Parcel M - P

Southeast False Creek

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M 2 Use tight setbacks

M 3 Provide semi-private open space for each home

M 4 Layer living and working

Burnaby Mountain Community

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N 3 Design homes around a courtyard

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O 1 Place buildings in response to natural features

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East Clayton

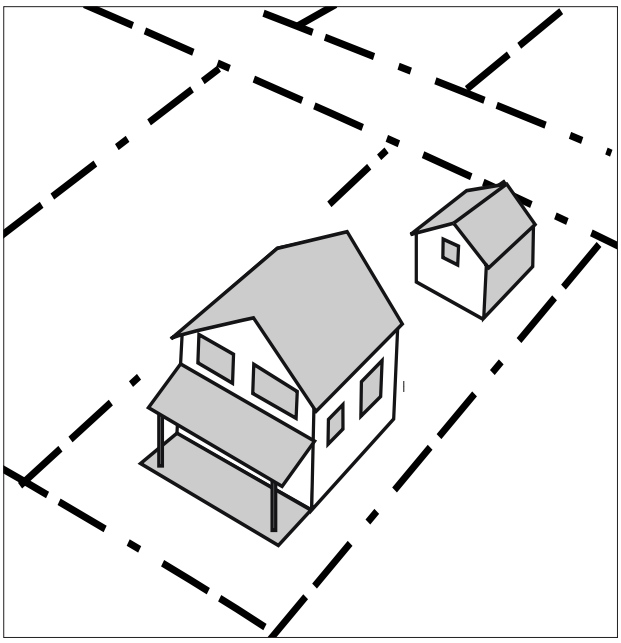
P 1 Design smart parcels

P 2 Maintain flow through the parcels

P 3 Create organic unity

P 4 Layer living and working

The parcel is the smallest increment of development. However, what happens at the scale of the individual house and yard has important social, economic and environmental implications for the rest of the district. The recent (post-1950) emphasis on the automobile has resulted in a whole new set of dimensions that demand ever-wider parcels to accommodate driveways and garages. Wider individual parcels mean less density in the aggregate, meaning more expensive infrastructure per individual parcel serviced. It also translates into a context that becomes, over time, so car dependent that even the simplest of everyday needs cannot be satisfied without a car.



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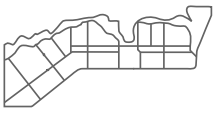
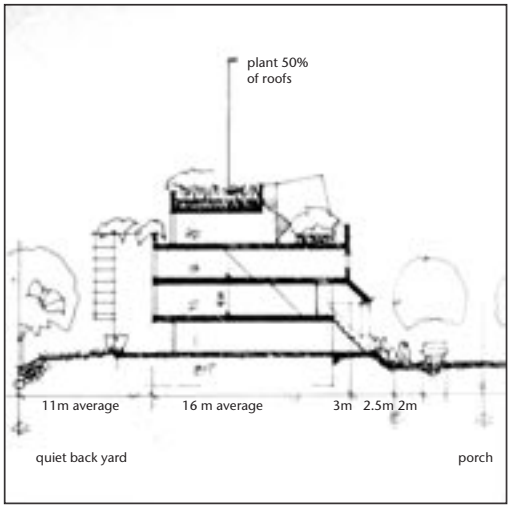
Southeast False Creek



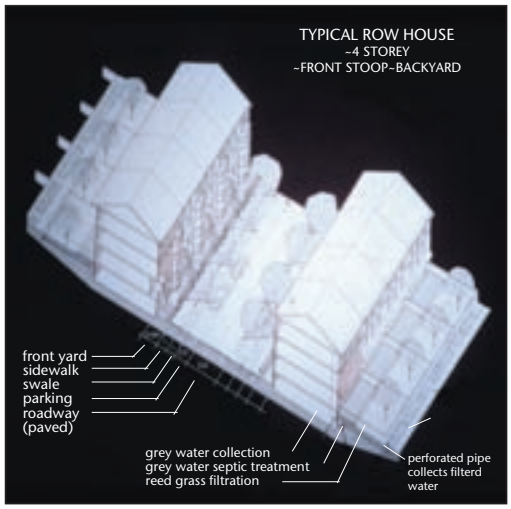
Green Infrastructure

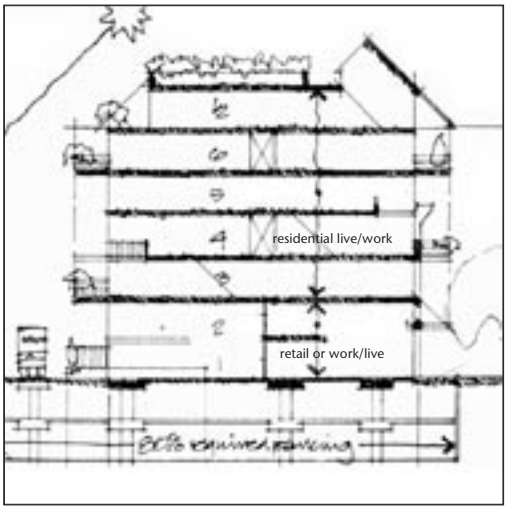
M1 Step the envelope
Incorporating "green infrastructure" into the function of buildings helped meet the "sustainaing space" objective of the Southeast False Creek charrette. The building shown below is terraced in order to maximize outdoor space, and is oriented towards the sun. This allows roofs to be planted for both gardening and cooling. Adjacent areas, including green walkways, courtyards, roadways and boulevards/swales, fuse buildings with green street systems to form uninterrupted green infrastructure.



Movement

M2 Use tight setbacks
A residential street's most important function may be to provide a place for people to interact. The image below shows a "porch street." Its narrow width and on-street parking combine to discourage through-traffic and to reduce car speed. Street trees and tight front yard setbacks create a pleasant and safe envelope for pedestrians while framing views at the ends of the street.





Social Infrastructure

M3 Provide semi-private open space for each home
In Team Two's proposed "townhouse district," each four-storey townhouse (shown above) has direct access to a private garden and is close to the nearby elementary school. Patios and balconies allow upper storey units and basement suites to also enjoy the outdoors and socialize with neighbours.

Cost

M4 Layer living and working
Mixed-use structures and settings help to create an economically vibrant community. The above section of a mixed-use building shows a flexible space that can adapt to diverse needs while promoting social exchange between live-work residents and day-use occupants. "Live-work" units like these allow a working parent to stay at home with young children rather than commuting long distances to work.

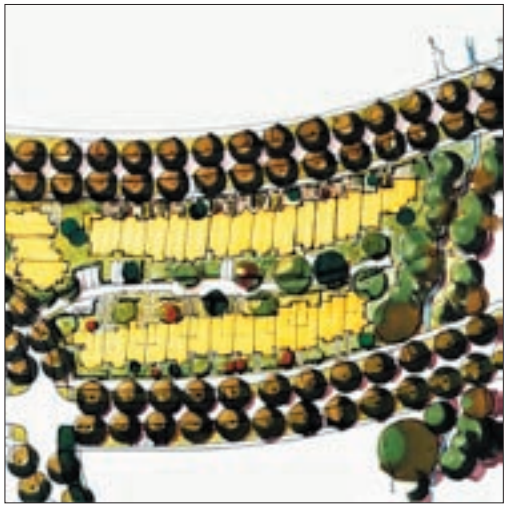
Burnaby Mountain Community

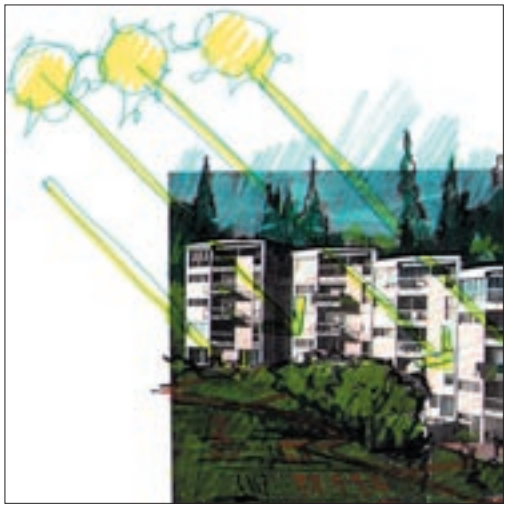
Green Infrastructure

N1 Minimize hard surfaces
Increasing density should not sacrifice natural systems. Above, narrow and tall buildings of about 10 storeys are nestled into the mountainside and invite absorptive "forest fingers" to penetrate the block. Large green roof gardens designed to infiltrate and store rainwater eliminate any contribution to storm water loads and downstream erosion.

Movement

N2 Use lanes to increase access
Whether in ground-oriented units or in higher density areas, people need access to natural areas. As shown, a rear lane gives each townhouse parcel access to the adjacent riparian greenway. With units overlooking the lane, it becomes a place for social interaction among neighbours and a safe place for children to play.





Social Infrastructure

N3 Design homes around a courtyard
Courtyard housing, wherein homes are organized around a semi-private open area, are ideal for enhancing social interaction, while giving residents access to outdoor space. As shown above in the sketch of a courtyard block, community gardens provide a shared resource for residents and create a venue for social interaction, environmental stewardship and experimentation.

Cost

N4 Design smart parcels
Energy efficiency begins at the scale of the individual parcel. A consideration as simple as building orientation can play a measurable role in reducing energy costs. Overhangs, high performance glazing and structural articulation can allow the sun to penetrate the building when it is most needed, and provide shade and cooling in hot summer months. In climates with long periods of sunshine, ground-source heating and cooling can be cost-effective alternatives to traditional energy sources.

O
Parcel

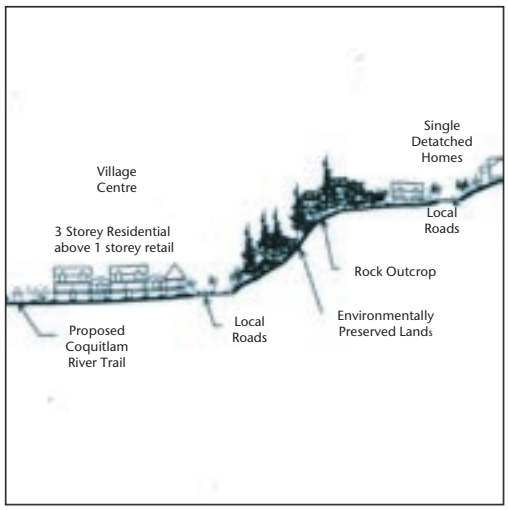
Riverwalk on the Coquitlam

Green Infrastructure

O1 Place buildings in response to natural features
Steeply sloping areas are easily damaged by development. Placing large lot/small footprint housing types on sloped but still buildable sites reduces development impacts. At Riverwalk, large footprint, high density buildings are located on the flatter, more forgiving, sites. The steepest slopes remain undeveloped.

Movement

O2 Provide a front door on the street
People like to have easy access to their home. A front door that gives direct access from the street means less distance to carry the groceries and safely shepherd one's kids. It also gives each family a public "face," which includes them in a community that they can care about and care for.



Drawing credit: Bob Worden, Ramsay Worden Architects, Ltd.

Social Infrastructure

O3 Use lanes to access open space
Like streets, parks provide an opportunity for socializing and casual day-to-day contact between neighbours. Here, the semi-public lane has the effect of extending the back yard and allows people to access the park without leaving the comfort of "home."

Cost

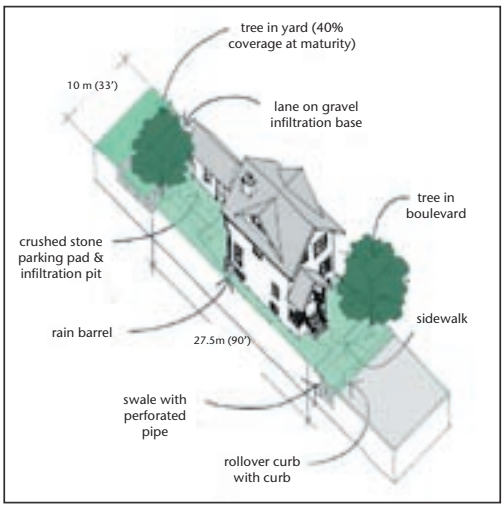
O4 Layer living space on the parcel
Secondary suites can help young families to afford their own home. Houses that back onto a lane have the option of a suite above the garage, as seen in this illustration. Separating the suite from the house gives homeowners and renters independent space, while access from the lane allows tenants to have their own front door on a public right-of-way.

Green Infrastructure

P1 Design smart parcels
Individual lawns and backyards in East Clayton will be like small sponges, capable of absorbing the rain that drains off roofs, parking surfaces, and pathways during typical rain events. Pervious pavers, or crushed stone-surfaced walkways and parking pads absorb water near where it falls. Splash pads and grading quickly direct roof water to underground infiltration chambers. These make the backyard soil "sponge" even more absorbent while ensuring that yard surfaces stay walkable.

Movement

P2 Maintain flow through large parcels
In many suburban areas, buildings and parking areas associated with commercial and industrial uses cover between 80% and 100% of the surface area. This means that the majority of rain falling on these sites cannot be absorbed naturally, but must be conveyed off-site. It also means that a single large building mass dominates the urban landscape. Breaking buildings into smaller envelopes as shown, allows for the healthier movement of water, air and people on the parcel.



Drawing credit: Bob Worden, Ramsay Worden Architects, Ltd.

Social Infrastructure

P3 Create organic unity
Creating organic unity means accomodating variation and change while maintaining the elements that make a community special. This allows people to connect with the past and feel more comfortable with the processes of change. On this residential street, a great diversity of housing and tenure types is masked by a powerful sense of unity. Peaked roof forms and people-friendly (as opposed to merely car-friendly) front facades maintain the "single-family feel" despite the fact that density is almost twice that of conventional suburban developments.

Cost

P4 Layer living and working
Layering living and working space within a single unit increases the diversity of a neighbourhood and provides affordable space for small businesses — businesses that might otherwise have to locate outside the neighbourhood. The live/work unit shown above has ground-floor office/retail space and a residence located on the upper floors.