Design Rationale – Development Permit Application

1485 Davie Street, Vancouver, B. C.

Overview:
The five block long Lower Davie Corridor in which this development site is located is characterized by mainly mature residential uses along its eastern three blocks from Cardero St. to Jervis St. with the heritage Gabriola Mansion property as the grand dame of the neighbourhood. The western 2 blocks includes a healthy mix of commercial and some newer mixed-use residential buildings from Cardero St. to Denman St.. The eastern 3 blocks of the Corridor which includes 1485 Davie St. and is part of the Nelson Slopes hillside is almost all residential use and counts seven 9 to 14 story mid-rise residential towers with Davie St. addresses of 1960s or 70's vintage except for one residential tower completed more recently.

The West End Community Plan identifies this eastern part of the Corridor as having a potential, partially realized, connecting the Davie Village commercial district with the western mixed-use commercial segment of the Lower Davie Corridor and Denman Village by the build out of existing building ground floor retail additions to the sidewalk. However there are physical limitations that discourage this idea. Among them, being on the Nelson Slopes, the grade plays havoc with how retail frontage can be opened up given existing building conditions. Other constraints include many of the apartment buildings having low Ground Floor ceiling height with some apartment lobbies below sidewalk level and the second floor suites immediately over making it too vertically cramped for retail uses, varying setbacks of the buildings with some being quite minimal which do not allow for creating a viable amount of space for retail use and a number of buildings having driveways with a Davie St. crossing reducing available frontage and upsetting the flow of retail continuity.

For this 1485 Davie proposal, retail use has been deemed inappropriate as, even if the property were not heavily sloped, any retail here would remain an island unto itself with no prospect of other retail development synergy likely possible at least until some of those midrise apartment buildings were completely redeveloped with an integrated retail component which is not a foreseeable event. In studying the development potential of 1485, it was concluded that an all residential development is best suited for the location and sustains the residential character of the Nelson Slopes portion of the Lower Davie Corridor. Added to which, particularly when traveling east to west from Davie Village to Denman Village, there is this natural, almost gravitational draw to Denman upon leaving Davie Village in which driving through the Lower Davie Corridor becomes a blur of an experience which is not a desirable condition for retail exposure along that stretch of Davie St. Since the viability of a commercial storefront on Davie St. at this location will likely not thrive, there will be no commercial space provided in this proposal.

PROPOSED DEVELOPMENT:
The proposed development of 1485 Davie St. then is for market strata residential units as well as market rental residential units with the rental units replacing the existing 51 rental units now on site at a one to one replacement ratio. Taking advantage of the lay of the land sloping down from east to west, the market units will all be located in a 21 story tower at the lower west half of the site and the affordable housing rental units located in a detached stand alone 6 story low rise at the east end of the site. The street wall of the two building base revives the rhythm and cadence of the existing tower fabric along the slope of Davie St., replacing the long low walk-up apartment existing on site. The landscaped setback on Davie St. is divided in three frontages, the entry and privacy setback landscaping in front of the affordable rental housing block, the courtyard opening between the two buildings with high quality appointments and
materials and the landscaped setback for the tower which is dominated by a long cascading water feature which wraps the SW corner of the tower terminating at the Nicola St. tower entrance. The Nicola St. frontage is defined by the landscaped setbacks for three townhouse type units with front stoop street entrances and privacy planters. Around the back at the Lane, beyond the driveway entry to the underground Parkade and the garbage/loading area which are tucked under the base of the tower the courtyard podium is revealed with an arbour over the garbage staging and loading area with the lush planted trees and shrubs beyond. The back of the 6 story affordable housing maintains the high quality design and materials of the Davie St. and courtyard facades, with a setback for a band of planting and trees which extends to both east and west property lines allowing for the driveway and staging areas.

The massing of the affordable housing block is terraced on the top two floors away from the courtyard permitting an earlier and longer penetration of sunlight into the courtyard while softening the physical relationship with the tower. At the same time the east façade of this building facing the east neighbouring tower 52’ away, due to the slope of the block, is only half the height of the east neighbor. The east wall, set back 6’8” from the east property line, maintains a friendly façade of mainly individual bedroom windows.

**FLOOR SPACE, UNIT MIX, PARKING:**

The proposed Floor Space Ratio of 6.45 is somewhat less than the maximum permitted of 7.0. Height and floor plate size constraints of 190’ and 5,500sf respectively have contributed to this lesser figure as well as choosing not to include any commercial use in this development. At 21 floors and ‘190’, the tower is at the maximum height with a minor encroachment of the envelope by a stepped portion of the top floor and elevator overrun. Otherwise the massing is conforming to the zoning guidelines.

The mix of unit types being proposed favours the larger 2 and 3 BR suites with 47% of the rental units and 63% of the market units being these larger unit types with most being 2 BR sizes. This compares with the 51 existing rental units to be removed and replaced, one to one. The existing suites are made up of 42 one BR (82%), 7 two BR and 2 three BR suites (combined 18%).

The vehicular parking provision is well in excess of the Parking By-Law requirements for both market and rental housing units and bicycle parking provisions complies with the By-Law.

**ARCHITECTURAL DESIGN:**

In terms of the architectural language and articulation, treatment at grade for the tower entrance includes a significant water feature which surrounds the tower Lobby on the Davie and Nicola sides and engages the resident or visitor who, entering from Nicola St., walk over slotted concrete slabs with water flowing beneath leading to the Lobby entry. This SW corner of the building is recessed from the main building façade to draw attention to the entrance and provide weather protection. Evening lighting from the Lobby, water feature and entry area accent lighting will highlight this entrance design. This tower entrance location also has the unique sightline to the Gabriola Mansion and it’s entry court across Nicola St..

The rental units entrance is up the hill on Davie St. and is sheltered by a steel and glass canopy above and spatially defined by landscaping around it and will be additionally highlighted by evening lighting.

The palette of high quality exterior building materials include fibre cement panels in two colours, terra cotta panels at the tower and affordable housing base, glazed balcony guards and generously glazed windows.

For both Davie and Nicola elevations and at the Lane, residential units have been located at grade to reinforce the street wall with horizontal setback and vertical separation to provide privacy and security. Along with landscape treatment, this brings the residential character down to grade and sets the tone for the at-grade residential vocabulary and is in keeping with the Davie St. context in this area.
On the east side at the shared property line with the east neighbor, the affordable housing building is set back 6' 8" from the property line to allow for fire fighter access and exiting. General access will not be permitted down this side yard.

The tower design is modulated with a solid-transparent-solid-transparent rhythm around virtually all typical floors from 6 to 19. Transparent glazed walls behind open balconies and glazed living room spaces alternate with the solid façade planes with punched windows set in fibre cement paneled walls which vertically define the towers. By varying the length of tower balconies from floor to floor relative to the Davie St. and Lane façade centerlines, a dynamic movement is created about the centre bay of red fibre cement panels. Similarly on the Nicola tower façade, the centre bay of balconies taper in length creating a different dynamic from the Davie and Lane facades. Shadows cast by the balcony recesses at the open corners help reduce the visual mass of the tower as well as giving corner transparency through glazed balcony guards around the tower.

The top floors are largely glazed to lighten the top of the building and are set back to address height envelope issues and terminate the top of the tower with a slightly tapered form.

The affordable housing block utilizes similar exterior materials to the tower composed with a loose grid of columns and spandrels and framed bays. Along with the gridded frames, the balconies give the façade depth and shadow. Ample glazing allows residents to maximize daylight harvesting.

SHADOWING AND VIEW PRESERVATION:
There will be shadows cast by the tower building onto properties immediately north of 1485 Davie and to a lesser degree to the NW and NE. With north being close to 45º to the street grid, the property across the Lane is closer to a NW polar relationship to the 1485 tower. Morning sun will cast shadow onto the Garbriola Mansion grounds. A south noon sun will touch the low rise buildings to the north with afternoon sun reaching lower buildings across the lane and less so with the mid-rise immediately north east.

With the new 1485 Davie tower at this location, preservation of views for neighbouring buildings will result in some view blockage, however that is a part of life when living in a high density high rise area. The greatest impact for loss of view is with the midrise apartment buildings immediately across Davie St from 1485 where a new tower close by will inevitably block some views to the north/northeast. However, some of those views will have already been blocked by existing high rises 2 to 3 blocks further northeast though they are more distant view blockages. Views northwest towards English Bay and Stanley Park already have a wall of high rises a block away to contend with, though the view right down Davie St. is preserved. Southerly views are already blocked up to the midrise level by the apartment buildings across Davie St. while southerly views at higher elevations are partially blocked by 1485, but only for 2 or 3 high rises 3 blocks away to the northeast. Views to the southeast at low to midrise levels are already blocked by Nelson Slopes and at high levels as seen by high rises a block to the northeast, the view blockage by 1485 would be superimposed onto the highrisers in Davie Village and Downtown, though 1485 would be a closer moderate proximity blockage where views beyond Downtown do not really exist.

SUSTAINABLE DESIGN:
Strategies for sustainable building design have yet to be formalized, but will include measures to curb domestic water consumption, reduce heat loss through envelope design and reduced glazing area, specifying Energy Star appliances, use of LED lighting and motion detection light activation in applicable common areas, drought resistant landscape design and green roof areas, incorporating solar gain control devices, sourcing local materials, control of rainwater runoff, use of energy efficient air handling and electrical systems and use of products with reduced off-gassing to name some options at our disposal. The goal will be to build to an equivalent LEED Silver rating for this development. Refer also to the Sustainability Consultant’s proposed Sustainability Report.
In conclusion, it is interesting to note that the projected 30 year build out aerial graphic shown on page 22 of the City of Vancouver West End Community Plan identifies many sites where future development might see high rises where 1485 Davie St. just happens to be one of those identified locations.