Shaw House & Shaw Centre ... undergo a facelift

The renovation of the new Shaw Centre retail mall and construction of the Urban Plaza at Shaw House will exploit its full potential upon completion in the first quarter of 2014. In the course of renovating an existing building, the building team will face different physical and legislative constraints. However, the architect (DP Architects) revealed how the constraints were solved and turned them into something helpful for them to create a more interesting architectural design.

Construction Phase

The renovation works were split into three phases. The first phase was addition and alterations (A&A) for Shaw House Lido Cineplex. It gave the cinema a whole new look and feel and together with the IMAX Experience, it immediately attracted many quality-savvy customers. The Second phase consisted of major relocation of mechanical and engineering (M&E) services. Technicians had to be cautious about cutting of wires as one mistake would just affect the other existing tenants. The third (current) phase include A&A for Shaw Centre with some A&A works at Shaw House Basement, 1st storey and 10th storey, and also the external public walkway.

Design Concept

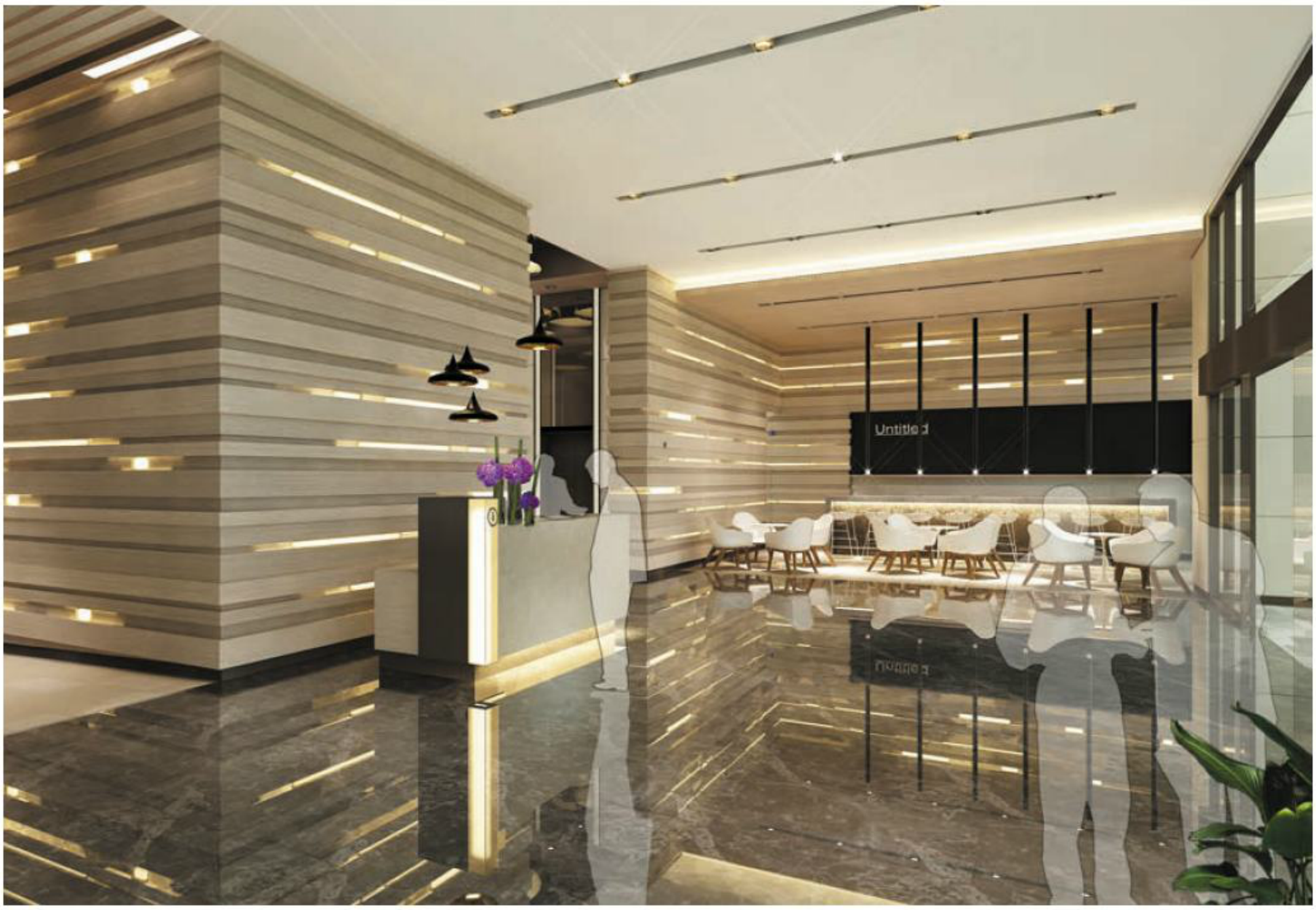
The design concept was based on interaction, connectivity, integration.

Interaction

The idea of interaction involves planning for seamless circulation of people flow.

An urban plaza is created to improve the flow of circulation and it provides a new focal point to complete the transformation of this iconic shopping junction. The new Urban Plaza will be built over the terrace public concourse formerly located at Shaw House. Complete with water features and skylight seating, the 1,000 square metres space will be a prominent and vibrant meeting-point for shoppers, and an ideal location for red carpet events and product launches.

The basement, 1st and 2nd floors are to be demolished and rebuilt to equalise the levels between Shaw Centre and Shaw House. Floors of Shaw Centre are also renumbered to match Shaw House at the retail floors. This will bring about seamless connectivity and integrate the two malls as a single building.



Visual Connectivity
The new Shaw Centre will have a refreshing new facade. Existing stone cladding for the entire retail podium levels will be replaced by a two-storey high floor-to-ceiling glass retail frontage, with urban verandas for merchandising. Glass was chosen for the curtain wall as it is transparent and it provides visual connectivity for people and activities between the external street level and within the mall.

Environmental Integration
The building will integrate with the environment by "borrowing landscape" of the sky and trees that embrace the building. The facade consists of a fine combination of hardscape and softscape as it is made up by a matrix of new vertical green walls, reflective and brushed aluminium claddings. The blend of the new greens and the reflected environment creates an interest in the contrast of materials without having actual green walls for the entire facade. With the greens and colours of the sky, the building disappears into its own surroundings.

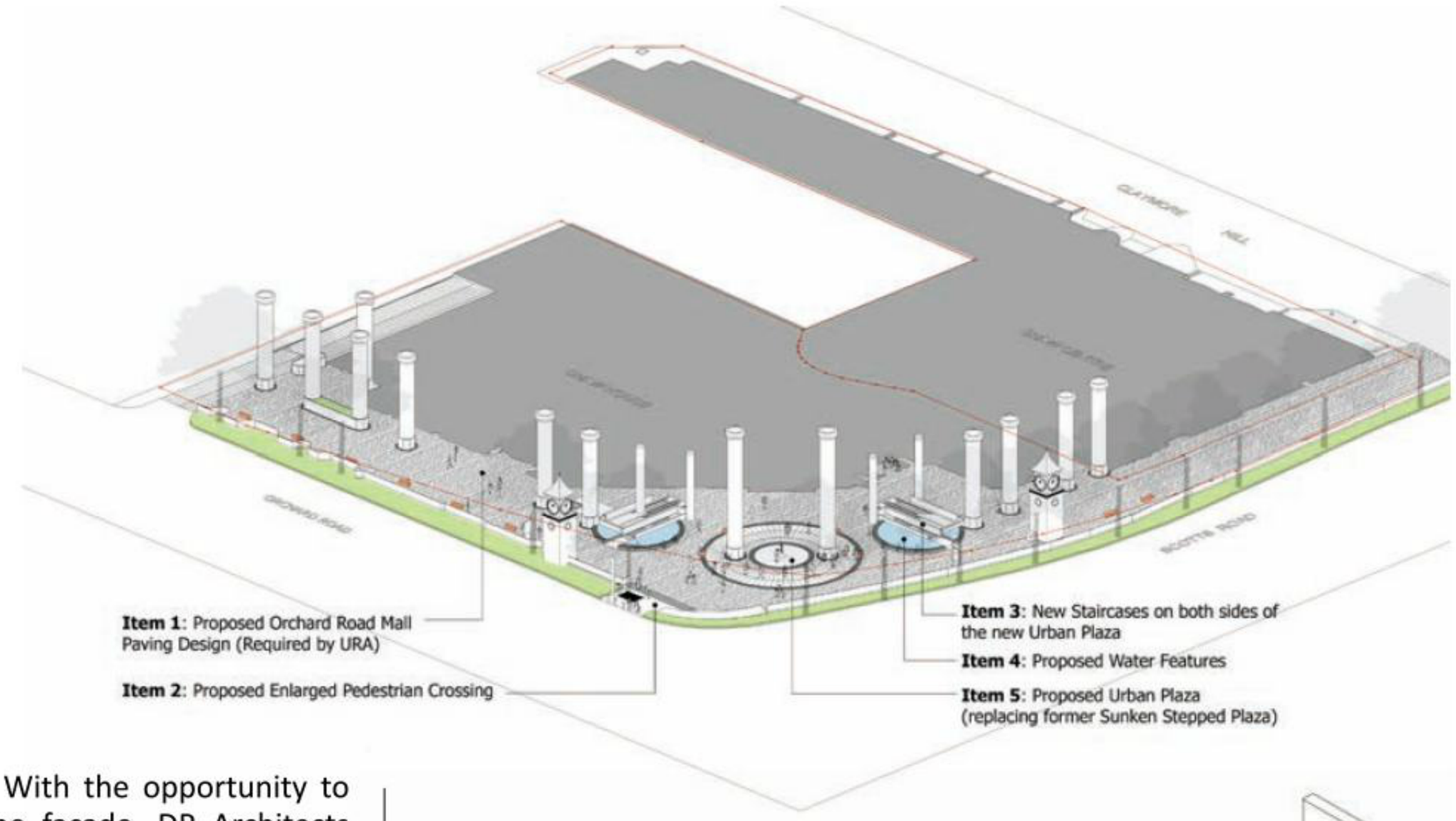
The patterning of the facade is such that the green walls and reflective panels are used more intensely nearer to Scotts Road and dwindle towards the end of the facade facing Thai Embassy. It adds a motion of having the greens and surroundings creeping into the building. At night, the building facade takes on another character by using the lights of the green walls and through the different degrees of perforation of the aluminum screens to produce trailing strips of lights that is in the same pattern language as the strips of green walls in the day.

Passive strategies
As the construction works are on an existing building, the focus was to maintain and upgrade the M&E services and lighting with better efficiencies, as well as the facade's Envelope Thermal Transfer Value (ETTV). The Shaw House and Shaw Centre both obtained the BCA Green Mark Gold Award.

Facing challenges positvely
At the design stage, there were several constraints that needed to be dealt with.

Firstly, the Facade Articulation had to comply with URA Orchard Planning guidelines. While the facade was allowed to be extended beyond the building setback, part of the base facade was still required to be shown.

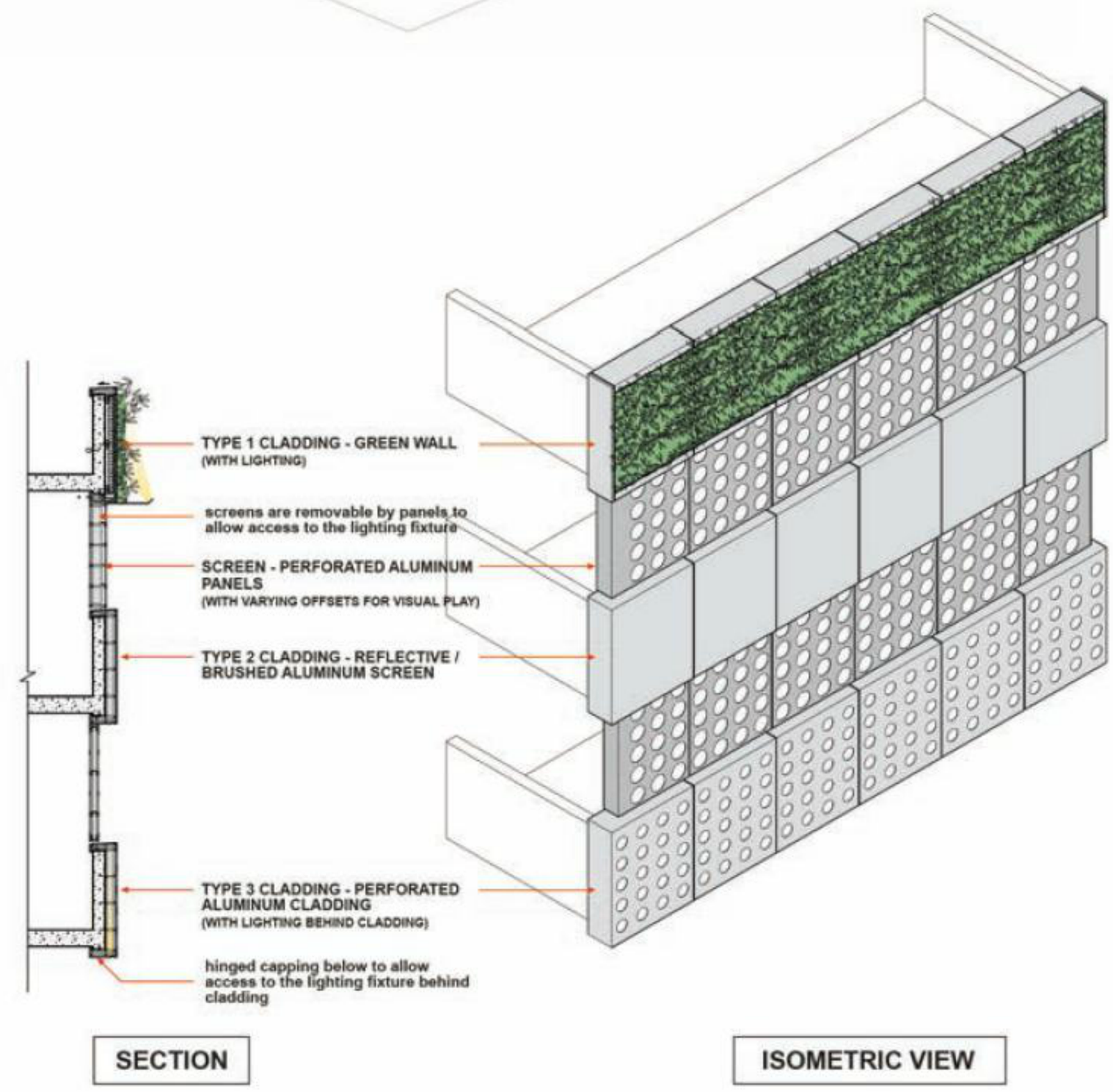
The facade is therefore sculptured in a series of protrusions and recesses to add texture to the surface of the building. The recessed portions are used to build verandas, to provide outdoor spaces that are physically close to the trees. The extended facade, including the 1st storey shop fronts are slanted to respond to the umbrella profile of the trees to form a continuous canopy over the public walkway between the trees and the building, giving a sense of enclosure and shaded environment. The slanted profile of the facade and staggered profile of the verandas at the various floors are in opposite direction to add further



contrast. With the opportunity to extend the facade, DP Architects used it to create a new roof garden above on extension to connect the verandas and vertical green walls. Being close to the trees, the green roof and verandas help to enhance the integration of green into the building.

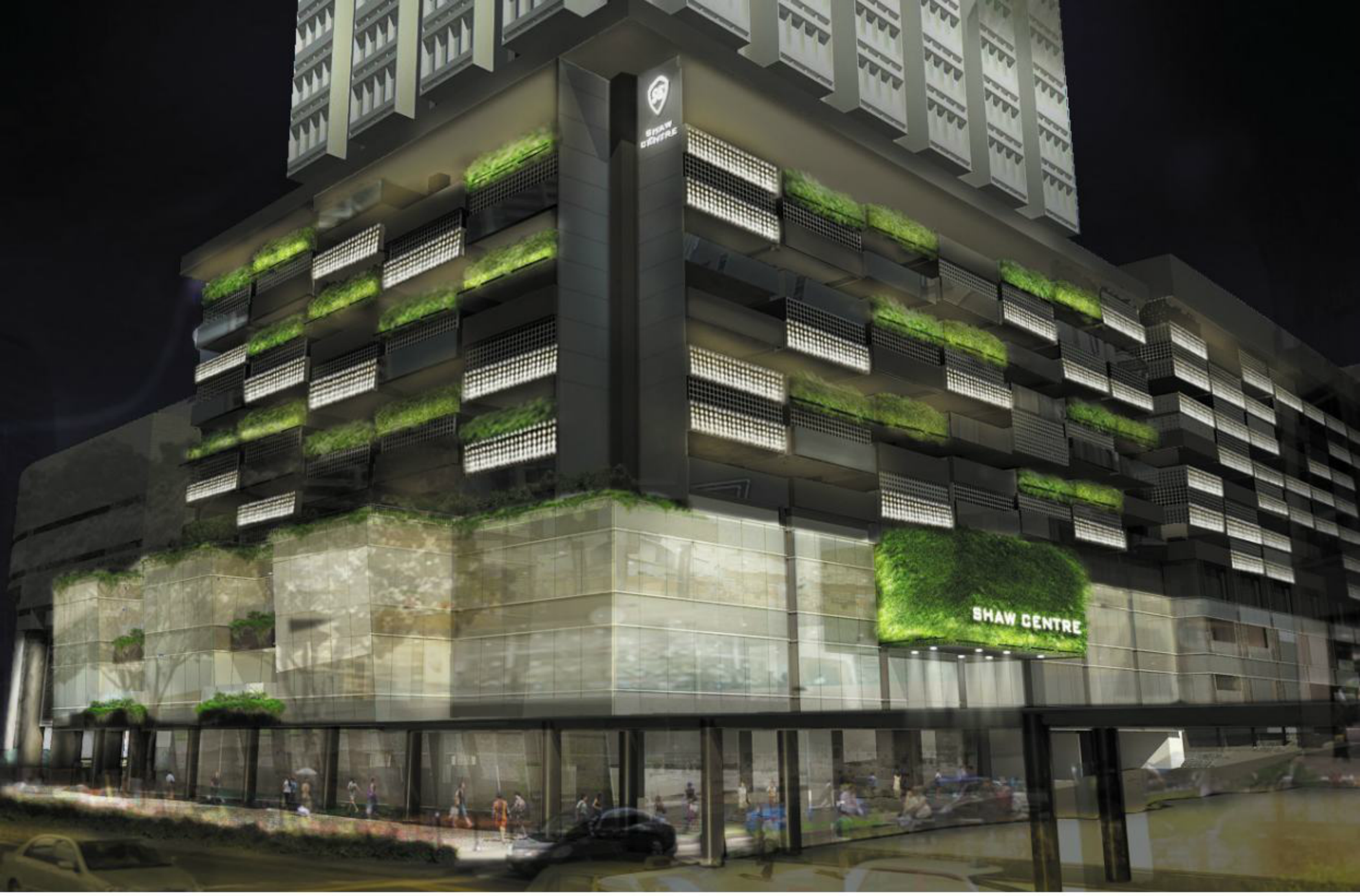
Secondly, the heavy traffic condition at Claymore Hill had to be taken into consideration at the early design stage to ensure smoother construction process as well as maintenance of the building. Installation works and maintenance of the facade are not easily accessible from the road especially during the day, thus the architect had to think of innovative ways to allow accessibility from within the building.

The vertical green walls are installed and hung from within the building, and it is made possible to lift them up from inside the building during maintenance. The lighting fixture of the facade cladding can be accessed from the floor below by creating a hinged cover that can be opened to allow the hand to reach the fixture. The facade claddings at the carpark openings can be installed and removed in series of panels with the right tools but not easily removable by the public.



GENERAL COMPOSITION OF CARPARK PARAPET CLADDING AND SCREENS

Additionally, it is foreseen heavy maintenance is not required for the LED lights and the green plants under the specialists' careful recommendation and design, hence the system of panelling division and independent panel fixing connections allow one to remove or attend to the affected areas without affecting the rest of the facade cladding or green walls.



Location
Orchard Road and Scotts Road junction

Site Area (approx.)
Shaw House: 6,200 sq m
Shaw Centre: 4,800 sq m
Gross Floor Area: 40,000 sq m

Main Contractor
Shimizu Corporation

Architect
DP Architects Pte Ltd

Civil & Structural Engineer
Chong and Lee Consultants

Mechanical & Electrical Engineer
J Roger Preston (S) Pte Ltd

Quantity Surveyor
Langdon & Seah Singapore Pte Ltd

Lighting Consultant
Light Cibles Pte Ltd

Photos courtesy of DP Architects Pte. Ltd & Shaw Brothers Limited