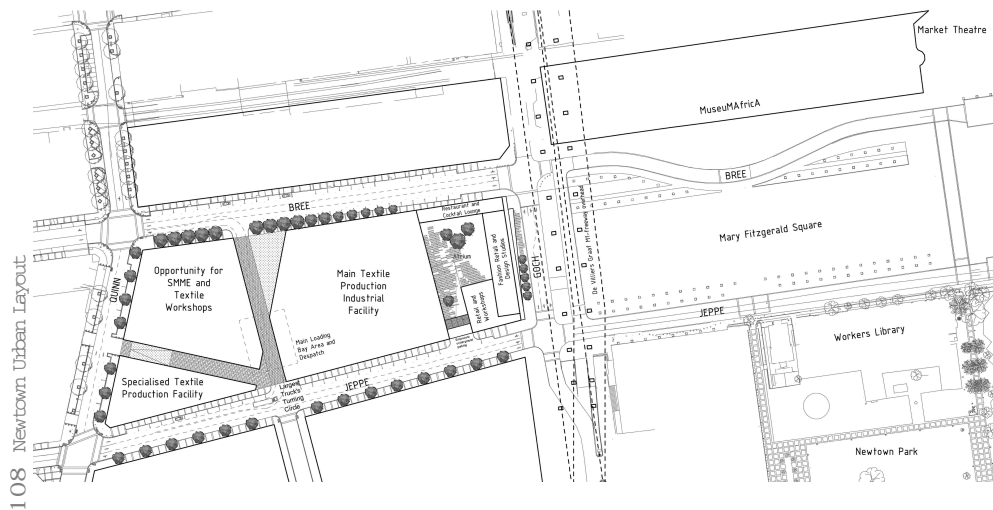


Design Development

The description of the design development is divided into two sections. The first concerns contextual influences and guidelines provided for the Newtown Development Precinct by the JDA, while the second deals with current theory regarding retail design.

The form, scale, composition and material choice of the building is informed by the Newtown Cultural Precinct Urban Design Plan and the Newtown Cultural Precinct Design and Development Manual. Besides the general guidelines (a summary of which is provided in Appendix A and B), the Urban Design Plan stipulates the following about the city block and site chosen for the project:

- * Bree, Jeppe, and Quinn are primary vehicular movement streets.
- * Bree and Quinn Streets form part of the Public Transport System.
- * The eastern side of the city block bounded by Jeppe, Quinn, Bree, and Goch Street should be a primary activity edge with an active ground floor that engages the public.
- * Goch, Bree, and Quinn Streets will be treated as a landscaped boulevard.
- * The entire southern façade of Bree Street between Goch and Quinn Street is deemed to be of historic value and must be retained.
- * The site boundary along Bree, Goch, and Jeppe Streets are mandatory build-to lines.
- * The façade on Goch Street must have a colonnade or covered walkway.
- * The site should be architecturally accentuated.
- * Goch Street must have a road surface that integrates with Mary Fitzgerald Square.



Form and Scale

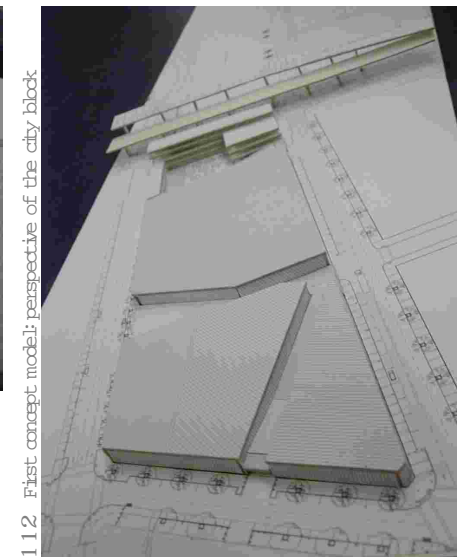
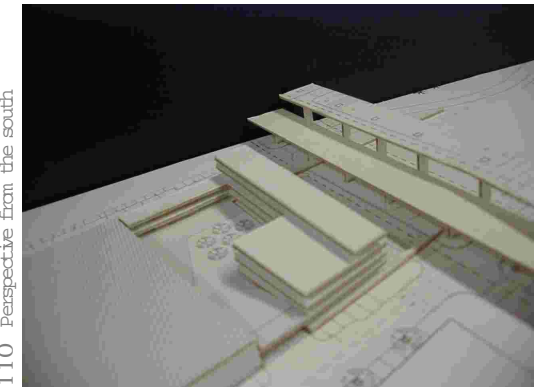
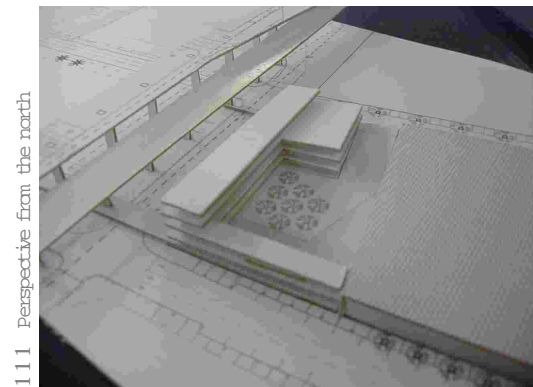
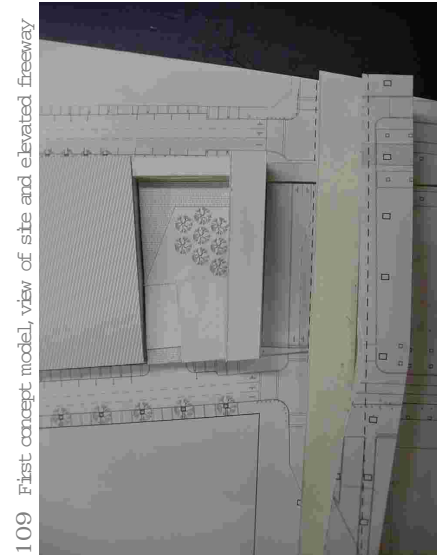
The overriding group form sought is that of a street-related wall architecture, characteristic of the Johannesburg CBD. In all respects, the mass and form of the building are to respect the existing buildings and respond to existing contours and levels of the adjacent streets.

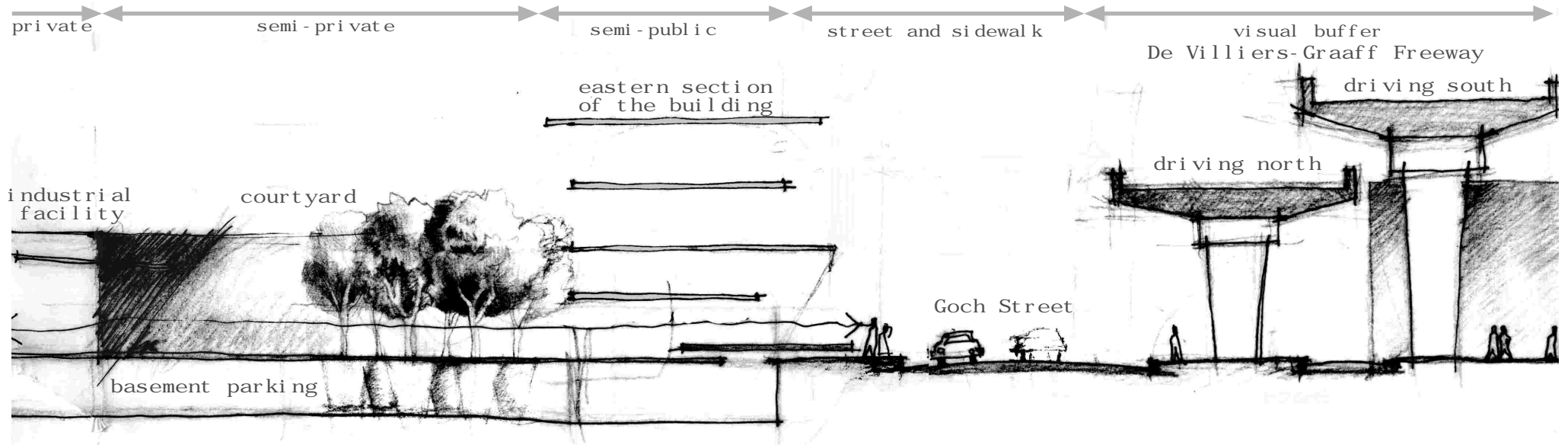
The form (two-dimensional plan) of the building is a product of:

- * The mandatory build-to lines.
- * The inclusion of a private courtyard.
- * The position of the entrances for the basement parking.

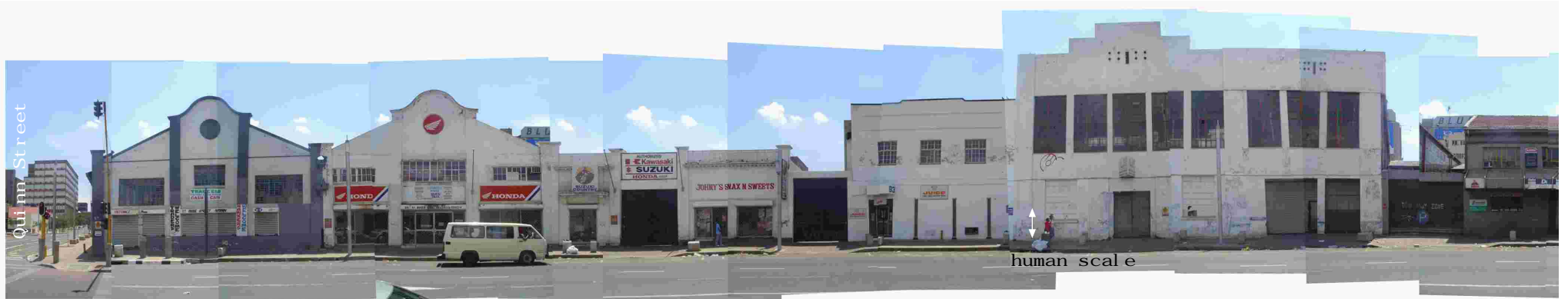
The following was considered in deciding on the scale of the building:

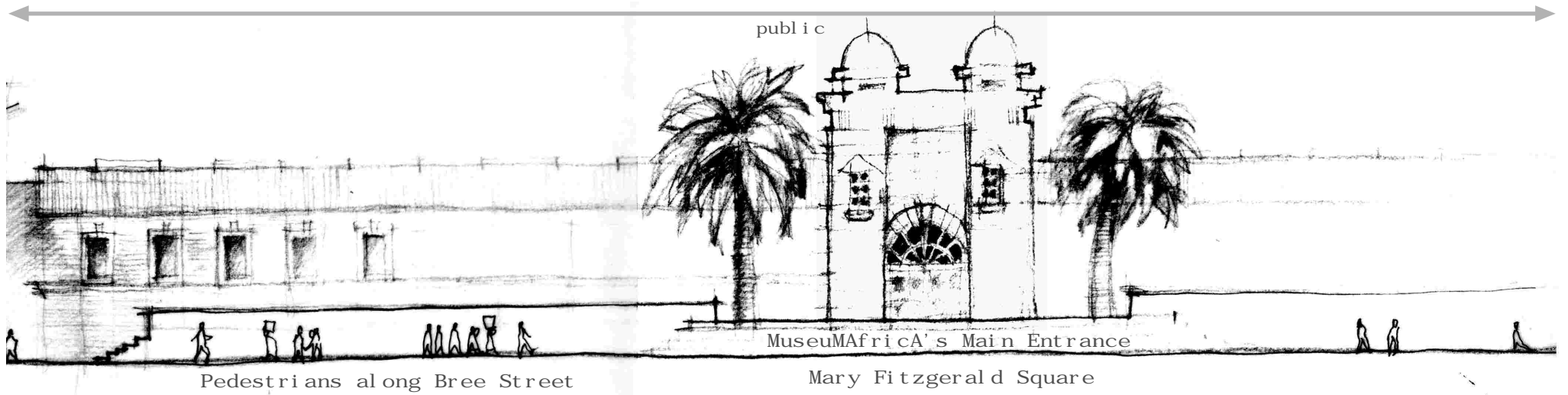
- * The Urban Design Plan states that the height of a building is a critical ingredient to the spatial qualities being sought. In keeping with the existing scale of the urban environment, building heights of three to four storeys are encouraged.
- * Competing with the elevated freeway, the building is eighteen metres in height. It has three storeys, each with a floor-to-ceiling height of 4.2m, containing at ground level retail space, a restaurant and the courtyard; and at the upper levels, the second floor of retail space, manufacturing workshops, fashion design studios and a cocktail lounge.
- * Considering the likelihood of future changes in programmatic requirements and building function, a floor-to-ceiling height of 4.2m can be considered flexible, seeing that it can accommodate a variety of industrial functions (like the manufacturing of musical instruments, clothing and shoes, theatrical props etc.) and commercial activities.
- * Building facades of historical value should be retained and integrated with the redevelopment of the site. Considering the scale of the southern façade of Bree Street, the northern façade of the proposed building should be no more than one storey, as not to compete with the historic structures along Bree Street, the height of which range between six and nine metres.



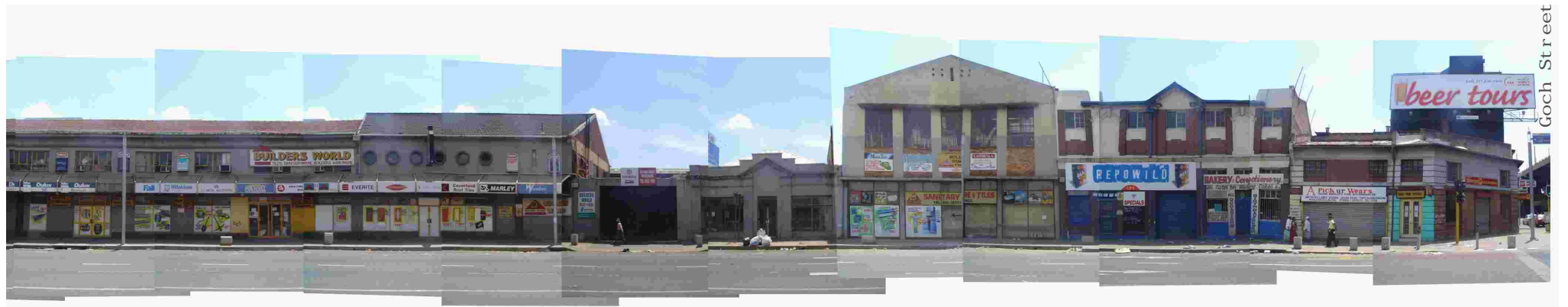


114 Historic south facade of Bree Street





113 Section through square, freeway and building. This was one of the first concept sketches drawn to analyse the site and explore the relationships between the different elements in its context

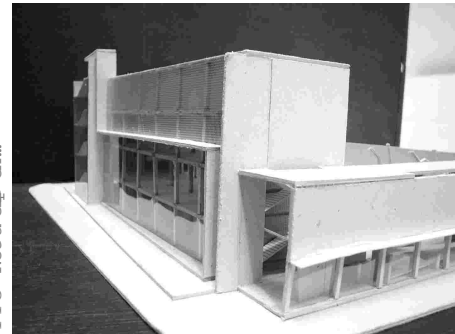


Regarding the form and scale of the building, the following guidelines provided in the Urban Design Plan and the Manual is taken into consideration:

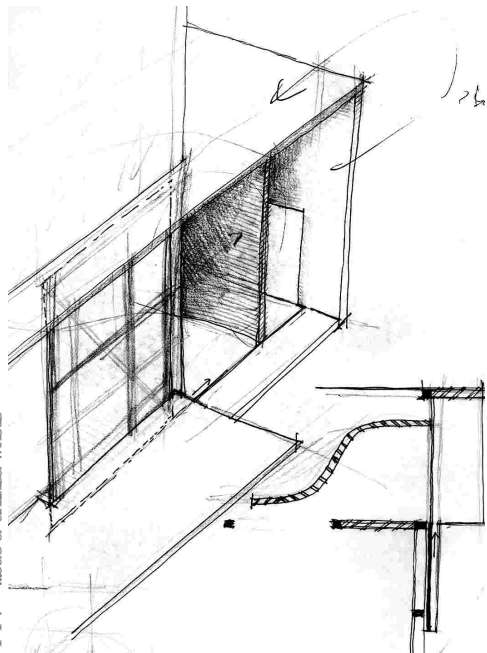
- * The positioning of buildings on site should achieve legibility, a sense of arrival for the visitors, and the optimisation of views.
- * The interior of each block should form part of the semi-private domain of the Newtown Precinct. The development should recognise this as an equally important frontage. (I.e. The surface of the courtyard is an extra façade.)
- * Because of the emphasis of the courtyard, the edges defining the courtyard become important. The building has an additional north, south, east, and west façade.



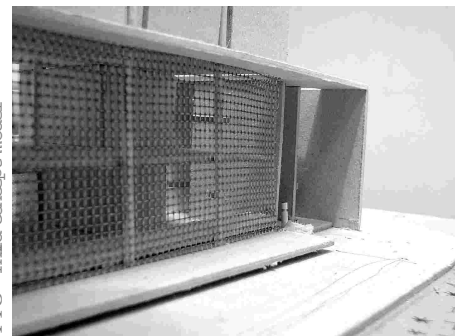
115 Second concept model.



116 Not a clip-on...



117 ...but a unified whole



118 Third concept model.



119 View of the north-eastern corner.

The main entrance ties together the different scales and the composite form of the building. The entrance is positioned on the north-eastern corner of the site (the corner of Bree and Goch Street), where the two wings of different scales meet. The Goch Street building mass relates to Mary Fitzgerald Square and the elevated freeway, while the Bree Street section of the building relates to the historic façade across the street.

The position of the main entrance is justified by it being on a primary vehicular movement street - which is part of a public transport system, on a primary activity edge, and on the corner of two streets that are treated as landscaped boulevards. Pedestrian movement concentrates along Bree Street.

Although it would be a logic decision to make the main entrance a point of architectural accentuation, one of the massive columns of the freeway is in the direct line of sight of pedestrians and motorists approaching from the east, thus making it useless to attract attention to this point.

The focus should rather be on the 60m long, eastern façade, which engages the public and form a backdrop to the elevated freeway. The skin of the building is a plane, rather than a point of architectural accentuation.

The main entrance however remains important. It is the connection between two vastly different parts of a building and is critical in ensuring

that neither wing reads as a clip-on. The entrance is inviting, drawing people into the core of the building. It provides views into the northern part of the building, which houses the restaurant and the cocktail lounge, and to the courtyard and retail space. Because the main entrance is a double volume space, it gives a sense of arrival for visitors.

Composition

The composition aims at elegance. Clearly articulated systems of proportioning, horizontal expression, and vertical modulation is of utmost importance in expressing dignified solidity and strong composition.

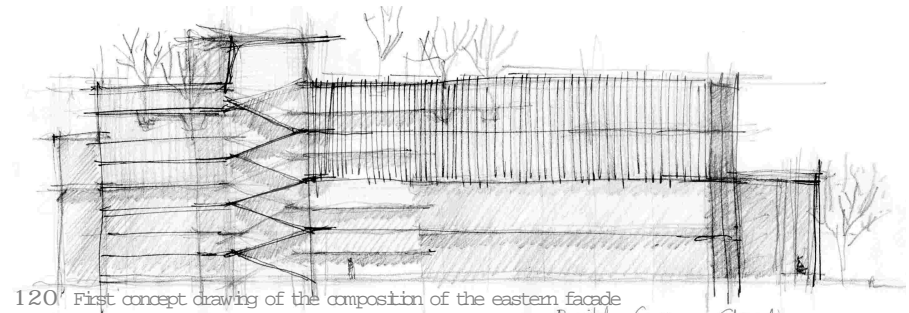
Each of the facades is divided into bays of five metres with the floor-to-floor height is 4.5m. The eastern façade consists of thirteen bays. The first bay of this façade (containing the main entrance) is wider to signify the difference of the corner in relation to the rest of the building.

The inclusion of a colonnade, with a 2m-cantilever canopy, divides the eastern plane into two sections. Glazing systems are used for both sections of this façade; the top system is set in front of the columns and floor edges, while the bottom system is set behind only the columns and in front of the floor slabs. This creates a colonnade with the same scale as the entrance. The canopy is extended to form the roof of the entrance and the northern section of the building. Bending 90°, the continuous line of the canopy becomes a homogeneous roof-wall.

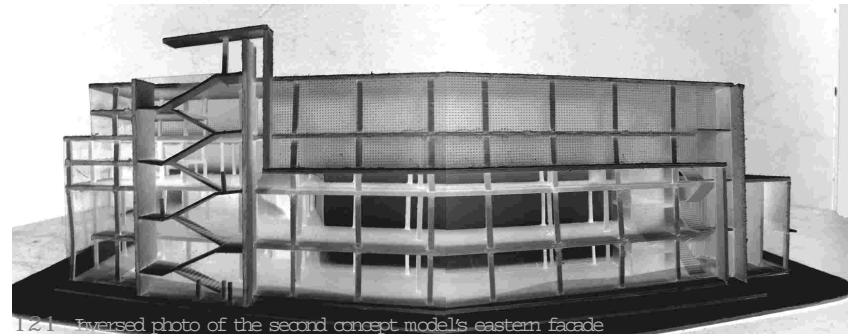
A second canopy is employed to divide the northern façade into two sections: below the canopy are columns, with glass set between them; and above a clean, concrete façade. The right end of the canopy bends to form the doorstep of the service entrance's steel sliding door.

The studios, workshops, and retail space are serviced by one fire escape staircase. As the National Building Regulations requires, the staircase is the mandatory 45m or less from any point in the building and is wide enough to accommodate the estimated occupancy on each floor.

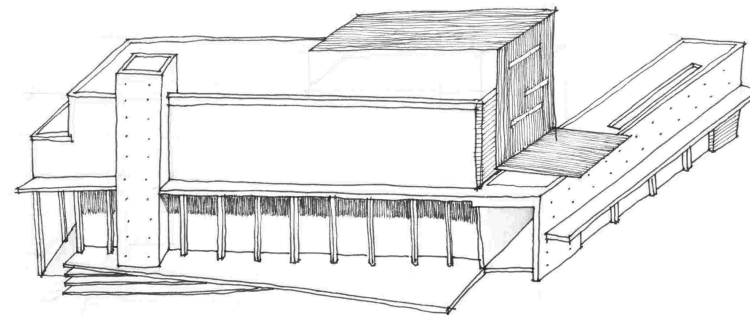
It forms an integral part of the eastern façade. The vertical shaft balances the recessed height of the main entrance in an asymmetric composition.



120 First concept drawing of the composition of the eastern facade
Possible Eastern Elevation



121 Inversed photo of the second concept model's eastern facade



122 Final concept sketch concerning form, mass and composition

It anchors the eastern façade, and repeats the mass and solidity of the columns of the freeway.

C i r c u l a t i o n

Access to the building is provided by two entrances on Goch Street, two elevators and ramp from the basement parking, and two smaller entrances from the courtyard to the main entrance area and retail space.

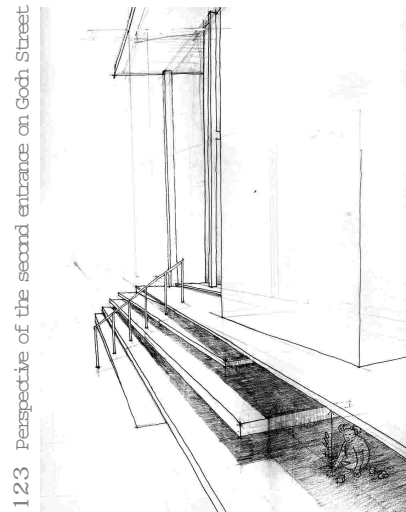
The main entrance on Goch Street provides access to the restaurant, elevator lobby, and courtyard. The secondary entrance, on the corner of Jeppe and Goch Street, provides access to only the eastern wing containing the retail space. The site falls approximately one metre to its southern side. The level change is not accommodated in the retail space, as the flow of customers should not be inhibited. The entrance level of this space is thus higher than the sidewalk. A ramp overcomes this obstacle.

Access from the basement parking to the eastern wing is provided with elevators. The elevators are each placed close to the Goch Street entrances. One serves the elevator lobby and public interface on each level; the other serves the role of primary connector between retail, workshop, and studio space. Both elevator shafts are made of off-shutter concrete, echoing the vertical shaft of the fire escape staircase on the eastern façade.

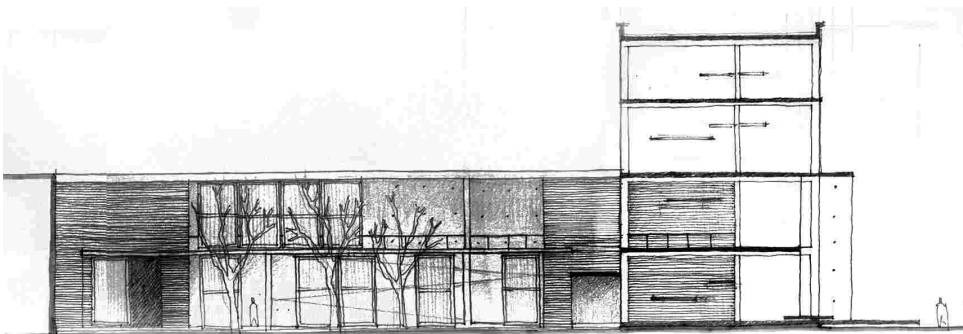
The basement and courtyard is connected with a ramp. From the courtyard, access is provided to all the functions on the ground floor.

With the first storey of the northern façade being a solid concrete wall, the cocktail lounge has only a view of the courtyard to its south. It is a semi-private and exclusive space, turning its back on the busy street. Above the ramp is a strip, glass, louvered roof, allowing light to wash the smooth concrete.

This space is accessed by the ramp, positioned next to the columns and glass planes on the northern side of the ground floor. Steel handrails are filled with safety glass, allowing pedestrians to view the activities of the restaurant and the tree-planted courtyard beyond. The ramp echoes the freeway, an element of movement, in front of the eastern façade. Just as



123 Perspective of the second entrance on Goch Street



124 Section showing the southern facade of the restaurant and cocktail lounge

one would view the activities of the eastern façade with the freeway in front of it, the internal workings of the northern part of the building is partly obscured by the ramp.

Materials

The Newtown Cultural Precinct Urban Design Plan was created to ensure coherence between new insertions and existing building fabric concerning form, mass and material choice. Legibility, character, and respect for the context of Newtown are emphasised continually in the Urban Design Plan. To ensure that the guidelines are followed, proposed developments will undergo a strict process of review, in the briefing, design, and construction phases of the project.

The recurring materials used in the buildings and infrastructure of Newtown are red brick, concrete, and steel. High quality materials such as suitably treated glass, anodised or coated aluminium, stainless steel, epoxy coatings, and suitably treated wood are accepted by the Urban Design Plan.

The design in question uses concrete, steel, brick, glass, expanded metal, and polycarbonate.

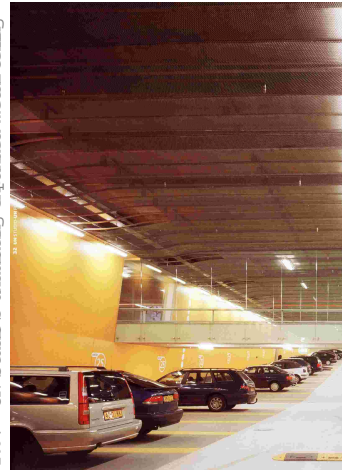
125 Light blue polycarbonate skin



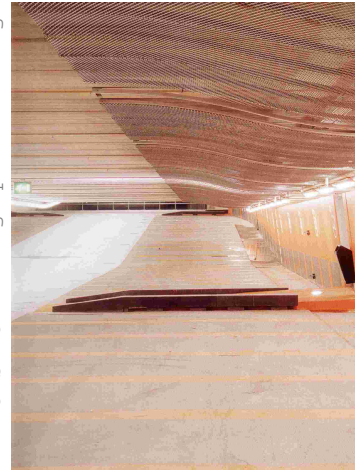
126 Light blue polycarbonate skin in aluminium frame



127 UN Studio's undulating expanded metal ceiling



128 UN Studio's undulating expanded metal ceiling



Skin

The author researched the relationship between cultural identity, skin, architecture, and fashion before starting the design process, to insure that the concepts, design decisions, and processes are not articulated exclusively by means of posterior rationalisation. Theory and technique, just as theory and material imagination, are increasingly disconnected from each other. The private imagination of architecture ostensibly disengages itself from the material and from public imagination, which is in reality impossible. The argument about the relationship between identity, skin, architecture and fashion, is the underpinning influence in all the decisions made in this scheme.

To summarise the argument presented in the introduction: consumption is seen as a form of cultural production. Commodities (which are consumed) serve two kinds of functions, the material, and the cultural. The cultural function is concerned with meanings and values: All commodities can be used by the consumer to construct meanings of self, of social identity and social relations. (Fiske 1992:11)

Sally Mackereth puts the relationship between social identity and fashion into perspective, fashion retail being the place where new meanings are most vividly produced through consumption. Contemporary fashion cannot be contained in the garments we wear. Where you shop and what you surround yourself with have become a means of expressing certain values and attitudes. Fashion is now more than ever about a level of indulgence. It enables people to mark themselves out from the anonymity of the city and align themselves with a particular group. (Castle 2000:61)

Ian Borden (2000:14) agrees. In shopping for clothes one is above all searching for identity, for a layer in which to drape one's self-image in relation to the city.

A shift from production to consumption, and visa versa, has changed the focus of how buildings are used and experienced, and by extension, how and why buildings are erected.

The primacy of the skeleton has given way to the primacy of the skin. Surfaces have acquired depth, becoming dense, complex substances

equipped with their own identities. (Lupton 2002:31)

For fashion houses, retail space has become an essential medium for the promotion of defining brand values. Unlike the clothes themselves, it is not limited to the extremities of the human body. A spatial skin offers the potential for a far more engulfing and engrossing physical and visual experience than that of mere clothing. (Castle 2000:61)

The questions regarding skin are profound, not superficial. Where are its boundaries? What is its status? Is it surface, depth, or both? Skin is the space of flux, of oscillating conditions. When Paul Valéry once noted, ironically, that "the skin is the deepest," he drew attention to skin as a surface of maximum interface and intensity. (Imperiale 2002:55)

A school of contemporary architects are placing the focus on surface and skin, compressing illusions of the depth of an interior onto the surface or skin of a building. Jacques Herzog and Pierre de Meuron address shells, layers, and wraps in their buildings. Exterior skins are built up through layers of veiling, or are inscribed with figurative imagery, invoking what might lie behind the surface. (Imperiale 2002:56)

The Eberswalde Technical School Library, in Eberswalde, Germany, has images marked on the concrete panels (using a cure retardant), and silk-screened onto the glass windows, creating a "tattooed" skin. While each frame contains a single image, the images are applied in repetitive ribbons that encircle the building, creating a unified whole. Although this is not an art library, the repeated images bring to mind the art of Andy Warhol, leading exponent of the Pop Art ("Popular Art") movement.

The use of imagery on both the glass and the concrete belies the inherent nature of each material: the glass becomes semi-opaque while the concrete attains a shimmering lightness. (Imperiale 2002:56)

The Eberswalde building clearly articulates Ellen Lupton's statement that the skin has become the emphasis in design; acquiring depth, density, substance, and identity.

New materials are able to respond to light, heat, touch, and mechanical stress. Translucency and mutability have replaced transparency and permanence.

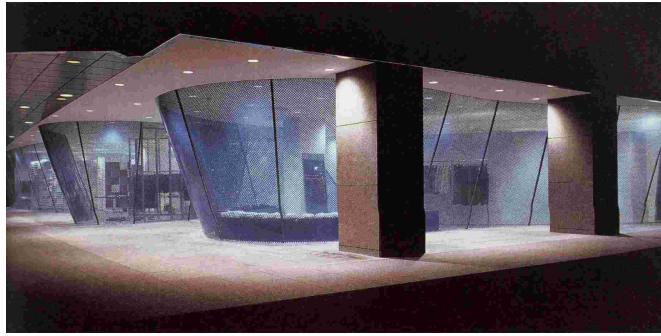
1.30 Library of the Eberswalde Technical School



1.31 Corner view of etched concrete facade



1.32 Comme Des Garçons



The outer envelope has detached from the interior volume. Flexible membranes are embedded with digital and mechanical networks. Industrial skins have assumed a life of their own. (Lupton 2002:31)

Skin is a two-dimensional surface that wraps around the volumes of the body. Sometimes it is taut, clinging tightly to the musculature beneath, and sometimes it is slack, hanging in loose folds. Fashion often celebrates excess material, finding beauty in wrinkles and creases, as surfaces eddy around the body or take on their own dimensionality. In architecture, flat materials are folded or warped to create load bearing structures, objects that are all surface. Skins are woven through space, from inside to outside, ceiling to floor. (Lupton 2002:208)

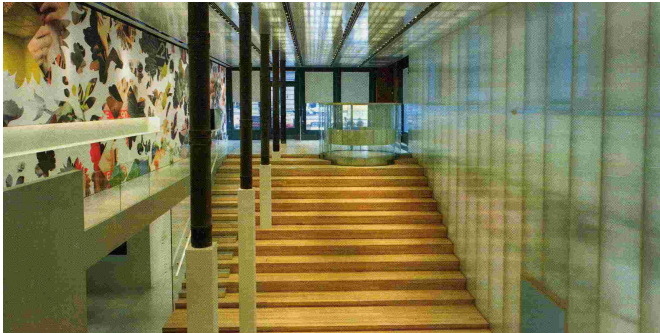
Undulating skins, weaving through space, reoccur constantly in the design of contemporary fashion retail space. The Comme des Garçons' flagship store in Tokyo was built, under the directorship of Rei Kawakubo, by Takao Kawasaki (interior design), Future Systems (architect/façade), Christian Astugueville (art director/interior), and Sophie Smallhorn (artist/interior). The undulating glass façade, overlaid with blue circular dots, allows passers-by only glimpses of the interior space. (Jodidio 2001:300)

Future Systems devised a different kind of connection between street and interior. Instead of an internal organ, the practice has created a piece of street theatre. Here architecture and fashion converge and contributes to the image Comme des Garçons wishes to project – an image that goes beyond clothing.

In the Prada store in Manhattan, New York, an undulating floor plate links street and basement levels to create one large, double-volume space. In this shop, designed by Rem Koolhaas, the hybridisation of commerce and culture, of economy and consumption, of representational and public space is achieved by allowing different programmes and corresponding typologies to intermingle. For instance, the main area is a museum-like space where merchandise is exhibited.

A skin with substance, layers, and depth is employed in the Louis Vuitton shop, Roppongi Hills, Japan. It was a collaborative project between

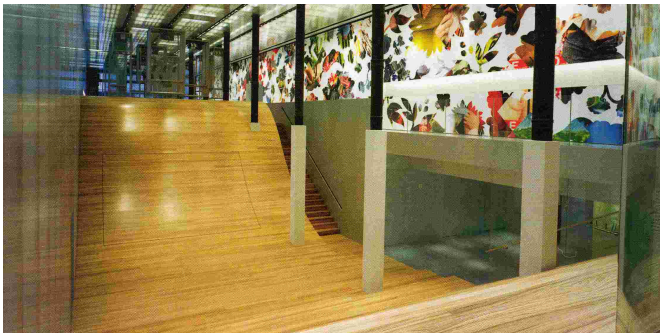
1.33 Prada, Manhattan



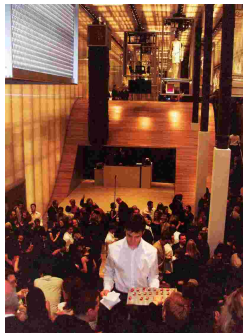
1.34 Prada's launch party



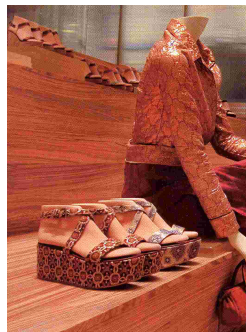
1.35 Prada's undulating floor



1.36 Prada's launch party



1.37 Prada exhibition



1.38 Prada exhibition



Jun Aoki, Louis Vuitton, and Aurelio Clementi. The exterior facade consists of a honeycomb arrangement of transparent glass tubes with a depth of 300mm. The interior is partitioned by skins, made up of stainless steel rings, similar to the tubes of the exterior wall. In short, through repetition at a small scale, the large scale is generated. The medium scale is composed of the products alone. (Anonymous 2003:49)

The influence of the of skin as surface with substance and depth, as well as skin as a woven element through space, is evident in the design decisions of the thesis project.

The main entrance, which connects the two wings of the building, can be read as a pivotal point around which people gather and disperse throughout the complex. This entrance provides access to the restaurant, elevator lobby, and courtyards; as well as inviting views of all these spaces.

Consisting of a double volume space with a curved brick wall, the entrance welcomes and guides visitors into the complex. The brick wall divides the main entrance into an exclusive foyer for the restaurant and a public foyer for the rest of the building. From the public foyer the elevated lobby, public toilets, and courtyard are accessed.

While the curved brick wall is draped in the main entrance volume, the translucent polycarbonate skin wraps around the unisex public toilets. Two skins of polycarbonate are screwed to a steel frame, creating a private core that forms part of the language of the curved brick wall, the undulating expanded metal ceilings, and the articulation of the eastern façade.

The eastern plane, fronting Mary Fitzgerald Square and the elevated freeway, is horizontally divided into two facades by the mandatory canopy required by the Urban Design Plan.

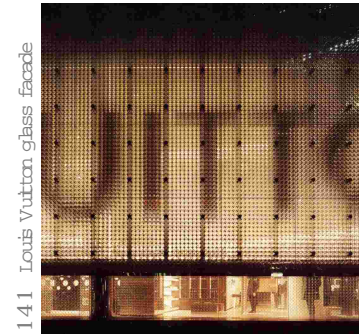
The bottom section is the ground and first floor façade, and is the shop front facing the square. Made of a suspended glass assembly, this façade is set behind the concrete columns and canopied by a 2m-cantilever slab. The upper section is the second and third floor façade and is a planar bolted, double glazed skin. Set in front of the concrete structure, the glazing is held in place by stainless steel glazing-boss castings connected with cables to



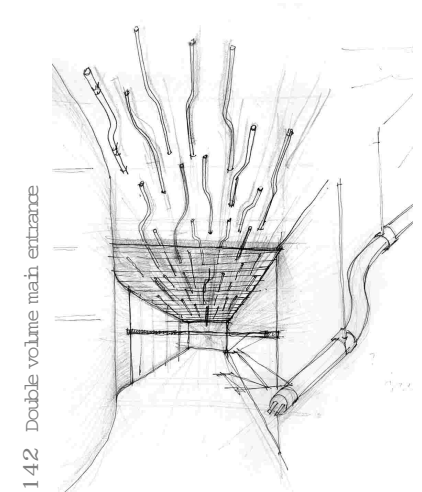
139 Louis Vuitton, Roponggi Hills



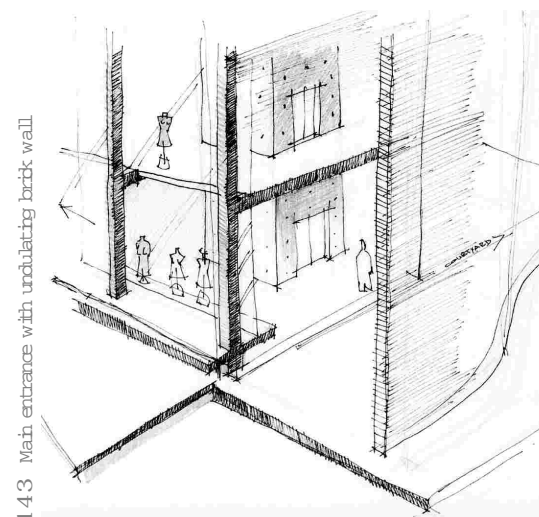
140 Louis Vuitton interior



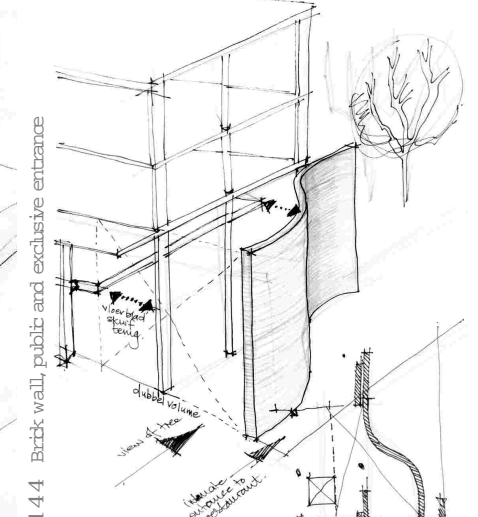
141 Louis Vuitton glass facade



142 Double volume main entrance

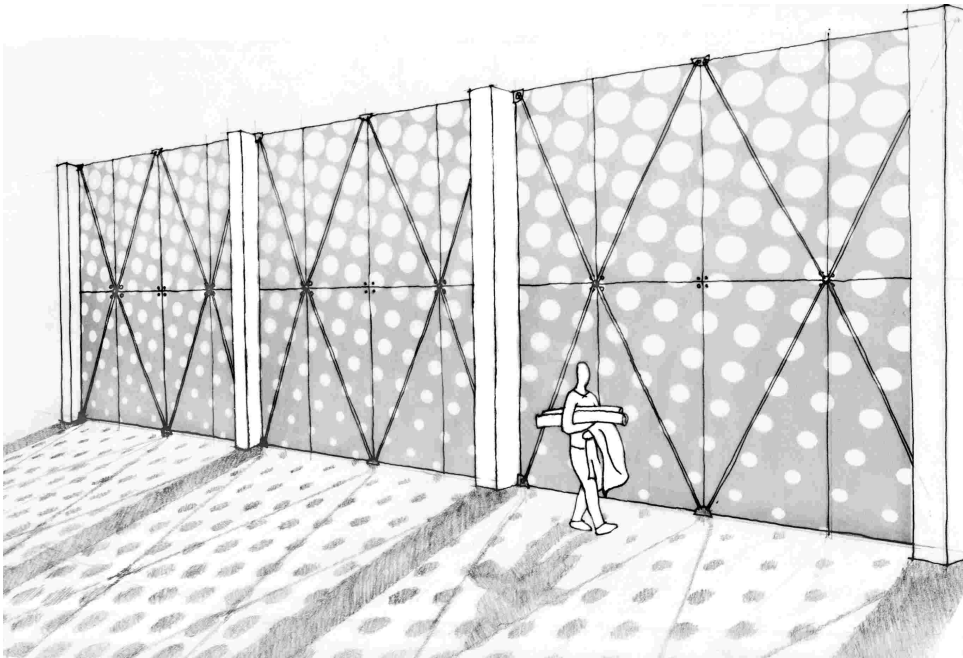


143 Main entrance with undulating brick wall

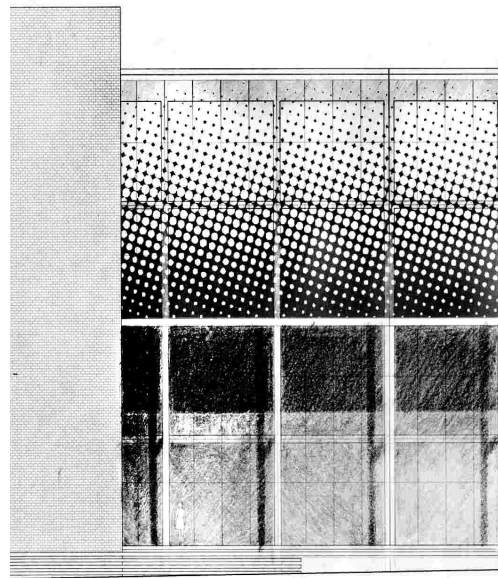


144 Brick wall, public and exclusive entrance

145 Interior of fashion design studios



146 Eastern Elevation



the ends of the concrete columns.

Facing east-north-east, the façade receives direct sunlight from eight until eleven o'clock in the morning during summer, from nine until midday during spring and autumn, and from ten o'clock in the morning until one o'clock in the afternoon during winter. The elevated freeway, situated parallel to this façade, provides shade from sunrise until the times noted above.

The glass for the bottom section of the façade is laminated and coated with a low emissivity coating. The glass for the top section of the façade is two skins of laminated, low emissivity coated glass planes separated by spacers, to create a cavity filled with Argon gas. The surface is printed to obscure the view through the glass.

The dot matrix printed on the glazing has no direct reference to any image or symbol. At most, one can argue that the pattern suggests a woven material. The size of the dots is graded, creating a dense, translucent and private skin for the fourth floor and a more transparent skin for the third floor. The dots are arranged on a grid of 390mm centre to centre and the matrix is rotated 18°. The size varies between 112mm and 530mm in diameter.

Surface printing, when viewed from a distance, produces a light veiling effect like a net curtain. The level of obscurity in the veiling effect depends upon:

- * The light transmission - determined by the portion of the surface covered by the printing. If 20% of the glass is covered, 75% light will be transmitted. If 80% of the glass is covered, 37% light will be transmitted.
- * The pattern design.
- * The distance of the observer from the glass surface. The closer the observer, the more discernible are the details of the pattern. More distant observation results in an overall veiling in light and colour. (Buttton and Pye 1993 67-71)

Motorists viewing the façade at speed will not recognise the larger dot matrix but rather read the plane as obscured. Pedestrians will be able

to identify the pattern of the printing, while the occupants of the building would see each individual dot.

As the Urban Design Plan stipulates, the roofs of buildings, especially those visible from the freeway, must be treated as an additional façade. A single air-conditioning plant, servicing the retail space, studios, and workshops, is on the roof. It is screened with perforated steel sheets, and covered with corrugated iron that folds over the northern edge of the building to become a part of the northern façade.

The emphasis on surface does not end with the articulation of the façades, but extends to the treatment of the courtyard. According to the Framework Goch Street must have a road surface that integrates with Mary Fitzgerald Square, and the courtyard materials are extended through the main entrance to form part of the semi-private domain of the Newtown Precinct.

Rectangular concrete tiles, red brick, and grass are laid in such a manner as to blur the boundaries between the courtyard and the enclosing buildings. The arrayed placement of the concrete tiles is continued on the eastern sidewalk. The trees in the courtyard are a reminder of the luscious trees between the established building fabric of Newtown.

We are surrounded by three skins. The first being our own, and the second the clothes we layer ourselves with, and the third the skin of the building.

147 Concept development: Elevated view of courtyard

