been designed to be seen from every angle, introducing a dynamic aesthetic that has helped the scheme become widely regarded as offering the best mixed-use accommodation within Liverpool city centre. There are no forgotten and neglected rear elevations and entrances are set squarely in the centre of the principal facades. High quality public realm has created a new destination towards which the city's business community has gravitated.

Waste reduction:

100% of the waste removed during construction of Phases 1 and 2 was recycled. All segregated materials (including card, plastics, wood and metal) were decontaminated where necessary and sold to end users as baled, shredded or graded product. Much of the residual waste was also put to good use, with soils, brick and concrete being used as hard-core and plasterboard being shredded for use in agricultural products. The total waste recycled amounted to over 63,600 kg.

Biodiversity:

No. 4 St Paul's Square features the first sedum roof in the St Paul's district: absorbing rainwater so that run-off is slowed, boosting the insulation properties of the building and creating a wildlife habitat. It also filters out pollutants and provides greater sound insulation.

OVERARCHING SUSTAINABILITY ACHIEVMENTS

ECf's regeneration of St Paul's Square's four acre site began in 2005, with the aim of bringing back into sustainable economic use a rundown area of Liverpool city centre. The area on which St Paul's Square now stands was unproductive, consisting of a car park and a handful of dated commercial buildings, and for years Liverpool had lacked the Grade A office accommodation necessary to compete with new space available in Manchester, Newcastle, Leeds and other provincial capitals.

The mix of residential and commercial uses and areas of public realm delivered into this unpromising site by ECf has underpinned the long term sustainability of Liverpool's new Commercial District and delivered a catalytic effect. Owners of neighbouring buildings have re-located their front entrances to face the Square and third party building owners in the vicinity have brought forward development plans for their own sites and buildings. In addition to the buildings, the project incorporates a new high-quality public square and pedestrian routes which link to other parts of the city centre.

WHAT LESSONS WERE LEARNED AND WHAT CONCLUSIONS CAN BE DRAWN FROM THIS PROJECT?

- Creating opportunities for local employment is a key element in community engagement
- Advances in new technology facilitate improved mechanical specifications in building, and these advances should be harnessed at the earliest opportunity

- Masterplans need to give due consideration to the balance between hard and soft landscaping in public areas

AWARDS WON FOR THE PROJECT

The phase 3 office building, No 4 St Paul's Square, won the 'Commercial' category in the 2011 RICS North West awards as well as the 'Commercial Workplace' award at the regional British Council for Offices Awards and the 'Best Office Development' award at the UK Property Awards 2012.

PROJECT COMMENTS/PRESS/QUOTES

"ECf is extremely proud of the work that has been achieved at St Paul's Square. The scheme has played a major role in the renaissance of Liverpool's commercial offering and has set new standards in terms of architecture, design, quality and sustainability. No 4 St Paul's Square is the final phase of this development and delivers Merseyside's first speculatively built BREEAM 'Excellent' building."
Darran Lawless, development director for ECf

"The opening of No 4 St Paul's Square marks a 10 year commitment to Liverpool by English Cities Fund. The St Paul's Square scheme has provided an entirely new focal point for Liverpool's Central Business District and plays a crucial role in the reshaping of the city centre and how it does business. ECf was established to show how private sector development and investment skills could work with local partners to change the shape and purpose of neglected city locations. St Paul's Square well illustrates the impact that is possible."
Sir Michael Lyons

"St Paul's Square is an example of effective partnership between the public and private sectors. I look forward to the day when we see a demand from the private sector which will be hugely welcome and help the city to build on the real progress it has made in recent years."
Lord Heseltine

"St Paul's Square has been a key element in our strategy for Liverpool's Commercial District for a number of years. We are delighted to have worked with English Cities Fund and to see the completion of the final phase of this important commercial scheme. St Paul's Square will continue to bring real benefits to the city's economy and satisfy growing demand for high quality commercial space in Liverpool city centre."
Max Steinberg, former chief executive, Liverpool Vision