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## 1. PRELIMINARY PROCESS

### 1.1. PRE PLANNING APPLICATION

A pre planning application has been submitted on 23/03/2015 and following a preplanning meeting with Sally Shepherd was held at the offices of the Camden Planning Department.

On 27/04/2015 the Planning Officer responded with an advice in which the proposal for a roof extension and the addition of a basement were considered to be acceptable in principle. The advice also outlined relevant policies and guidance to be observed, the content of which is referred to below ( letter where quoted, in italic ).

*The principal considerations material to the determination of this application are summarised as follows:*

- Land use ;
- The impact of the proposal on the character and appearance of the conservation area ;
- Principle of adding a basement ;
- The impact of the proposal on neighbouring amenity.

#### Land use

*The proposal to use the premises as a workshop/office for a lighting business which would fall under B1 use class. The site is currently in use as a motor vehicle garage which falls under class B2. It is possible to change from class B2 to B1 under permitted development and so the proposed use would not form part of the planning assessment and is acceptable.*

#### The impact of the proposal on the character and appearance of the conservation area

*First floor extension : It is proposed to remove the existing glazed lantern and erect a single storey glazed extension. The proposed extension would measure approximately 1.8m (height) x 6.3m (width) x 6.6m (depth). It would include three rooflights which would project 0.2m above the roof. The extension is set back approximately 3.5m away from the front and rear elevations. The proposed extension is comparatively smaller than the extensions refused in 2009 and 2014 (see planning history above). It would extend 1.4m above the front parapet which would be 0.7m higher than the existing rooflight. Due to its set back position and height the extension is unlikely to be visible from Rochester Place, particularly as it is a narrow street. The reduced scale and increased set back is considered to address the concerns raised in the previous application with regards to the impact on the cohesive group of unaltered units. The extension would result in the loss of the historic rooflight, however, it appears that the rooflights at nos. 52-54 Rochester Place have been replaced in the past and so this is would be acceptable. The glazed walls of the extension reflect the original rooflight and industrial style and give the extension a lightweight feel. The metal frame should be kept as simple as possible to ensure the extension has a simple, contemporary appearance. The proposed extension is considered to preserve and enhance the character and appearance of the conservation area and is considered to be acceptable. As discussed in the meeting, it should be noted that the proposed extension is the limit as to what would be approved in terms of scale and bulk. Alterations to the elevation/entrance : It is proposed to replace the existing roller shutter entrance with a glazed entrance door. The entrance would match the existing in terms of proportions and would be acceptable. It is proposed to recess the entrance by 2m to allow for a porch area, however as discussed in our meeting, this would not be supported by the Council as it would be contrary to CPG 1 (design).*

#### Principle of adding a basement

*The proposed basement would be contained within the footprint of the building and would be one storey below ground level. The proposed basement may therefore be acceptable, however this would subject to the outcome of a Basement Impact Assessment. In line with policy DP27, a BIA would be required to ensure that the basement developments do not harm the built and natural environment or local amenity. The level of technical information required will vary according to the type of the development and the guidance in sections 2.7- 2.49 of Camden Planning Guidance 4 (basement and lightwells) sets out what is needed to provide.*

#### The impact of the proposal on neighbouring amenity

*Policy CS5 seeks to protect the amenity of Camden's residents by ensuring the impact of development is fully considered. Furthermore Policy DP26 seeks to ensure that development protects the quality of life of occupiers and neighbours by only granting permission to development that would not harm the amenity of neighbouring residents. This includes privacy, overlooking, outlook, noise and disturbance and implications on daylight and sunlight. Concerns were raised from neighbours previously regarding the impact on daylight to the no. 52 (the objections can be viewed online). The proposed extension is lower than the previous proposal and it set back from the boundary with no. 52 by 1.3, and the impact on amenity was not a reason for refusal in the previous application. Due to the orientation of the buildings the extension may partially reduce small amount of sunlight to the rooflights during the morning, however it would not be considered sufficient enough to warrant a reason for refusal. There would be limited opportunities for overlooking from the front elevation due to the setback, and any overlooking which may occur would be common in a mews style street. The extension is set back from the rear elevation and so any overlooking which may occur would be limited. In addition, the use of the building as B1 would be less intense than residential and any opportunities for overlooking would only be in the daytime.*

#### Conclusion

*The extension is considered to be acceptable in principle. The detailed design and choice of materials would need to be sufficient to ensure that the extension does not harm the character and appearance of the conservation area. The alterations to the front elevation would be supported in principle; however the proposed recessed entrance should be removed. The principle of a basement extension may be acceptable; however a basement impact assessment would be required to establish whether the basement would have any impact on the local area.*

*For submitting a valid planning application it is advised that the dossier should contain following information and documents :*

- Completed form – full planning permission
- An ordnance survey based location plan at 1:1250 scale denoting the application site in red.
- Floor plans at a scale of 1:50 labelled 'existing' and 'proposed'
- Roof plans at a scale of 1:50 labelled 'existing' and 'proposed'
- Elevation drawings at a scale of 1:50 labelled 'existing' and 'proposed'
- Section drawings at a scale of 1:50 labelled 'existing' and 'proposed'
- Design and access statement
- Basement Impact Assessment

## 1.2. ISSUES ADDRESSED IN THE SUBMITTED DESIGN

The required drawings are provided as part of this application.

The design submitted for this planning application is consistent with the design submitted for preplanning.

The proposed roof extension consists of a volume with limited height that is set back from the front and rear boundary walls. The proportions of the roof extension have been refined in relation to its surroundings as well as in relation to the original building. The eaves of the neighbouring property and the brick piers of the existing construction have formed reference points for the new construction.

In its materialisation, the lightweight glazed volume has been refined. This can be seen in the proportions and rhythm of the glass panes, the specific type of steel profile proposed, as well as in the proposed detailing principle for zinc cladding of the roof.

### Entrance area

The recessed entrance has been removed and the entrance door has been designed as a contemporary interpretation of the original sliding door.

### Basement Impact Assessment

The required study has been executed. Croft Structural Engineers have compiled a Basement Impact Assessment with job number 150605, which is part of this application.

The BIA document that is part of this application, addresses the issues concerning the built and natural environment and local amenity.

### Consultation with Reed's and Rochester neighbourhood committee

A consultation with Reed's and Rochester neighbourhood committee was organised on 16/09/2015. The questions that were raised have been collected, and have given concrete form to some issues pertaining amenity. ( please refer to the relevant section in this document ).

### Policies and guidances

It is the aim of policies and guidances to set a context and frame of reference for good design. The complex set of issues at stake call for a design with an integral approach, that aims to overcome apparent contradictions.

This statement intends to demonstrate that the relevant policies have been incorporated rather than merely addressed. I have outlined the issues that were brought forward by analysis, and subsequently balanced and addressed by design, in the following design and access statement.

Relevant policies and guidances :

- National Planning Policy Framework 2012
- The London Plan March 2015, consolidated with alterations since 2011
- LDF Core Strategy
- CS5 (Managing the impact of growth and development)
- CS14 (Promoting high quality places and conserving our heritage)
- LDF Development Policies

- DP24 (Securing high quality design)
- DP25 (Conserving Camden's heritage)
- DP26 (Managing the impact of development on occupiers and neighbours)
- DP27 (Basements and lightwells)
- Camden Planning Guidance 2011/2013
- CPG 1 (Design)
- CPG 4 (Basements and light wells)
- CPG 6 (Amenity)

## 2. PLANNING CONTEXT

### 2.1. 50 Rochester Place in the context of London, Camden and Rochester Conservation area

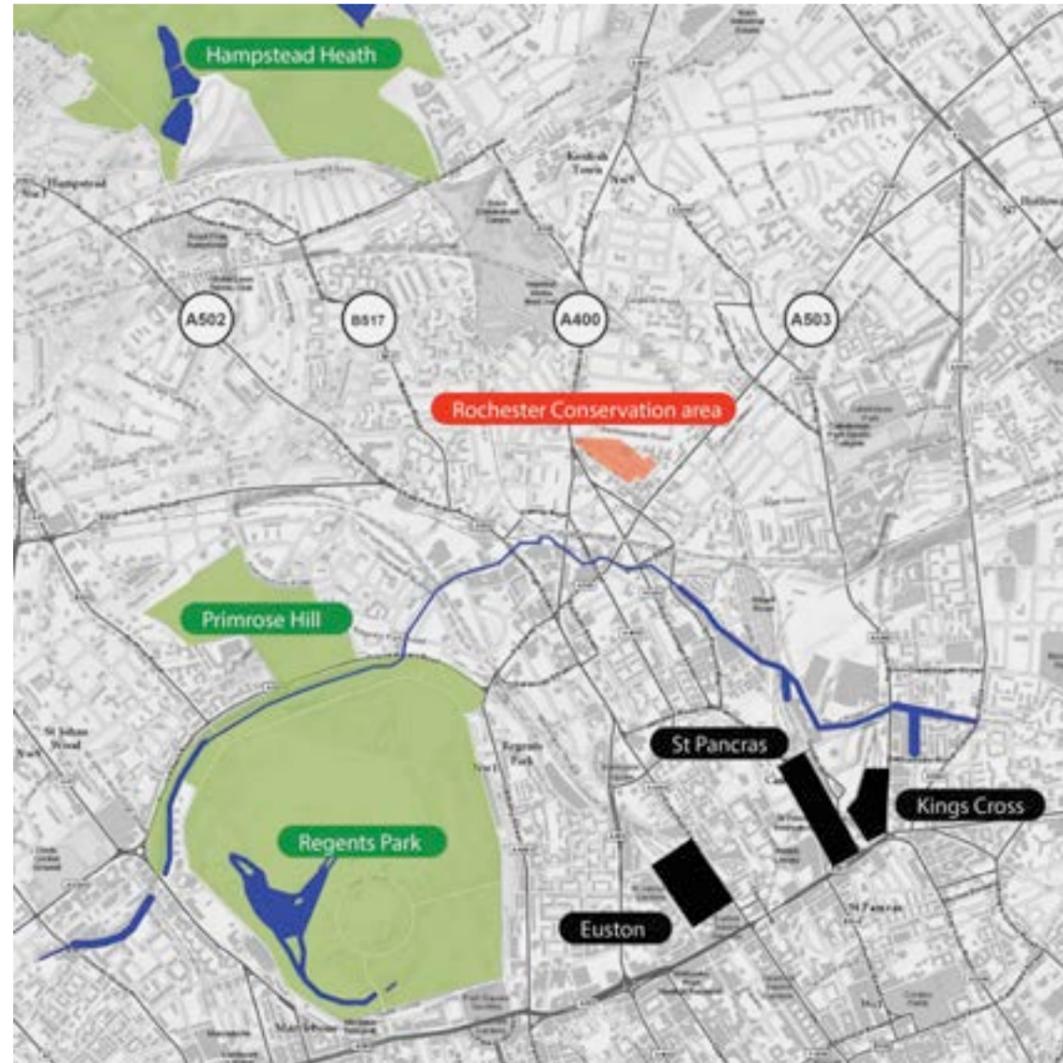


figure 1 Rochester Place : context

Camden is arguably the greenest of the Inner London boroughs. This is largely because it contains most of the extensive swathe of land that is Hampstead Heath. But there are also many other green spaces defined as a mix of green open spaces, listed squares, historical parks and pocket parks.

A number of water bodies are situated in the borough of Camden: among others the Regent's Canal and Highgate and Hampstead ponds ( two chains of earth banked reservoirs and ponds situated on Hampstead Heath ). The nearest surface water feature is the Grand Union Canal ( 375 metres to south of the site and situated approximately 5 metres lower ). Given that it is lined, there is no hydraulic connectivity with the underlying aquifer / groundwater ( for more detailed description and information: please refer to the Basement Impact Analysis ).

The site for the proposed works is situated in the Rochester Conservation Area. Positioned on the southwest boundary of the conservation area, Rochester Place 50 is also neighbouring on the Jeffrey's Street Conservation area. Rochester Conservation Area lies to the east of Kentish Town Road. The topography of the area is generally flat, with the highest spot height recorded at 32 metres above ordnance datum.



figure 2 Rochester Place in relation to strategic view Parliament Hill and St-Paul's

A designated Strategic View (Strategic View 3 Parliament Hill to St Paul's) cuts across the Rochester Conservation Area.

Parliament Hill is an area of open parkland in the south-east corner of Hampstead Heath. The hill is notable for its views of the capital's skyline. Many landmarks can be seen from its summit such as Canary Wharf, St Paul's Cathedral and the Houses of Parliament ( although they have become rather obscured by surrounding buildings ).

As the height and bulk of the proposed roof extension remains substantially lower than the surrounding buildings, there is no impact of the proposed extension on the strategic view.

2.2. Public transport around 50 Rochester Place

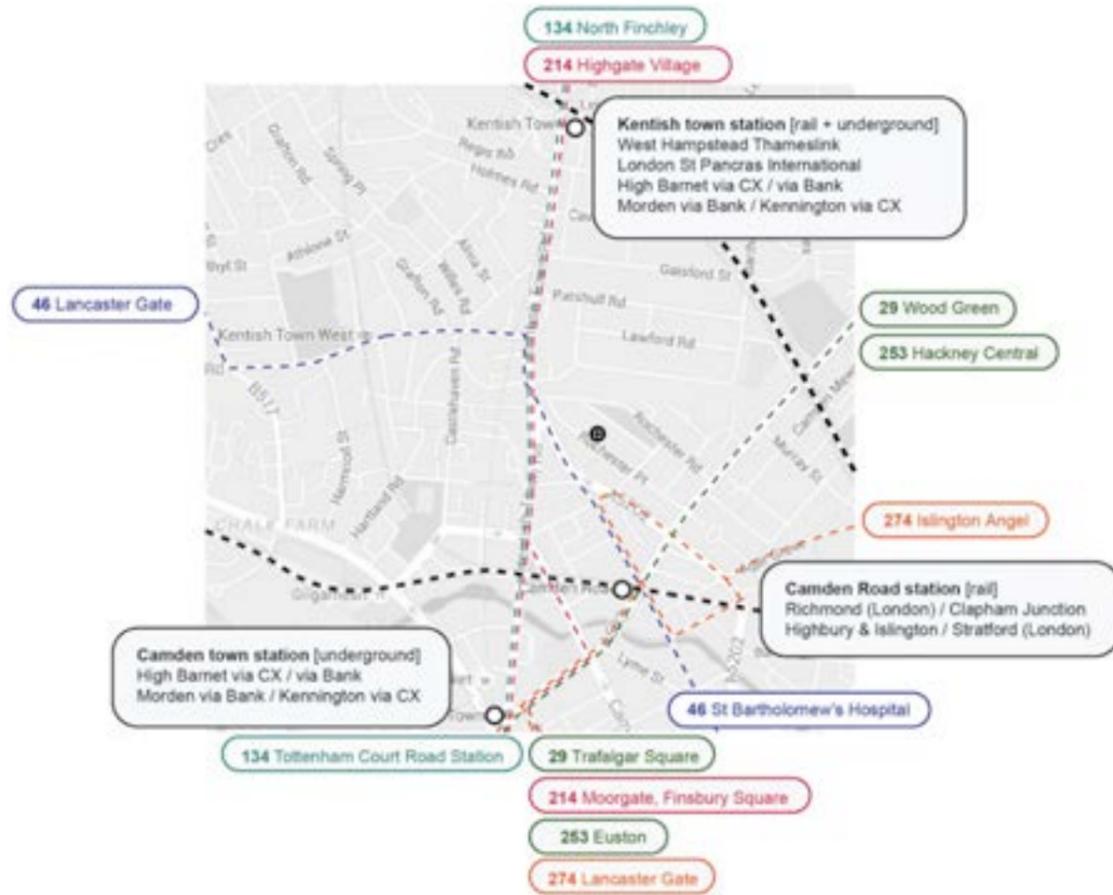


figure 4 public transport network

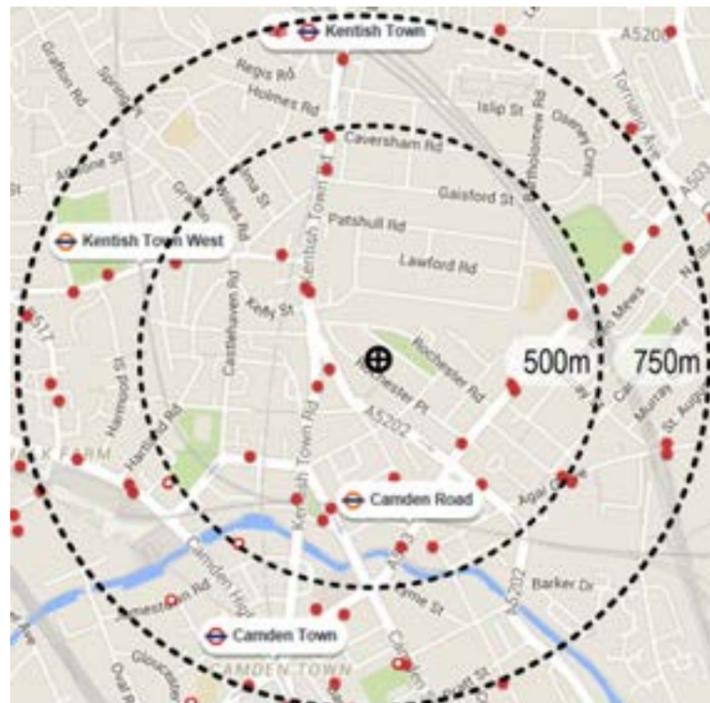


figure 5 tube and bus stops within a radius of 750 metres

With its southern part bordering on the boroughs of Westminster and the City, Camden is a borough within London that has both a local and an international dimension. The new development around King's Cross Central and St-Pancras international station can be seen as the most recent examples of this dual identity. On the scale of London, the site is very close to the international and national railway connections of Euston, Kings Cross and St-Pancras, as well as being served by an intricate network of local transport facilities within London.

50 Rochester Place lies within close proximity of large number of bus stops ( approximately 20 within a 500 meters radius and up to twice as many within a radius of 750 meters ). With the tube stops of Camden Road, Camden Town, Kentish Town and Kentish Town West within a radius of 750 metres, it is clear that the location of the site is well served by public transport facilities.

As the remaining distance can be easily covered in less than 10 minutes by foot, or in 5 minutes by bicycle, it is reasonable to assume that employees and occasional visitors to 50 Rochester Place, will opt for a route by public transport, with the remaining distance to be covered by foot.

It will be shown in the next section that the quality of the public space around the site also makes walking an attractive option.

As the use of the building will be changed from a motor garage into a design studio, the impact of car traffic in the street is likely to be positively affected.

### 2.3. Site analysis

#### Walk 1: The conservation area, defined by its architecture and its green space



figure 7 walk 1

By walking a line as drawn in figure 7 ( walk 1 ) the overall situation around the site can be appreciated. On the south side, St Pancras Way and Royal College Street are part of a thoroughfare to the north. The buildings along these streets are of a larger scale with 5 to 6 storeys. The shops and local facilities present on Kentish Town Road form one of the many neighbourhood centres that are typical of London. It is when turning into Rochester Road that the scale of the Conservation Area and its quality of a green lung become apparent. The same scale of buildings with 2 to 3 storeys and with front yards continues in Wilmot Place.

Green areas, both public, semi-private, and private add up to the overall quality of the Conservation area. Mature trees define the specific character of the area ( from the ones on Rochester Terrace Gardens to those on Royal College Street.



photo series walk 1

**Walk 2: The core of the conservation area , characterised by architectural integrity**



figure 8 walk 2



photo series walk 2

In the Rochester Conservation Area statement ( page 8 ) this is described as follows:

*'Rochester is a compact and cohesive Conservation Area that has as its centre the Park Rochester Terrace Gardens; which gives it a strong focus and a sense of Place... ' it has an architectural integrity that survives overall with some minor changes.*

*'The original composition of Rochester Conservation Area is still intact, although incremental changes to individual architectural features have occurred over the years.'*

*'Throughout the Conservation Area the contribution of the streetscape is significant and a feeling of elegance is captured through the architecture, the open expanse of Rochester Gardens, the relatively low height of buildings and the gaps of the buildings give glimpses to the rear Gardens.'*

The Gardens are intrinsic to the Conservation Area, providing an interesting focus and communal area for residents, while softening the surrounding urban environment.

The architectural unity and integrity of the conservation area is most prominently present in this part, which forms the core of the area.

**Walk 3: Reed's Place and Rochester Place, a specific subset of the Conservation Area**

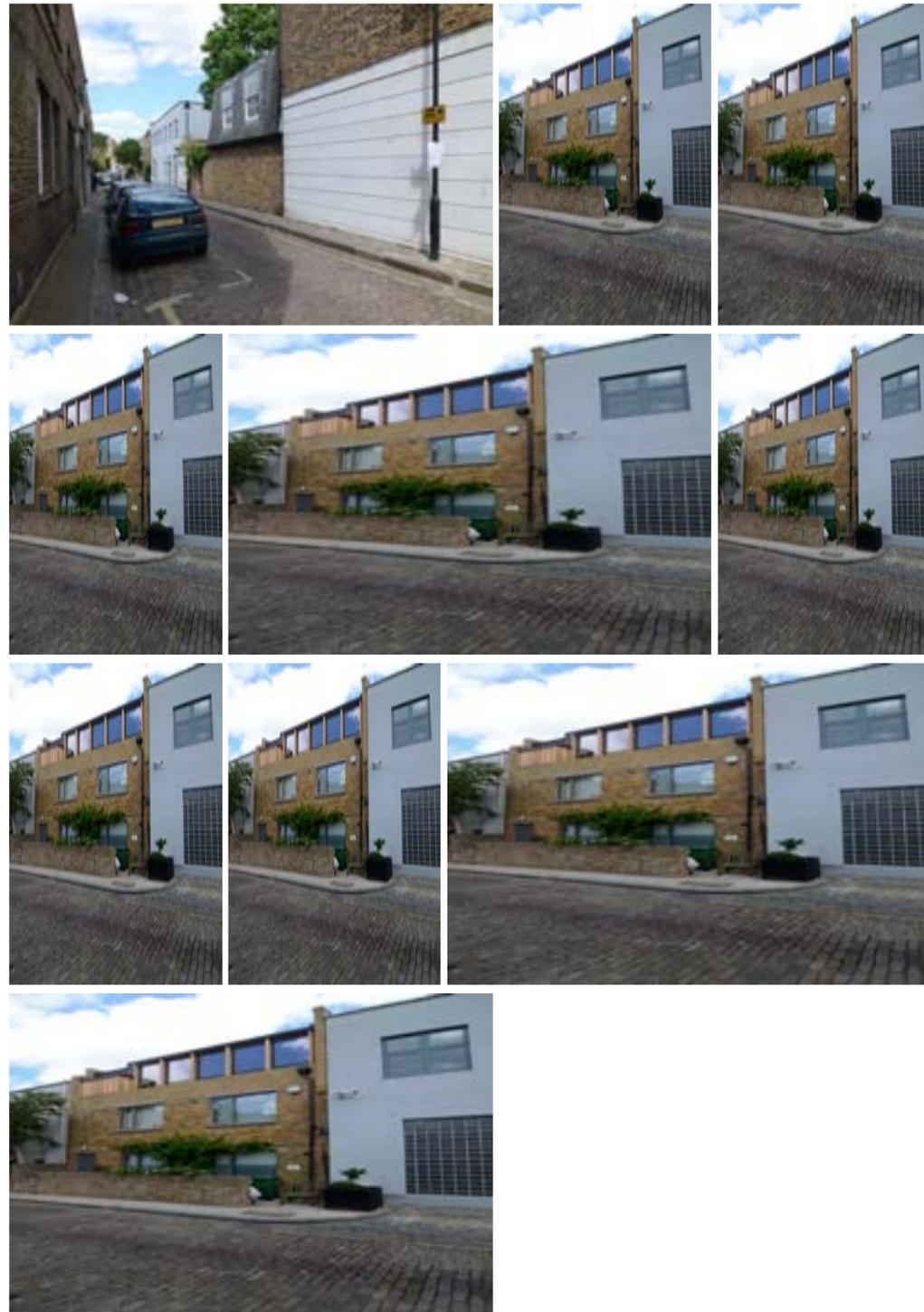


figure 9 walk 3 [ the application site within its immediate context; a sense of space ]

While the mature trees play an important role in defining the quality of the public space in the larger area around Rochester, the individuality of many separate front gardens adds up to a strong sense of place. Reed's Place is an exceptional example of this, and can be seen to act as a foot passenger gateway from the south to the area.

Reed's place is part of the Jeffrey Street Conservation Area, and has a particular scale that is related to the scale of Rochester place.

Rochester Place is situated at the fringe of the Rochester Conservation area. Within the conservation area, the mews of Rochester Place were among the latest plots to be developed. Some plots were developed until the 1980's ( no 42 and 44 ) and more recent ( no 40).



**photo series** walk 3 [ the application site within its immediate context; a sense of space ]

In figure 13 the specific character of Rochester Place is identified. With Reed's Place acting as a pedestrian gateway to the street, Rochester Place is experienced as a narrow street with a low intensity of motorised traffic. The individual front gardens of Reed's Place contribute to the quality of public space, which can be appreciated when walking through this calm street. The layout of the plots in Rochester Place, with most buildings fronting the street, does not appear to leave a lot of surface area for green.

In this light, it is particularly striking that individual green features such as climbers on garden walls, and plants on terraces form such an important contribution ( refer to figure 14 + photo series ). As the street

profile is particularly narrow, even the greenery on balconies has a significant positive impact on the perceived landscape and add a particular quality to the experience of walking in the street.

The plants add a sense of individuality to the buildings while they serve both the public and the private realm. In Rochester Place, they form a filtering screen between the private and public realm, and enhance the general character of the area as a calm enclave in the urban context.

A similar effect can be observed in the back yards between Rochester Place and Rochester Gardens, where mature trees form informal green screens between the terraces, filtering views and reducing the sense of overlooking. ( refer to figure 29 )

Where the tarmac surfaces appear to be give prevalence to cars throughout the streets of the conservation area, the surface materials of this pedestrian area - York Stone slabs for Reed's Place and cobbles for Rochester Place, form another important contributing factor in the identity of the 'Rochester Place subspace' of the Rochester conservation area. The haptic qualities of the cobbles and slabs contribute to the experience of walking, and are fitting to the narrow proportion of the street section.

Whereas the character of Rochester Terrace can be ascribed to a set of common features to a shared architectural style, it appears that it is precisely the individuality of the buildings and the individuality of the green volumes that forms a common feature for Rochester Place.

For the qualities of its soft and hard fabric Rochester Place seems to be dependent on the cumulative effect of caring by individual owners. One might argue that the quality found in this mixture of individually cared for plots and micro green spaces is an outcome of its ownership structure. The character of this enclave is then seen to be dependent on a mixture of light making industry and dwelling, both of which imply a form of space 'making' and 'owning' the space. The act of 'living' in these particular buildings and streets is equally present in the functions of working and dwelling.



**figure 10** the role of softer space in connecting the urban tissue

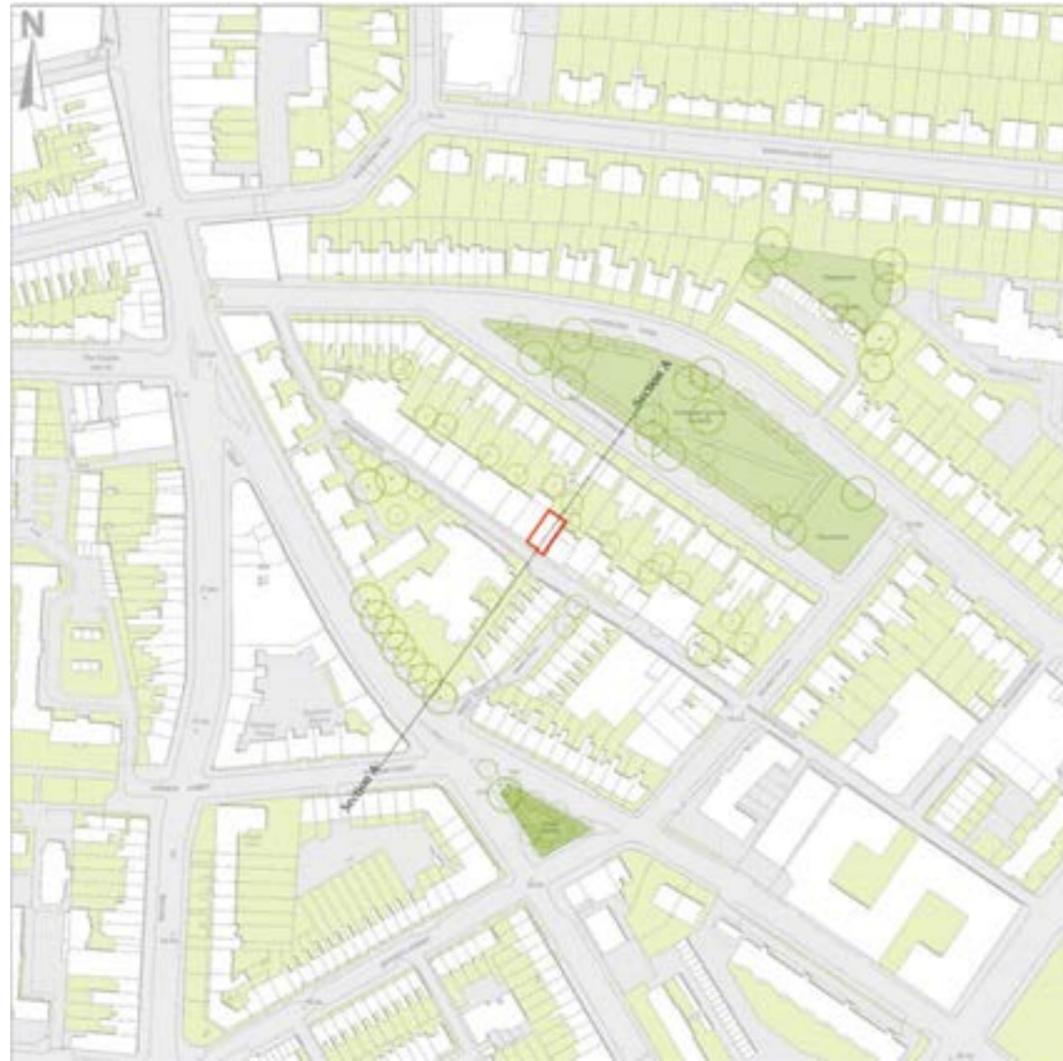


figure 11 OS map with indication of section A over project site

### Analysis of the built scale, typology and volume

The scale of the buildings and the role of mature trees as landmarks among the buildings in the area can be easily identified on the section across the project site.

**In this section, the project site can also be seen to be situated at the border of the Rochester and Jeffrey Street Conservation Areas.**

*'The Jeffrey Street Conservation Area is an enclave of quiet, predominantly residential, streets and narrow lanes ... It consists, mainly, of terraced house set between areas of green open space.'*

[quote from Rochester Conservation Area Statement]

The mature trees in front of the St Richard of Chichester School, together with College Gardens, form another example of the green spaces that are characteristic of the area, they constitute a shared quality between both conservation areas.

*'A narrow passage leads to Reed's Place, a small paved space between short rows of two story plain fronted cottages of painted stucco with rusticated ground floors. Five of the houses have mansard roof extensions set behind the front parapet, the rest retain unaltered valley roofs. The cottages have little front gardens with iron railings, some of which have been replaced ...'*

[quote from Jeffrey's Street Conservation Area Statement]

However, it must also be noted that the series of large scale buildings at the south side of Rochester Place, form a marked contrast in scale. These buildings mark the transition between the Rochester and Jeffrey Street Conservation Areas rather sharply. Rochester Place is therefore an atypical mews street, situated at the edge of the Jeffrey's street conservation area. In the light of these neighbour buildings, the Rochester Place buildings appear to be somewhat dwarfed.

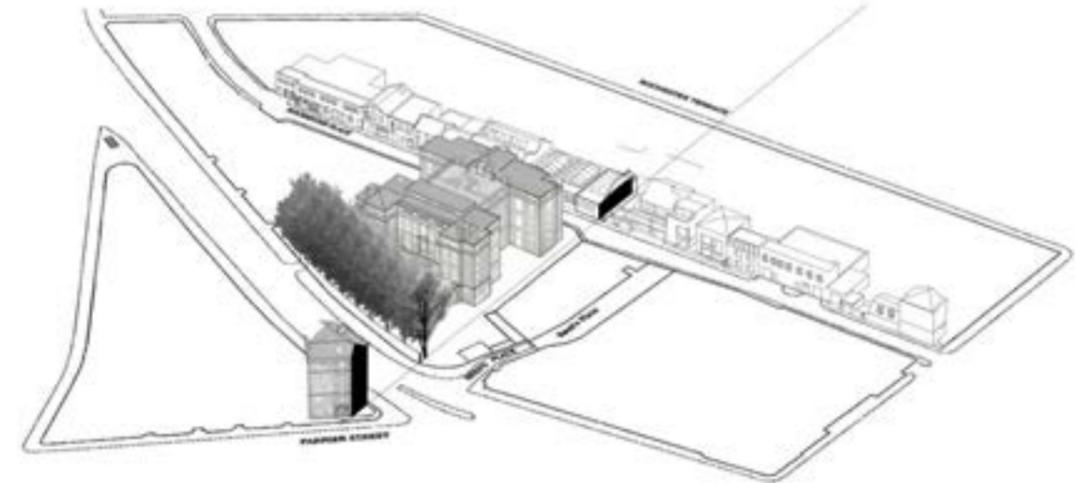


figure 12 cross section [showing the main spatial elements defining the area]

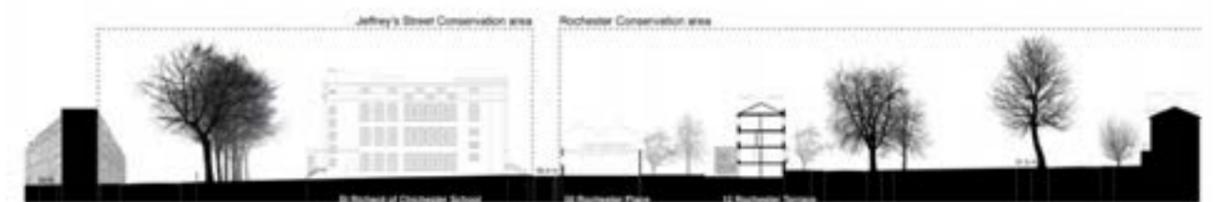


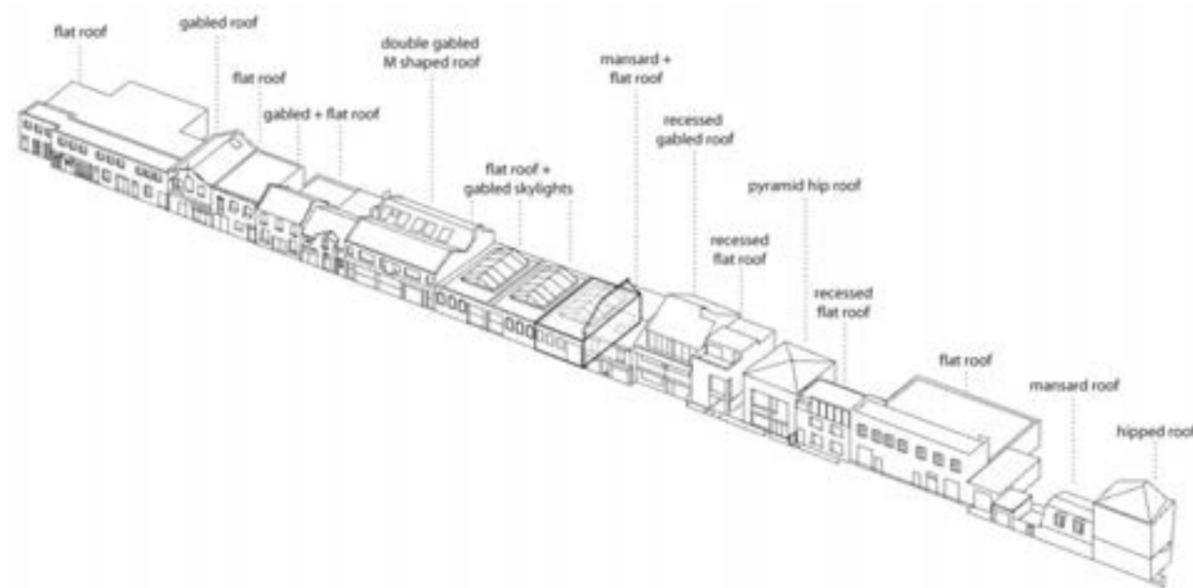
figure 13 section : existing situation



**figure 14** the specific character of the public realm in Reed's Place and Rochester Place [quality of the small scale soft green, determining the character and urban pocket quality of Rochester Place]



**photo series** the specific character of the public realm in Reed's Place and Rochester Place



**figure 15** Rochester Place : the variety in the roof form, parapet height and overall architecture

*Rochester Place is characterised by low mews type buildings, originally built from the 1870's to serve the properties in Rochester Terrace. The narrow street is paved in rectangular granite sets and is characterised by small scale intimate development, containing a mix of light industrial and residential uses. Early development of Rochester Place began after 1870, limited to a few properties. Later, sporadic development began after 1932 and has continued to the present day. The street therefore encompasses a wide range of architectural styles, dating from 1870-1990. In common with traditional mews development, the earliest buildings in Rochester Place have a limited number of architectural elements and detail and are generally uniform in plot width and in construction. All buildings spring from the narrow footway without physical front boundaries and vary in scale, but generally are between one and two storeys high.*

However a series of residential properties from no 40 up to 46 have 2 + 1 floors.

The bulk of these properties is well controlled with the roof volumes conceived either as a mansard roof, or as stepped back volumes under a gabled roof. A stepped back volume with flat roof, and a well designed modern interpretation of a mansard at no 40 complete the series.

It is noteworthy that the stepped back third floor volumes of numbers 44 and 46 are not discernible from the street level. This is due to the fact that the volume both is limited in bulk and stepped back, and that the narrow street limits the perspective.

The axonometric drawing of the buildings and their roof forms in figure .12 shows a variety of roof forms.

The coherence found in this series of buildings is not the result of a formal architectural unity determined by a shared style. Rather it is the result of individual answers to similar design issues, with the built forms drawing on a limited range of materials and construction techniques. The fabric of the buildings consists of brick walls with openings that are typical of small warehouses with limited ceiling height. The overall scale of the buildings is similar, with the occurring differences in height forming positive contributions. The visible gable of no 66 forms such an positive exception: Its visible impact is limited, for the gable base is significantly smaller than the plot width. It forms the exception that doesn't break the rule, overall it could be argued that it contributes more than what it detracts.

Coherence is seen to be the result of different buildings using a similar vocabulary.

As a mews street serving the properties in Rochester Terrace, Rochester Place forms part of the conservation area. Through its intimate scale, its typology and the form of its paving, it sets itself apart from the rest of the conservation area and is experienced as a small enclave within the larger whole.

## 2.4. Consulting with the neighbourhood

After submitting the pre-application, owner and architect set out to contact the Reed's and Rochester Place neighbourhood association. We found Gill Scott to be the driving force of this association.

Ms. Scott, who lives in 48 Rochester Place, was very helpful and suggested to set up a meeting with the neighbourhood, with the purpose of communicating the intention and design of the pre-application plans and soliciting questions and concerns from the neighbourhood. We sent a digital copy of the plans to Ms Scott for sharing with the neighbourhood committee members. Ms Scott offered to host an informal meeting at 48 Rochester Place and consequently, an open invitation was sent out, upon which a variety of local residents turned up for the meeting on september 16th 2015, held at 48 Rochester Place.

The meeting started with a round of the room. The neighbours introduced themselves, and Gill Scott outlined the purpose of the meeting. Michael Anastassiades explained the nature of his business for which he acquired 50 Rochester Place. The plans of the pre-planning application and the ideas behind them were explained by myself, as the architect responsible for drawing up the design proposal.

Questions were raised concerning the way light permeates to the basement, and on the nature of the activities that Michael Anastassiades was planning to house in the premises and concerning the production of sounds. The neighbours mentioned that MDA motors, even with their mechanical activities, never caused disturbance in terms of noise. It also appeared that the vehicles being served by MDA motors, do not give rise to disturbance to the amenity of the street.

As the activities of MA Ltd entail design work, with the occasional assembly of light fittings and model making, it quickly transpired that the new use of the building would result in a 'light activity' in terms of noise and amenity compared to the activities of MDA motors.

Concerning the glass roof extension, questions were raised around the potential of light pollution, more so than overlooking. We argued that, although a large part of MA Ltd's activities involves lighting, the type of lighting that MA Ltd produces, consists of bespoke items which emit rather subtle forms of light.

We also argued that it is not an intention of the architectural design for the extension to become a light beacon in the area. The building will house the offices and design studio for MA Ltd, but is not intended to act as a showroom, let alone form a beacon in the area.

A fair point was raised however in that the neighbours identified the risk that a glass roof extension could potentially lead to a certain amount of undesirable light emission, especially during the winter period.

In this respect it must be noted that the original lantern currently in place does not provide any means to control light emitting from the building.

We proposed to look into the matter, in order to come up with a solution to control the emission of light (refer to chapter 4 for more detail).

The proposed basement did not form an obstacle in principle for the residents, but some concerns were raised around the impact of the demolition and construction works. Will a basement construction not unbalance neighbouring properties and will it not cause problems with the water table ? Will the removal of material not cause vibrations ?

We explained that a basement impact assessment had been imposed as a planning obligation and that the risks involved in the construction will be duly assessed in the BIA document that is to be drawn up by an external and certified consultant.

The questions concerning amenity that were brought forward in the meeting and that can be addressed by design have been listed so far.

We do realise that the scope of the building works and specifically the excavation of a basement can have a considerable impact on the amenity of the street.

However, the questions concerning the impact on amenity that relate to the potential disturbance involved in construction work, will not be addressed in this design and access statement.

We proposed to the neighbourhood committee to draw upon the know-how of contractors to see how the impact of the works can be contained and limited.

They depend on concrete and temporary measures, and should be addressed in a C/DMP to be drawn up.

We intend to have a Construction Management Plan drawn up in close communication with the Reed's and Rochester Place neighbourhood association, once planning consent is granted for the construction of a basement.

### 3. DESIGN PROCESS : ARCHITECTURAL ANALYSIS AND PROPOSED CONCEPTS

#### 3.1. the existing structure and fabric : the constituting elements of the architecture

As a one storey building with an open plan and a single entrance, it is clear that the workshop is a relatively uncomplicated structure. However, a closer analysis reveals more than meets the eye and provides insights and starting points for design.

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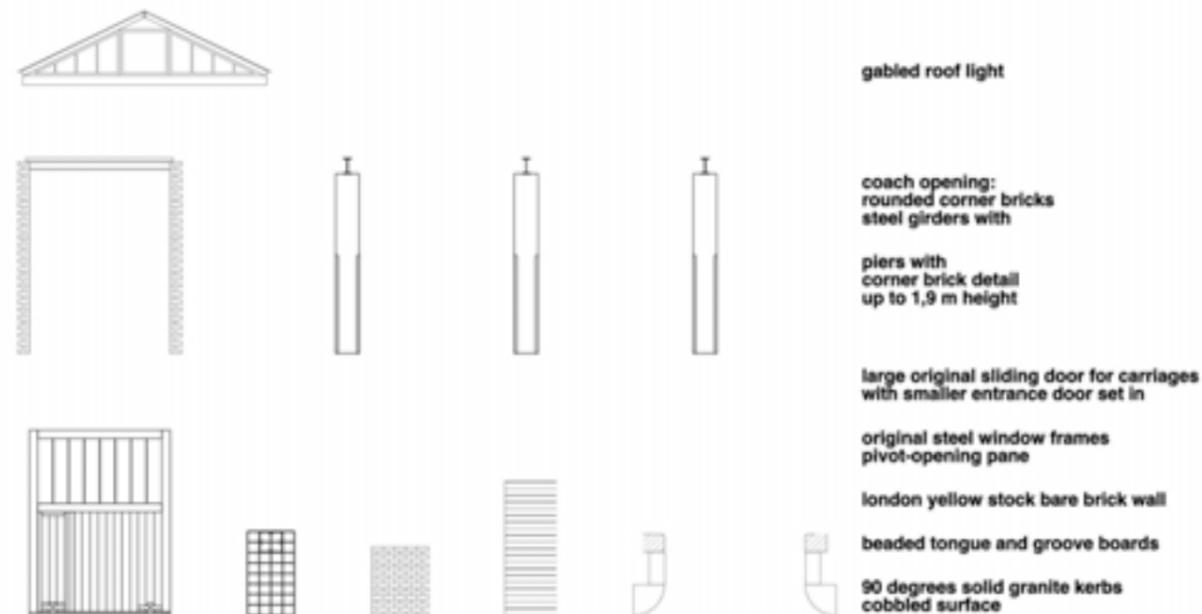


figure 16 constituting elements

#### The front elevation

The front elevation is a mixture of representational and utilitarian elements. The windows are placed high, at 1,9m above floor level. The large sliding door in the coach opening, has a window pane set in at similar height. The steel windows and window pane in the sliding door are all placed at 1,9 m and provide light to the first bay of the floor plan, while preventing views into the interior from the public domain.

The windows have brick arches and the sills for the original steel windows are constructed with moulded bricks.

The coach opening is formed on either side by moulded bricks, which are black. As all the brickwork has aged and discoloured, the contrast of the black moulded bricks with the original yellow stock bricks of the main surfaces has somewhat diminished.

The front elevation is furthermore characterised by a relatively high parapet wall, and is finished with brickwork coping. Most of the brickwork features remain intact, even though the brickwork could benefit from correctly executed repointing. If such repointing were to be executed, it would be preferable for this work to take place simultaneously on the three units.

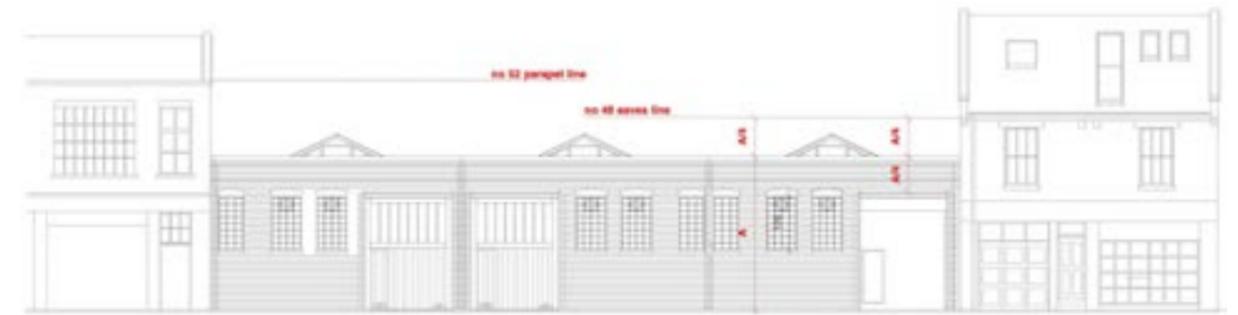


figure 17 front elevation + parapet and eave lines from neighbouring building

#### Windows and door

The original steel windows with single glazing are still in place. They do require a thorough overhaul, which is part of the proposed works.

Signage panels for MDA motors have been set in the window openings, and are proposed to be removed.

The original wooden horizontally sliding door has been replaced by a steel shutter that rolls up in a shutter box. The sliding doors of the neighbouring properties have been surveyed and form a point of reference for the new door to be designed.

Boulders to protect the edges of the coach opening are still present in no 52 and 54, but were removed in no 50, most likely at the time when the rolling steel shutter was installed. These are proposed to be reinstated on no 50.

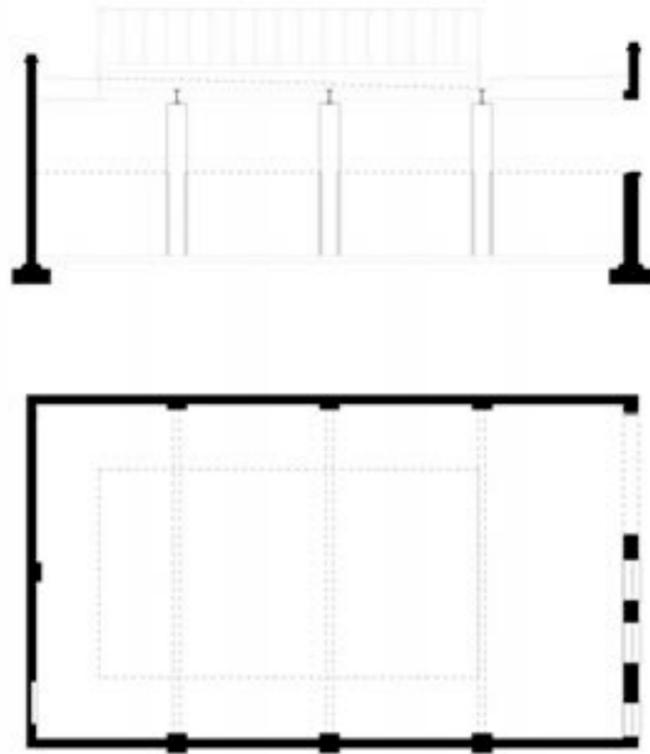
#### The gabled roof light

The gabled roof light is a simple construction, with a regular rhythm of steel profiles holding glass panes. In plan view, its layout appears to be determined by an equal distance of approximately 1,4 metres from side and rear boundary walls, while keeping a one bay distance from the front. The rooflight is lifted from the ceiling level in the space, and manifestly present in the space as a large light opening. It's architectural features are simple and do not draw attention. The rooflight is not visible from the street.

#### Materials and details; built culture

The ceiling is clad with beaded wooden boards that are painted white. The roof is supported by a primary structure of steel beams resting on the brickwork piers, with the secondary structure also bearing on the front and back walls. This infill structure is formed by wooden joists, as is the inclination of the flat roof. The roof no longer has this original covering, and has been covered with bituminous felt. It is likely that the original roof covering consisted of zinc sheeting.

## Load bearing structure



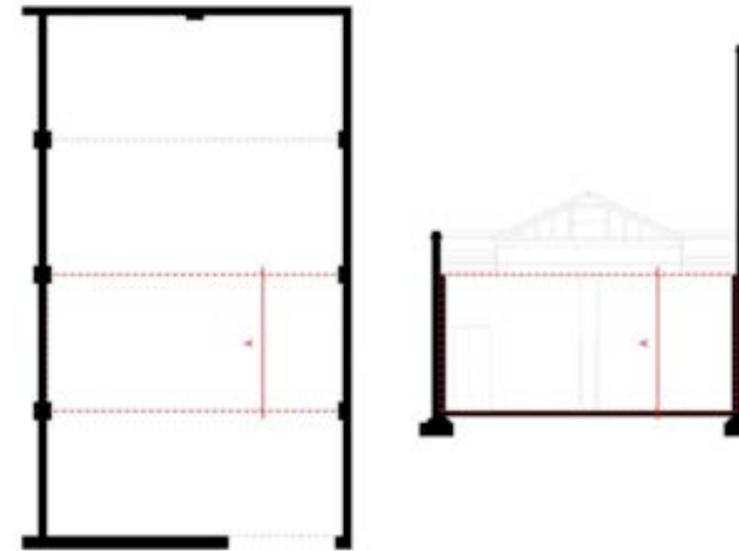
**figure 18** load bearing structure in section and plan view

On the inside, brick walls with regularly placed piers determine the spatial boundaries of the space and act as a load bearing structure for the roof.

The brick walls are left bare outside as well as inside. The brick piers have a corner detail, formed by moulded bricks, up to a height of 1,9 m. A reference line for the human scale is formed by these features and the lower glass line in the interior front elevation, in a very economical way. The piers also form the load bearing columns for the main steel beams that are supporting the roof. The piers and steel beams jointly define the 4 bay structure of the unit.

## 3.2. Utilitarian with a neo-Georgian economy and controlled proportions

Although the construction of the workshops can be dated to be around 1890, the architectural principles underlying the construction are closer to those of the Georgian era. Strict and simple proportions can be seen underlying the design of the spatial proportions, as well as the proportions governing the front elevation. This is illustrated in plan and section ( refer to figure 19 ).



**figure 19** proportions similar in plan and section

### Risk of overheating

The workshops of no 52 and 54 have had their lanterns replaced. The aluminum profiles and double glazing units fitted with sun-reflective glass don't represent the most sensitive choices for replacement but the overall rhythm of the glass panes has been respected. The airconditioning units placed on top of the renewed zinc roof have not been considerably planned. They draw attention to the fact that the lanterns are exposed to the sun and can easily cause overheating of the space. The zinc roof is executed with the batten seam technique, whereby the zinc capped battens form a rhythm and add a sense of structure to the roof. The zinc roof is correctly detailed and well executed.



**photo** Rochester Place 52 - 54 : airconditioning units

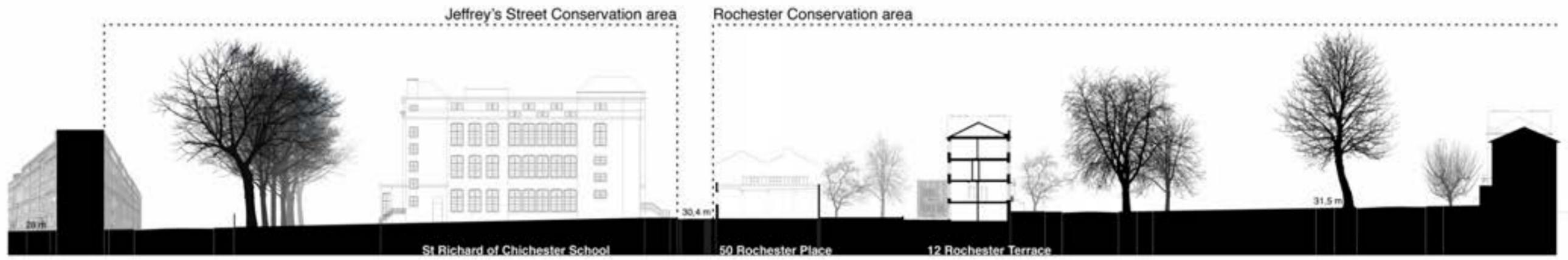


figure 20 section : existing situation

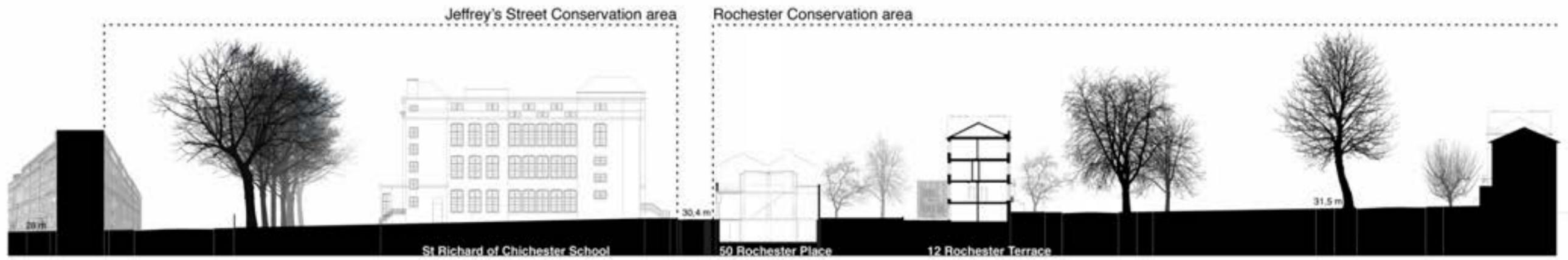


figure 21 section : proposed situation

## 4. DESIGN PROCESS : SELF-IMPOSED GUIDELINES, APPROACH AND PROPOSED DESIGN

### 4.1. Introduction; identifying architectural design issues

From the previous analysis of the site, the embedded rules of the surrounding architectural fabric and soft space were extracted.

The constituting elements of the existing architecture of the workshop are seen to operate in a truly economical way: a limited set of elements is assembled into a whole whereby the result adds up to more than the sum of its component parts.

To design for the longevity of the structure implies starting from the existing architectural order to design for the new structure. An adaptive reuse of the existing structure implies devising an approach that is careful enough to retain the elements that constitute the character of the building, while designing the new parts for the building that can act as extensions intrinsic to the structure.

It follows from the analysis of the surrounding fabric and the built tissue itself, that a range of considerations impose themselves on the design. As guidelines, they inform the approach taken for the proposed design.

- The added building volume of a new basement and a roof extension require a carefully designed structure that communicates with the existing structure and that connects existing and new parts.
- A contemporary interpretation of the Georgian architectural principles of simple proportions, repetition of identical elements and economical subtlety in detail, needs to be sought. The clarity and legibility of the original building, that is a result of these principles, needs to be retained.
- The existing fabric is a testimony to the material culture and its qualities imply a fragility. Materials and construction techniques for the extended architecture must be carefully chosen not to create unnecessary tension or friction between the existing and new construction. A sympathetic conversation between existing and extended construction must be the aim.
- The simple quality of a single open space is essential to the utilitarian origin of the building and is part of its core identity. The potential for adaptive reuse of the existing space is great precisely because of this quality. Consequently, the added volumes of space need to be defined as open spaces. In order to extend this quality and reduce the need for future adaptations to a minimum, specific or complex partitioning of the space is to be avoided.
- The design needs to incorporate advancing insights regarding climate, light and energy, as well as being sensible in its use of resources.
- A fitting solution to reduce energy loss on the one hand and to avoid overheating on the other hand, needs to be devised when designing a glass roof extension.

### 4.2. Designing the structure, starting from the existing architectural order

#### Structural concept

The following guideline was used in the design for the structure.

With the addition of a basement volume under the existing ground floor space an act of underpinning is required, for legal and structural reasons.

The concrete underpinning techniques used to construct basements, are extremely robust and solid, to the point of entailing the risk of making the existing structure appear irrelevant. A conceptual tension may arise between the brutal strength of monolithic reinforced concrete and the relatively thin and brittle stacked construction of brick walls.

In order to address this issue, the solution of inserting an elegant secondary structure of slender columns, mirroring the brickwork piers, was selected. Concrete walls underpin the boundary walls, but set in are a series of slender columns that act architecturally and structurally to support the construction of ground and first floors. The proportions of the columns is taken from the rhythm of the existing brickwork piers and establish a communication between the existing and new fabric. These load bearing elements assume the proportions of the original elements and form a complement to the delicate walls.

With the existing roof structure removed, the series of columns reinstates the edge zones formerly defined by the roofline, and strengthens the sense of rhythm characteristic of the original space, while introducing this rhythm to the new basement space. A four bay structure that is derived from the existing ground floor, is introduced in the proposed basement.

The columns constitute an architectural order, transferring the loads from the superstructure of the roof to the foundational level of the basement. Drawn as it were from the existing fabric, they extend the ground floor into the new superstructure and into the new foundation. The specific proportion of the columns is taken from the brickwork piers, which are defined as two bricks wide, protruding half a brick from the perimeter walls (i.e. 11 x 46 cm). The columns match this size of 11 x 46 cm, their slenderness forms a complement to the elegance of the existing structure.

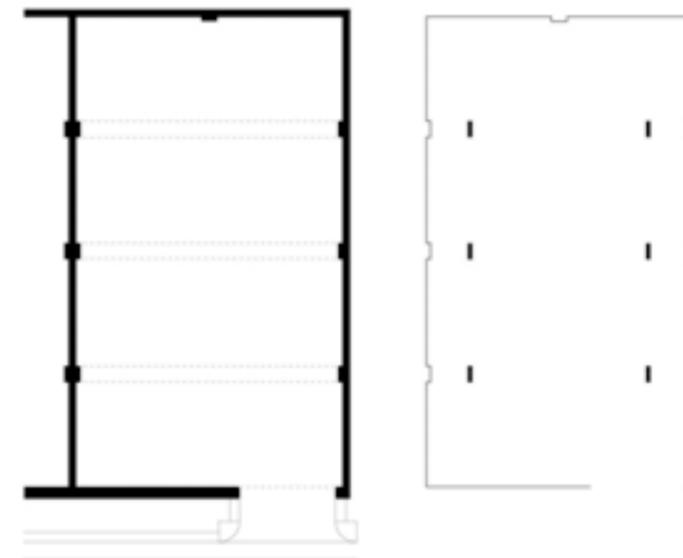
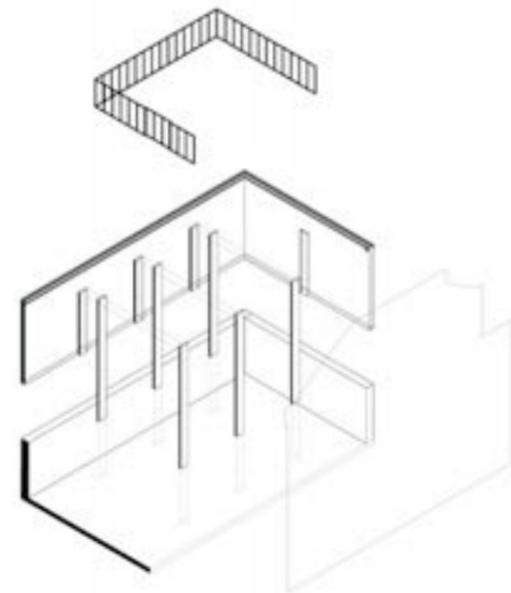


figure 22 plan view of the four bay structure and new columns inscribed

figure 23 axonometric view of the new structure connecting the levels



This structural approach is continued into the proposed roof extension. The proposed order of columns, allows the roof extension to be constructed with a distance to the perimeter walls, while still forming an integral part of a new whole. The proposed principle avoids the structural tension associated with setting a smaller structure on top of an existing building. The roof extension is not planted on as a separate addition to the existing architecture, rather is continuous with its structure. The roof extension is light and limited in scale and bulk, but it is also properly supported.

### Open space is of the essence

As outlined above, the most important spatial characteristic of the existing workshop is its openness

In our conversations with with the client about the programme and brief for the design, it transpired that we needed to adapt the strategy for occupying the space to suit the essential characteristics of a warehouse space. Rather than defining a series of functions demanding specifically designed rooms, it was decided to reinforce the open space quality to the point of determining it as the fundamental quality of a workshop space. The programme of the spaces for offices and design studio was consequently adapted and redefined as a series of open spaces. In the proposed scheme, the partitioning of the space thus occurs by means of the floors rather than the walls. This approach was deliberately chosen, plan types that would subdivide the space into a series of smaller rooms were rejected.

As a result of this design approach the spatial essence of the workshop space is extended into the new basement and roof extension spaces, ensuring architectural continuity as well as incorporating the necessary flexibility that is crucial for future adaptive reuse.

### Light, legibility and clarity, general access stairs

Direct sight lines and straightforward connections between the ground floor and upper and lower level organise the spaces on a visual as well as a physical level.

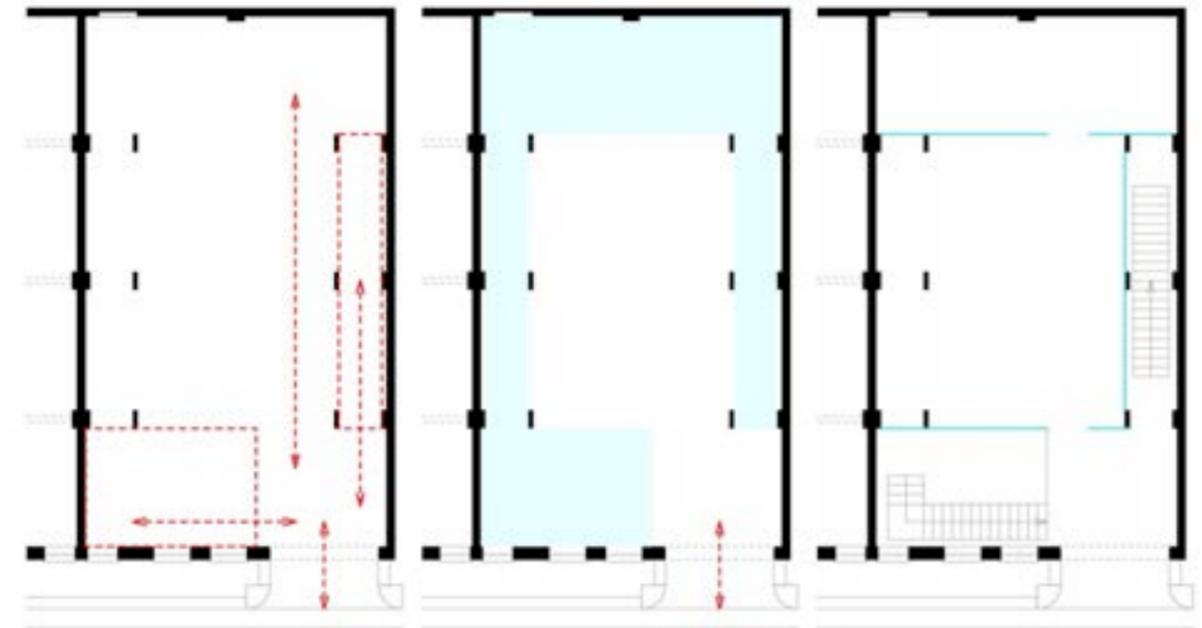


figure 24 organisation and distribution

Upon entry, the entire ground floor can be overseen, as well as both staircases, with one staircase leading up and one leading down. The openings for the staircases are further accentuated by skylights, with natural light underscoring their legibility and visibility.

### Design for access and means of escape

The original space, with its coach opening designed for easy use by carts and vehicles in the case of MDA motors, is inherently easy to access.

With a view to incorporate the principle of designing access for all, it is logical to retain the directness of access, that is also incorporated in the original construction details of a floor that is level between outside and inside and that is already executed without thresholds. The need to design with the question of historical continuity and design for access can be seen to coincide here.

In the event of a fire, the legible layout of the space and direct access to the upper and lower spaces provide direct, safe and fast egress. The staircase from the basement up is not connected to the other staircase, going to the first floor. Smoke is therefore less likely to fill the escape route from the basement. On the first floor, access to the roof provides an alternative final exit.

There are no storage spaces or kitchens, situated 'deep' in the plan. As there are no separate rooms where a fire could build up unseen, the open plan layout further reduces the risk of fire. Glass walls with a fire resistance of 1 hour protect the staircases leading to the final exit.

The overall architectural concept, has been informed equally by the issues of access for all as the means for escape in the event of a fire.

#### 4.3. Access for all - within the sensitive context of a Conservation Area

The building is existing and is not a dwelling, hence Building Regulations Approved Document M volume 2 (Access to and use of buildings other than dwellings) applies. Paragraphs 0.17 and 0.18 of the Approved Document M volume 2 state that for buildings in conservation area's, the value of the characteristics of the historical fabric must be weighed and assessed when considering the measures to improve access for all. *'In such work the aim should be to improve accessibility where and to the extent that it is practically possible.'*

*The need to conserve the special characteristics of such historic buildings must be recognised. They are a finite resource with cultural importance. In such work the aim should be to improve accessibility where and to the extent that it is practically possible, always provided that the work does not prejudice the character of the historic building, or increase the risk of long-term deterioration to the building fabric or fittings. In arriving at an appropriate balance between historic building conservation and accessibility, it would be appropriate to take into account the advice of the local authority's conservation and access officers, and English Heritage, as well as the views of local access groups, in order to make the building as accessible as possible.*

*The onus must, however, be on the applicant to justify such exceptions in an Access Statement. As an indication of the sort of factors that might be relevant to such a justification, applicants may wish to demonstrate for example that no members of the general public are accommodated, that all facilities are replicated on each floor, that the space demand of the lift and associated landings is disproportionate to the accommodation provided, that adequate provision is made for installation of a lift at a later date should it be required, and so forth.*

[quote from Building Regulations Approved Document M volume 2 paragraph 0.18]

The careful balance, that has been sought between the conservation of the building on one hand, and accessibility on the other hand, is rendered below.

At the entrance, the cobbled surface of the street is retained for its intrinsic value.

The concept of access can be seen to coincide for a large part with the design choice of keeping all floors open in plan type and therefore legible in their layout.

As the original coach opening is a large opening, with a level access that is continuous with the street, the principle entrance of the building is already clear and logical to approach. The decision to retain the ground floor level with the exterior level has been influenced by the choice to respect the original type of the space, but was also informed by the direct benefits it offers in terms of access for all. The entrance door swings to the inside and has a clear opening that is sufficiently wide for access with wheelchairs.

As outlined above in the architectural analysis, we think there is a strong case to be made for conserving the main body of the building in a state that is as close as possible to the nature of its character, in that it is essentially an open space. While the concept of an open space is arguably beneficial for the general approach concerning access, the aim to retain a substantial part of the existing fabric can be at odds with the introduction of some concrete measures facilitating access.

The conceptual and actual transparency of the space, on the floor of entry as well as on the extended floors, is beneficial for visual access. An overview of the spatial layout and an understanding of the circulation can be obtained from a single point of view, starting from the entrance, and continuing on the extended floors. There are no complicated routes to follow up or down. Doors are placed where one would expect them in the glass partitions, consistent with the circulation scheme that is straightforward. The physical and visual paths coincide. ( refer to figure 24 )

On a more detailed level, care will be taken to design the doors to offer sufficient visual contrast with the glazed screens they are part of. While observing the principle of contrast, necessary for people with impaired vision, the aim of architectural transparency with minimal visual and physical interruption, can be achieved.

The likely end users of the building will for the largest part consist of the design and office staff of the applicant's business. The offices are not open the general public, and visitors typically come in by appointment only. Visitors are received and accompanied by the receiving member of staff.

The ground floor forms the core of the building, where the main design activities of the applicant's business will be located, and where most of the activities that would be of interest to business relations or visitors will be situated. At the heart of the building, the ground floor and especially the meeting room will contain most social interaction. The kitchenette that is planned on this floor, has a worktop at 850 mm high and is designed to be easy to use for all users, including wheelchair users. The ground floor is thus physically completely accessible to all, and the decision to organise the core of the activities at this level, increases the potential for the 'core floor' being inclusive to all users. To have access for all on the ground floor, we argue, implies to have access to the core of the building's functions and activities.

The basement is a more experimental workspace, where model making and testing will take place.

The space of the roof extension will serve as a calmer space for a smaller amount of people to reflect and concentrate, away from the busier 'design floor'.

The staircases going up and down can be observed from the moment one enters the building. Both staircases are top lit by skylights, which contributes to making the stairs visually accessible and safe to use.

The staircase to the basement is a separate staircase from the staircase to the first floor. Both stairs are designed to facilitate evacuation in the event of a fire, and are separated by a fire-resisting enclosure. They serve a limited surface area, and the vertical travel distance is limited. With a small amount of people occupying a rather limited surface area within a low-rise building, and with two separate general access stairs in a fire resisting enclosure, both leading directly to a final exit, we are convinced the issue of fire safety and means of escape have been generously incorporated in the design.

The roof extension has an alternative means of escape, with a door leading to the roof.

As the protected staircase forms itself an atypically large space, the lobbies in the basement and ground floor offer sufficient space to accommodate a refuge.

The architectural concept relies on an open plan type and extends this quality to the upper and lower floor that are added. It is in this generic quality that lies the key to the longevity that is inherent in the original building. To extend this quality is to allow for adaptive reuse in the future, as well as forming an approach that it avoids being wasteful with materials and energy.

#### Facilities close to the entrance lobby

The demands on the design to provide access as well as the need to transport light to the basement, lie at the base of the design decision to work with a large open stairwell leading to the basement. From the choice to work with an open plan type, it follows that the space allocated for facilities needs to be concentrated in the area under the ground floor entrance lobby.

Within this compact area, facilities and waste collection are organised. It makes technical sense to locate these functions in close proximity to one another, as waste water and other effluents in the basement are ideally situated close to the main sewer in the street. The entire area is designed with an impervious floor, with the area for solid waste storage having a floor drain, and being served by an independent ventilator. The same principle applies for the toilet facility. The doors to these spaces have been designed as part of a compartment, i.e. offering 1 hour of fire resistance.

A deliberate choice was made to opt for one unisex toilet that is accessible to all, rather than two separate sex toilets. The internal dimensions of the space, as well as the location of the WC and washbasins, allow for the toilet to be used by a wheelchair user, and leave room for a person to assist. The doors allow for easy entrance, and the location of the toilet is determined as a balance between being easily accessible while offering reasonable discretion to all users.

A similar choice has been made in the current offices of MA Ltd, where a generous unisex toilet at basement level has proven to work well for all employees and visitors.

In the limited physical space available, and within the architectural constraints implied in the sensitive context of the existing building, the bulk associated with the installation of a lift installation in order to implement access for all would be detrimental to the architectural qualities.

However, the open stairwell leading to the basement has been dimensioned to allow for a platform stairlift to be installed. The proposed plans show the architectural layout designed in anticipation of such option. Given the structural redundancy in the concrete floor and walls of the proposed basement, the installation of a platform lift can be executed without additional structural measures. As such, the installation of a wheelchair platform lift may be easily executed at a later date, should the concrete need arise. A platform lift in the stairwell opening has the advantage of being able to operate independently from the main access staircase.

The staircase to the basement as well as the staircase leading to the top floor would also be suitable for a wheelchair stairlift to be installed. This option has the potential of forming an elegant solution, and can also be retrofitted.

#### 4.4. Design of the elevation and impact on neighbouring amenity

##### Roof extension as a light glass volume

The proposed roof extension is conceived as a light and transparent glass volume. The transparency is detailed in the form of a window scheme ordered accordingly to a very regular rhythm that takes its cue from the existing rooflight. Today, larger uninterrupted glass surfaces can easily be achieved with state of the art technology, but this design path was not considered. A more suitable approach can be found in the language of the existing building, the lantern of which is constructed by means of the simple repetition of identical elements.

##### Window frames, rhythm and opening direction

Research into window frames shows that only a limited amount of thermally interrupted steel frames exist on the market that can form a viable substitute for the slender profiles that were common in the period of the original construction. We consider the profiles of Secco ( figure ) to be suitable. The steel profiles are slender at less than 50 mm width. They also offer the possibility of using a variety of opening parts ,including outward opening windows, which are part of the language of industrial buildings. The galvanised version of the Secco profiles offers the benefit of being rust-proof and durable, and can also be painted on the outside and inside. The chosen window profiles, glass partitioning scheme, the type of opening and the paint finish, all form essential parts of a limited vocabulary, with which to design the glass elevations for the front, rear and side.

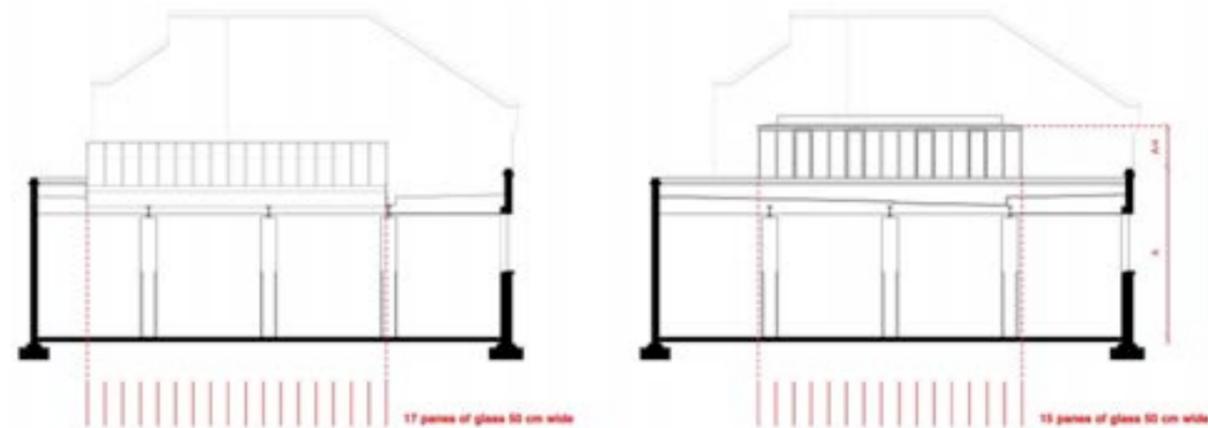


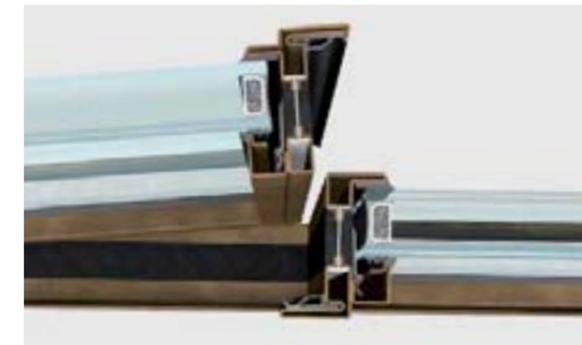
figure 25 window rhythm proposal (right) based on existing pattern (left)

## OS2 window outward opening

### system and performance



OS2 outward opening window is an integrated system with accessories, seals and thermal break profiles 65 mm deep allowing for a wide range of windows, rectangular, shaped or curved. They can be equipped with double glazing up to 30 mm thick. Each solution is equipped with a related set of accessories integrated in the system.



The sealing of the door and window frames is guaranteed by a double rebate seal system. The performance of OS2 thermally insulated system has been tested by the best European certifying labs under the reference standard EN 14351-1.

wind resistance - test pressure	4
wind resistance - frame bending	C
water tightness	8A
thermal transmittance (with Ug glass 1.0 W/m²K)	1,60 W/m²K *
air permeability	3

maximum achievable performance

### size and variations



lower section | frame section 47 mm



lateral section | frame section 47 mm



central section | frame section 62 mm



muntin | frame section 36 mm

OS2 is a rebated system with 47 mm face lateral sections and 47/62 mm central section. For sashes with multiple lights a 36mm thermal break profile is used.

figure 26 Secco OS 2 window profile



During the restoration work of this district, which has recently started, the replacement of doors and windows has been the object of a specific evaluation by the designers. The old iron windows needed to be replaced with new window systems that could guarantee not only living comfort, but also the preservation of the previous design and size while guaranteeing, at the same

time, the performance of a modern window system in terms of thermal and acoustic insulation and resistance to weather conditions. OS2 in painted galvanized steel could fulfil all the above requirements and was the ideal choice also for the bigger elements where the reduced size of the sections was balanced by the higher structural resistance of the steel.

Thanks to the thermal break and OS2 gasket system, it was possible to achieve those standards of thermal and acoustic insulation required by the project. (On top of this, the thermal break, the double rebate seals, the frame with weep system and the ironware with multi-point locking system have guaranteed the internal living standard required by the project).

windows and doors with thermal break  
 facade and cladding  
 safe and fireproof windows and doors  
 steel windows and doors

figure 27 Secco OS 2 window profile : examples similar to the proposed size, rhythm and colour

Several design exercises were carried out for the glass elevations. The regular rhythm that is proposed, proved to strike the optimum balance between fitting in with the existing surrounding fabric and offering a sense of lightness, without appearing too open. The elegant steel profiles define the structure of the glass enclosure, which is similar in principle to the existing windows, in which the relation between steel and glass is that of an elegant steel structure that is filled in with glass. Glass and profiles work together to form a light and delicate construction. Although modern glazing techniques allow substantially larger surfaces of glass to be used ( whereby the glass assumes a partially structural role ), a design along these lines would not establish a communication with the surrounding building fabric, or with the historical architectural context For this reason, designs using a different ratio of glass vs profiles, were rejected.

With a regular and repetitive rhythm of panels / profiles at approximately 50 cm wide, the proposed elevations resonate with the rhythm of the existing roofline, as well as with the proportions of the columns and piers, and the glass partitions used on the inside.

The 50 cm intervals also allow opening parts to be incorporated at regular intervals. With the profiles selected, windows of 50 cm wide can be constructed to open to the outside, adding specific visual interest to the elevations that is fitting for a light industrial building. Outward opening windows were a common feature that were typically used in industrial buildings of this period.

Outlook, overlooking and privacy

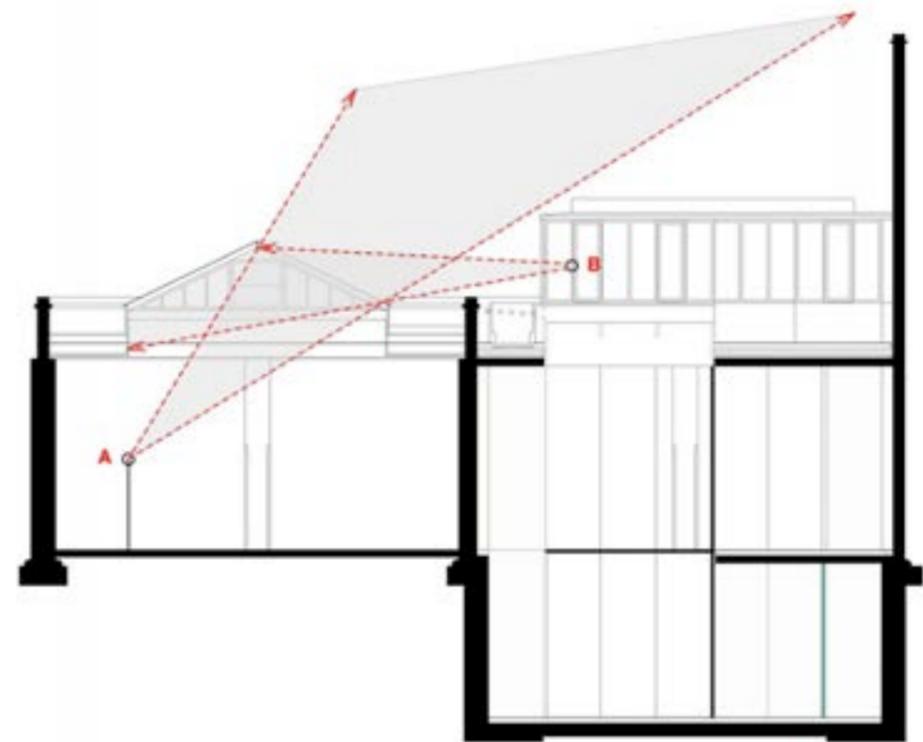


figure 28 Rochester Place 52 : outlook towards no 50 [A] and overlooking from no 50 [B]

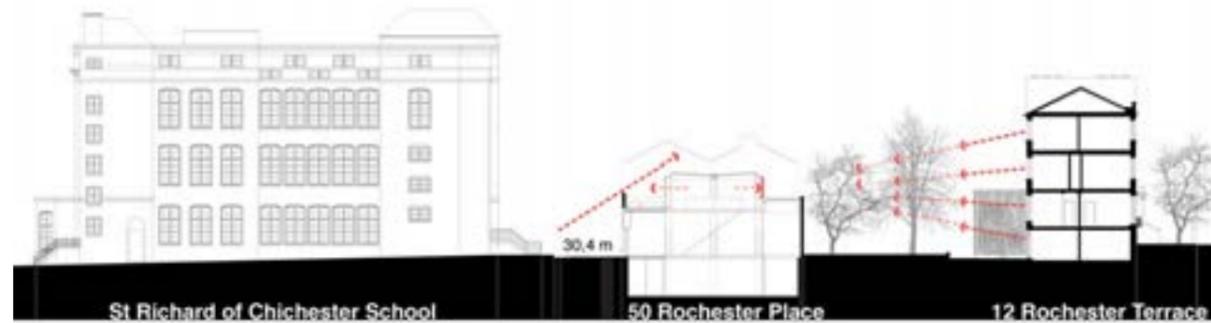


figure 29 50 Rochester Place in between Chichester Court and Rochester Terrace : outlook and overlooking

Transparency and reflection are in the nature of glass, and it follows that the issue of overlooking needs to be considered. With the glass volume set in from the exposed perimeter walls, the effect of overlooking is principally reduced. The effect of overlooking from the roof extension into the neighbouring skylight, as shown in figure 24 can be seen to be insignificant to non-existent. An analytical diagram shows the physical viewing angles from the proposed roof extension towards no 52 being limited by the construction of the existing skylight. It is demonstrated that no actual overlooking can occur. As a result of its limited height and its being set in from the party wall, the amount of light reaching the skylight of no 52 will not be affected. From this diagram, it can also be seen that the roof extension will not manifest itself in views from no 52 through the skylight towards no 50.

At the back, the roof extension is set back from the rear wall by 3,1 metres, and is also set in from no 48 by approximately 1,3 metres. The potential of overlooking towards the rear gardens is thus less when compared to the actual situation of the first floor windows and second floor terraces of no 48. **The effect of overlooking is mitigated by the vegetation and the presence of mature trees, which act as a green filter between the buildings of Rochester Terrace and Rochester Place** ( refer to figure 29 ). To further limit the sense of overlooking towards the rear, **it is proposed to fit translucent rather than transparent glass to the rear elevation of the roof extension.** The light appearance of the glass extension can be maintained, and overlooking towards Rochester Terrace is prohibited.

Even though overlooking towards a street can be desirable, direct overlooking from the front elevation towards Rochester Place will not occur. This is a direct consequence of the primary design decision to keep the bulk and volume of the roof extension limited and stepped back. Due to the limited width of the street and the limited height of the roof extension, the extension itself will not be seen from across the street.

Inspired by the effect of green on balconies ( as analysed earlier ), a row of planters is added on the roof, allowing small plants to grow and act as a subtle green screen between public and private realm. The plants also offer an added sense of privacy between no 50 and 48.

The planters, which are approximately 40 cm high and which are designed to contain plants up to the height of the parapet wall, are primarily designed to offer visual interest for the interior space. The small area of the roof that is accessible, keeps a considerable distance from no 52, and is well set in from the street and no 48.

The inclusion of plants will also make a modest contribution to the biodiversity of the area.

### Preventing light pollution, by means of specifically designed internal blinds

The potential of light spilling out of the glass roof extension, an issue that was raised in the meeting with the Reed' s and Rochester Neighbourhood Committee, has been addressed in the design of the exterior envelope. In order to contain the light emission ( e.g. during winter ), integrated blinds have been introduced in the design of the glass surfaces of the roof extension. These blinds, indicated with a red line, follow the contours of the extension and keep all artificial light in. They form an important element in the functioning of the glass envelope in the given surrounding conditions. Their installation will result in containing the artificial light needed during winter, while limiting the sense of feeling exposed for the people using the space.

The blinds are specified with a black colour on the outside, and a white colour on the inside, so that the windows appear blacked out towards the outside, while reflecting the artificial light on the inside, supporting an ecologically durable lighting solution. The glass will be specified to be non reflective so as to fit in with the existing glass surfaces.

The windows in the existing front elevation are part of the entrance lobby and the stairwell to the basement. These areas do not require permanent task lighting and the potential effect of light pollution is considered to be minimal. These windows are not fitted out with blinds.

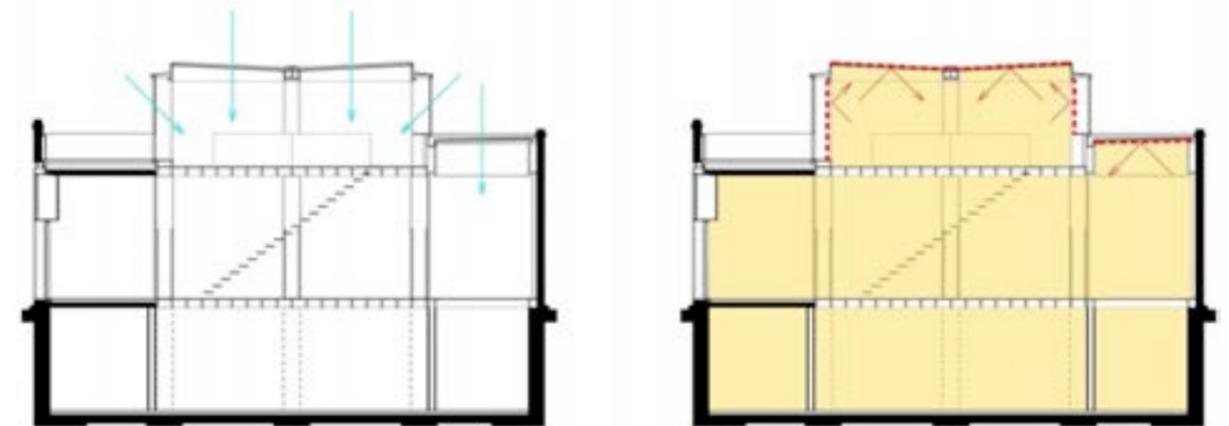


figure 30 internal blinds [left : day | right : night]

### Design of the roof and intake of light + reduction of heat intake

The glass skylight of the existing building brings a generous amount of daylight to the space, albeit not without the consequence of exposing the space to overheating by the sun. The original design was clearly not informed by knowledge of climate control. The airconditioning units and retrofitted internal blinds in no 52 and 54 are solutions that form no longer fitting answers to current ethical and ecological standards, nor building standards.

With a glass skylight playing a central role in the original building, the intention to find a modern interpretation of a roof that lets in an equally generous amount of light while preventing the risk of overheating, has been the subject of design research.

As solar heat needs to be blocked from the outside and needs to be dynamically controlled to answer to the changing conditions of daylight, the challenge consisted of finding appropriate solutions for combining these contradictory needs.

Permanent screens or lattices mounted in front of glass have the disadvantage of making cleaning and maintenance very difficult, and can have the effect of taking over the identity of the architecture. Especially in

the elevations of the roof extension, this would be undesirable. Options along these lines, although valid in their own right, were rejected for being too dissimilar to the surrounding fabric.

A solution was found in the reinterpretation of the valley roof solution. In this historical type of roof, which is typically hidden from the representational plane, a pitched roof construction is used in combination with a central gutter. These roofs are an inventive solution, beautiful in their own right, yet intentionally designed to be invisible. This roof type can, for instance, be found in the nearby original buildings in Reed's Place.

In the proposed design, a central gutter forms an essential part of the structure of the roof, as it marks the centre of the space and is inscribed in the structural system that consists of existing brick piers and new columns and that has been explained earlier in this document. ( refer to proposed section 1/50 )

Ground floor and basement have a four bay structure. The space of the roof extension has a two-bay structure whereby the roof extension is set in from front and back by one bay. The gutter forms the legible center of a symmetrical structure and collects the water from the glass roof. The symmetry of the roof and the architectural qualities associated with this principle, make the roof interesting to look at both from the inside as well as from the outside. Governed by simple proportions, it forms a reinterpretation of the Georgian architectural principles inherent in the original architecture.

Building on the discreet nature that is inherent in the concept of valley roofs, the central gutter also contains the housings for roll-up solar screens, which are to be fitted in between the glass supporting profiles. As a result of this construction principle, the shutter housings are hidden from views.

The combined construction offers the means to control the amount of heat carried by the sunlight to enter the roof extension and find its way to the ground floor, and allows the representational plane to remain uncomplicated and perform its main function of communicating in a language that is architecturally adapted to its surroundings. With the screens following the rhythm of the architecture, the technical solution remains subjected to the architectural appearance.

#### 4.5. Materials and techniques used - built culture - building fabric

##### Reinforce and reinstate

The thin steel frames of the windows are galvanised and painted black on the outside and white on the inside. This coating will be maintained by applying paint by hand, a maintenance method which will add patina to the joinery over time. The roof and its edges are covered with zinc, in its natural grey colour, which is a material fitting for industrial buildings of this period, as can be seen on the neighbouring buildings. The seam detailing chosen is the lapped joint, a more refined version of the capped batten technique. The joints are designed to follow the rhythm of the window frames, with one zinc joint corresponding to every other vertical window profile. Steel, glass and zinc are the basic materials that were originally used and that yet again constitute the entire vocabulary of the proposed roof extension. Not only on a material level but also by the design of the structure and the use of construction detail a connection with the built fabric is established. The adaptive reuse of the building is interpreted as continuing a building tradition without replicating it.

In order to counteract the erosion of character, the fabric that is to be retained is identified, and new design details are being made subject to the existing details. **Features that have been identified as missing or that are under threat of disappearing, are proposed to be restored or reinstated.**

All the existing brickwork is retained, including the brickwork sills and coping details. Flashing details for the new roof will be inserted under the existing coping, so that the architectural identity of the original walls remains intact. Where necessary, careful repointing will occur. If repointing is to be executed on the front elevation, this will preferably be done in consultation with the neighbours of no 52-54.

The original windows in the front elevation remain in place and will be restored or overhauled. A new sliding door that is inspired by the original sliding doors that are still in place in no 52 and 54, is proposed. This sliding door has a large fanlight, and a smaller door that is suited for day to day use. This joinery element is to be executed in hardwood, and will be painted black.

The signs referring to MDA motors are removed. Any new signage proposed will be limited to black letters stating 'MICHAELANASTASSIADES', and will be applied on the glass above the entrance door.

The granite corner stones protecting both sides of the entrance, still present in no 52-54, are proposed to be reinstated in no 50.

##### Interior

A similar principle of drawing on a limited set of materials and construction techniques originally present in the building, is proposed for the interior construction. Wooden joists and boards form the visible ceilings. Necessary fire proofing materials will be installed in between the wooden ceiling boards and wooden flooring boards. The necessary technical performance of fire resistance in compartment floors can thus be achieved without affecting their appearance. Fireproof compartments are formed by glass, held in steel frames, and form a minimal interruption of the open space character. The brickwork walls are currently painted on the inside. It is proposed to carefully remove this paint by chemical peeling, and to apply a lime based coating, applied by brush. This type of coating is thin and allows the walls to breathe, which voids damage and ensures its longevity. Where the application of render or plaster removes the texture and identity of a brick wall, the proposed lime coating will emphasize the texture of the walls as brick walls, and is a finish fitting for the utilitarian character for the building.