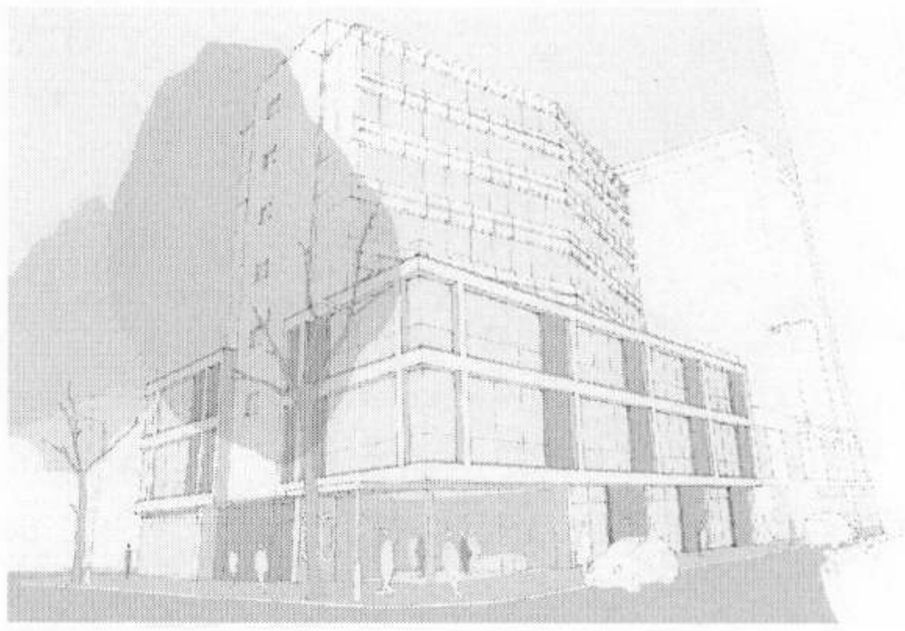
ROLFE JUDD

60 CHARLOTTE STREET
LONDON W1

CLADDING REPORT



JCC/4195/C
September 2006

60 CHARLOTTE STREET

CLADDING REPORT

Contents

60 CHARLOTTE STREET

CLADDING REPORT

1.0 INTRODUCTION

This document is produced in support of the current application for planning consent to refurbish and re clad No 60 Charlotte Street. It augments the submitted design statement accompanying the application and its purpose is to explore and clarify why the current application seeks to revise the detail of the scheme already consented in September 2005. The current scheme includes the re cladding of the entire building rather than just the partial re cladding of the podium block as shown on the consented scheme.

The consented scheme extends the existing 1970's building in the following ways:

- Extension of the 2nd floor plan form to infill over the top of the existing podium.
- Extension of the office floor at 7th to infill the recessed balcony feature.
- Partial re cladding and total replacement of windows at podium level.
- Partial replacement of windows to tower.

Although this consent addressed some of the issues associated with extending the life of the building, it ignored the major issues of sustainability. This in our view is a somewhat short sighted approach and in order to bring the building up to acceptable modern day standards a more holistic view has to be taken of the building from the inside out.

The revised application seeks to rectify these shortcomings by improving the buildings overall efficiency. The building services have been designed to incorporate energy and water saving measures and the building envelope has been designed to achieve a high level of thermal efficiency. The total building package will therefore be comparable with new build standards and capable of alignment with the new Part L2 of the Building Regulations thus reducing carbon emissions.

The existing building envelope not only falls short of modern day standards in terms of thermal efficiency but because many of its components are reaching the end of their design life it's maintenance costs will continue to rise significantly over the coming years. Windows are single glazed and many opening lights are inoperable. The cladding panels are extremely thin and the fixings will become increasingly vulnerable in the future.

In order to give this building an extended life for the next 30+ years it is essential that the fundamental shortcomings of the existing building, including the cladding envelope, are considered in a comprehensive and cohesive manner. We believe that by addressing these issues, as described within our proposals for the revised application, considerable improvements can be achieved to enhance the buildings environmental performance, reduce significantly the ongoing maintenance requirements and contribute to a vital and beneficial change in the appearance of this well regarded neighbourhood.

This document focuses on the issues surrounding the re cladding of the building and seeks to demonstrate the benefits of adopting a strategy for overall improvement - rather than piecemeal extension which we believe will retain many of the buildings outdated and inefficient characteristics.

2.0 EXISTING BUILDING ANALYSIS

We do not have records on the exact date the existing building was completed. We do have however full construction drawings from both the original engineer and architect.

The first survey drawings from the engineer are dated April 1971 with the bulk of the piling drawings being produced in late 1971 and the rest of the structural frame being detailed in 1972. The earliest architects production drawing is dated 1972 and the latest 1974. This suggests a construction period between 1972 and 1974. A completion certificate was issued by Camden on 6th October 1975.

- Architect was Sidney L. Belfour Architects whose address in 1971 was at 4 Bloomsbury Square, WC1 and in 1974 was at 44 Russell Square, London, WC1.
- The Engineer was J. Atherton at 138 Tachbrook Street, SW1

We are not aware that the Architect achieved widespread acclaim or that this building was considered in any way a keynote design at the time of it's construction.

60 Charlotte Street was designed as a mixed development including cinema at basement, offices in this tower and flats in the residential tower. The structural frame is reinforced concrete clad with large concrete panels to podium and thinner mosaic set panels to the tower. The frame generally appears in good condition.

Glazed throughout with single glazing and without any thermal protection to the cladding the thermal characteristics of the envelope fall well below acceptable modern day standards. Some of the protection to the fixing points of the larger panels to the podium have come loose and there is evidence of loss of some parts of the mosaic covering to the panels on the tower and the external spine feature.

The existing building services have been extensively revised during their life span often on a floor by floor basis – resulting in a system which is out of date and uncoordinated. Plant has been added to the upper plant level at 7th / 8th floors to create an unsightly conglomeration on top of the building.

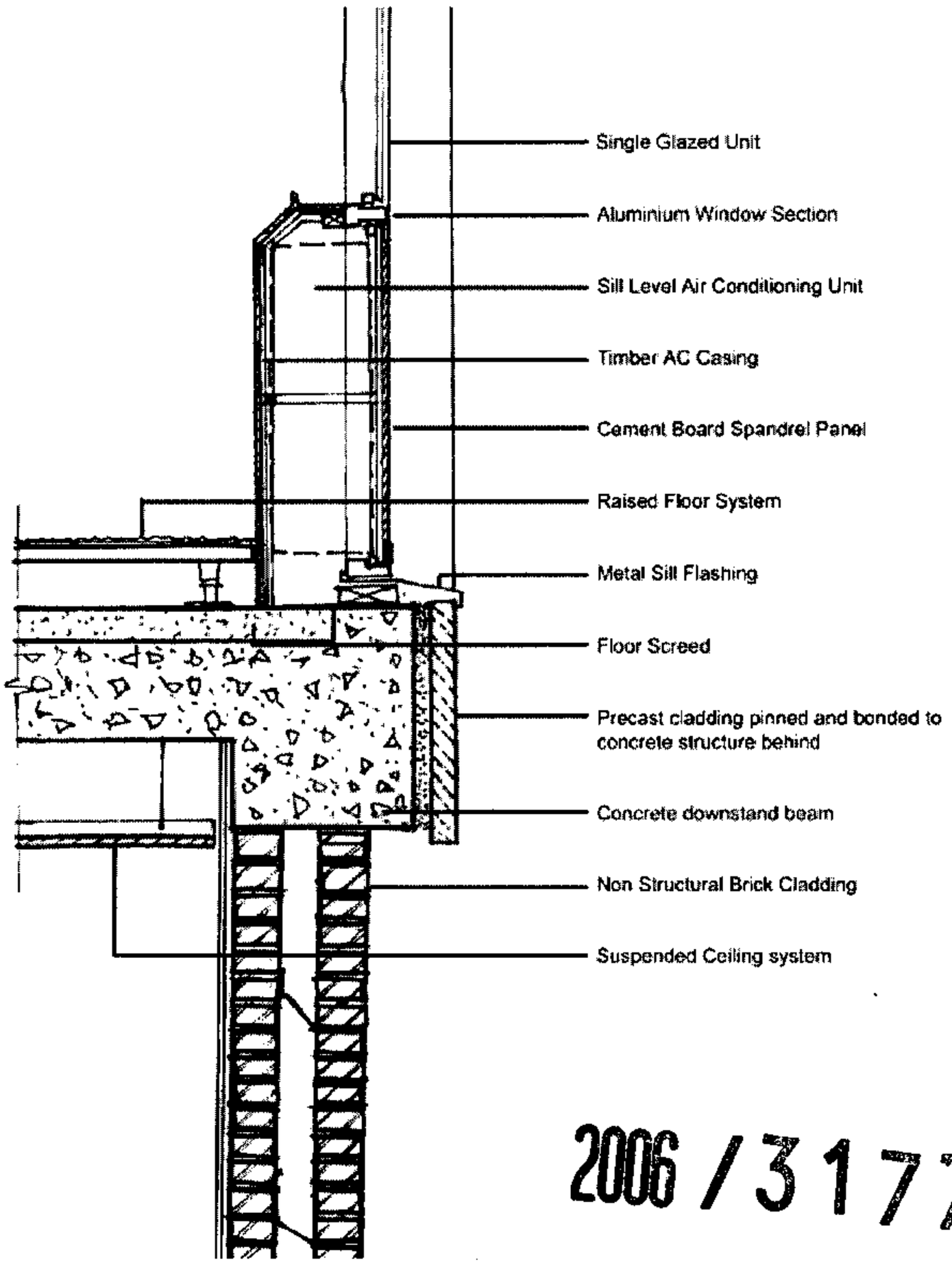
CLADDING REPORT

3.0 PODIUM

The revised proposals are similar in approach to the consented scheme in that they propose that the podium is sympathetically remodelled up to the existing line of the residential property.

The new scheme proposes a new fully insulated cladding system to replace the existing to comply with current standards.

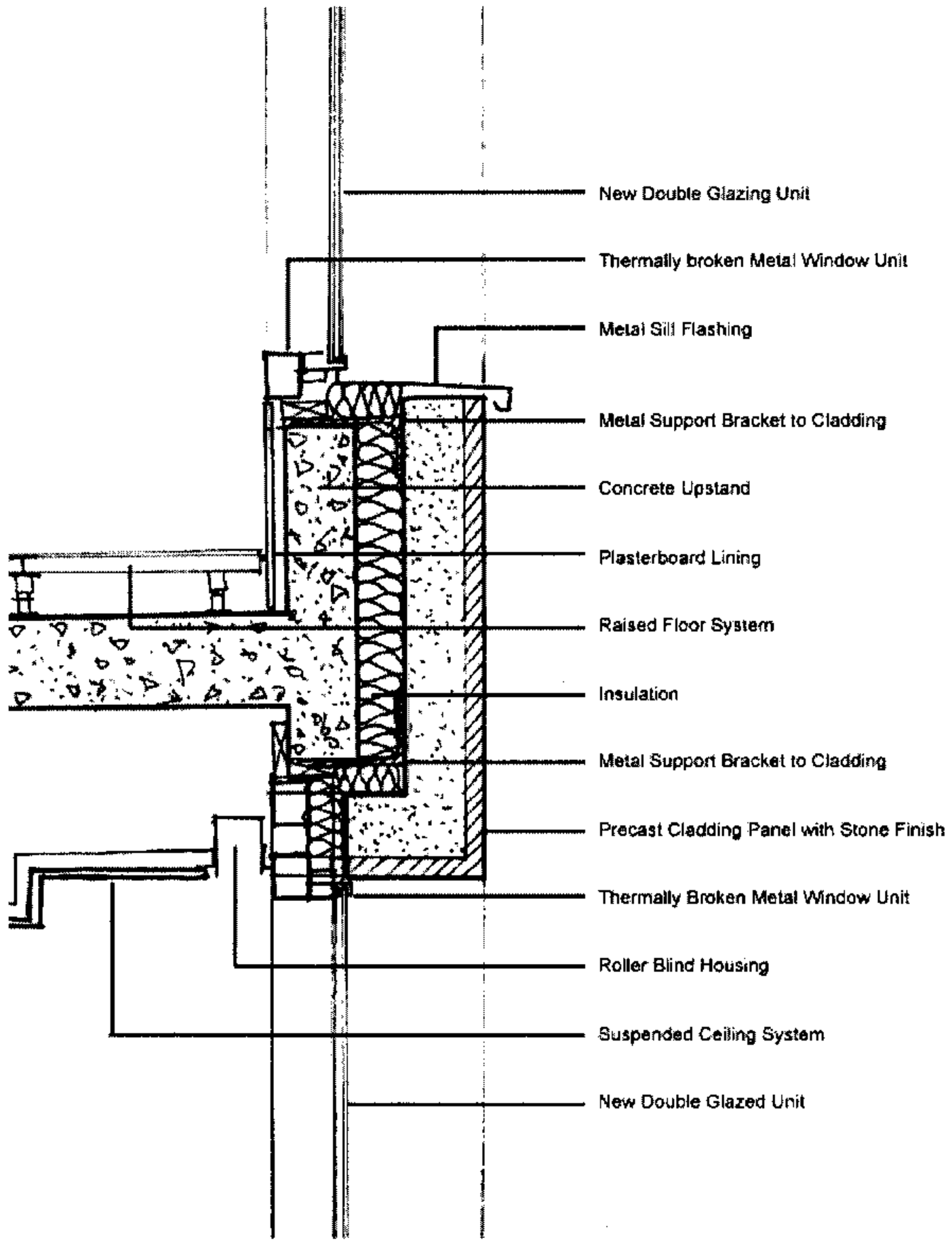
New double glazed window units will be installed as in the previous scheme.



SECTION THROUGH EXISTING PODIUM CLADDING

60 CHARLOTTE STREET

CLADDING REPORT



SECTION THROUGH PROPOSED PODIUM CLADDING

60 CHARLOTTE STREET

CLADDING REPORT

4.0 TOWER

In the consented scheme the tower remains very much as it currently exists.

For a number of reasons we do not consider this to be a practical decision and it possibly reflects the previous owner's intention to undertake a more budget driven, short term approach to refurbishment particularly when compared to the significant amount of work proposed to be being carried out by the applicant under the new revised proposals.

- The existing cladding panels are very thin and consequently thermally inefficient.
- The existing windows are single glazed and reaching the end of their design life.
- The existing mosaic covering to the cladding – particularly to the spine feature appears to be failing locally.
- Even though the new cladding to the podium and the new windows to the 7th floor have been designed to be sympathetic to the original premise of the buildings design, the 'cladding to cladding' junctions would be very difficult to achieve if the existing cladding between was retained.

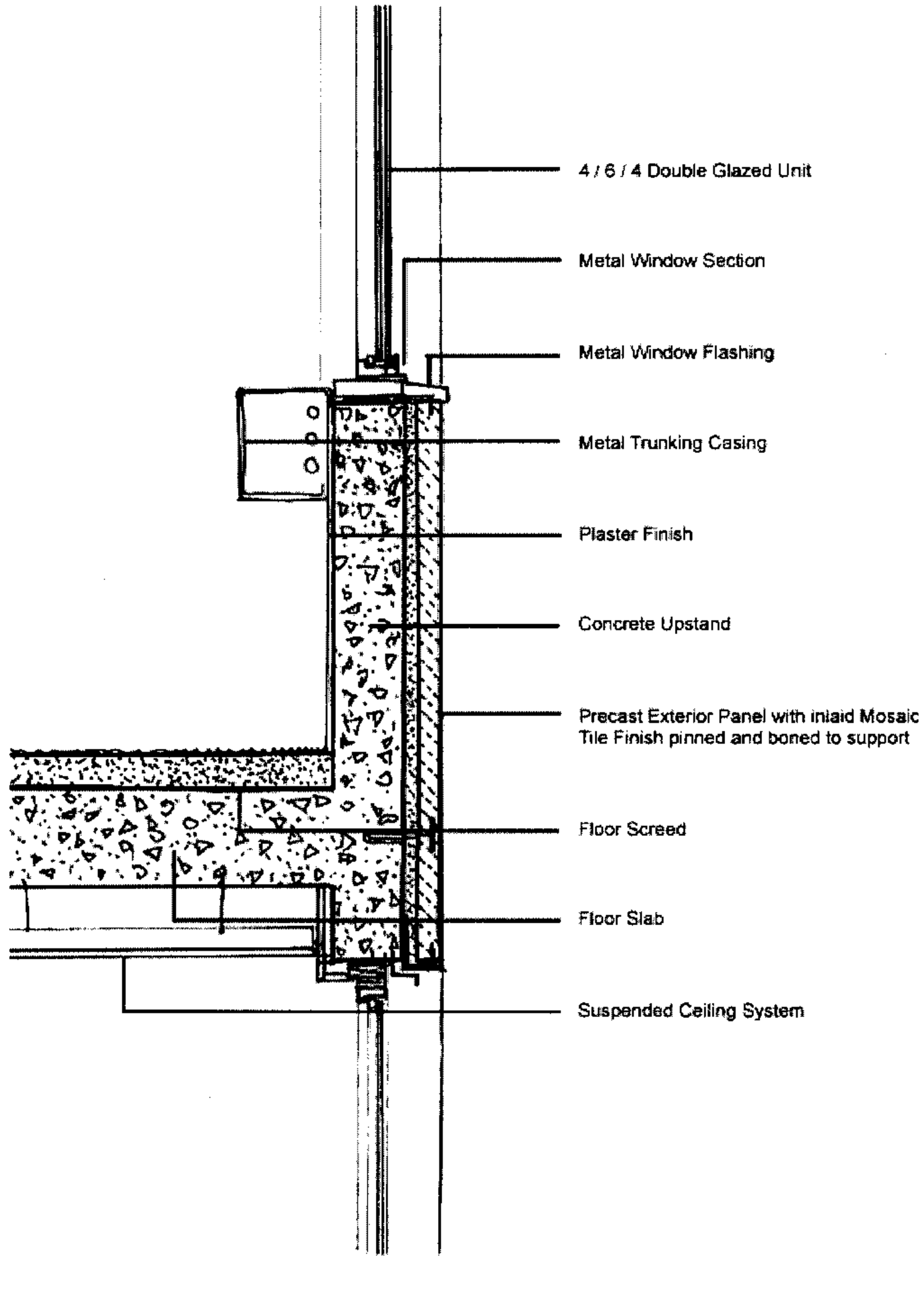
The new design proposal is that a new cladding be designed and fitted to the building to achieve the following:

- Provides a high level of thermal performance to comply with modern standards and reduce carbon emissions.
- Designed to be sympathetic to both the concept of the new cladding of the podium and maintain the design rationale of the existing building.
- Significantly increases the building envelope life span.
- Provides the opportunity for a super efficient building services installation in that it incorporates ventilation louvres which introduce fresh air directly to the system on a floor by floor basis.

It is also proposed that the spine detail of the existing building is removed. It has been established by structural engineers that the detail was decorative rather than functional in the original design. The feature is currently a weak point in terms of the stability of fixing of the mosaic panels and forms a significant cold bridge transmitting straight to the internal face of the building. We do not believe that the feature is a positive asset to the building in urban design terms and therefore can be removed without detriment to both the structural performance and appearance of the building.

60 CHARLOTTE STREET

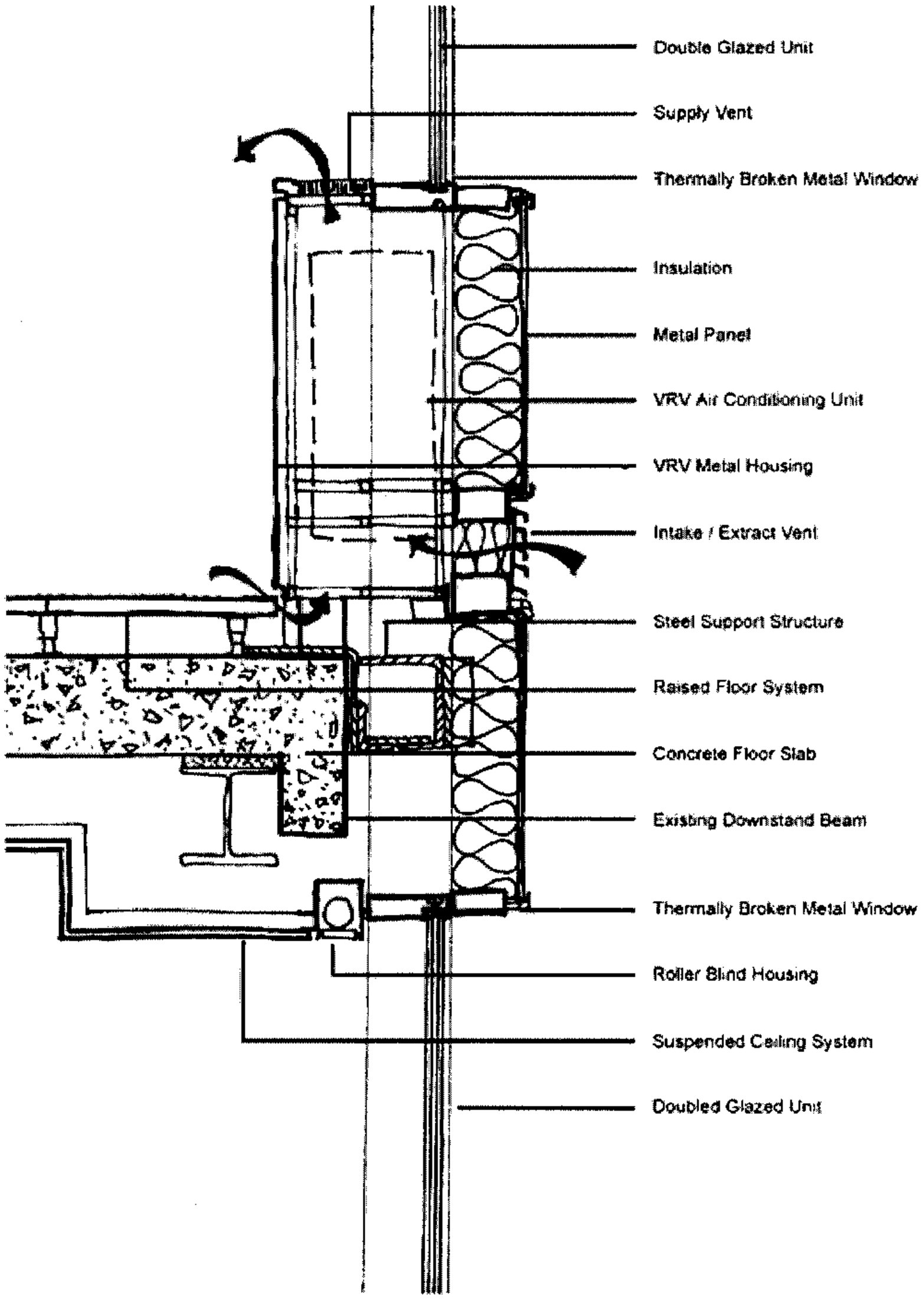
CLADDING REPORT



SECTION THROUGH EXISTING TOWER CLADDING

60 CHARLOTTE STREET

CLADDING REPORT



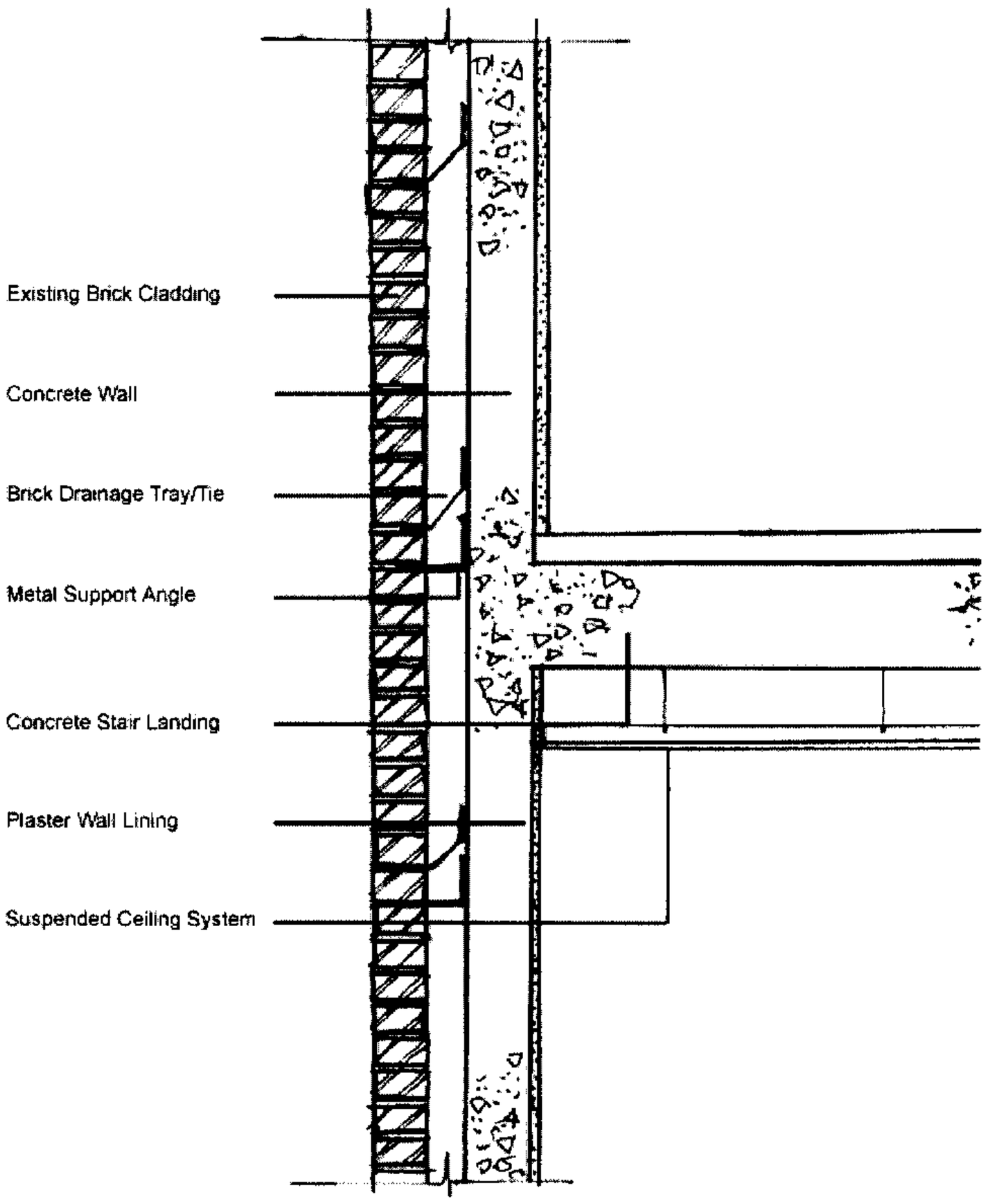
SECTION THROUGH PROPOSED TOWER CLADDING

60 CHARLOTTE STREET

CLADDING REPORT

5.0 STAIRCORE

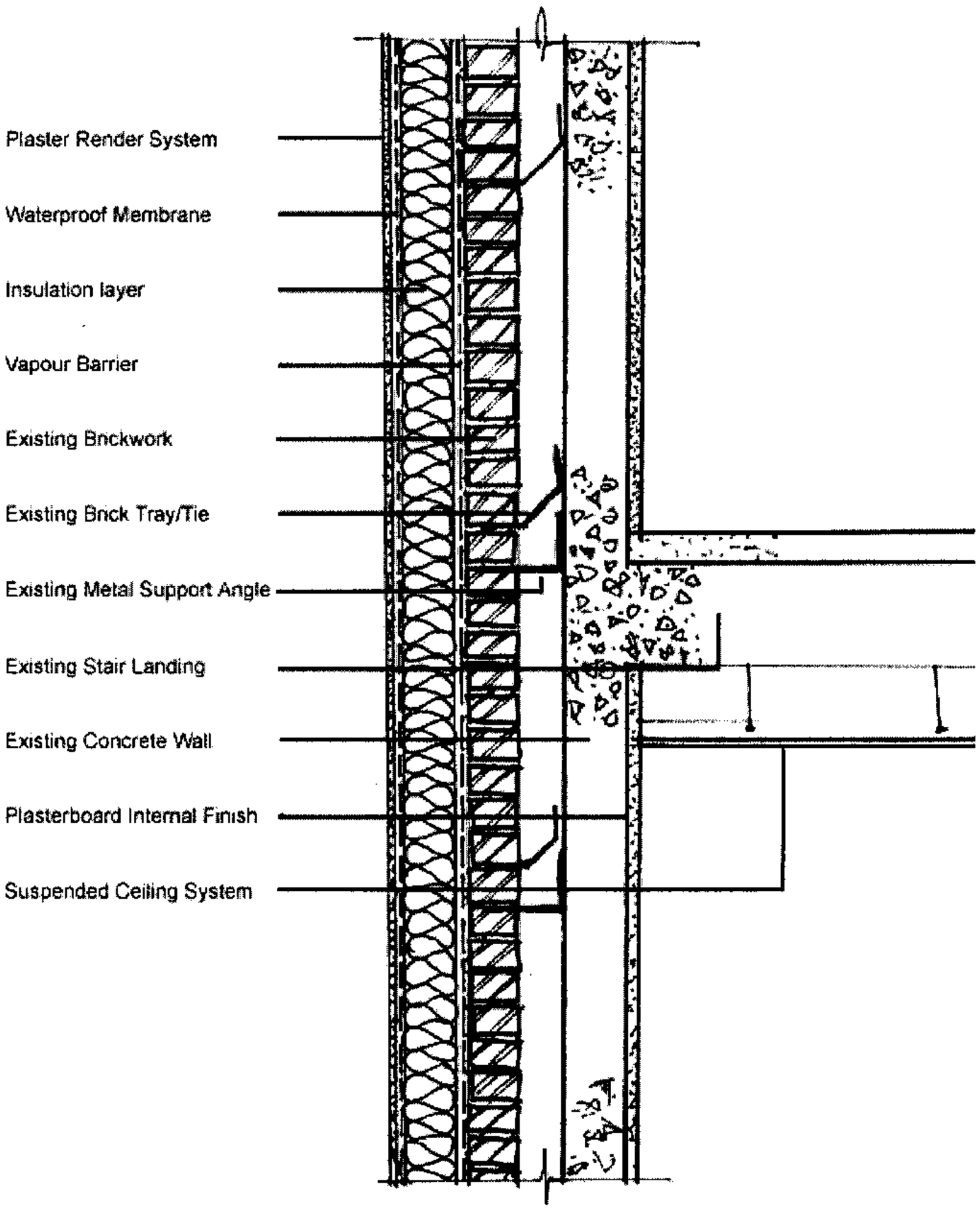
The revised proposals include the upgrading of the two end elevations of the tower to achieve comparable thermal performance to the tower itself. These walls are curved to accommodate the existing stairs which will be retained. In this area any enhancement of the thermal performance will need to be applied externally so as to retain the existing stair width. In order that this is done in a way which is comparable with the existing brick finish we propose a rendered system. Currently the existing brick finish is a dark brown brick. We believe that in the context of the lighter colours that now exist in Charlotte Street a light off white would be the most appropriate colour to finish this element which will compliment the palette of materials selected for the rest of the building.



SECTION THROUGH EXISTING STAIRCORE CLADDING

60 CHARLOTTE STREET

CLADDING REPORT



SECTION THROUGH PROPOSED STAIRCORE CLADDING