

### 3.17 Energy Efficiency, Sustainability & Ecology

An Energy and Sustainability Statement has been produced by Ramboll and is included with this submission as a supporting document.

The Sustainability and Ecological Strategies for the scheme have been carefully considered specific to both the site and the brief. The design concept has evolved in parallel with the energy and sustainability strategies to ensure that the final proposals are well considered and integrated in the fundamental concept rather than as an after-thought.

The design responds to national, regional and local sustainability policy and guidance. The proposals promote a design centred on a low energy and sustainable design, with high carbon reduction and Code for Sustainable Homes targets. The residential has been designed to achieve a Code for Sustainable Homes Level 4 rating.

The following key characteristics have been incorporated:

#### Energy / Renewables

- An ambitious energy performance will be achieved primarily through passive design (e.g. highly insulated building fabric and low air permeability).
- Very efficient condensing gas boilers are proposed for each flat and maisonette.
- Photo voltaic panels indicatively proposed on the roofs of Units 3.2, 4, 5.2 and 5.3
- The overall predicted reduction in regulated CO2 emissions from the Baseline development model (which is Part L 2010 compliant) is estimated to be at least 28%.

#### Transport / Connectivity

- Site has excellent links to public transport, and can thus support high density, sustainable development.
- Area well served by bus routes.
- Local streets connecting the site to the wider transport infrastructure and amenities.
- Secure cycle storage is provided for the residential units.

#### Materials / Construction

- Materials will be responsibly sourced (e.g. FSC certified timber) where available.
- All insulation materials will be specified to have zero ozone depletion potential.
- Main Contractor will achieve a best practice score (Considerate Constructors Scheme).
- Main Contractor will monitor energy, water usage and waste related to the site for the duration of the works.

#### Sustainability in Use

- Water efficient fittings and appliances to be installed.
- Individual meters to be provided to each home.
- Dedicated storage facilities to be provided for recyclable waste.
- A home user guide will be provided to future tenants describing operation and energy performance.

#### Ecology

- Brown roofs to be used on available roofs, which have the following advantages:
- Creating a natural habitat for flora and fauna to help support the local ecology.
- Aiding biodiversity - encouraging a wider spread of species in the area.
- Storm water management - helps to reduce the flood risk by retaining rainwater.
- Improved air quality - reducing both gaseous pollutants and dust particles.
- Each home has its own private balcony, terrace and/or courtyard garden which will include planters and pots landscaped next to trellis railings, adding to the biodiversity and supporting the ecology of the area.
- New trees to be planted along street edge and in rear gardens.

### 3.18 Daylight / Sunlight & Overshadowing

A Daylight and Sunlight Report has been undertaken by Brooke Vincent & Partners and is included with this submission as a supporting document.

The design of the infill sites proposals have been developed with careful consideration to daylight and sunlight, both for the proposed buildings and the surrounding existing buildings.

In their document "Kiln Place Development Sites, Planning & Urban Design Briefing" document, issued 12/06/13, L.B. Camden Planners state: *"The proposed residential units should maximise sunlight and daylight whilst minimising overshadowing or blocking light to adjoining properties. Where possible the council would favour dual aspect units... The council would expect to receive a daylight and sunlight assessment."*

The design aspiration for the new proposals is to create dwellings with good levels of natural light. The Daylight / Sunlight Report has enabled the team to use daylight as a quantifiable design tool, ensuring good quality daylighting for the proposed buildings and sensitive design consideration to ensure minimal impact on the neighbouring buildings. All the dwellings have been designed to be at least dual aspect, the majority are triple aspect, with their massing and orientation specifically designed to maximise daylighting.

The internal daylight and sunlight results show that the levels of daylight within the proposed accommodation as recommended by BRE and the London Plan would be satisfied. Sunlight availability to proposed accommodation would be better than the BRE's worked example for a block of flats.

The results for daylight and sunlight to the surrounding existing properties show that all buildings analysed will meet or exceed the numerical criteria recommended in the BRE criteria and so be in accordance with local planning policy.

Kiln Place - Proposed Site Plan & PrecedentsBoard 2



The Kiln Place infill site proposals provide beautiful new homes which will enhance the existing estate, adding discrete and delightful architecture forming a picturesque backdrop to Kiln Place. Additional improvements to the existing estate, such as new entrances, improved landscaping and play areas will benefit everyone. Kiln Place is blessed with plentiful open space and a strong sense of community, and the new proposals capture the charm and character of the area - a place where people love to live.

**Community investment programme**



Kiln Place - New Proposals - What has changed?Board 3

**NEW ARCHITECTS & DESIGN TEAM:**

London Borough of Camden have appointed **Peter Barber Architects** to develop new proposals for the infill sites within Kiln Place Estate bringing a fresh approach to the design of the scheme. PBA were selected by a panel including representatives from the Kiln Place TRA. PBA are supported by a wider design team including EC Harris (Project Managers) and Hardsell (Engineers).

The previous architects, Neal McLaughlin Architects produced a Feasibility Study for the Kiln Place Infill Sites in 2012.

**SITE 1:** Seven x 3 bed Courtyard Houses proposed varying between one and three storeys high.

The previous architects' scheme proposed eight x 4 bed houses between two and three storeys high.

**SITE 1:** Triple aspect 'notched' courtyard houses proposed which are built into the sloping site with three areas of terraced private outdoor space.

The previous architects' scheme proposed single aspect houses with a central light well courtyard.

**SITE 2:** 3 Courtyard houses proposed, varying between one and three storeys high. Buildings step down and set back from the existing buildings at either end of terrace to preserve daylight, outlook & privacy of existing dwellings.

The previous architects' scheme proposed a solid terrace three storeys high plus roof terrace. Massing did not step down to respect amenity of adjacent existing buildings.

**SITE 2:** Two existing garages proposed to have entrances reconfigured to access directly from Kiln Place.

The previous architects' scheme did not make allowance for these garages.

**SITES 3 & 4:** In each infill site, a single 3 bed house is proposed. Varying between one, two & three storeys high - each house steps down and away from the existing buildings at the upper levels to preserve daylight and outlook to the existing dwellings at third floor.

The previous architects' scheme proposed four storey double stacked units with a roof terrace which compromised outlook and privacy of the existing dwellings at third floor.

**SITE 5:** Possible additional dwellings proposed to front Kiln Place around corner from Site 5 (currently parking + refuse stores). Three additional 1 bed dwellings proposed.


**Sketch View of Site 4 Infill Proposal**

**Sketch View of Site 5 Infill Proposal**

**Massing Model of Sites 3 & 4 Proposals**

**Massing Model of Site 5 Proposals**

**Community investment programme**



Kiln Place - Proposed ViewsBoard 4



Proposed Perspective View down Kiln Place towards Lambie Street & Oak Village



Proposed Elevation View of Sites 2 & 3 from Kiln Place



Proposed Visualisation Sketch of Sites 1 and 2

**Community investment programme**



Kiln Place - Site 1Board 5



Site Plan 1:500



Typical 3 Bedroom House Sketch



Typical 3 Bedroom House Section



Typical 3 Bedroom House Section through 3 Bedroom House

**Community investment programme**



3.19 Consultation Statement

Consultation Event 1: Kiln Place Residents

A resident consultation event was held on Thursday October 3rd 2013 (6.30-8.30pm) to present the new proposals to the Kiln Place Estate residents, the event took place in the Kiln Place TRA centre 'The Shack'.

Invitations were issued to all estate residents and a representative from Hemingway Close was also invited (and attended).

There were ~20 attendees on the night.

All attendees were given individual presentations of the proposals by a representative of the architect / client team, responses and queries were discussed and they were then given an information leaflet to enable them to leave their written feedback. This leaflet is also being posted to all Kiln Place Estate residents to enable them to have their say if they were unable to attend.

The feedback from residents on the night was generally very positive, key comments were as follows:

- Support for the terraced courtyard houses along Sites 1 & 2
- Support for the removal of the existing 'foyer' areas in Sites 3, 4 & 5 and replacement with new dwellings
- Concerns regarding impact to daylight / sunlight to existing properties from the proposed Site 5 one bed cottages
- Residents of the lower marionettes of 81-96 would like their own entrances to their dwellings if this can be incorporated?
- Residents are keen to see improvements to the existing playground.

Consultation Event 2: Public Consultation

A public consultation event was held on Monday 18th November 2013 (4-7pm) to present the revised proposals to the Kiln Place Estate residents and the wider local community. The event again took place in the Kiln Place TRA centre.

Invitations were issued to all estate residents and all neighbouring residents in Oak Village, Barrington court and close and Lambie street.

There were 40 attendees who signed in on the night.

All attendees were given individual presentations of the proposals by a representative of the architect / client team. Many of the attendees were Kiln Place residents who had been to the previous consultation event. The architect / client team were able to explain how the proposals had been amended to reflect the comments and concerns raised at the previous event. The feedback regarding these changes was very positive. New attendees who had yet to see the proposals also provided positive feedback and no major concerns were raised in the course of the consultation event.

Consultation 3: Public Consultation

A final consultation has been taken place two weeks prior to submission which will involved the distribution of informative leaflets detailing the proposals, and detailing how the revised scheme has addressed all comments raised in the previous consultation.



### Final Summary

The proposals for Kiln Place offer a fantastic opportunity to provide beautiful new homes and estate improvements, thus improving the local area and also providing much needed new homes for local people.

The 15 new homes at Kiln Place will create a delightful, public spirited, socially sustainable development for this and future generations to enjoy.

The proposals have the following benefits:

- 15 beautiful new homes
- Each house has its own front door onto the street
- Each dwelling has large areas of private open space (courtyards, roof terraces and rear gardens)
- Brightly lit, open plan kitchen / dining / living spaces
- No additional communal circulation or stair wells
- Lifetime Homes Compliant
- Clad in high quality brick
- Significant improvements to the existing wider estate
- Increased overlooking of public space and streets through the estate
- Improved access to open green space

## Appendix A.1\_Schedule of Accommodation

### Site 1

1.1	3 Bedroom 5p House	105 m2	Market sale
1.2	3 Bedroom 5p House	110 m2	Market sale
1.3	3 Bedroom 5p House	110 m2	Market sale
1.4	3 Bedroom 5p House	110 m2	Market sale
1.5	3 Bedroom 5p House	110 m2	Market sale
1.6	3 Bedroom 5p House	102 m2	Market sale

### Totals

1 Bedroom 2p Units = 5 (inc. 2 WC accessible units)

2 Bedroom 3p Unit = 1

2 Bedroom 4p Units = 2

3 Bedroom 5p Units = 7

### Site 2

2.1	2 Bedroom 3p House	88 m2	Market sale
2.2	2 Bedroom 4p House	101 m2	Market sale

### 15 dwellings

Total NIA / GIA = 1309 m2

Current proposed tenure split:

Total NIA / GIA Market Sale = 836 m2 = 64%

Total NIA / GIA Social Rent = 473 m2 = 36%

### Site 3

3.1	1 Bedroom 2p Maisonette	64 m2	Social Rent
3.2	1 Bedroom 2p Maisonette	50 m2	Social Rent

### Site 4

4	3 Bedroom 5p House	97 m2	Social Rent
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### Site 5

5.1	1 Bedroom 2p WC Flat	50 m2	Social Rent
5.2	2 Bedroom 4p Maisonette	85 m2	Social Rent
5.3	1 Bedroom 2p WC House	52 m2	Social Rent

### Site 6

6	1 Bedroom 2p House	75 m2	Social Rent
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## Appendix A.2\_Accompanying Drawing Issue Sheet

## Stage D / Planning Drawings - Issue Sheet

Drawings issued as separate accompanying package

**PETER BARBER ARCHITECTS**  
173 KING'S CROSS ROAD  
LONDON WC1X 9BZ  
TEL: 020 7833 4499 FAX: 020 7833 4999

**KILN PLACE - 116**

### DRAWING ISSUE SHEET: Stages C - D (up to Planning Submission)

Please receive the drawings/documents listed below:

BRIEF DESCRIPTION	SCALE	DRAWING NO.
<b>Site Plans</b>		
Site Location Plan	1:1250	116_P_00X
Existing Site Plan; inc. Roof Plan	1:250	116_P_01X
Existing Site Demolition Plan	1:250	116_P_00D
Proposed Site Plan; inc. Roof Plan	1:250	116_P_01P
<b>GA Plans - Sites 1, 2 &amp; 3</b>		
Proposed Ground Floor GA Plan (Sites 1, 2,3 & 6)	1:200	116_L_001
Proposed First Floor GA Plan (Sites 1, 2,3 & 6)	1:200	116_L_101
Proposed Second Floor GA Plan (Sites 1, 2,3 & 6) + Third Floor GA Plan (Site 1 & 3)	1:200	116_L_201
<b>GA Plans - Sites 4 &amp; 5</b>		
Proposed Ground Floor GA Plan (Sites 4 & 5)	1:200	116_L_002
Proposed First Floor GA Plan (Sites 4 & 5)	1:200	116_L_102
Proposed Second Floor GA Plan (Sites 4 & 5)	1:200	116_L_202
<b>Elevations</b>		
Elevation 01 - Site 1: Existing & Proposed South-West Elevation (Kiln Place Elevation)	1:200	116_E_01
Elevation 02 - Site 1: Existing & Proposed North-West Elevation (Lamble Street Elevation)	1:200	116_E_02
Elevation 03 - Site 1: Existing & Proposed North-East Elevation (from Hemingway Close)	1:200	116_E_03
Elevation 04 - Site 1: Existing & Proposed South-East Elevation	1:200	116_E_04
Elevation 05 - Site 2 & 3: Existing & Proposed North-East Elevation (Kiln Place Elevation)	1:200	116_E_05
Elevation 06 - Site 2: Existing & Proposed South-East Elevation	1:200	116_E_06
Elevation 07 - Site 2: Existing & Proposed South-West Elevation (Garden Elevation)	1:200	116_E_07
Elevation 08 - Site 2: Existing & Proposed North-West Elevation	1:200	116_E_08
Elevation 09 - Site 3: Existing & Proposed North-West Elevation	1:200	116_E_09
Elevation 10 - Site 4: Existing & Proposed North-East Elevation (Kiln Place Elevation)	1:200	116_E_10
Elevation 11 - Site 4: Existing & Proposed North-West Elevation (Kiln Place Elevation)	1:200	116_E_11
Elevation 12 - Site 5: Existing & Proposed South-West Elevation (Kiln Place Elevation)	1:200	116_E_12
Elevation 13 - Site 5: Existing & Proposed South-East Elevation (Kiln Place Elevation)	1:200	116_E_13
Elevation 14 - Site 5: Existing & Proposed North-East Elevation	1:200	116_E_14
Elevation 15 - Site 6: Existing & Proposed South-East Elevation	1:200	116_E_15
<b>Sections</b>		
Section A-A - Sites 1 & 2 - Cross Section	1:200	116_S_01
Section B-B - Site 1 - Long Section	1:200	116_S_02
Section C-C - Sites 2 & 3 - Long Section	1:200	116_S_03
Section D-D - Site 4 - Cross Section	1:200	116_S_04
Sections E-E & F-F - Site 5 - Cross Sections	1:200	116_S_05
Sections G-G, H-H & I-I - Site 6 - Long Section & Cross Sections	1:200	116_S_06
<b>Reports</b>		
Design & Access Statement	N/A	
<b>DISTRIBUTION</b>		
LONDON BOROUGH OF CAMDEN (Julia Farr, Colin Barnes)		
EC HARRIS (Tim Preston, Yolanda Edwards, Luke Brooker)		
LONDON BOROUGH OF CAMDEN PLANNING (TBC)		
ENGINEERS (Ramboll)		
PLANNING CONSULTANTS (Quod)		
<b>File</b>		

Key: inc = included within Stage C brochure

DATE	ISSUE PURPOSE
17/01/13	STAGE C: CRIBB ISSUE
31/01/13	STAGE C: CRIBB ISSUE
02/02/13	STAGE D - DESIGN DEVELOPMENT
11/12/13	STAGE D - DESIGN DEVELOPMENT
19/12/13	STAGE D - DESIGN FREEZE
31/01/14	STAGE D - DRAFT PLANNING
16/07/14	REVISED SITE 1 - STAGE C ISSUE
04/08/14	REVISED SITE 1 - DESIGN & ACCESS STATEMENT
11/08/14	REVISIONS SITE 1 - PLANNING DRAWINGS
12/09/14	PLANNING DRAWINGS
28/09/14	ADDITIONAL PLANNING DRAWINGS
22/03/15	DAYLIGHT/SHADING AMENDMENTS TO SITE 1 & 5
17/10/14	FINAL PLANNING DRAWINGS

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## Introduction to Peter Barber Architects



Peter Barber Architects have completed several projects over the last decade that incorporate similar principles to the Kiln Place proposals, including Colony Mews, Hannibal Gardens (Beveridge Mews), Donnybrook Quarter, Baden Powell Close.

These projects have been received extremely positively by residents, the local community, the client, and the Local Authority. They have won multiple awards and been received with critical acclaim. Case Study descriptions of each project are provided in the following pages.

The projects have carefully considered highly articulated architecture with lively picturesque facades that have contributed positively to the streetscape in local communities. The projects are predominantly street based housing along delightful public streets, mews, existing estates and squares made with a hard edge of buildings. Multiple front doors, balconies and bay windows tend to repeat along the street with the parapet and terraces alternating or notching, articulating each house (similar to the Kiln Place proposals).

The housing creates a hard edge to the street creating an active lively street frontage, bringing activity and increased natural surveillance to existing estates and infill sites. Housing is designed so that each dwelling has its own front door to the street, plus a high level of private amenity space, whilst achieving good densities.

Peter Barber Architects won the accolade of UK Architect of the Year for Housing in 2007/08 and 2010/11 as well as being a finalist for UK Architect of the Year for Masterplanning in 2012/13 and for Housing again in 2013/14.

## A.3\_PBA Relevant Project Case Studies

### Project Profile: Hannibal Gardens (Beveridge Mews)



“Beveridge Mews in Stepney Green is one of the great achievements of London as a city. The architecture transforms an unattractive piece of land previously occupied by dingy garages into a beautiful place. They are designed by Peter Barber, one of London’s finest architects of humane housing and they are part of this city’s commonwealth. We should be proud of them.” Kieran Long, Evening Standard (12th September 2012)

Hannibal Road Gardens (otherwise known as Beveridge Mews) is a housing project set around a public community garden in Stepney.

The proposal replaces a problematic strip of garages and creates a fourth side to a square within an existing housing estate with 3 slab blocks forming the other sides.

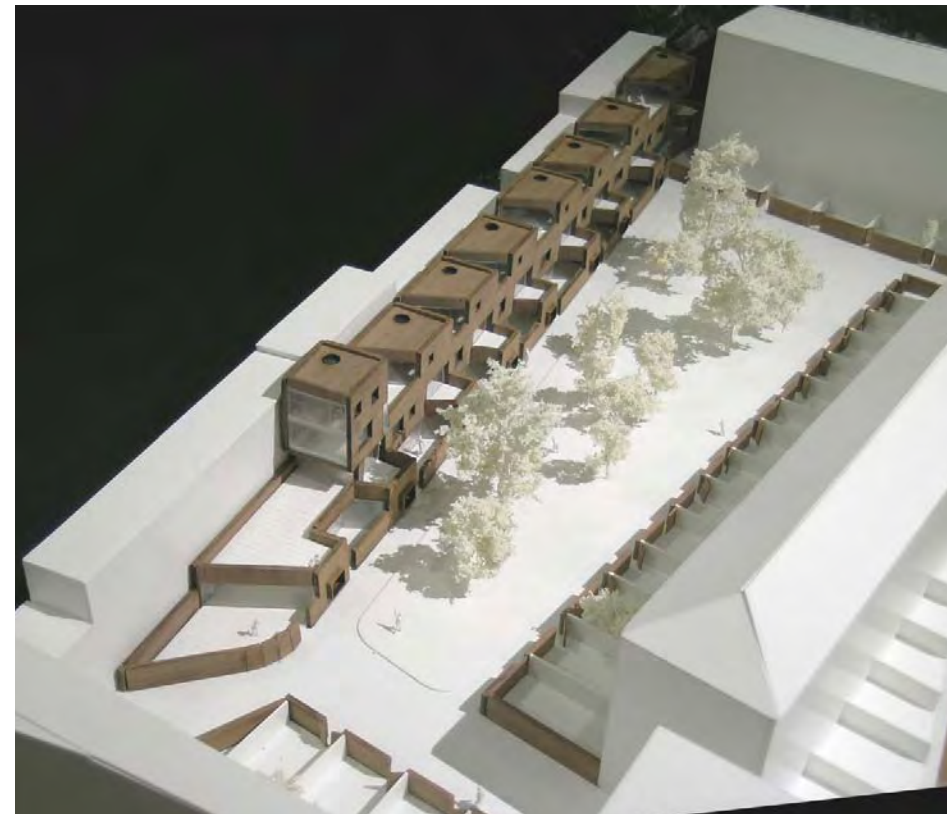
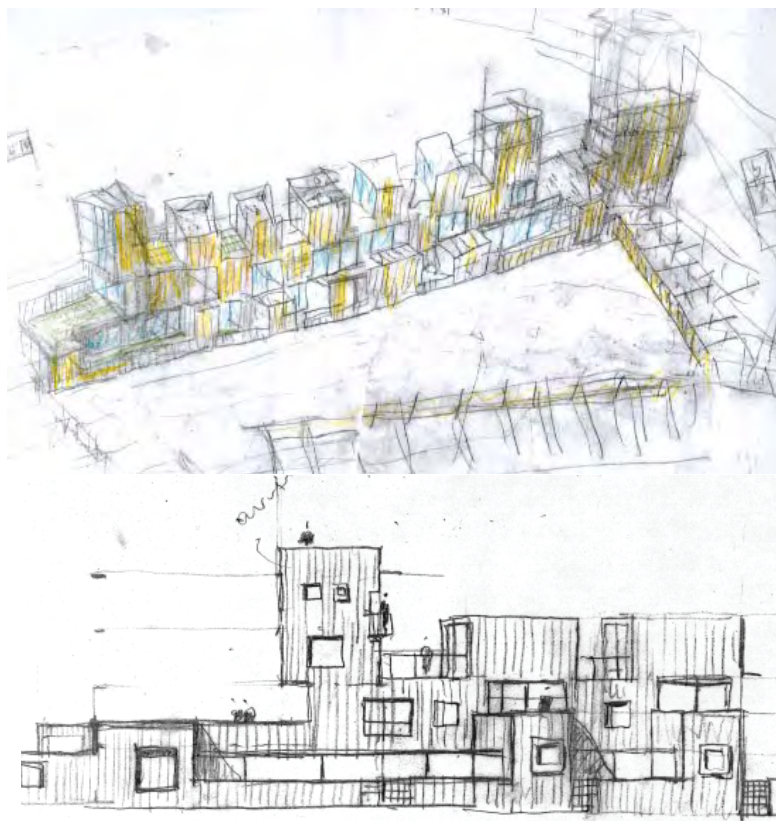
The newly landscaped and densely planted community garden created in the centre of the square will be overlooked by a delightful new terrace of 8 contemporary family houses.

The new row of houses is conceived as a continuation of the timber garden fences of the existing housing blocks, being constructed from timber and configured as a series of stepped and notched south east facing garden terraces.

The accommodation is predominantly made up of large family houses (3, 4, 6 bedrooms).

- High density, large houses created on a difficult, single-aspect site.
- Innovative notched terrace typology, creating a variety of amenity spaces and outlooks.
- All courtyard houses have their own front door and a minimum of two large courtyards / roof terraces.
- Great example of collaborative approach to planning, working closely with Planners and Highways Officers.

- Housing Design Award. Finalist 2013
- NLA Award Winner 2013
- RIBA Award Winner 2013
- RIBA STIRLING PRIZE BUILDING OF THE YEAR AWARD. 2013 (shortlisted to final 8)





## A.3\_PBA Relevant Project Case Studies

### Project Profile: Baden Powell Close



Baden Powell Close is conceived as a terrace of courtyard houses running the length of the site, creating a hard edge of buildings to a new tree lined space at the south end of Baden Powell Close.

The site was a originally a thin strip of unprogrammed land running along the boundary between a suburban residential Close and a large retail / leisure park beyond. The boundary fence was previously used as an unofficial cut through, contributing to anti-social behaviour within the Close.

The new development comprises 12 x 2 bedroom, 2 storey courtyard houses with 1 x 3 bedroom bungalow at each end of the terrace. Each unit has a good sized courtyard and terrace. There are no internal communal circulation areas.

The scheme has achieved EcoHomes Very Good rating using a variety of sustainable features such as green rooves and ground source heat pumps.

- Mixed tenure development
- High density on difficult site
- Innovative notched terrace / courtyard typology
- All courtyard houses have their own front door and two large roof terraces
- Great example of collaborative approach to planning, working closely with the London Borough of Barking & Dagenham Planning & Highways Officers



Project Profile: Colony Mews (Islington)



**'This is an urban intervention of considerable ingenuity and it demonstrates that design skills of a very high order are required if the potential of the many similar derelict sites in our inner cities is to be properly exploited.'** Housing design Awards 2003

Colony Mews is located on the edge of the Canonbury and Newington green Conservation Areas in Islington. It is a luxury mews style development built on an awkward back-land site at the rear of an existing Victorian terrace. The proposal comprises a combination of double height studio apartments and a terrace of courtyard houses with large roof terraces and open plan living spaces. The development is enclosed on all sides by existing building or garden walls that were retained, strengthened and underpinned during construction.

The buildings are accessed through an arch in a Victorian terrace fronting Mildmay Grove. A high walled open passageway leads through to a row of front doors, each of which in turn opens into a delightful south facing private courtyard garden.

In each courtyard house, a fully glazed sliding screen at ground level gives into an open plan living space. All principle windows look in to the courtyard thereby eliminating overlooking of adjacent owners.

- Private sale development
- High density on impossibly difficult site
- Innovative notched terrace typology
- All courtyard houses have their own front door and two large roof terraces
- Great example of collaborative approach to planning, working closely with planners

Housing Design Award 2003 (winner)  
RIBA Award 2007 (finalist)  
Housing Design Award 2007 (finalist)





Colony Mews (Islington) continued..



Project Profile: Employment Academy (Peckham)

The Employment Academy is a state of the art learning and support centre for long term unemployed people. It occupies delightful, light and airy accommodation in a beautiful listed arts and crafts building designed by ET Hall in 1904.

The building has been restored and extended with a series of new buildings which look into a sunny courtyard that lies at the heart of the scheme. The building uses a pale rustic brick, similar to the type of brick proposed for Kiln Place.



Recently completed PBA building showing possible materiality for Worland Road Houses

