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Arsenal House Police Headquarters, Central District Headquarters and Central Divisional Police Station

# Landmark Headquarters

by Tim Youngs

The latest high-rise landmark to enhance Hong Kong Island's skyline is no typical office tower. Rising 42 storeys with its predominant sleek curtain-wall facade oriented towards the harbour, the Arsenal House Police Headquarters, Central District Headquarters and Central Divisional Police Station complex proudly presents the modern image of the city's Police Force.







ompleted in 2004 and officially opened this year, the Arsenal House project has been constructed on the 7,500 sq m site previously occupied by May House and the vehicle compound of the Police Headquarters located between Wan Chai and Admiralty. Comparable with any modern Grade-A commercial development, the new tower provides office space for the Hong Kong Police to reduce long-term rental costs by bringing together units previously housed in separate locations.

The brief from the Hong Kong Police was for Architectural Services Department to design a building that would be operationally efficient and a state-of-the-art facility which would serve the Force's needs well into the century. The design was expected to provide for a more corporate image, signifying how today's Hong Kong Police Force moves with the times while remaining committed to providing quality services to the public. The architects also had to ensure the tower not only featured cutting edge technology but would also be flexible for future change.

Three main structures are physically integrated as one building in the development but are marshaled separately with a strategic centrally controlled security system. The









complex consists of a 14-storey block accommodating the Central District Headquarters and Central Divisional Police Station; a 42-storey high tower block which houses various Police Headquarters major formations; and a lower block which houses common facilities such as a library and resource centre. Four basement levels combine vehicle parking with functional aspects such as plant rooms. The new development is linked with the existing Arsenal House East Wing and Arsenal House West Wing by a footbridge and new integrated staff entrances. Access is available from Arsenal Street for vehicles and pedestrians, from Harcourt Road for vehicles only and from Harcourt Garden for pedestrians.

#### **Design details**

The Arsenal House project benefits from having a prominent site viewable from many directions



and a location next to the open space of Harcourt Garden. The architects took the opportunity to depart from the norms of hemmed-in architecture in nearby Wan Chai to present both a varied building envelope and more inviting entrance points. In developing a design approach that could both meet client's requirements and improve the local urban fabric, the architects carefully considered the various vantage points the public would have in viewing the building, ranging from Kowloon's waterfront to The Peak. Even Wan Chai's busy Lockhart Road, a key location in viewing the completed development, had to be suitably addressed.

The building envelopes are clad in a combination of metal cladding, double-glazed curtain wall and natural stone. In order to break down the scale of the building, which features large floor plates, the designers selected differing









treatments that divide the project visually into separate blocks. The south-facing envelope is clad with strip windows reminiscent of the compound's adjacent West Wing tower, while the facade towards the harbour is clad in reflective glass with fins for a refined appearance. The Harcourt Garden-facing envelope features differing treatments combined to rise the height of the tower above columns at the base. Stone is introduced at the lower levels of the project, presenting variation of materials and articulating the building's form.

Arsenal House's entrances differ significantly from common design approaches in the surrounding area, where buildings typically









Lobby to Public Access Office



feature small streetside portals. Seeking a more open approach at the Arsenal Street main entrance, the project team included a wide outdoor staircase and escalator on which visitors can go up into the building's public interface lobby. A lay-by was also introduced at Arsenal Street in front of the staircase, significantly widening the streetscape from its previously cramped layout. At the Harcourt Garden entrance, the designers took advantage of the building's unique park entrance by integrating the development's boundary into the green space. In a move to brighten up this entry point



and add to the park's nighttime appeal, the architects placed random dots of fibre optic lighting within new stone fences.

The design of the Police Station report room, accessed directly from Arsenal Street, follows the corporate image applied to Police Report Rooms throughout Hong Kong. The Police Station component is clad in transparent glazing that allows passersby to view interior spaces, though fritted glass is applied in the curtain wall in places where privacy is required. Attention was paid to providing spatial impact within the building through measures such as raised ceiling heights that complement a userfriendly and airy atmosphere for users.

Public access areas such as the Shroff Office and Crime Prevention Bureau and the Licensing and Central Traffic Prosecution Bureau enquiry offices are all located on lower floors for easy access. Low block facilities include a library and resource centre, a 298-seat auditorium with simultaneous interpretation facilities, a multi-purpose hall and a firing range.

#### Intelligent and sustainable design

A wide range of intelligent and green building features are found throughout the Arsenal House project. To enhance the use of natural daylight and energy conservation, the whole complex has been enclosed in glazing with high light







Force Library and Resource Centre











transmittance. To complement this, lighting clusters near windows may be separately turned off when daylight is sufficient. Major lift lobbies have high glass walls to also allow light to flood in during the day. Indoor air quality and energysaving devices include infrared sensors in cellular offices to automatically reduce air supply and switch off lights after users leave and central control of all electrical and mechanical plants so that chillers and other devices are matched to demand. Carbon





**Report Room** 





Dioxide detectors are installed to automatically control ventilation rates in offices while air filters and ultra violet radiation sterilisers maintain air quality. The development's airconditioning system is equipped with sea watercooled chillers installed in the basement to minimise the nuisance of noise and hot air emitted to surroundings while refrigerants comply with international environmental requirements. The development has achieved a rating of Excellent under HK-BEAM (Hong







Section





Kong Building Environmental Assessment Method) - the highest rating possible under the system.

Electronic and communication systems allow flexibility for changes in the future. All office floors are equipped with a high speed broadband fibre optic system which provides a voice, image and data interchange platform for video conferencing and sending instant messages. Additional flexibility is provided in the layout by using relocatable partitions. With design of the tower based on a grid, partitions can be relocated to cope any variation in room sizes. Open plan office spaces allow the client to foster better communication and a sense of spaciousness, which is a departure from the normal office layouts of the past.





Auditorium

### **Challenges and partnerships**

Arsenal House Police Headquarters, Central Divisional Police Station presented a range of challenges that had to be overcome in the course of the project. An initial challenge in the brief was the inclusion of both a district police station and the Hong Kong Police Headquarters within a single restricted site. Operational needs of police stations in Hong Kong require compounds to accommodate ample vehicle parking, yet the Arsenal Street location could not offer such space with the headquarters sited there as well. In response, the architects placed above- and below-ground parking, loading and unloading zones beneath the tower and set back the development from the street.

Additional complexity came with the large amount of utilities on Arsenal Street that had to be diverted, as well as the connection of new services coming into the site. To minimise disruption on the street, ArchSD had to coordinate all the utility companies, contractors and Transport Department so that a single excavation to lay utilities could be carried out within the tight programme. Closure of road lanes was required during nighttimes as the utilities work progressed. A further challenge was the provision of large-diameter sea water mains leading from Fenwick Pier into the site. Construction of the mains involved sections of pipe jacking in order to avoid disruption of traffic on Harcourt Road.



The architects note that teamwork between the design team, the contractors and the client was integral to the project's success within such a short time frame. Risk assessment workshops and technical meetings were a regular part of the process, ensuring matters could be resolved as soon as possible and avoiding problems that could have arisen. Regular meetings were also held with with the Police to make sure their requirements were fully reflected during the design and construction stages — an essential process given the complexity of user requirements.







Harcourt Garden Entrance

As the project developed, the designers managed to integrate features that relate the new building back to the history of the Arsenal Street compound. When May House was demolished, hardwood timber and other materials were deemed worthy of reuse in the new project. The demolished granite fence wall and reused under ramps (as well as in Wetland Park Phase 1) while a set of old brass doors from Caine House were kept for the entrance to the auditorium. A number of former British Navy cannons from the 1920s or earlier were dug up on the site during basement excavations and these too found new homes. Though some of the cannons were sent to the Museum of Coastal Defense, two are now displayed in a sunken glass-topped case at the new headquarters' podium. Hong Kong Police Force client

Architectural Services Department architect, structural engineer, quantity surveyor

Hip Hing — China State Joint Venture main contractor

