

Block I - L

Southeast False Creek

- I 1 Manage stormwater in the middle of a block
- I 2 Make short blocks
- I 3 Encourage connection
- I 4 Create flexible row-house blocks

Burnaby Mountain Community

- J 1 Allow natural features to shape the block
- J 2 Create mid-block connection
- J 3 Layer public space into each block
- J 4 Accomodate many parcel types within a block

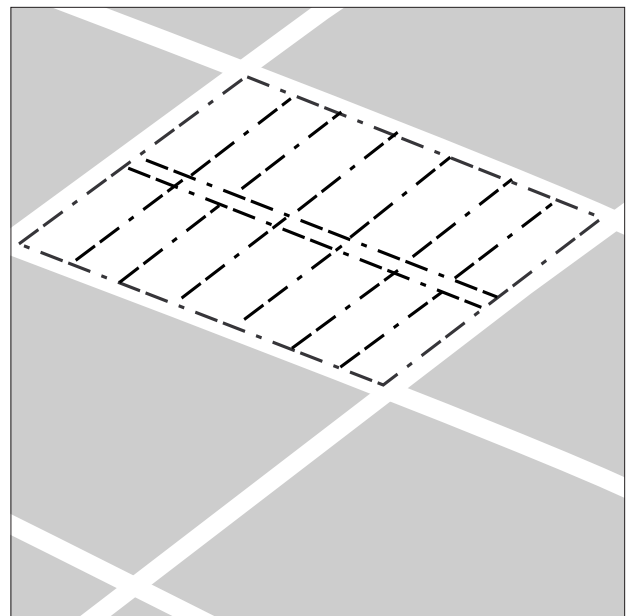
Riverwalk on the Coquitlam

- K 1 Manage stormwater block by block
- K 2 Modify blocks to favour natural features
- K 3 Design blocks to encourage flow
- K 4 Design blocks efficiently

East Clayton

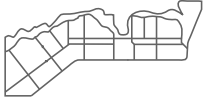
- L 1 Wrap blocks around natural features
- L 2 Make continuous sidewalks
- L 3 Layer public space into the block
- L 4 Add density at the corners

Blocks are the chunks of developable land that are available after a street pattern is imposed. Smaller blocks result from a more integrated (or net-like) street system, while large super-blocks are the result of a disintegrated dendritic (or tree-like) street system dominated by dead-end blocks. The smaller the block, the finer the grain of development and the more permeable is the neigh-



I Block

Southeast False Creek



Green Infrastructure

I1 Manage stormwater in the middle of a block
 “Working greens” should be located prominently. This helps residents and visitors understand how the community’s natural systems are managed. The image below shows a central stormwater bioremediation green. The space is used for recreation when it is dry but fills with water immediately after it rains. The space dries out after a day or so as water infiltrates into the soil.



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



Movement

I2 Make short blocks
 Large blocks are impenetrable to the movement of people. Shorter blocks mean more intersections and more intersections mean slower car speeds. Team Three chose a block dimension of approximately 180m by 60m, which continues the block pattern established by the existing city fabric to the site’s south.



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



Social Infrastructure

I3 Encourage connection
 The sidewalk is an essential connective element between blocks in a neighbourhood and between residents and the public life of the street. Tight setbacks and front stoops, as shown above, allow visual and even conversational exchange between residents and passers-by.



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



Cost

I4 Create flexible row-house blocks
 The image above shows townhouse type buildings that, while seemingly all one size, are actually configured in a variety of ways. The elderly, empty-nesters, young families, and individuals can choose among a range of apartment and loft buildings, all of which are convenient to on-site stores and services and are within walking distance of local transit. This kind of diversity welcomes a range of income groups and provides affordable options even when family circumstances change.

Burnaby Mountain Community



Green Infrastructure

J1 Allow natural features to shape the block

Environmental considerations should inform all design decisions. In the plan detail below, a larger residential block is broken into pieces by the preserved stream courses. 15 to 30 metre wide riparian setbacks from the top of the stream bank protect the habitat envelope of the stream, while intermittent pathways and bridges allow for the easy migration of fish, people, and wildlife.



Movement

J2 Create mid-block connections

In the original Erickson/Massey vision for SFU, cars were excluded from the campus proper and walking distances provided the yardstick for determining building scale and location. This example shows a mid-block pedestrian route that provides an alternative to walking on the street. The integration of water into the design makes this an appealing place to walk.



Social Infrastructure

J3 Layer public space into each block

Pedestrian-only streets can function as a linear public plaza, allowing people to move freely and interact without the disturbance of cars. In the design by Team Four, three-storey commercial and office buildings line the edges of the market place square, creating a sunny, flexible space for people to shop, stroll, study, and gather. The generous dimensions of the street allow for shops lining the street to spill out onto the sidewalk.



Cost

J4 Accommodate many parcel types within a block

Smaller blocks with many parcels create more opportunities for local economic development. This example of a 60 by 60 metre "Portland Block" (after the City of Portland OR, that has blocks this size) shows a grain of development that is highly efficient and adaptive. Zoning would be flexible enough to accommodate small businesses, live/work units, or commercial uses in the same block and even the same building.

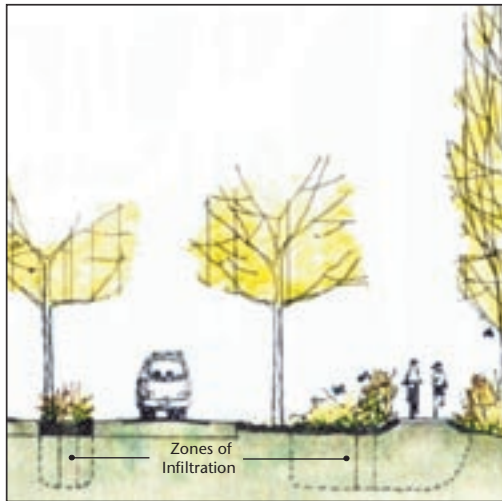
K Block

Riverwalk on the Coquitlam



Green Infrastructure

K1 Manage stormwater block by block
Preserving natural features is an ideal way to enhance neighbourhood identity. The Riverwalk plan uses the river and site's streams to divide the community into legible "blocks," each having its own identity and demonstrating a unique relationship to nature. Large central open spaces serve a dual purpose as a public green suitable for recreation or gatherings, and for stormwater management during heavy rain events.



Movement

K2 Modify blocks to favour natural features
A modified block pattern favours the location of natural features without unduly compromising connectivity. Many blocks in Riverwalk are oriented towards parks, riparian areas, and green streets. As shown below, blocks defer to the stream course, rather than diverting the stream. This course in turn becomes an essential connecting corridor for the movement of water and wildlife.



Social Infrastructure

K3 Design blocks to encourage flow
Streets and lanes are usually designed to the needs of the car. In this proposal, this view is changed to emphasize access for people instead. The location of pockets of development was decided first and the pattern of streets was laid out to connect them. Lanes are also provided where possible to access rear driveways and garages with suites above.

Cost

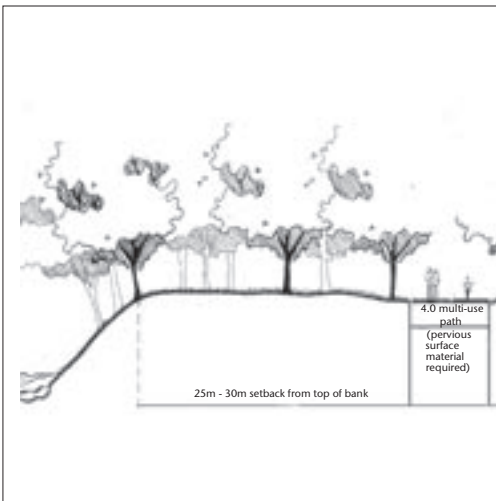
K4 Design blocks efficiently
Compressing commercial activities in a compact multi-storey building with street-oriented configuration saves construction costs while maximizing synergy between uses. Parking requirements of about 1 metre parking space per 1 metre commercial space (about half of the conventional standard) is critical to this strategy. Surface parking is located in the rear of the structure and on only 50% or less of the developed site. Diagonal parking is on all surrounding streets to supplement or replace surface parking. Underground parking is used wherever economically viable.



Green Infrastructure

L1 Wrap blocks around natural features

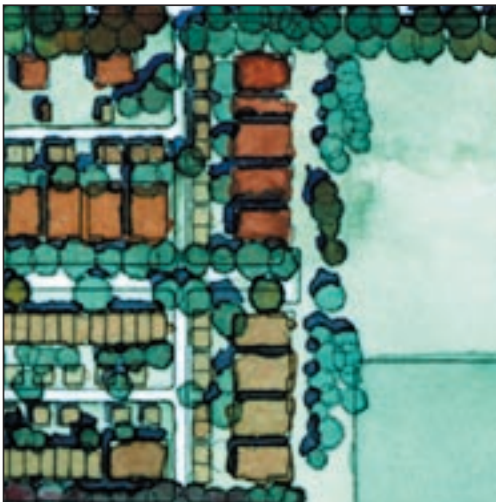
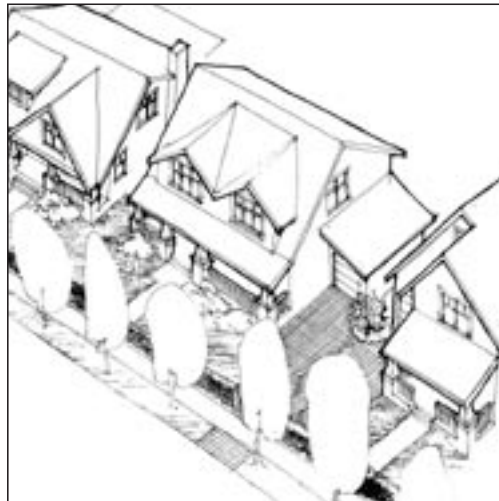
Development should respect the ecological structure and function of important aquatic systems, for their importance to fish and wildlife, and for their intrinsic value. Blocks should form around these features, but should also allow people to connect with, and enjoy their special attributes. Access routes should impose as little disturbance as possible, be set back an appropriate distance from the top of bank, and be paved with a material that allows for natural infiltration.



Movement

L2 Make continuous sidewalks

Sidewalks are the connective tissue between blocks in a neighbourhood and between neighbourhoods in a district. Driveway entries are a considerable barrier to pedestrian comfort and connectivity. For this reason, rear lanes are ideal for maximizing pedestrian connectivity along the public street. Where front driveways are necessary, their impact can be limited by narrowing their entry at curbside and by pushing the garage back from the house facade, as shown below.



Social Infrastructure

L3 Layer public space into the block

How we structure neighbourhoods says a lot about what we value. Combining schools, parks, and stormwater retention areas within the centre of a community underlines their importance to residents and creates a venue for environmental learning. Designed appropriately, these large central community spaces can accommodate district-scale alternative energy and wastewater systems.



Cost

L4 Add density at the corners

Corner parcels are ideal places to add density as two sides of the unit will face a street. In the example above, a rental coach-house unit above and beside the garage provides an alternative to apartment living (or a less expensive owner-occupied home), thus enhancing the diversity of incomes and family types within a block without detracting from the single-family character of the neighbourhood.

