

Design Rationale – MPA Affordable Housing

128 Powell Street is an affordable housing project proposed by MPA Society. It is intended to provide badly needed affordable rental housing in the Downtown Eastside. MPA Society is a registered charitable non-profit organization that was founded in 1971. The Society works to support people with serious and persistent mental illness through offering a variety of supports and services, including housing and advocacy. They strive to inspire hope and facilitate recovery for people facing the challenges of living with mental illness. MPA Society's housing programs focus on connecting participants to family, friends and the larger community in which they live, while actively engaging with service users and community partners, to reduce the harm and stigma associated with having a mental illness.

The Site

The site is approximately 7.62 metres wide by 37.22 meters long. It is essentially flat, sloping around 350mm from the street to the lane. It is currently vacant and used as a surface parking lot.

Site Context

128 Powell is in the Downtown Eastside HA-2 Gastown Zone, located mid-block on the south side of the street between Main Street and Columbia Street. It is located immediately adjacent to the existing MPA offices on the west and the Lucky Lodge, a mixed use (residential/commercial) building to the east. Directly across the street is the Four Sister's Housing Co-operative and across the lane to the south is the Salvation Army's Harbour Light building. Other significant adjacent development includes the recent eight storey Smart condominium building at 168 Powell Street, No.5 Orange at the corner of Main and Powell, and the Warehouse Recording Studio at the corner of Powell and Columbia.

Design Description

Beyond the program requirements and the desire to maximize the number of affordable housing units, the major determinate of the design is the site's narrow 7.620 meter (25') width. Further affecting the design is the presence of light wells on both buildings bordering the site. In addition, there are pole mounted transformers in the lane adjacent to the site.

The proposed building is six (6) storeys high comprised of service spaces and amenity areas on the ground floor and twenty (20) self-contained studio units above. A common outdoor area is provided at the third level. All residential units have a net area (measured to the inside of the walls) of 30.2 square meters (325 sf). The residential component above the third floor has been designed in a "dumbbell" shape so that only circulation faces into the light wells. The main floor amenity room, complete with common laundry, has been located to provide a sense of community for the residents plus provide both overlook and animation to the street.

The building has been designed as a modest building which complements the existing heritage context and responds to the intent of the 2002 *HA-2 Design Guidelines*. It's simple form and six storey height contributes to the established Gastown urban pattern. Due to the presence of the pole mounted transformers in the lane it is proposed to use doubled glazed laminated glass to shield the windows from the possibility of venting issues with the transformers.

Soft landscape is, of course, minimal. There are two (2) street trees on either side of the building on Powell Street in front of the adjacent buildings. They are approximately thirteen (13) meters apart which is similar to the rest of the existing streetscape. Ceramic tile is proposed on grade along Powell Street in between the property line and the building face in keeping with historical precedents in Gastown. The common deck on the third floor would have some pots and containers for planting to be determined by the residents.

Major materials proposed for the building include clay masonry, composite panels, metal siding, painted concrete and clear glazing in both aluminum and vinyl frames. Materials facing into the light wells will have a high degree of reflectance.

Energy Targets

Our proposed energy targets, subject to budget constraints are:

TEDI	32 kWh/m²/yr
TEUI	120 kWh/m²/yr
GHGI	7 KgCO₂/m²/yr ⁽¹⁾
EALR_{n50}	2.0 L/s*m² @75 Pa
IPALR_{n50}	1.17l/s/m² (0.23 m/ft²)

The intent is to reduce and simplify the mechanical systems generating heating and cooling and adopt more passive design strategies and a better building envelope to maximize resident comfort and minimize energy use.

Requested Variances

Site Size

There currently is a 2.133 meter (7') misalignment of the property lines along Powell Street. Negotiations are currently underway with the City to incorporate this area into the site to avoid a break in the street frontage.

Parking

The current proposal provides one (1) parking stall and one (1) class A Loading stall. This number of stalls more than meets the parking requirements of the proposed residents. As the residents are typically on a form of social assistance there is very little possibility that they will own or drive cars. The project is not supportive housing so there is no staff parking required.

70 Degree Vertical Light Angle

In the 1991 *Guidelines for New Development Adjacent To Hotels And Rooming Houses With Windows Or Lightwells Near Interior Property Lines* there is a guideline asking for a 70 degree vertical angle of daylight measured from the sill of the lowest windows on the adjacent properties to 6 meters above their roofs. Because of the narrowness of the site the 70 degree angles meet above the fifth floor. Without this relaxation of the guideline, this site is essentially undevelopable above four floors. This restriction would make the project unaffordable.

Bicycles

Due to the site size constraints, we cannot achieve the required number of Class A or Class B spaces. However, we have provided a Class A bike space for every resident. We also cannot achieve the maximum 30% vertical bicycle ratio. We respectfully request that this be relaxed to 50%.