4.4.1 SCALE

envisioned in the Grandview Woodland Community Plan. Developing the Safeway site to a density of 5.84 FSR will result in a vertical extension of mass within this site which will be quite distinct from the scale of the immediate neighborhoods.

Resultant large building masses will rise above the skyline, and create a landmark reference for the Broadway Commercial Drive intersection.

Residential floor plate considerations result in tower forms. The number of towers which can be accommodated on the site is limited due to tower off-sets. A three tower scheme balances the target residential densities whilst allowing the site to open to the south. In this configuration, the towers become staggered rectangular blocks rather than slender towers.

The stepped form of the towers, introduction of sky garden horizontal breaks within the tower forms and the external expression of the tower superstructure are appropriate means to introduce scaling devices to the composition of forms and mitigate against an impression of monolithic dominance.

4.4.2 RESIDENTIAL FLOOR PLATES

The proposed form of the residential towers creates a range of floor plate sizes. Rather than a uniform tower plan form, the stepped massing and the introduction of sky gardens at the levels where the towers are set back avoids the creation of a simple extruded form for the vertical elements of the architectural composition.

As a consequence of this approach to the design, we propose a decreasing floor plate area with increased height. The average floor plate for the towers is below 7,000 sf.

4.4.3 ORIENTATION

The scheme is composed of mid-rise and high-rise components as The placement of the residential towers has been carefully considered to create a south-facing orientation to the interior heart of the scheme, visually open towards east 10th Avenue. Towers A and B are placed orthogonally to the west and north to frame the interior gardens, and whilst tower C frames the interior to the east it is also rotated about its center to formally address the City along the axis of the cut. The placement of towers A and B opens up the north-west corner to reinforce this diagonal axis through the site.

> Below the residential towers, the building mass is built up along Broadway and new plaza edges to create an appropriate urban response to the scale and context of the public realm. As stated previously the scheme steps down towards East 10th where the scale of the development is softened and opens out to the expansive gardens.

> The treatment of the building faces reinforces the reading of an urban exterior and a more generous, exuberant interior. However, this compositional approach is prevented from creating an introverted character as the oblique views between the tower forms reveal and present the interior gardens to the harder edges of the site.







TOWERS

3 towers spaced to maximize separation distance within site boundary.

SKY-GARDENS

Sky gardens give 3BR units and 3BR townhouses garden access, and vertically break up tower massing.

3 TO Tow and

TOWER STEPPING & ROTATION

Towers A & B step back in order to optimize daylighting and views.

Tower C rotates and shifts to maximize daylighting on the south and views to the mountains on the north.







SECTION 04 / DESIGN RATIONALE



BALCONIES

Balconies are defined as inset to the building masses on the 'street facing' elevations of the towers, and as suspended outboard elements facing into the garden court.



4.4.4 BUILDING HEIGHT

The Grandview Woodland Community Plan stipulates that building height on the Safeway site is to be a maximum of 24 storeys above the retail plinth. Pursuant to clause 7.1.3 of the GWCP, which provisions increased height and density in return for additional non-market housing Tower A is proposed to increase by 6 stories. The increase in height for this tower is also seen as reinforcing the site as a landmark 'gateway' structure within the wider urban context.

Also through discussion with the City of Vancouver it has been agreed that the relative heights of towers B and C are in alignment with the spirit of the Grandview Woodland Community Plan and that the stepping of height from 27 storeys to 24 storeys is a positive design response to the plan.









RESIDENTIAL AMENITY COURTYARD







COURTYARD AND LEVEL 7 LANDSCAPE DRAWINGS

SECTION 04 / DESIGN RATIONALE

4.4 FORM AND MASSING

4.4.6 THE INTEGRATION OF LANDSCAPE -COURTYARD GARDENS AND ELEVATED **GREEN SPACES**

The building form and massing must be considered in respect to the landscape strategy. The concept of 'green urbanism' is at the heart of the proposal and the configuration of building mass, orientation and treatment of edges have all been critically reviewed with the intention of creating a range of spaces where nature can flourish.

Conceptually, the building forms occur within the spaces between the landscape as opposed to landscape filling the voids between building forms. Paths and routes are overlaid onto the landscape rather than pockets of landscape occurring within the interstitial spaces.

Wild and tamed gardens reveal themselves throughout the various elevations within the project, balcony spaces are colonized and cascade down and across the inner faces of the residential towers. Building edges are blurred as walls are festooned from above.

4.4.5 VISUAL IMPACT

The place-making power of this project has been celebrated with a bold approach to the architecture. This is architecture with heroic scale and presence, a confident landmark for a dynamic, culturally rich, part of the city.

However, great care has been taken to test the modelling of component elements of the scheme to ensure that the project density and distribution of use are composed in a manner that is appropriate and sensitive to the immediate context.

The forms and placement of the residential towers allow visual permeability into the center of the site. The silhouette and profile of the development, both from distance and at closer proximity, is varied and full of incidental interest.

Faces of the building forms are modelled to accentuate shadow play across the masses and to articulate volumetric qualities of the composition.

From the ground plane up, the building forms are ordered with contrasting deep reveals and projecting bays; inhabited and animated beltlines punctuate the massing and respond to the functional layering of the programme.



AERIAL VIEW LOOKING NORTH-WEST TOWARD DOWNTOWN

PERKINS+WILL





TOWER FACADES FACING COURTYARD



NORTH ELEVATION WITH STRUCTURAL + FACADE MODULE

SECTION 04 / DESIGN RATIONALE

4.4 FORM AND MASSING

4.4.7 ORDERING PRINCIPLES AND PROPORTION

The architecture of the project is ordered with a regular 2 foot (600mm) modular grid. This module is extended three dimensionally to form horizontal and vertical reference planes by which elements can be related to each other within relationships of ratio and proportion.

This arithmetic discipline of composition remains generally consistent, but some modification or deviation is accepted (for example, where tower C rotates, or where the north eastern edge of the scheme recognizes the orientation of the cut, and induces geometric relationships as opposed to strictly arithmetic ones).

Regular planning from the primary order of the unit and multipliers results in orthogonal, rectangular plans for the individual homes within the residential component of the scheme, and avoidance of peculiar shaped units.

Structural discipline and clarity is a consequence of this approach, and the expression of the structural framework in turn reinforces the architectonic qualities of the building forms.

Transfer of load-paths within the frame to accommodate the stepped form of the tower, and the change in planning grids between the grocery store and the development above is given poetic expression. It is at these points of transfer that changes in programme are celebrated and communal functions and garden spaces punctuate and modulate the forms in a meaningful way.

The modular approach to the design is also expressed within the various cladding systems employed throughout, the base grid allowing a high degree of variety and play within the compositional framework without undermining the principles of that framework.

4.4.8 STRUCTURAL AND DIMENSIONAL CLARITY

The rigor of the dimensional order of the project is manifest in its structural clarity. The structural elements are afforded clear expression within all elements of the design and it is through this expression that the ordering principles of the design are manifest.

Great care has been taken to ensure that the structural format of the building is resolved to reinforce the arithmetic compositional approach of the architecture and to synthesize the engineering and the architectectonic aspects into a cohesive expression which is both poetic and pragmatic.

The dimensional purity of the scheme is revealed in the two grid forms of 6 meters above the podium deck and 9 meters below. The transition between the two grid systems is resolved at the garden courtyard providing expressive, but logical, column interplay rather than shifts in the load paths concealed within transfer decks.

The structure of the building is fully revealed at the skygarden levels where the stepping of the building is acknowledged in the raking perimeter columns, which provide a motif element for the architectural expression of the scheme itself.

This poetic expression, derived from the purity of the structural arrangement is classical in inspiration, not only in terms of the ordering of the architecture into a compositional language of bays, but also in its resonance with the heroic age of nineteenth century engineering, which is itself reflected in the industrial heritage of the city.

Due to the constraints placed upon the site by the grocery store and its functional programme the placement of the main cores for the residential buildings was a key design driver.



DIAGRAM ILLUSTRATING STRUCTURAL LOGIC AND TRANSFERS

PERKINS+WILL







IMAGES OF MODEL STUDYING STRUCTURE

SECTION 04 / DESIGN RATIONALE

4.4 FORM AND MASSING



STRUCTURAL EXPRESSION