



To the left you see how the city of Vancouver might look when it doubles in population to approximately 1.5 million inhabitants. Assuming that current trends continue, we expect this population to be reached some time after 2050. The map you are looking at is actually a large satellite photograph of the existing city that we have altered to show potential changes. Places on the map that appear as black and white are, we speculate, largely unchanged by 2050. Places where there are vibrant colors are places change might occur. Most of these colored spots are places where we expect buildings to be built, either on the locations where buildings presently exist right now (well over 90% of the cases) or on sites that are presently unoccupied. Other vibrant elements are the bright white lines that indicate major transit corridors (in our case we assume these are streetcar lines) or the vivid green lines that indicate either existing open spaces to be preserved or new open spaces to be created. You will note that many existing streets have been given over to green, indicating that certain streets in the system are proposed for some combination of ecological, agricultural, or recreational function.

On the following pages we show six much enlarged details of this map, each one quickly produced by a small collaborative of urban designers. Each of the six teams was provided with a population and jobs growth target sufficient to meet the assumed doubling of jobs and population for the city. Their main task was to arrange this population within their 25 square kilometer square, and to do so in a way that would meet previously determined sustainability targets. Key among those targets was the imperative to reduce by at least 80% the per capita greenhouse gas (GHG) produced by Vancouver residents. Finally, and importantly, each of the six squares provides, in a myriad of ways, opportunities to demonstrate, in form, the implications of discoveries identified in the first four chapters of this

book: the streetcar city, demographic realities, energy consequences, and the primacy of place.

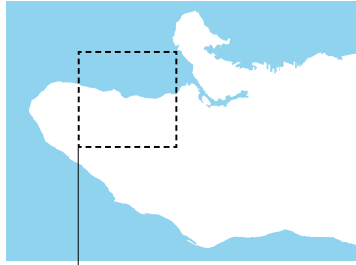
## vancouver MASTER PLAN

6.0

### Key Concepts:

- This plan shows how the city might look in 2050
- All of the colored areas are areas where things are expected to change
- We anticipate a doubling of population and jobs by this time
- The imperative is to reduce per capita GHG by at least 80%
- Six separate teams worked on sub sections of the map, with the seams between sections co-ordinated collaboratively
- Higher density along transit arterials provides a pathway to achieve this goal
- Opportunities for green infrastructure are found mostly through repurposing some streets for green function
- The designs incorporate a myriad of solutions in response to issues of demographic shift, energy use, and sense of place



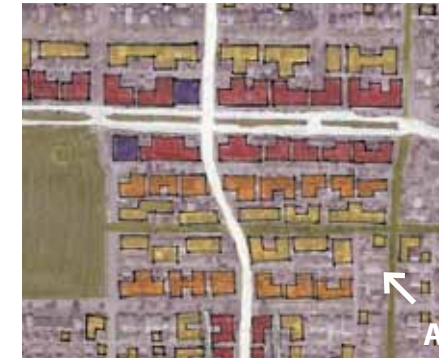


The northwest section is composed of the West Point Grey, Dunbar, Kitsilano and Arbutus-Ridge communities. Currently these neighbourhoods are distinguished from the rest of the city by their more human scale, commercial corridors and adjacency to the UBC endowment lands and Pacific Spirit Park. In order to maintain and enhance the unique character of these places, mixed-use corridors were extended

and densities intensified across the site; albeit, concentrated along streetcar routes. Added density can accommodate a 35,965 growth in population, from 46,561 to 82,526. Accordingly, the number of jobs available in the area is increased by 10,298, from 34,211 to 44,509 by 2050. The reclamation of the waterfront for public use will add to the generous amount of green, open

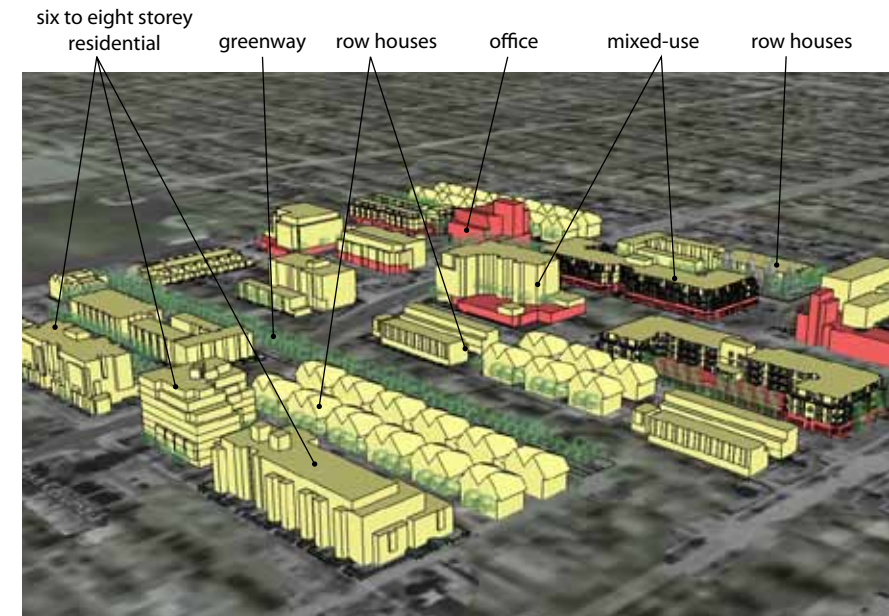
space the area already enjoys. Intermittent streets will be transformed into permeable greenways exclusively available to pedestrians and cyclists. Placement of the greenways according to topography and connecting parks, schools and community centres allows for the incorporation of stormwater management practices as well as the creation of an alternative mobility network of green corridors. Kitsilano

epitomizes the positive qualities of a neighbourhood originally shaped by the streetcar. Old streetcar lines like those along 4th Avenue and Broadway have been reinstated and additional streetcar routes are placed along important arterials such as Macdonald Street and Cornwall Avenue, along which bus lines can currently be found.



*Below:*

Mixed-use buildings frame the intersection of 16th Avenue and Macdonald Street. The presence of retail and office space allows for more people to work and shop in areas closer to home and accessible by transit. Row houses are used to buffer higher density residential buildings and provide accessible housing for an aging population. Placement of such typologies along the greenway preserves sense of place while increasing density.



Tate Francesca White

## vancouver NORTHWEST

6.1

*TEAM MEMBERS:* Sara Orchard and Tate Francesca White

### Key Concepts

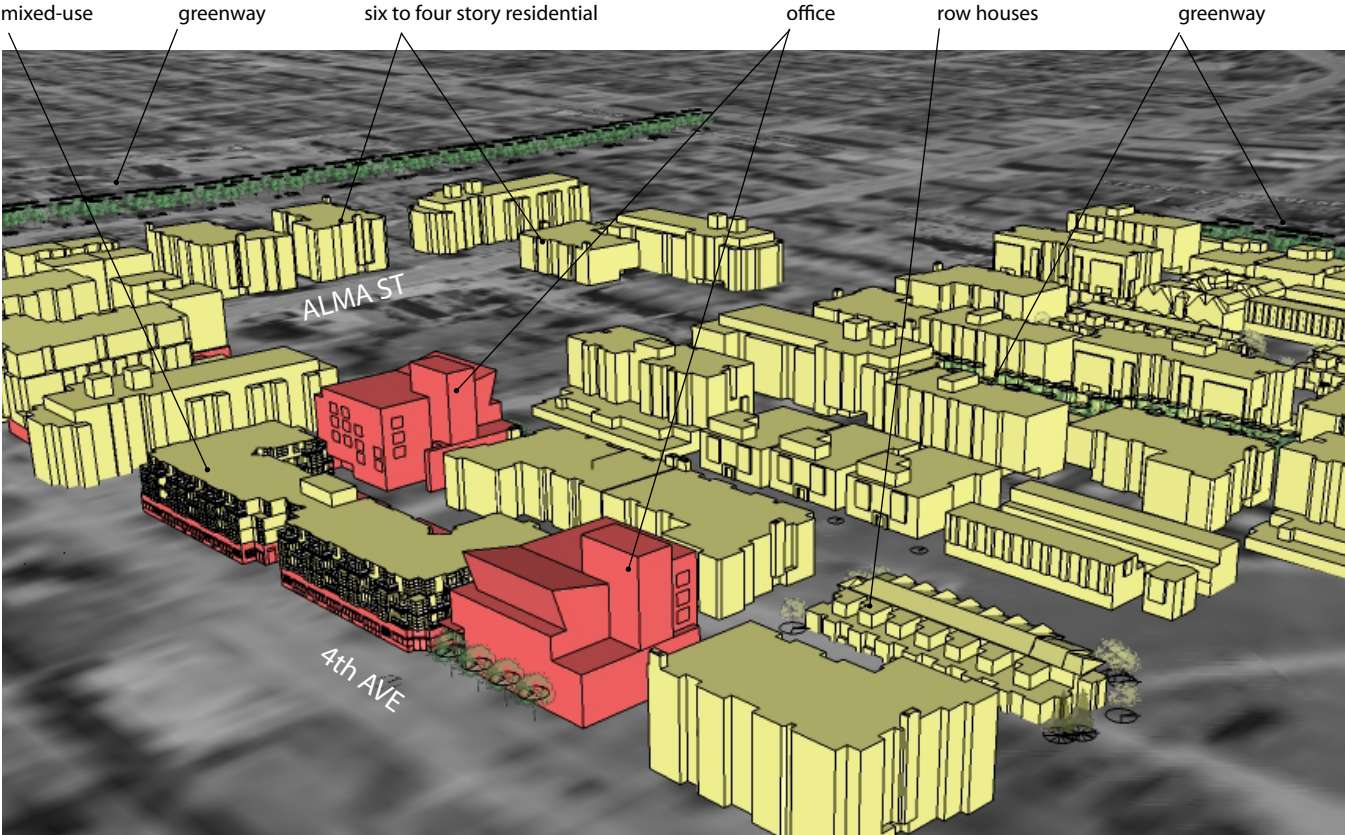
Four major strategies influenced the 2050 plan for the northwest section of Vancouver:

- **Reclaim the waterfront for public use**, creating a sizable addition to open, green space that can serve a diversity of programming functions.
- **Add mixed-use commercial areas along streetcar routes** targeted toward currently under served neighbourhoods.
- **Transform a number of streets into greenways** to provide a five-minute walking radius to green corridors.
- **Redevelop former military base** to extend the grid and desirable characteristics of Kitsilano while adding residential density.



*Below:*

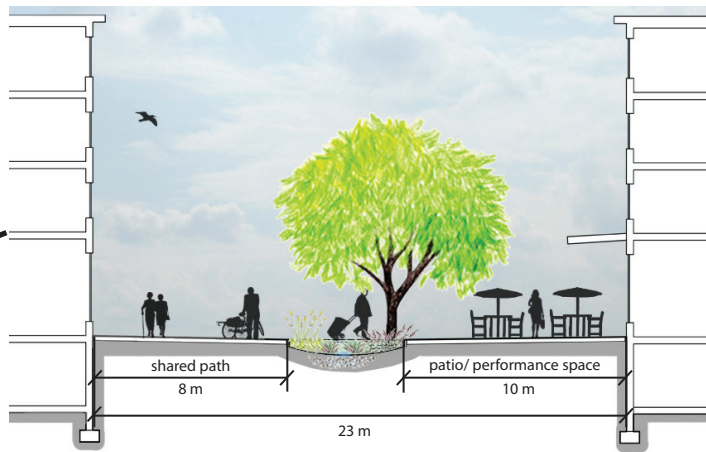
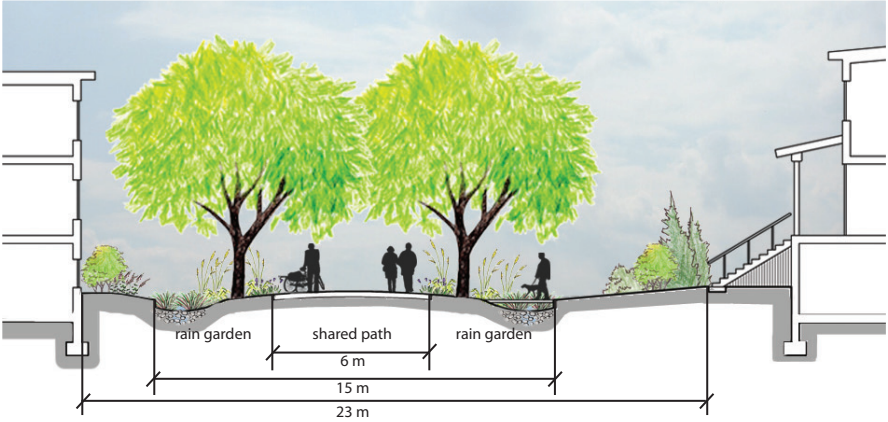
Redevelopment of Alma and 4th Ave. expands the commercial corridor and increases density into the military base. Access to commercial areas, greenways and offices helps to decrease the need to travel outside the community for basic needs. A mix of housing typologies, allows for seniors, families, and students to live here. A rhythm is created by building typologies and the presence of regular green ways. In order to enhance the sense of place, a distinct pattern of commercial and higher density residential surround lower densities to create a different experience when walking along major and minor corridors. Green ways weave through the area as an alternative transportation route.



Sara Orchard



The drastic reduction of car use in the future results in the potential for residential streets to be transformed into greenways. With no cars on the greenways the traditional road right-of-way can take on other functions, for example community gathering spaces, stormwater management, and the safe movement of pedestrians and cyclists. This greenway design examines a section of Dunbar St. in Kitsilano as an example of what a residential road greenway could look like in the future. The diagram to the right depicts a schematic representation of potential programming on the street. Active areas include activities such as community gardening and sports, whereas passive areas focus on facilitating movement through the neighbourhood in a pleasurable way. Similarly, high intensity corners incorporate cafe seating and performance spaces on the road. Stormwater management features are a common link between the spaces, allowing for natural drainage while increasing amenity. A diversity of spaces starts to create a rhythm and interest for people using the greenway.



**Top left:**  
The greenway incorporates community gathering space, in this case an area for community gardening and pick-up sports. Rain gardens help define the space and provide forage for birds and habitat for pollinators.

**Top:**  
Rain gardens are used to separate movement from more stationary activities in this high intensity corner situation. Pathways are shared by pedestrians and cyclists

**Bottom left:**  
Rain gardens increase neighbourhood aesthetic, manage stormwater and provide habitat. In passive, less programmed areas alternative pathways weaving through the rain gardens allow for the users to learn about and explore the rain gardens.

**Bottom:**  
A low area at an entry/exit point offers the opportunity for the rain garden to engulf the former asphalt street. A boardwalk elevates pedestrians above the garden. An alternative path for bikes and faster moving pedestrians is also provided.



## Vancouver NORTHWEST

6.1

TEAM MEMBER: Sara Orchard

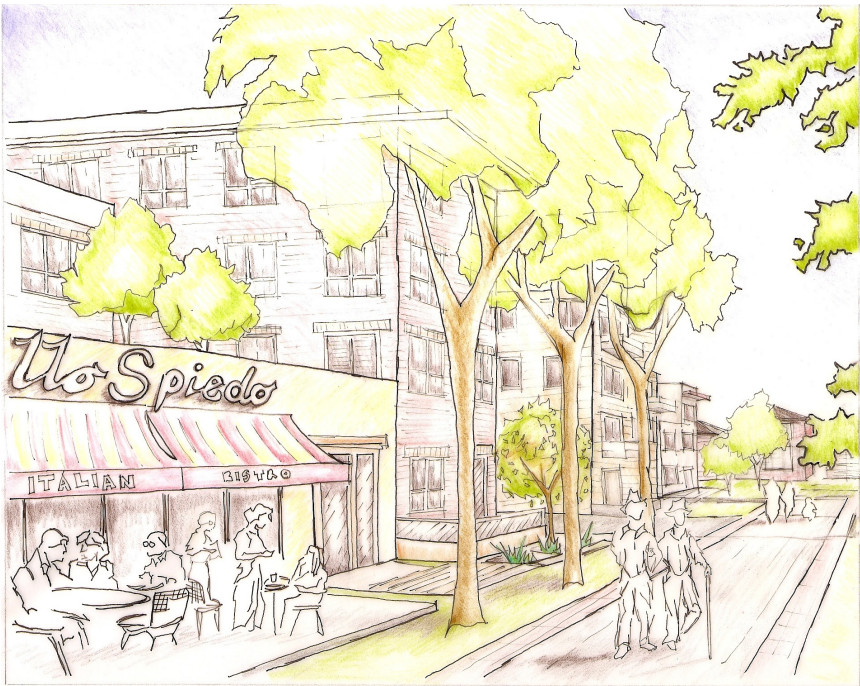
### Green the grid: Reclaim the road for people

#### Key Concepts:

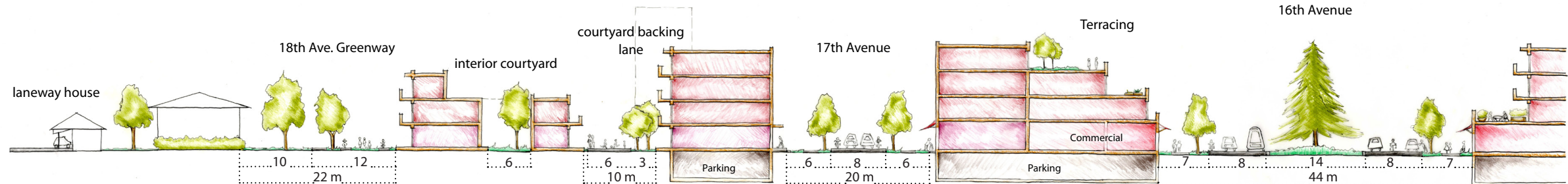
- Transform selected neighbourhood streets into greenways, linking parks, community centres, and other amenities.
- Close greenways off to motorized vehicles to allow for the safe movement of pedestrians and cyclists.
- Use sections of greenways for community centred activities including community gardens and sports
- Incorporate stormwater management and habitat into greenways
- Vary greenway design to enrich the experience for the pedestrian and cyclist



**Right:**  
Buildings are strategically placed so as to preserve a mid-block green corridor. The perspective shows a view looking down this corridor towards the south from 16th Avenue. Such an application of residential density behind mixed-use buildings can be seen to create more complete and vibrant neighbourhoods. Retaining open space assuages senses of overcrowding and allows for the inclusion of green infrastructure elements like the stormwater planters seen in front of the townhouse adjacent to the cafe. Stacked townhouses retain compatibility with the single-family houses that can be seen in the distance.



**Below:**  
The site section demonstrates in greater detail the transition from the streetcar arterial at 16th Avenue to the lower density fabric past 18th Avenue. A variety of open spaces – private interior courtyards and rooftop gardens and public greenways – are distributed amongst the increased residential density to provide a valuable amenity to residents and surrounding communities. Ground floor units (colored pink) are ideal for seniors. They replicate lower density living but offer better accessibility to services and social interaction. Reclamation of 18th Avenue promotes green mobility choices and buffers lower density areas against the higher density buildings.



**Below:**  
Shadow studies greatly influence the design because of the blocks' position south of the arterial. Appropriate step-backs and height decreases were applied so as to not cast streets, green corridors, courtyards and rooftop gardens in the dark. Thus the highest points of buildings and openings for courtyards are oriented to the south to optimize solar angles.

### Spring Equinox



### Fall Equinox



10:00 AM

12:00 PM

2:00 PM

Vancouver  
**NORTHWEST**

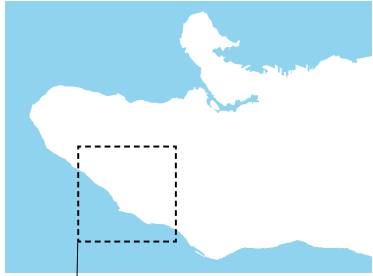
6.1

TEAM MEMBER: Tate Francesca White

### Residential Density Behind Mixed-Use Corridors

- Include a variety of unit types and sizes so that the fluctuating needs of a demographically shifting population can be accommodated.
- Use buildings to define outdoor spaces that serve public and private uses, including leisure, recreation and gardening.
- Design higher density buildings so as to not cast shadows on surrounding spaces or overwhelm adjacent lower density communities.





The Kerrisdale and south Dunbar area in the southwest of Vancouver is presently experiencing the projected demographic shift for 2050: a large elderly population. This demographic in combination with the predominant typology of the detached single family home leaves a lot of empty nesters in more space than they know what to do with. Kerrisdale and Dunbar are not doing their part in accommodating

the expected near doubling of the population in 2050. The big assumption made in this area is that Kerrisdale will experience an anomalous demographic shift from the rest of the city. In 2050 this area will quite possibly be once again filled with young families but also with UBC students due to the proximity of



the university. A master plan has been developed in this area keeping with the targets of a projected population growth of 25,436 and the creation of 1,600 new jobs. The big moves in this area include the development of a student living area with a focus on walkability and green corridors; the implementation of the streetcar line along West Blvd, SW Marine Dr, 41st Ave and MacKenzie St; an overall densification

along major corridors through mixed use typologies; the transformation of an existing public golf course into a regional park bordering a light industrial live-work space. Most importantly, this area will undergo a gentle densification as not to disrupt the existing fabric in the area.



*Bottom :*  
Mixed use typology lines the main corridor on 41st Ave. These would typically consist of 4-6 story walk-ups. Mid-density buildings generally fall behind the mixed use, also 4-6 stories. Taller buildings are located to the north of greenspace and existing single family homes can be retrofitted to accomodate multi-family residence



Lisa Lang

## vancouver SOUTHWEST

6.2

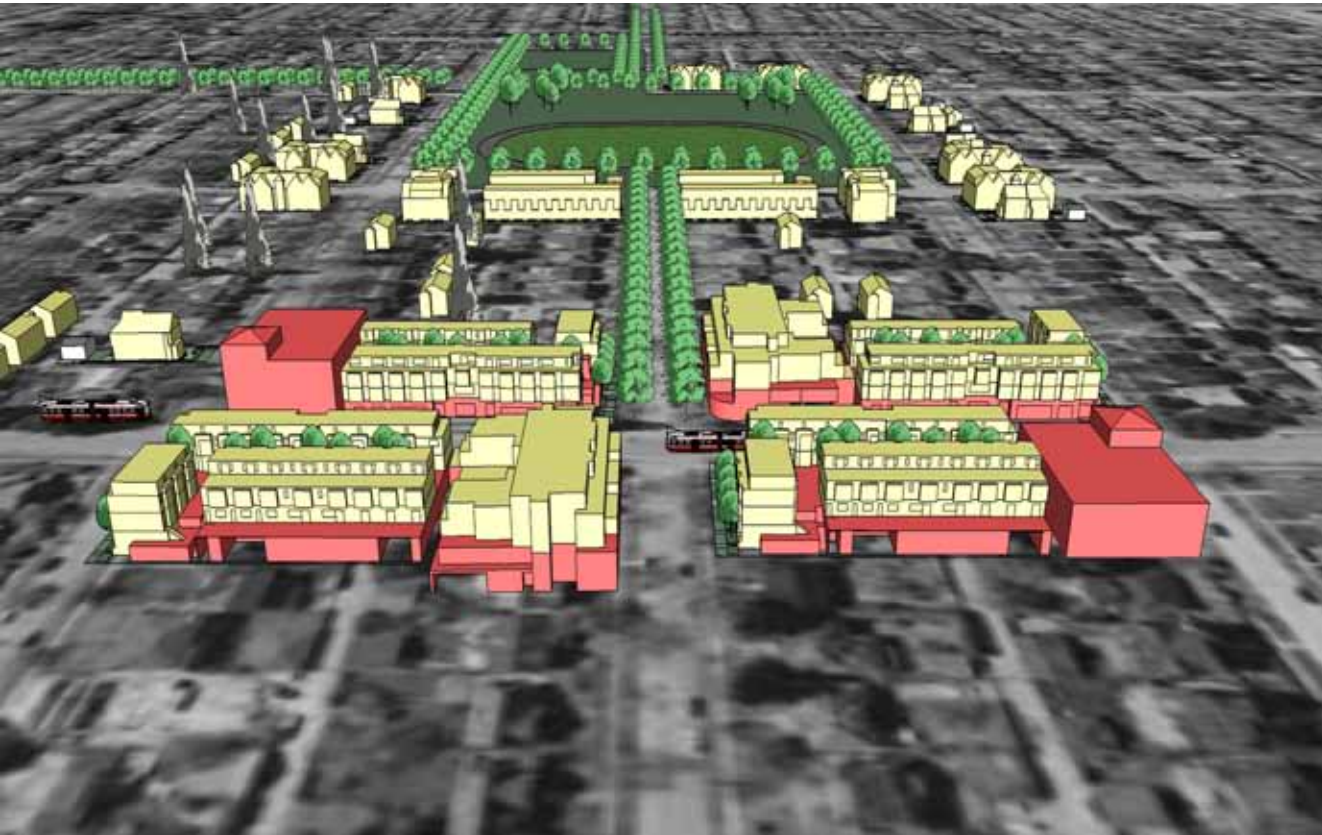
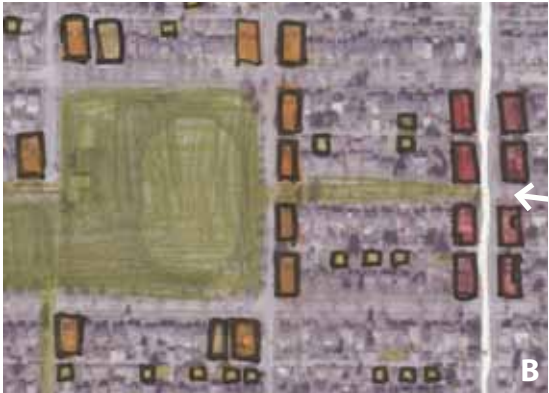
TEAM MEMBERS: Jingjing Sun, James Godwin, Lisa Lang

### Key Concepts

- development of student housing area
- restoration of the West Blvd. Streetcar line and extend to UBC through the student housing
- transformation of existing city golf course into a regional park and light industrial area
- preserve and protect existing old growth and create green corridors to link existing and proposed green space



*Bottom:*  
The northeastern subarea on both sides of Mackenzie Street requires mixed used developments along the tram corridor. Balaclava Park is an ecological stepping stone that is linked with other natural areas through green corridors. 4-6 storey mixed use buildings are located on both sides of the tramway corridor. New housing types include laneway infill, duplex, rowhouse, multifamily complex.



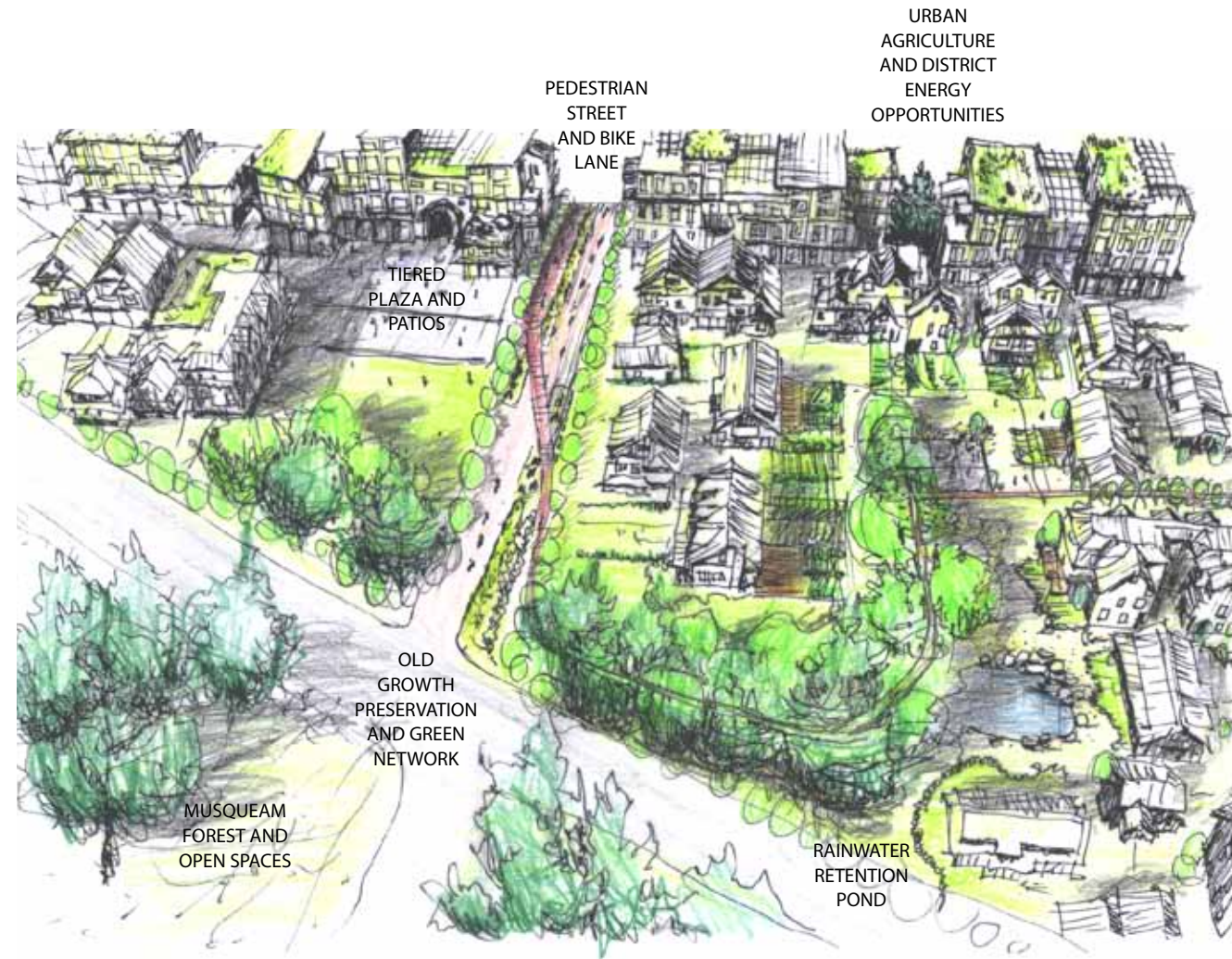
Jingjing Sun

*Bottom:*  
The Dunbar Greens is a case study in increasing residential density in an area currently predominated by single family homes. The massing model shows the large amount and variation of residential dwelling types, and the mixed use typologies along the main arterial.



James Godwin





**Dunbar student community:**

Not just close to campus, the new Dunbar student community provides amenities within a 5 minute walk. A public plaza and commercial area greet the resident as they hop off the streetcar line with cafes and pubs.

**Interconnected green space:**

By mapping out the existing old growth in the area, an interconnected green network reveals itself. This network is then preserved from building and housing can be clustered around these. This space becomes a sort of public commons with rainwater retention and urban agriculture along the periphery.

**Housing density and typology:**

In 2050, property lines are skewed to accommodate the expected density increase. Underused front yards enable laneway-type housing to overlap existing property lines without obstructing access to the existing housing. The current single family dwellings will be converted to multifamily residences. Mixed use and mid-density along arterials

**Public vs. private space and circulation:**

Purple represents the public spaces in 2050. The light pink are private areas and courtyards surrounding the low density areas. The magenta represents the semi-private areas in former backyards which will be converted to urban agriculture practices for the residents.



**Vancouver**  
**SOUTHWEST**

6.2

TEAM MEMBER: Lisa Lang

**Dunbar student community:**  
**green communities dictated**  
**through continuous habitat**  
**design**

At the corner of SW Marine Dr. and 41st Ave exists a unique opportunity for the development of a student community. This area lies along the crossroads of the proposed streetcar lines making it a perfect spot for a node. Mixed use lines 41st Ave straight to Dunbar.

Of great importance in this area is the green network that is created by connecting areas of old growth and allowing them to flourish. The conversion of existing backyards to community green space and green mobility with access to the Musqueam forests nearby. These spaces can be lined with gardens for local food, rainwater retention and filtration for cleanwater and district energy possibilities.

Existing single family residences are converted to multiple dwellings and property lines are erased allowing for increased housing clusters in these areas. Lower densities are maintained on SW Marine to mesh with the single family housing south of the street.

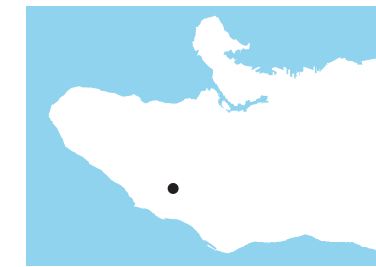




**Top Left:**  
By increasing canopy cover and green space, laneway housing reclaims 'back alleys' and turns them into vibrant, pedestrian friendly areas

**Top Right:**  
Examples of the woonerf, or pedestrian oriented street, from urban areas in Portland and the Netherlands provide examples of alternatives to standard paved solutions

**Bottom Centre:**  
The expanded role of street trees will create a continuous canopy cover increasing habitat coverage and tie into Vancouver's larger green street network, while at the same time allowing the laneway houses to form an invisible density increase



## Vancouver SOUTHWEST

6.2

TEAM MEMBERS: James Godwin

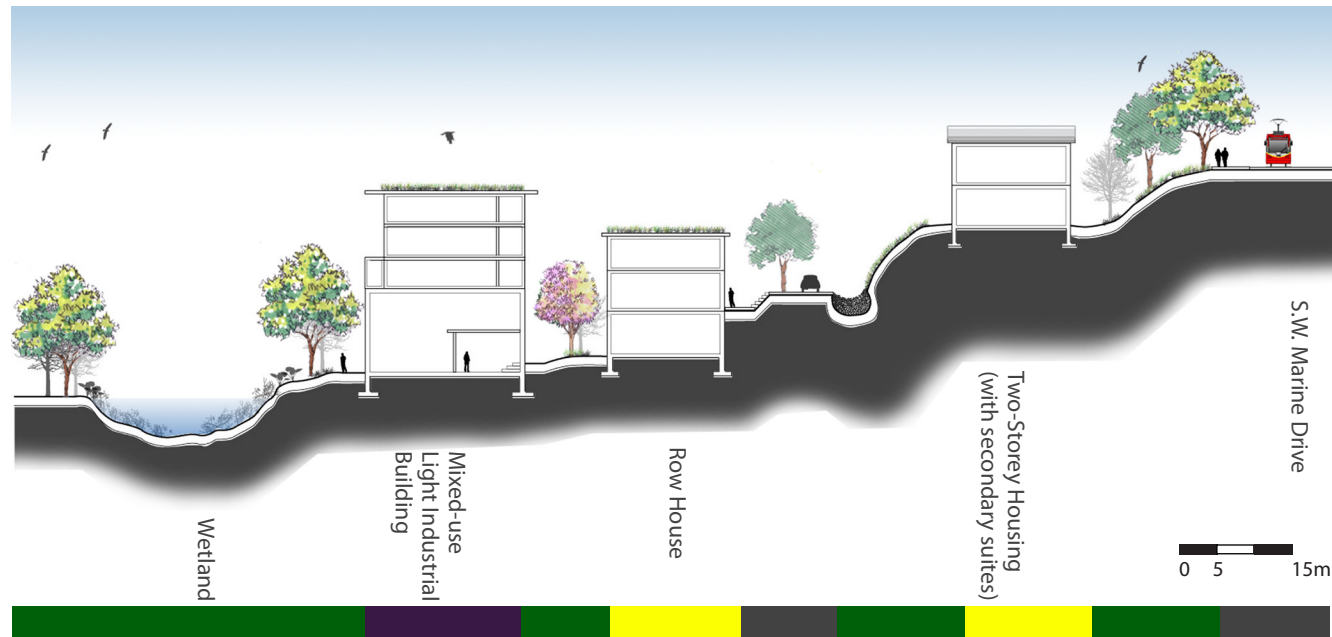
### Key Concepts

In the South West, Kerrisdale is an area with a large cover formed by numerous old coniferous and deciduous trees. Mixed in with primarily single family homes, they provide the perfect starting point for an alternative, habitat oriented, form of the green street. By increasing plantings to infill this already extensive canopy, the area will become a green network of immeasurable value to local wildlife. With the addition of laneway housing, the benefits will include:

- Large green canopy cover
- Invisible density
- Revitalized laneways
- Will tie into larger green street network
- Create new affordable housing







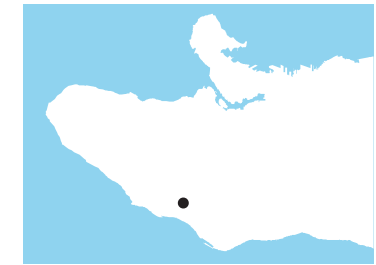
The northern part of McCleery Golf course in Vancouver southwest area is an ideal site for both light industrial and residential development. The site is perfectly suited for both working and living because of its close proximity to Southwest Marine Drive, a major road that leads to the airport, and a proposed regional park to the south.

In addition, the site is also situated on a drainage basin, where water is collected and released into the ocean. The unique drainage situation means that green infrastructure such as urban wetlands, green roofs, rain gardens and curbside swales are well suited to be used on site. Existing natural drainage features, such as a wetland pond, are further enhanced by the design. Increasing the ecological function of the wetland by encouraging the growth of native plant species will enhance the site both aesthetically and ecologically.

In a larger context, the site also acts as an ecological stepping stone that links nearby green spaces to each other.

The new building typology created for the site consists of double ceilinged industrial space on the ground floor, office space on the second floor and residential space on the upper floors. The ground floor is a flexible studio space that can accommodate a variety of light industrial activities. Glass walls to help maximize sun exposure in the studio spaces. Many of the buildings have green roofs and terraced roof top gardens for residents to enjoy.

In conclusion, the overall objective for this design is to create a new type of light industrial district that embraces industrial, residential and commercial activities in the same area, therefore promoting local industry, affordable housing and a greener future for the city.



Vancouver  
**SOUTHWEST**

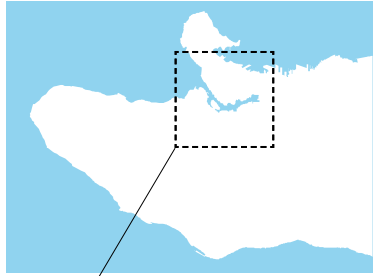
6.2

TEAM MEMBERS: Jingjing Sun

### Key Concepts

- **New types of industrial districts** mix light industrial, residential and commercial uses together within a 5 minute walking distance of each other helps to activate the area at all times of the day.
- **New building typologies** with light industrial space on the ground floor and residential space above promotes local industry and provides affordable housing for the Dunbar area.
- **An interconnected street** extends and connects the city grid.
- **A linked green network** connects existing green spaces to the larger context.
- **Green infrastructure**, such as urban wetlands, green roofs, rain gardens and curbside swales, are applied to mitigate stormwater runoff on site.





This area connects downtown and its surrounding neighbourhoods. Thus, proposed urban forms should be able to tie the neighbourhoods' different physical and social characteristics.

This area's population will grow from 151,720 to 22,8147. Additional housing is mostly at False Creek Flats, Main Street and the Mt. Pleasant industrial lands because these areas

are a short walking/transit distance to adjacent areas experiencing significant jobs growth.

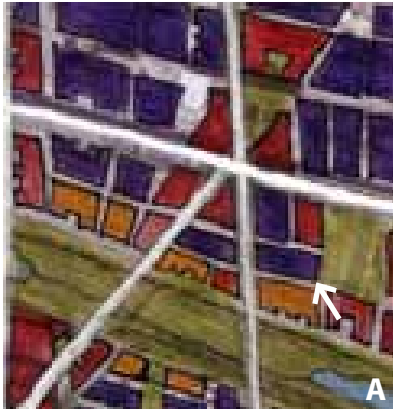
Already job-intensive, this area's jobs growth is insignificant. However, a some jobs will be placed in the Flats to provide services as the rail-travel returns as a major transport mode. As jobs become cleaner and safer, they can mix more readily into

commercial and residential buildings, thus carefully desegregating land-use.

New developments can tap into the existing Southeast False Creek Neighbourhood Energy Utility. Besides, with the Flats proposed to be an energy precinct, added clean energy can be supplied. Also, this area will be weaved through by green corridors and pocket-parks favouring walking and cycling while

remediating the elements.

Streetcar lines are investments that can spur concurrent and future growth. Thus, routes are strategically introduced to support the new developments and better east west and north south connections.



*Below:*

The industrial lands surrounding the flats have been reimagined as a vibrant mixed-use community, while maintaining an industrial fabric. Creative industry, academic and other institutions, artist live-work spaces, new and exciting commercial activities will create an energetic district. New innovative typologies will foster economic clusters and creative industry while allowing for live-work spaces that make the site vibrant 24/7. Green corridors will connect this area to False Creek's sea wall while mitigating storm water run-off. Gross FSR will increase from 0.4 to 2.2.



Sam Mohamad-Khany

## vancouver NORTH

6.3

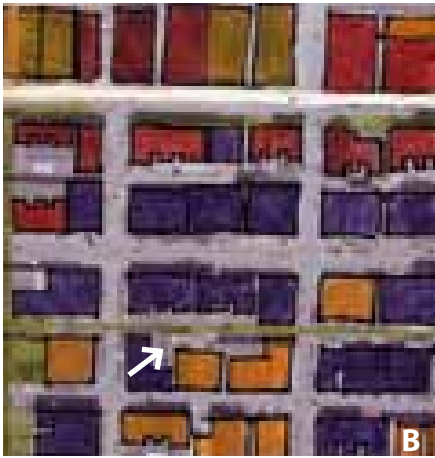
*TEAM MEMBERS:* Pat Chan, Paula Livingstone, Sam Mohamad-Khany.

### Key Concepts

- Use streetcar-oriented corridors as connectors between downtown, Olympic Village and the rest of Vancouver while gradually stepping down from downtown's tower format.
- Use streetcar as an urban investment to spur the development of creative industry, future jobs and housing in areas like the Flats and Great Northern way.
- Link existing green open spaces together to create a green networks that provide comfortable walking avenues through the neighbourhood blocks while enhancing the city's environmental performance.
- Ensure 5-minutes distance is applied to all densified arterials to make walking to amenities and transit comfortable for all ages.

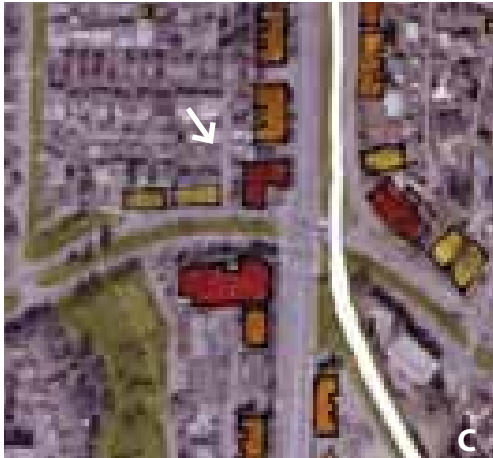


*Below:*  
**Existing:** FSR: 1.2  
Land use: Light industry.  
Typologies: 2-3 stories attached buildings.  
**Proposed:** FSR: 2.1  
Land use: Mixed use (Light industry-residential and commercial-residential).  
Typologies: 3-8 stories attached buildings.  
**Activate the area** by restoring the streetcar and introducing mixed use typologies such as commercial-residential and live-work; **ensure better relationships** between buildings and the open space; **green network** provides comfortable pedestrian paths through the neighborhood.



Paula Livingstone

*Below:*  
As an urban investment, a revived streetcar line on Arbutus Greenway can activate Arbutus with more visual, architectural and programmatic diversity. This makes walking more pleasurable. Moreover, a mixed use corridor allows for “trip chaining” as people commute to and fro their homes and work along the Greenway. Density need not be drastic here. The existing gross FSR of 0.45 for the 6 blocks around this junction can be increased to 0.73 by introducing neighbour-scale buildings like mixed use buildings along Arbutus, 4-storeys woodframe walk-ups and townhouses with laneway infills (for deeper lots) in the current single-family lots.



Pat Chan



## Emerging cluster of strategic green jobs and creative industry in the greenest city:

The industrial lands surrounding the Flats has an immense potential to foster an energetic economic cluster, bringing together 21st century green jobs and creative industry, while also allowing for a complete community to form around this unique industrial fabric.

As illustrated in the systems diagram below, the consolidation of the train tracks and the better utilization of the land around this area, combined with the re-connection of the grid allows for the emergence of a fabric that is highly accessible by public transportation, cycling, cars and by foot. This increased connectivity allows for ample car access particularly for commercial needs in a city with 80% less cars, while also allowing for the pedestrianization of the major intersection at the heart of this area.

Similarly an interconnected green network, running through this site, provides continuous connection for habitat and storm-water run-off, while also serving as a natural amenity for the public. Therefore, green corridors and pocket parks provide a natural connection from East Vancouver to the False Creek seawall, with a unique urban

experience for cyclists and pedestrians.

Finally, as Vancouver becomes an exchange city, rooftops, parks and streets will be better utilized for public gathering and exchange of ideas, while also urban agriculture and rooftop gardens further reduce the city's impact on the environment.

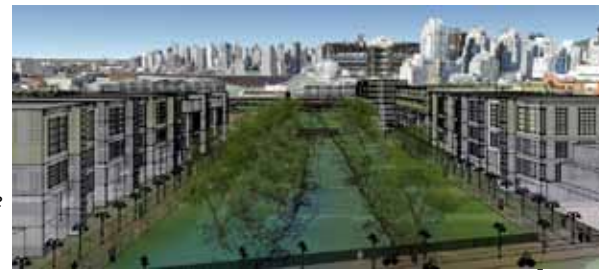
*Pocket parks as gathering and exchange places: Precedent from the High Line project, New York*



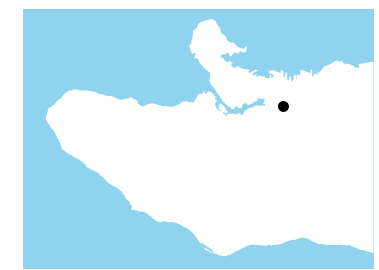
*Rooftop gardens and urban farming: Precedent from the High Line project, New York*



*Green grid allows for continuous habitat, storm water management & recreational uses: Perspective illustration of the proposed green corridor, with a view of downtown skyline and the Science World*



*Rooftops utilized as meeting places: Precedent from Midtown Manhattan, New York*



## Vancouver NORTH

6.3

TEAM MEMBERS: Sam Mohamad-Khany

### Key Concepts

**Re-thinking the industrial zone:** building on the industrial fabric of the Flats, while strategically incubating green jobs and creative industry.

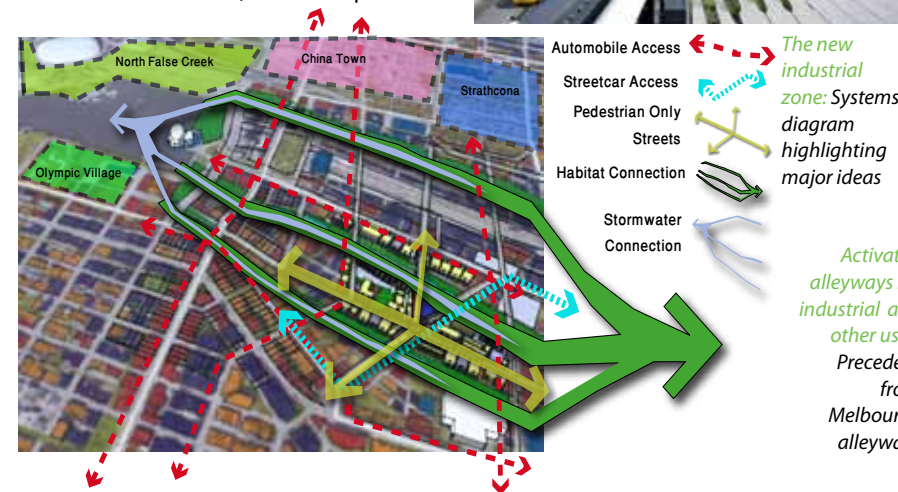
**Green mobility:** reintroduction of the grid allows for increased access by multiple modes of transportation, while creating unique pedestrianized places.

**Exchange city:** reclaiming the streets for pedestrians, while turning pocket parks and rooftops into places of exchange and public gathering.

**Green Grid:** Creation of green corridors for continuous habitat, run-off mitigation, as well as recreational uses for pedestrians and cyclists.

**Innovative places for a new economy:** Alleyways can be utilized for industrial uses, while on-street showrooms showcase Vancouver's latest innovations.

**Increased resiliency:** Urban agriculture on the rooftops contributes to the city's resiliency in a post-Carbon world.



*Pedestrian only Streets: Precedent From Mexico City*



*Heart of the new neighbourhood: Perspective drawing of the main intersection*



*Exhibition Space for Green-Industry: Precedent from 5th Ave New York*



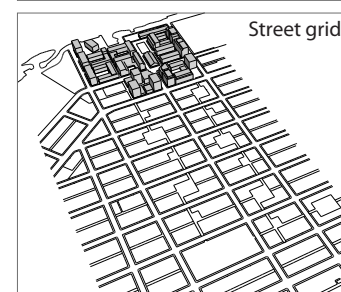
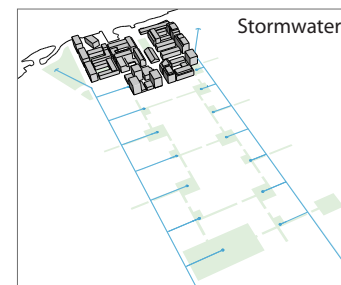
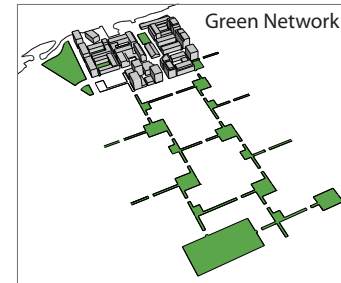
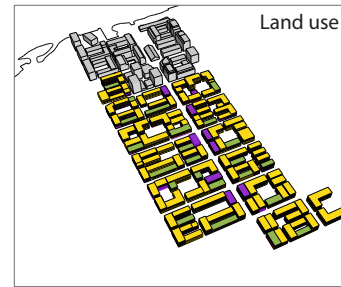
*Activated alleyways for industrial and other uses: Precedent from Melbourne alleyways*





This development's overall aim is to activate the Mount Pleasant Industrial Area through mixed use opportunities which brings a modest number of residential dwellings and services other than traditional industrial jobs. The proposed jobs will be ones that can be staffed by local residents; thus, making the area a more complete

community where people can walk to work and services. Being more densely populated the area will less likely be vacated at night as residents will add eyes-on-the-street; making the area safer at all hours. So, how can this diversity of activities be organised? To ensure green open spaces are always within



close proximity to the future residences, buildings and services are organised along a green network - a green spine - that runs from the Olympic Village to Broadway.

*Mixed Land Use* is achieved by expanding the existing light industrial programs, but seeks to incorporate commercial and residential spaces in an integrative way. Commercial use is proposed along Manitoba Street from Broadway down to the Salt Building, which marks an entrance to the Olympic Village. Light industries will be scattered through the neighbourhood and located on grade while offices are placed immediately above them. Residences are proposed from 3rd floor and above. The FSR will increase from 1.2 to 2.2.

A central green network is proposed to be the

organizational spine of the project. Pocket parks and resting areas are designed by breaking the superblock into units and opening the interiors of the blocks. Parks are interconnected through pedestrian paths and lane community gardens. Runoff is retained in the pocket parks and resting areas and then directed to the False Creek through Hinge Park and the new proposed bio-swale.

*Passive energy* consumption is attained by having building mass, height and siting be responsive to sun orientation and natural ventilation, so as to reduce heating and cooling loads. For instance, Taller buildings are proposed to be located north while lower buildings are located south. Also, residences are situated on the upper levels to take advantage of passive solar energy.



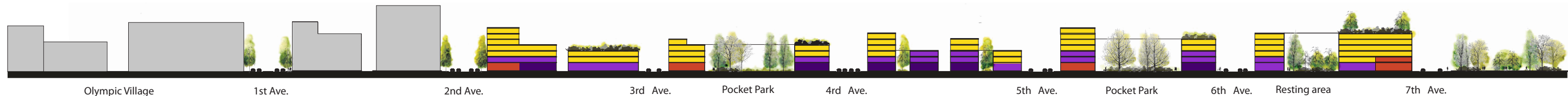
## Vancouver NORTH 6.3

TEAM MEMBER: Paula Livingstone

### Key Concepts

- Activate the Mount Pleasant Industrial Area through innovative mixed use opportunities. Light industrial programs are expanded while commercial and residential spaces are incorporated in an integrative way.
- A central green network is proposed to be the organizational spine of the project. A system of pocket parks and resting areas are interconnected through pedestrian paths and lane community gardens.
- Passive energy consumption is achieved by having building mass, height and siting be responsive to sun orientation and natural ventilation.

- |             |                |
|-------------|----------------|
| Commercial  | Light industry |
| Residential | Offices        |





**Activating Arbutus:** The Arbutus-King Edward junction with its irregular street-grid and landmark power station presents an opportunity for a gateway to the heart of the Arbutus Neighbourhood to be developed. For example, architecture and urban design responsive to the power station site's unique block configuration and history can sustain the site's landmark status. On the same site, there can be boutique crafts-shops, offices, housing, weekend markets and a public art-plaza like those on Granville Island. Most importantly, part of the railway that veers off Arbutus and goes through the power station site can become a pedestrian- and trams-only passage offering a car-free urban street experience.

However, this development will not be an isolated high-density site. All along Arbutus, arterial-fronting blocks will have widened sidewalks (through reclaimed car lanes) and 2-to-6 storeys mixed-use buildings forming an undulating streetwall. This exemplifies future arterial designs when car usage decreases by 80%. This change in land use can provide increased jobs and housing to foster a "complete community".<sup>1</sup> and a better public realm.

Qualitatively, increased street-level services and activities allow locals to trip chain as they commute to and fro their home and/or work along Arbutus. Socio-culturally, an active street offers more eyes-on-the-

street and makes it a place where one can dwell and build social, personal and cultural attachment. Moreover, mixed use corridors will become increasingly important as the population ages. With over 50% of the Arbutus Neighbourhood population already over 50 years-old<sup>2</sup>, nearby shops and on-grade accessible transport vehicles like streetcars prove necessary as physical mobility wanes.

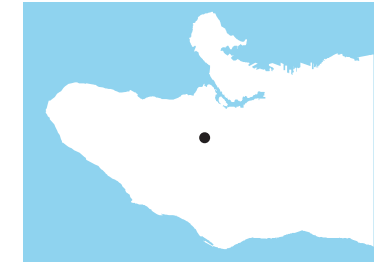
The overall objective is to create a pedestrian- and transit-oriented Arbutus corridor while including the unique histories and urban morphologies of each segment of the corridor, such as this junction, in future designs.

**Top (Looking South along the tracks):**

Traveling south along the tram tracks one enters the redeveloped power station site. Boutique art studios line the tracks. Moving on, the 1900m<sup>2</sup> art-park featuring sculpture using disused powerlines sits on the west. Mid-rise buildings with cafes and offices fronts onto the art-park, offering locals the opportunity to work closer to home.

**Bottom (Looking at Art-Park from Arbutus Street):**

Walking along Arbutus one encounters more ground-level activities like eateries, grocerers and services (i.e. banks, post offices and clinics). With these programs, Arbutus becomes more a high-street than a car thoroughfare. Also, on the Arbutus edge of the power station, glimpses of the newly created public art-park peer through.



Vancouver  
**NORTH**

6.3

TEAM MEMBER: Pat Chan

**Key Concepts**

- **Arbutus as an energy corridor** can become part of the area's collective identity. When excavating for tram tracks, district energy pipes running from the Southeast False Creek Energy Neighbourhood Utility can be laid for future and existing developments.
- **Power station as a landmark site** can house an energy museum showing how 'typical' neighbourhoods like Arbutus converted to green energy. The site can also house an art-plaza, artist studios, mixed use buildings that front both Arbutus and the art-park.
- **Arbutus as a pedestrian- and transit-oriented arterial** exemplifies future arterial designs when car usage decreases by 80%.
- **Urban realm for the aged** is important. Being able to walk and take transit to services gives seniors independence; hence raising their self-esteem.
- **Respecting heritage buildings** by repurposing some Shaughnessy houses for small offices, eateries and shops can be done without significantly altering the houses' architectural and historical integrity.



**Notes:**

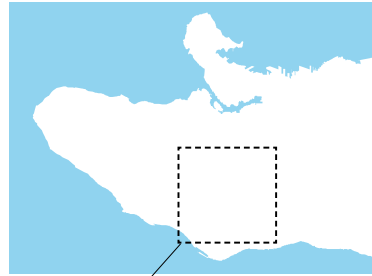
<sup>1</sup> City of Vancouver, *Vancouver 2020: A Bright Green Future*, p.24

<sup>2</sup> City of Vancouver, *City of Vancouver Statistics*, <http://gw.city.vancouver.bc.ca/commsvc/planning/census/2006/localareas/arbutus.pdf> (Accessed: October 17th 2009)



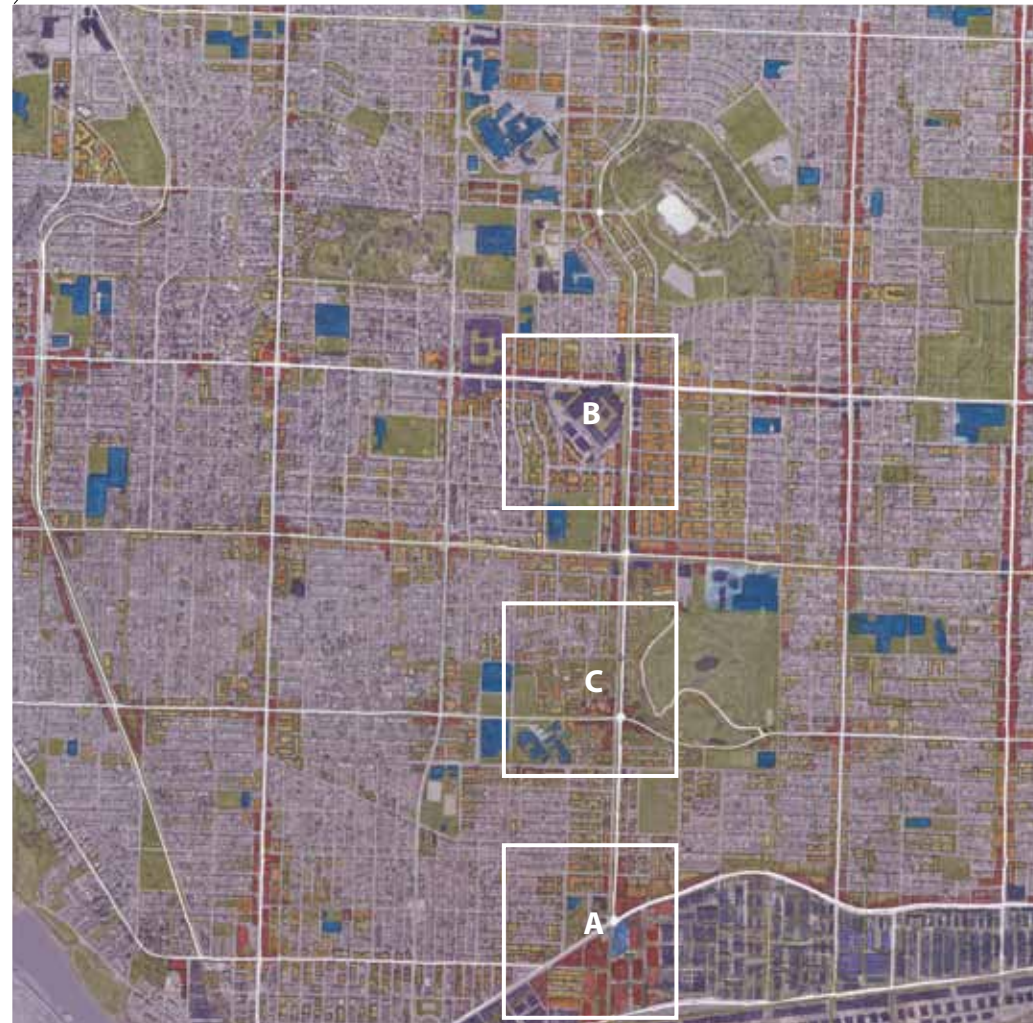
Commercial/Offices   Mid Density Residential  
Mechanicals/Parking   Low Density Residential



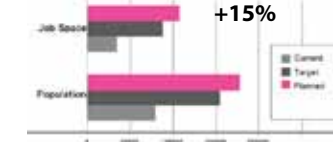


The south-central area is home to just under 80,000 people. It is framed by King Edward Avenue and the Fraser River to the north and south respectively, and Fraser and Arbutus Streets to the east and west. The planning grid is immediately obvious. It is expected that by the year 2050, the population in Vancouver will double; 25% of the urban population will be over the age of 65. Our design strategy requires that we

house and provide for job space for the increased population. This is achieved through intensifying along corridors and establishing mini nodes in neighbourhoods that service residents within walking distance. A reorganisation of the industrial precinct will provide for 50% of the job space. The balance is distributed throughout the grid. We must plan for a reduction in GHG emissions, and provide for adequate green space. Building



out from the central corridor of the grid has been at the base of our strategy. The Canada Line rapid transit system is the most significant city building move since the build-up by the baby boomers. A reinvigorated streetcar line supports the rapid transit investment. Green space is integral to the fabric of Vancouver; an interconnected green corridor knits communities to the greater city. Green infrastructure/open space  
Current: = 8.7ha  
Planned: +15 ha in public park/cemetery, park reclamation of public golf course, pocket parks,

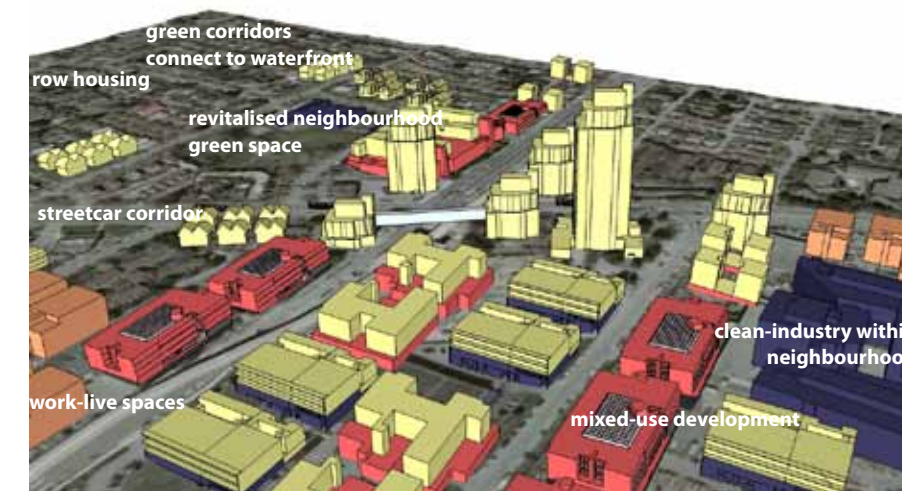


green ways, waterfront along river  
Transit:  
Current: Canada line along Cambie corridor to airport, bus routes on all major arteries  
New: + 2 stations on Cambie, streetcar network, reinvigorated Arbutus corridor.



*Below:*  
Building out from the central corridor achieves job space and increased residential density without sacrificing neighbourhood fabric.

Accommodating double the population is achieved with integration and investment at a neighbourhood scale – the city is adapted – not rebuilt.



Nicci Theroux

## vancouver SOUTH

6.4

TEAM MEMBERS: Jia Cheng, Cindy Hung, Nicci Theroux

### Key Concepts

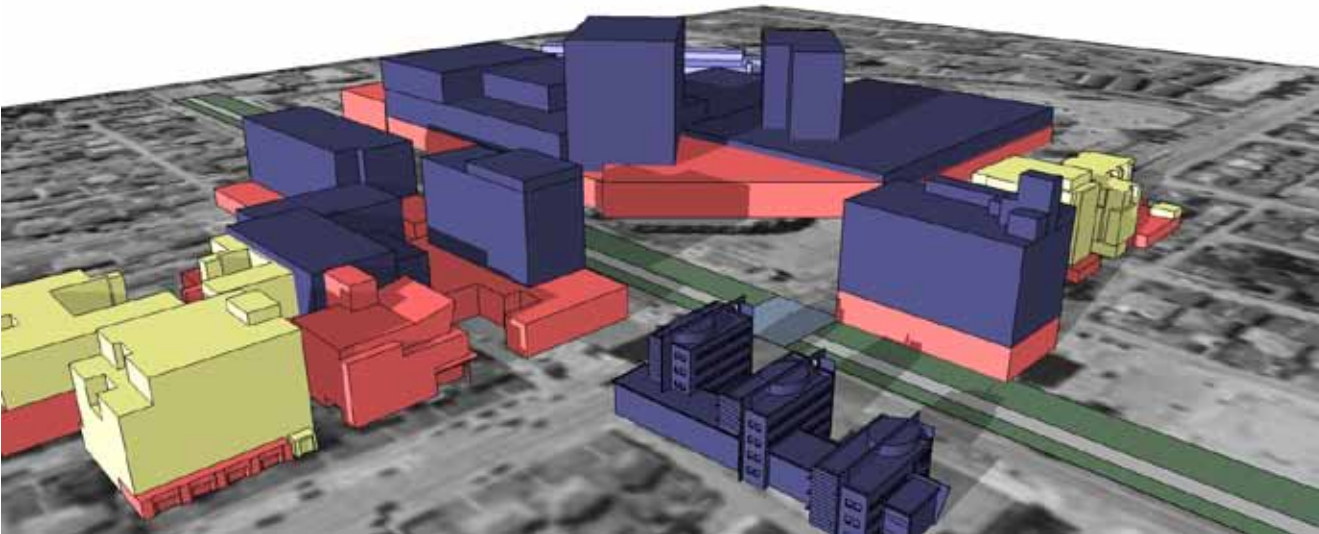
- Optimising the investment in skytrain transit along Cambie Corridor, reinvigorated streetcar grid, reactivation of Arbutus corridor;
- Linkage to community centres and schools, and interconnected network of green corridors;
- Everyday travel needs accommodated by walking, cycling or transit;
- Provide a range of affordable housing choices, and encourage gentle and invisible density while maintaining neighbourhood character;
- Ensure job space close to where people live, and revitalise existing industrial precinct along Fraser River with restored rail corridor that also utilises Arbutus corridor;
- Enhance access to public amenities in neighbourhoods with community scaled mixed-use development



*Below:*  
Oakridge Centre and planned high street along Cambie corridor will provide large number of retail jobs. Office towers near skytrain station will accommodate different type of office jobs.

Office building height steps down from 16 story tower in Oakridge Centre to around 12-10 stories around the intersection of 41 AVE and Cambie ST. The mixed use buildings are 8-6 story mid rise with 2 story retail at the base.

Green Cambie corridor by taking out 3 lane of traffic on the west side. Two lanes are planned to be green way for pedestrian and one lane is planned to accommodate biking.

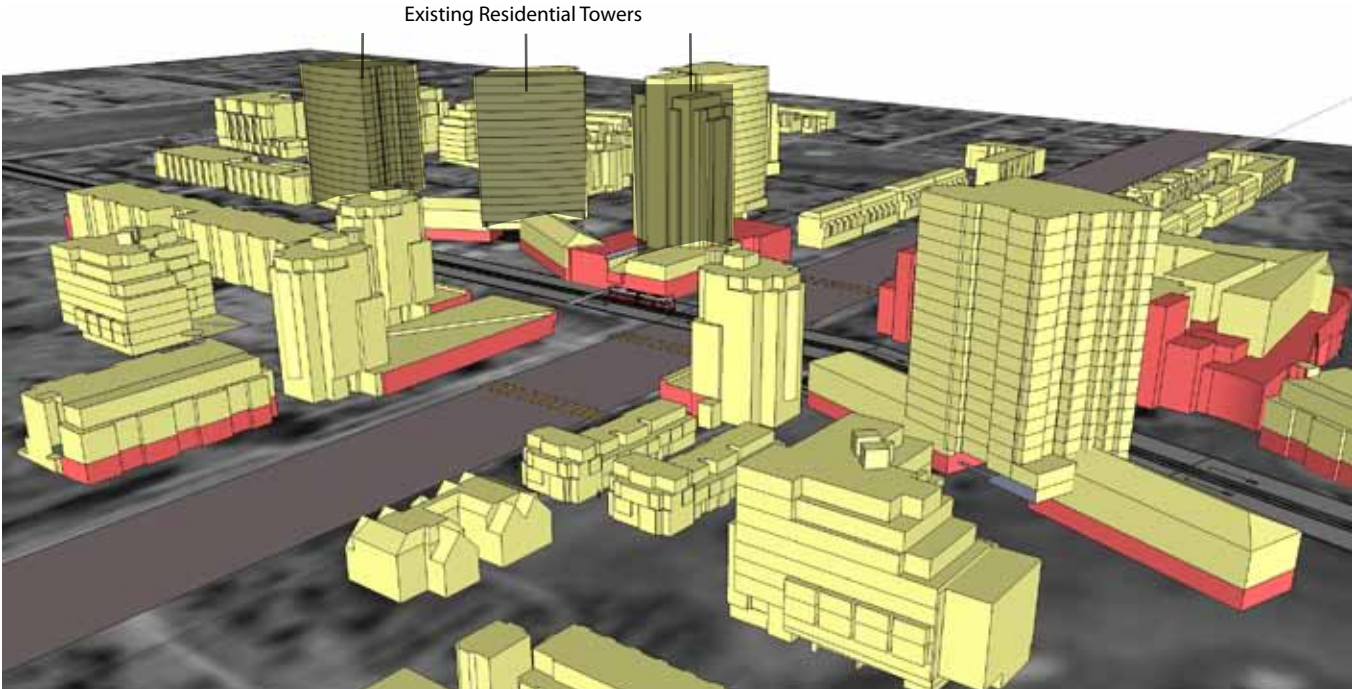
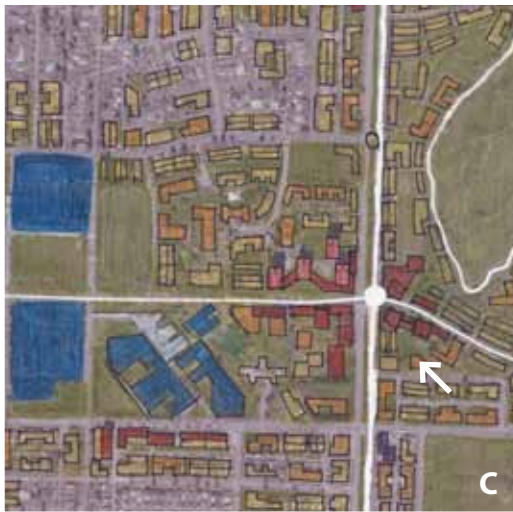


Jia Cheng

*Below:*  
Concentrate developments around major transit corridor -- skytrain on Cambie and tram on 57th, public amenities -- schools and medical center, and large green spaces.

Higher density housing types with mix-use commercial within walking distance, accomodating the dramatic increase of elderly residents and future young family.

Street designs focusing on place experience and pedestrian safty, like the residential square, bike lane and shorter distance street crossings.



Cindy Hung

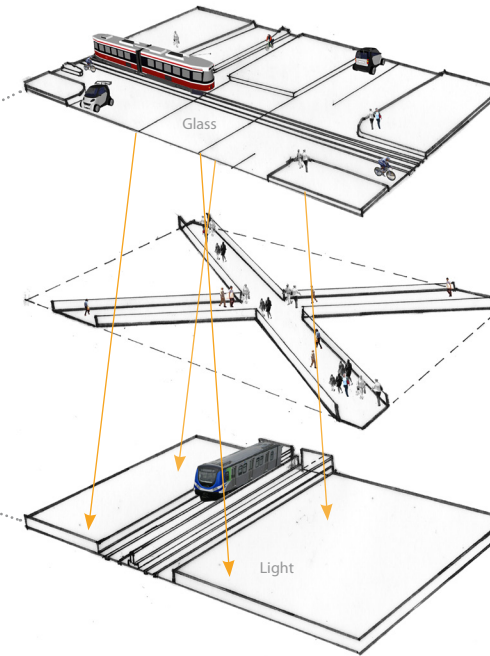
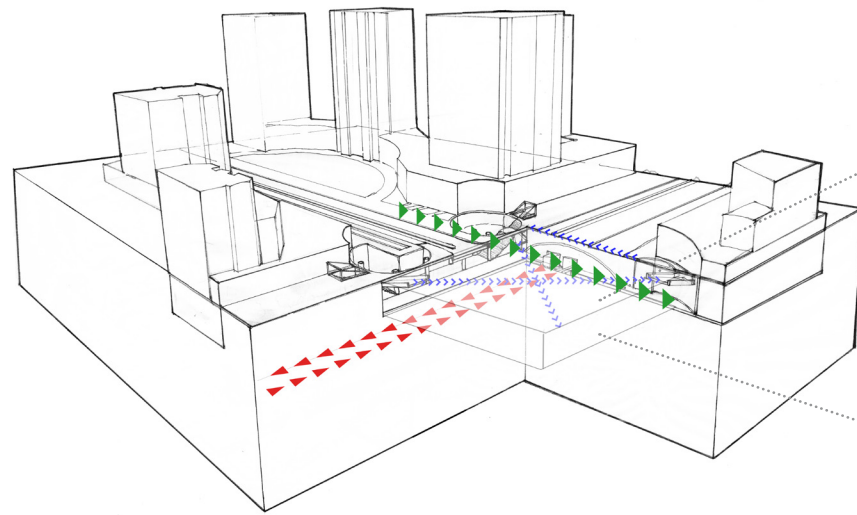


### Connected Green Ways and Green Spaces

Connecting the 57th Ave design with the new Cambie Green Way, creating continuous green corridors both North-South and East-West.

### Experiencing Transit

Our overall design concentrates developments around major transit corridors and major amenity nodes. . Therefore, this is a heavy duty node serving public transits (streetcar on 57th Ave and Cambie Canada Line), bikes, vehicles, and pedestrian. The purpose of the 3-level design is to direct the different traffic systems safely and to experience the transit systems in an evocative way. The on-street level has reduced the vehicle traffic by transforming 2 lanes of Cambie Street to bike lane and wider pedestrian sidewalk. The streetcar lanes and the bike lane going on 57th also



#### On-Street Level

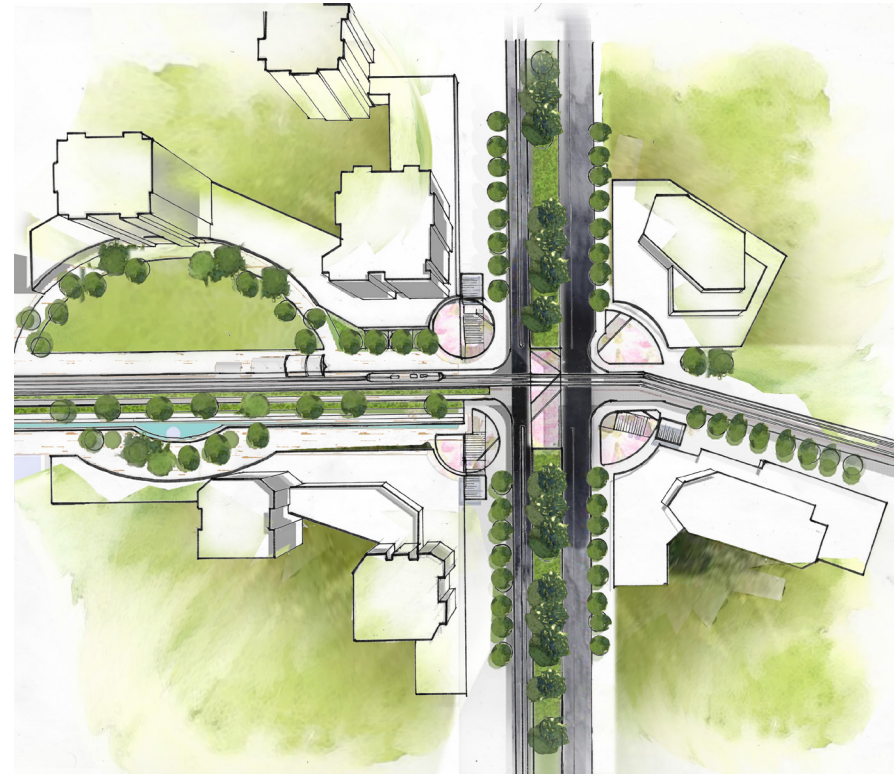
Mainly Pedestrian traffic, streetcars, bikes and less vehicles.

#### Mid Level

Designed for pedestrian crossing diagonally, at the same time experience transit flows from above and below.

#### Skytrain Level

The bottom level, but with light infiltrating from the strengthen glass on street level.



have unique paving texture to indicate the nature of a slower traffic zone. Less vehicle traffic and shorter pedestrian crossings are more suitable to accommodate elderly and families. In addition, there is also a Mid-level crossing designed between the on-street level and bottom skytrain level designated for pedestrian. The Mid-level crossing not only makes crossings easier and safer, it allows light to infiltrate from ground level down to the skytrain level and generates a distinct pedestrians experience, allowing transit flows to be visible from above and below.

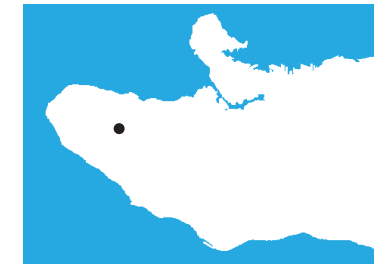
### Pedestrian Friendly Mix-use Residential

The Cambie and 57th node is an integration of major public transit elements and desirable urban amenities such as schools, parks, community center and hospital. The node satisfies demands for higher density residential developments and provides destination commercial developments within walking distance. Streetscape designs such as safe intersection, green boulevards, pocket squares, daylighted stormwater channels, planters, seatings and unique pavements substantially encourage walking.



#### Street Level Perspective:

Mix-use residential, different pavements, skytrain stations and streetcar view.



Vancouver  
**SOUTH**

6.4

TEAM MEMBERS: Cindy Hung

### Key Concepts

#### Cambie and 57th --Dogwood Green+Transit+ Pedestrian

- Connecting the 57th Ave design with the new Cambie Green Way, creating continuous green corridors both North-South and East-West.
- Developments concentrate around major transit corridors. 3 Level design accommodates different traffic systems flowing on the intersection: the on-street vehicles, streetcars, bikes, and pedestrians, the mid-level pedestrian crossing and the bottom skytrain line.
- Streetscape designs such as safe intersection, green boulevards, bike lanes, pocket squares, daylighted stormwater channels, planters, seatings and pavements encourage walking.





Aerial View of Oakridge Node

**Automobile Lane**

Three automobile traffic lanes remain on Cambie ST. The middle one is alternate based on traffic need.

**Greenway**

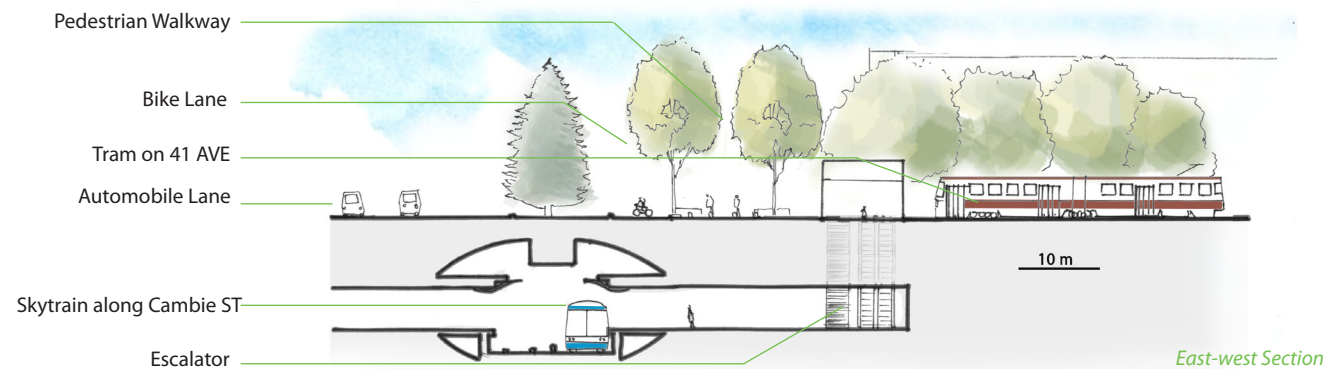
Two previous automobile lanes are converted to pedestrian walkway and one lane is converted to a two-way bike lane.

**Station**

The skytrain station has entrances on streets and to the plaza. The tram station sits adjacent to it.

**Plaza**

The 0.4 acre plaza is sunken and the edges are framed by stairs and seatings. Plenty of trees cover the edges, making it permeable and screening the plaza from the busy streets.



East-west Section



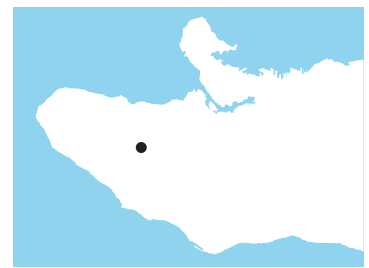
Cambie Greenway Perspective

Two rows of tall vertical street trees stand on both side of the walkway, casting down strip of shadows on the road and benches. The flowers in the planter are blooming and the wind carries the smell of fresh bakery around the corner of the plaza. On a good sunny day, people come out of the office and enjoy their lunch break on the benches. At rushing hour the walkway is busy and full of passers-by who rushed to and from the station. For rest of the day the street is calm, occupying by strollers, joggers, bikers and dog walkers.



Oakridge Plaza Perspective

The Oakridge Plaza is a vibrant gathering space both for everyday activities and community events. The east and north edges are interlaced with seating and stairs and the west and south edges are framed by storefronts. In the middle four tall lamp poles mark the stage for street artists and performers. During weekends, Oakridge community center makes use of the plaza for local markets, art exhibition and community performance.



Vancouver  
**SOUTH**

6.4

TEAM MEMBERS: Jia Cheng

**Key Concepts**

Oakridge Green Node  
Motion+Exchange+Gather

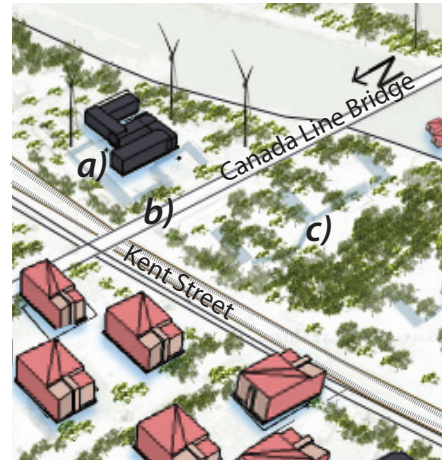
The three major elements for Oakridge node are the Cambie Greenway, the transit station and the Oakridge plaza.

- **Green Mobility:** Cambie Greenway provides safer and more comfortable walking/biking environment for people.
- **Green Jobs:** New jobs are distributed along with the residential developments on Cambie and 41 and Oakridge is an important living/working node. The station serves as an important exchange point for public transit.
- **Green Community:** The plaza is a public space for people to gather and bond. Making meaningful spaces is important for a greener community.





a)



b)



*Far left: Linear waterfront park with night and day programming, allow for seasonal flooding of Fraser River*

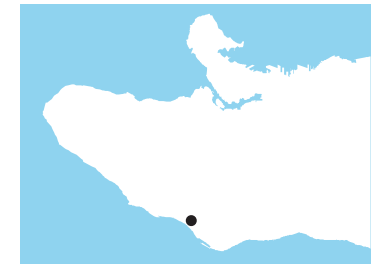
*Above: plan of South Cambie at River edge, waterfront park, mixed-use and industrial precinct co-habit the waterfront*

*Upper right: reclaim waterfront as public realm under bridge and along river's edge*

*Lower right: Urban wetlands connect to green infrastructure with a thick band that provides rainwater and stormwater treatment for industrial and mixed use community*



c)



Vancouver  
**SOUTH**

6.4

TEAM MEMBER: Nicci Theroux

### Key Concepts

Waterfront reclaimed and integrated into public realm

- provide access to nature with connected network of natural areas and parks along Fraser River that are accessible by walking, cycling and public transit

Environmental network of green infrastructure connects city grid to urban wetlands at river's edge

- collect stormwater from mixed use and industrial area for infiltration prior to flow into Fraser River
- multi-modal greenway supports habitat and stormwater management, reconnection of interurban rail connects Vancouver to lower mainland

Linear waterfront park provides an opportunity for all day programming, and connects people with ephemeral qualities of Fraser River and the natural floodplain landscape

### Conventions:

#### Urban wetland



#### Ephemeral landscape



#### Recreation



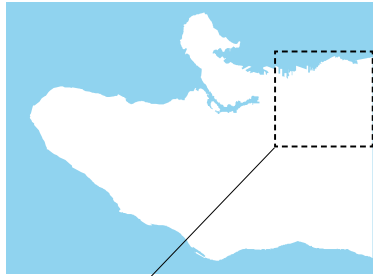
#### Flood-adapted architecture



#### Edge access







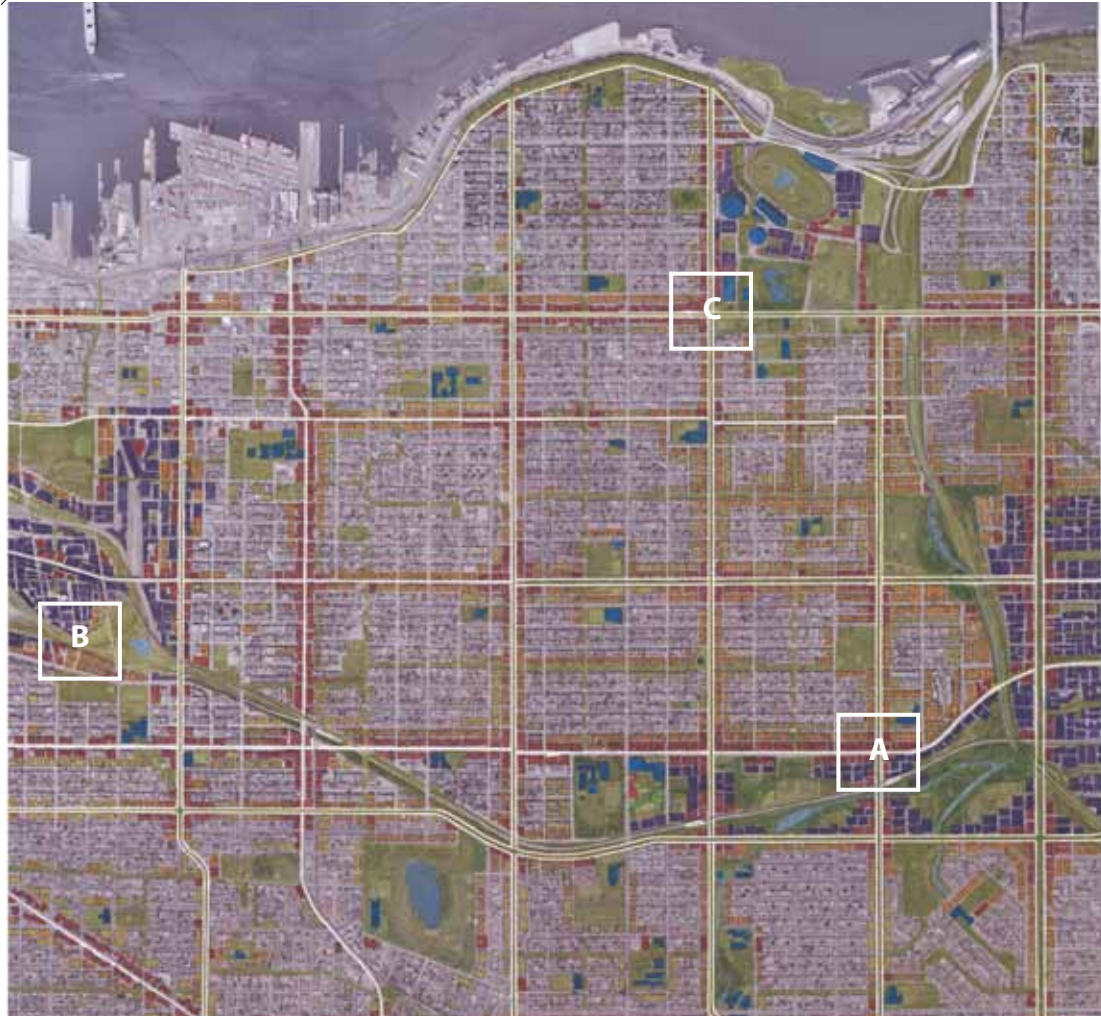
Vancouver Northeast (VNE) is comprised of the following communities: Hastings Sunrise, Grandview Woodland, Strathcona, Downtown Eastside, Mt. Pleasant, Kensington/Cedar Cottage and Collingwood/Renfrew. The current population of VNE is 102,302 people, who live in a mixture single-family homes and 3-4 story apartment buildings. The

population of this area is projected to increase almost 80% to 183,672 people by 2050. The proposed plan for VNE increases housing density along streetcar corridors, adjacent to green spaces, around schools and community centres. New housing types include 4 storey mixed use buildings, 4-6 storey apartments, townhomes, rowhouses and

laneway homes.

VNE currently provides 34, 211 jobs. In order to meet the projected job increase of nearly 190% to 99,511, three new job areas have been created. Each are designed to respond to the projected population needs and the existing character of the diverse communities within VNE.

Currently open space in VNE is scattered, providing little connectivity for people, wildlife or water. The proposed green space plan creates a network of open space that connects the larger neighborhoods with nodes in the Flats, Trout Lake, Still Creek, and the PNE. Throughout the VNE, a finer scale of green space connects neighborhood parks, schools, community centers and green streets.



*Below::*  
This neighbourhood is densified around the streetcar routes and skytrain stops. 4-6 storey mixed use buildings are located along the corridors, 4 storey apartments and townhomes occupy the mid blocks, and industrial buildings are located along the rail and skytrain line for ease of goods movement.



Rebecca Colter

**vancouver**  
**NORTHEAST**

6.5

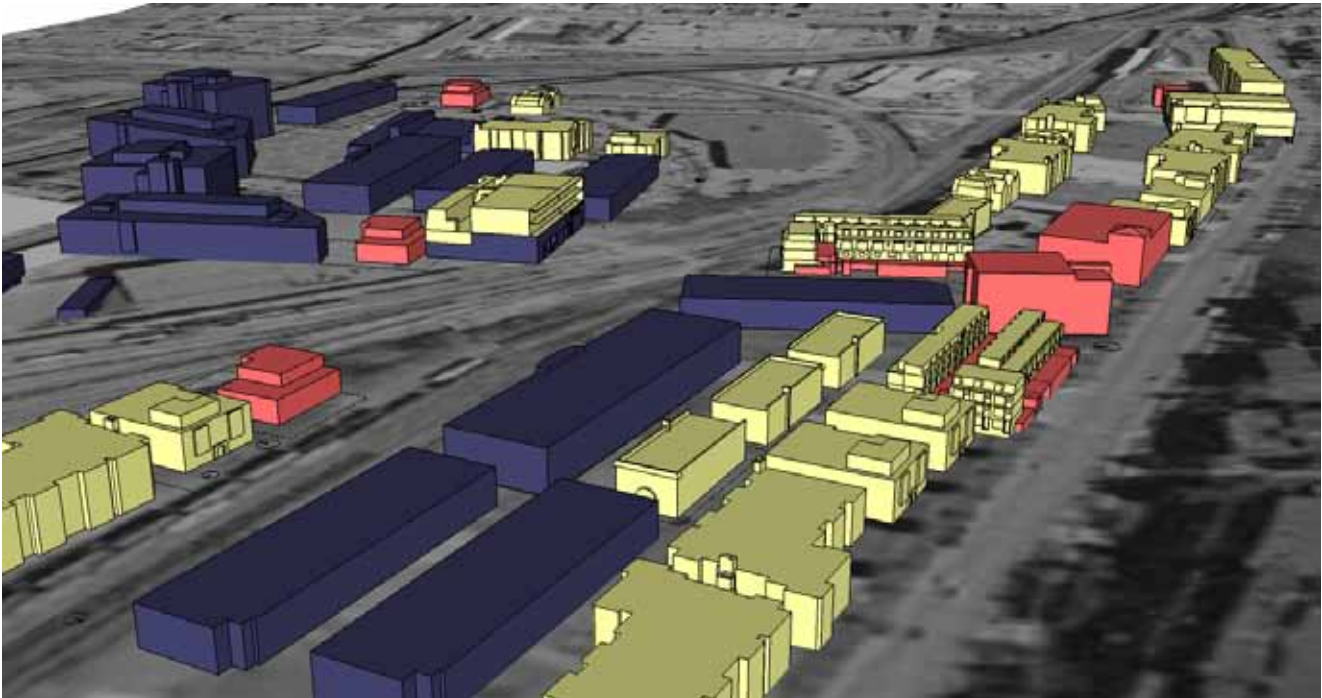
*TEAM MEMBERS:* Rebecca Colter, Margaret Soulstein, Peiqi Wang

**Key Concepts**

- Bury the freeway and create an open space legacy
- Create pedestrian and transit friendly green boulevards
- Densify industrial areas to increase job opportunities and open spaces
- 'Green' the skytrain route
- Daylight historical streams where appropriate

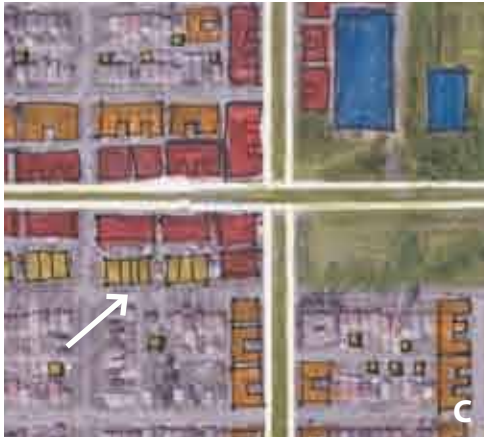


*Below:*  
The exististing industrial nature of this area will be strengthened by integrating residential and mixed uses into the area, including affordable housing. New commercial and artists space will awaken the area by bringing activities beyond business hours. The green network is the backbone of this space, residents have easy access to this open space and others in the VNE.



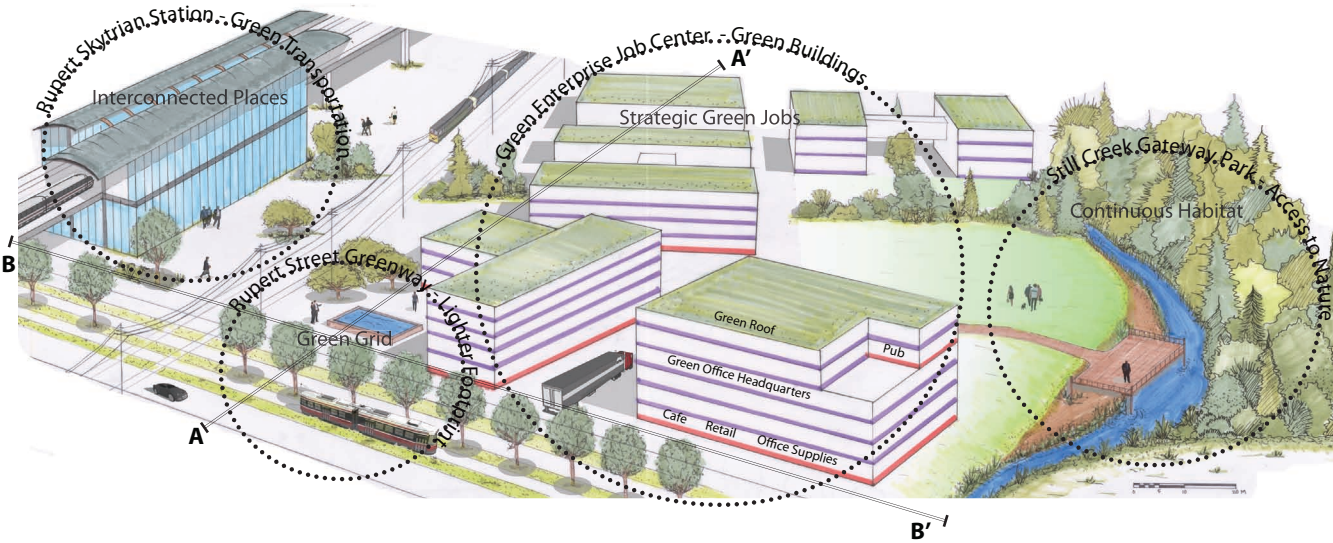
Margaret Soulstein

*Below:*  
This neighbourhood is densified around the intersection of two green boulevards, Hastings and Renfrew. Along the boulevards are 4-6 storey mixed use buildings, 4 storey apartments, rowhouses and laneway homes located inside the blocks. The PNE block is also densified with mixed use buildings of retail and entertainment related jobs.



Peiqi Wang

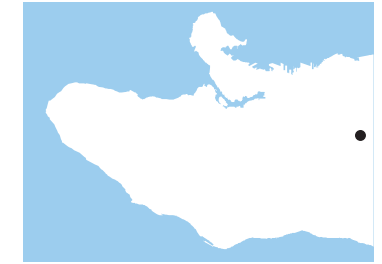




#### Left

Known as the Still Creek Gateway Park, this job centre is located adjacent to the Rupert Skytrain stop between Broadway Avenue and Grandview Highway. As a local solution to the broader master plan objectives, this area serves as an interconnected place along the green grid with strategic green jobs and a portion of continuous habitat. With green transportation networks, a lighter footprint, green buildings and access to nature, this office park is an example of Vancouver's success as the greenest city by 2050.

The mixed use nature of this area provides opportunities for various users. Not only will the park serve the employees who work here, it may also attract retail customers, restaurant patrons, those utilizing the larger green network, and neighbourhood dog walkers.



#### Vancouver

### NORTHEAST

6.6

TEAM MEMBERS: Rebecca Colter

#### Key Concepts

- The Rupert skytrain stop will service Vancouver residents and suburban dwellers, creating an interconnected place along a green transportation network
- This strategic job center will likely serve as a hub for green enterprise companies
- The revived streetcar line will run along the Rupert Street greenway, serving neighbourhood residents and connecting the green grid through the city
- With the complete revival of Still Creek, this park will serve as a piece of continuous habitat through east Vancouver



#### Left

This section is a schematic representation of the green buildings and the programming within these spaces. Basements are utilized as storage and parking areas, first floors are zoned for commercial use, and floors above are dedicated to office space. Green product research and development are likely practices in these offices.



#### Left

This elevation represents the specific character of the built elements. The buildings are explicit references to traditional Pacific northwest architecture style: post and beam construction using native Western Red Cedar.

As determined in chapter two, 4-6 storey wood framed buildings are the most energy efficient structures. The 'green' status of these buildings is achieved with this common frame, green roofs, a connection to a district energy system and other energy smart techniques.



Residential



Repair



Distribution



Production

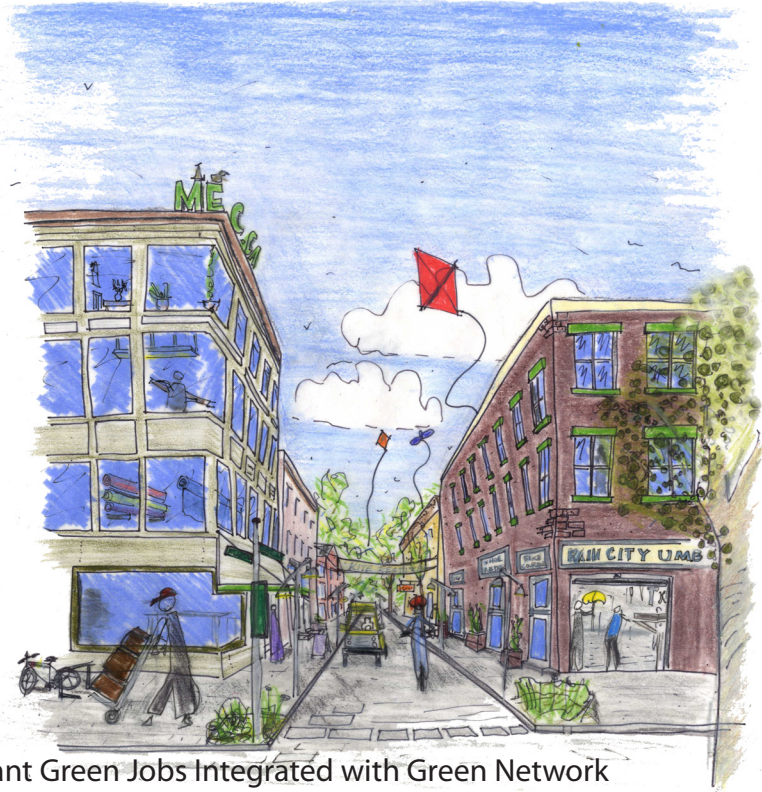


Traditionally industrial districts are removed from the rest of the city, including residential areas, parks and other naturalized areas. The pattern of this new fabric also incorporates residential units into some of the industrial buildings. Vancouver well understands and benefits from the advantages of residential mixed with commercial land uses. In order to create whole communities the next step is to integrate industrial and residential.

Industrial and Residential Building Section



Green Jobs Integrated with Green Network Elevation



Vibrant Green Jobs Integrated with Green Network

This industrial area is situated along the western side of the green space ring proposed for Vancouver Northeast. One has to travel no more than a 5-minute walk to access the major park network.

However, even along the streets and buildings trees and plantings are integrated, which provide simpler, cheaper and greener methods of handling stormwater management, habitat and public amenity.

By integrating a range of industrial uses, with residential and then situating this district close to commercial mixed use and parks this area will maintain a vibrant atmosphere once the 5 o'clock whistle has blown.

Vancouver  
NORTHEAST

6.1

TEAM MEMBER: Margaret M. Soulstein

Key Concepts

- Integrated Industrial and Residential Land Use
- Transparency of the City at Work
- Green Network woven with Green Jobs

On the eastern reaches of the False Creek flats, just west of Clark Drive, where Strathcona and Mt. Pleasant meet a new fabric of the city is being woven. This fabric is rich with green jobs, which are critical in order to meet the employment projections of 2050. What is new about this fabric is that it integrates a diversity of industrial jobs into one area and into one building. This area is designed to attract companies who will offer light industrial Production, Distribution and Repair (PDR) services. By localizing PDR this will significantly decrease the reliance on fu to ship goods from elsewhere and thereby reduce GHG emissions. Furthermore, by designing an industrial complex with the intent on attracting a range of businesses, there is an inherent flexibility that will allow the area to adapt to future uses.





**Top :**  
Views 1: Renaturalizing urban intersections (Hastings & Refrew) and creating a pedestrianized open space. Instead of a large area of pavement, pathways and sidewalks are organized in a human-scale. Street trees and landscape are planted to bring nature back to this urban intersection, creating a warm and welcoming entrance environment. With an 80% decrease of car usage, the parking lots across street is reclaimed for a pocket park, greening the intersection, and providing a everyday nature to the local residents. Streetcars are reintroduced to the arterial complemented by other modes of transient, increasing the accessibility and creating a unique pedestrian-oriented place.

**Bottom:**  
Existing views: in contrast, the existing intersection at Hasting and Refrew is completely automobile-dependent, discouraging pedestrian activities.



**Top :**  
Views 2: Reclaiming the streets for pedestrians. Convenient stores, cafes, restaurants, and such daily services are provided at three corners around the intersection, serving both the visitors to PNE and the local residents. With less traffic on narrowed streets, streets become place where people would gather and socialize.

**Middle:**  
Existing views: Streets are dominated by cars, and not pedestrian activities on the sidewalks.

**Bottom:**  
Plan of the intersection of Hastings and Refrew: entrance palaza to PNE, neighborhood park, 4-6 storey mixed use buildings served by streetcar arterials.



## Vancouver NORTHEAST

6.5

TEAM MEMBERS: Peiqi Wang

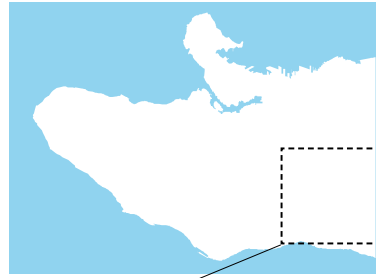
### Key Concepts

**Green Mobility:**  
streetcar system is reintroduced into the arterials of Hastings and Refrew, complemented by multiple modes of public transportation, increasing accessibility to the PNE and neighboring communities.

**Revitalization of Open Spaces:**  
arterial streets, existing parking lots, and palaza are revitalized as major urban green spaces at this intersection, creating a green entrance to the PNE, and providing local residents with a everyday nature.

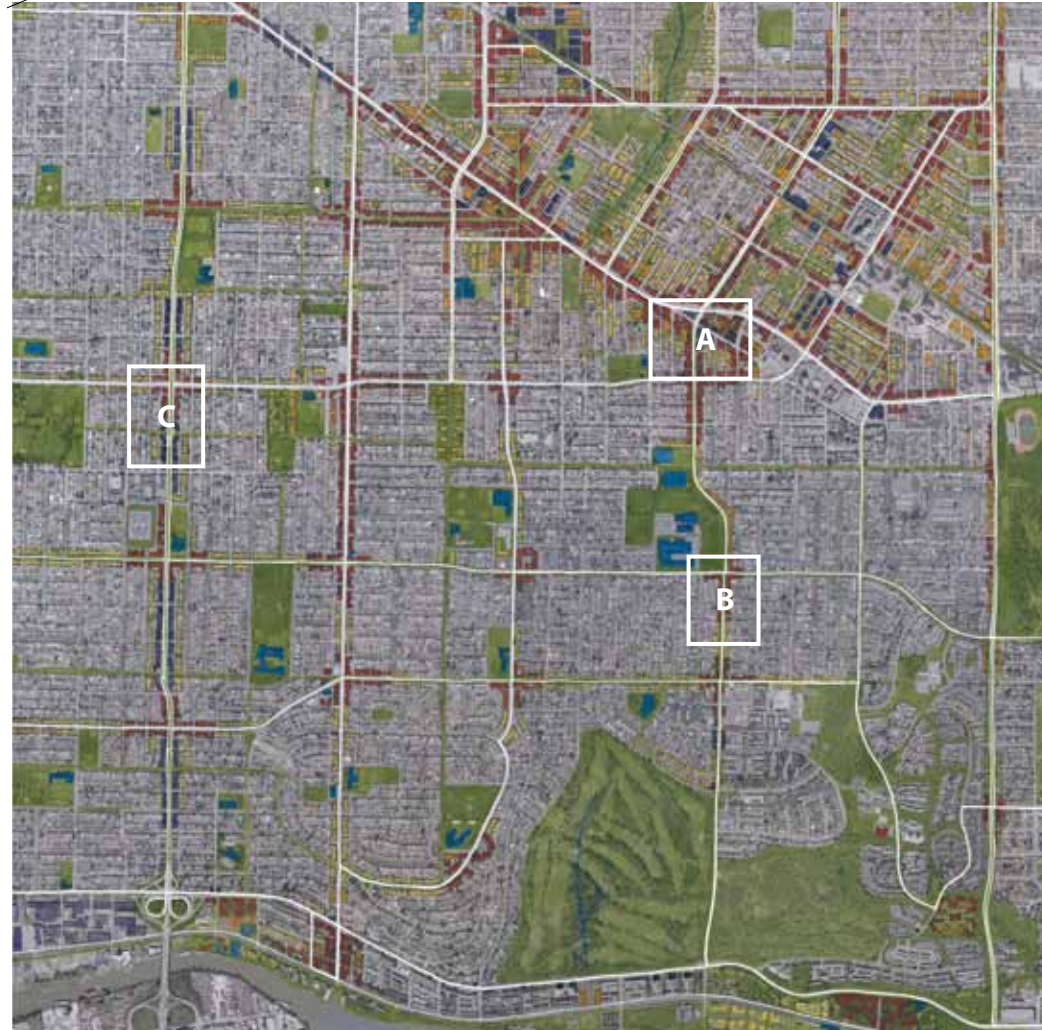
**Pedestrianized Places:**  
Streets and palaza are restored to a human scale. Everyday services provided by the mix-use buildings around the intersection encourage communication and social interaction on the streets, and green boulevards produce an pleasant environment for these activities.





For 2050, Southeast Vancouver foresees an increase of 82,000 residents (63% increase from current population) and increase of 76,000 jobs. To accommodate this dramatic increase of residents and workers, we have identified catalysts in existing anchors such as SE Fraserland and Joyce village, as well as unrealized potentials along corridors such as Kingsway, Knight, Victoria, and Kerr.

To enable a vibrant neighbourhood where live, work, play are located within a 5 minutes walking distance, proposed land use and density are concentrated along corridors, graduating changing to connect with the existing single-story dwelling fabric. Within 5 minutes, residents can access the streetcar system running along major arterials, further



connecting each neighbourhoods to larger wholes as demonstrated by the circular route connecting multiple communities along Kingsway to surrounding skytrain stations. To balance the needs of both region and neighbourhood, a new light industrial-commercial typology is introduced noticeably along Knight and Kingsway.

By relating green spaces across our site, the proposal has formed a shifted grid of green infrastructures running parallel to major arterials (and occasionally on arterials). This provides both an ecological framework and alternate route for bikes and pedestrians accessing schools / amenities. Keeping intact larger parcel of open space also provide opportunity to reinstate streams that were previously lost.



*Super-connectivity enables liveable density:*  
The area between Kingsway and the Skytrain line will be a transit mega-node. A streetcar loop connects the parallel transit corridors of the Skytrain Expo line and a dedicated-lane interurban-capable light rail line on Kingsway.

With transit options available in every direction, cars need very little space. A fabric of 4-6 story buildings just off the arterials provide density without crowding. Lanes flex as space for urban agriculture, greenswards or live-work studios.



Niall MacRae

## vancouver SOUTHEAST

6.6

*TEAM MEMBERS:* Neda Roohnia, Niall Macrae, and Mary Wong

### Key Concepts

- Enable 5-min city through close proximity of live, work, play
- Re-introduce and create streetcars routes to connect neighbouring communities
- Introduce a new, light, flexible industrial-commercial typology
- Create ecological and pedestrian corridors connecting schools and parks, forming the 'alternate grid'
- Daylight historical streams in large, intact green spaces

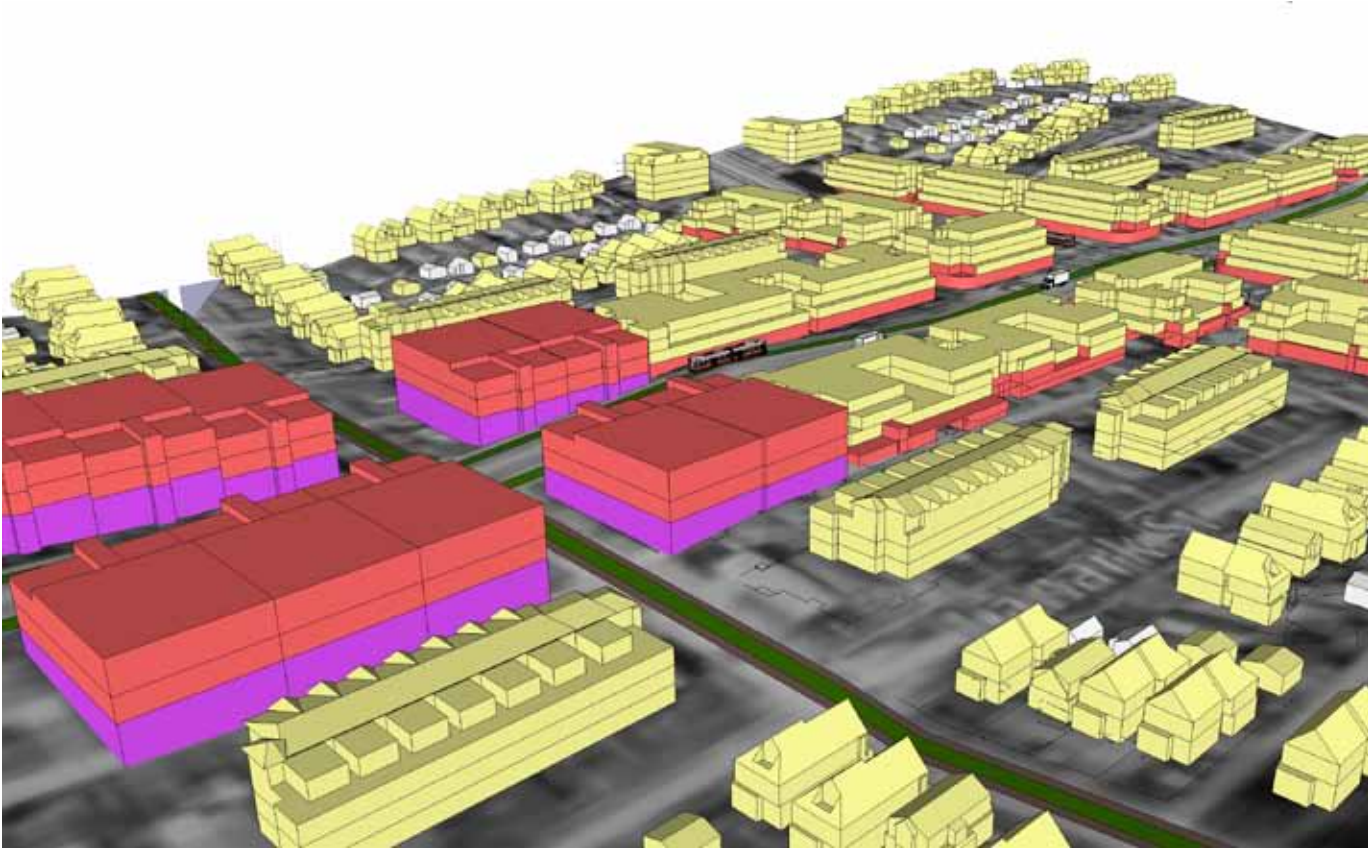


*Below:*  
In this neighborhood mixed use buildings are located along the corridor and residential occupy the mid blocks. The intention was also to keep a hierarchy between the mid-rised and lower buildings. This pattern of land use contributes to create both public (along the corridor) and private spaces for residents. The neighborhood was designed based on considering different land uses, hierarchy between public and private areas, spaces in between the buildings and also creating intimate environment for both public and residents in the neighborhood.



Neda Roohnia

*Below:*  
Green infrastructure is incorporated into streetcar tracks for infiltration and visual qualities. Green corridors for bikes and pedestrians connects midblock between schools and parks. These corridors cross major arterials like Knight and/or parallel to another, such as 41st avenue. 40 % of the site's job increase is located along Knight corridor where a new typology services this regional and neighbourhood corridor. This light, flexible industrial-commercial building includes a first floor with double heighted ceiling for flexible programming, topped with two stories of offices. This is supported by a 4-stories residential building, providing live-work opportunity.



Mary Wong

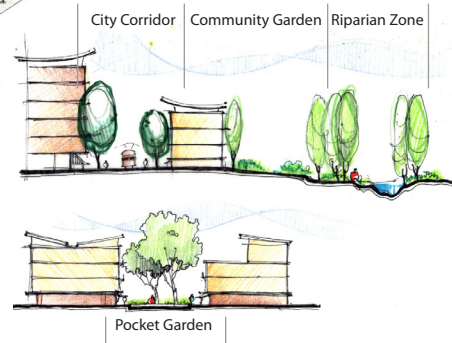




Bird's eye perspective

This site is located between Kingsway St, Earls St, Slocan St and Vannes Ave. The intervention is based on daylighting the buried stream. The concept of the design is the integration of the riparian zone and the city grid which creates landscapes with different qualities. The intention in this practice was to highlight these different characteristics.

For example the southern part of the site which is exposed to Kingsway, has more urban character compared to the central parts which expresses more of an Olmsted style landscape, both parts provide active public realms. The same pattern is followed along the green corridors which connect the urban corridors to the stream on both sides.



The section on top demonstrates three major types of landscape along the green corridors; a section of the green street, the community gardens, and the stream and riparian zone. The other section demonstrates pocket gardens in between the building blocks.



One of the key points in this design is stormwater management. The water runoff is kept on the surface, drains to the two open bio swales parallel to the stream. Two parkways are designed along these bio swales to display movement of people and water together. With this approach, the design meets the target of improving the habitat value of the site as well as the public realm.

Other design considerations include creating open spaces and pocket gardens in between the building blocks, avoiding solid continuous walls along the corridors, and interconnecting these small gardens and other natural features to the riparian zone.



View to the community garden and riparian zone



## Vancouver SOUTHEAST

6.6

TEAM MEMBERS: Neda Roohnia

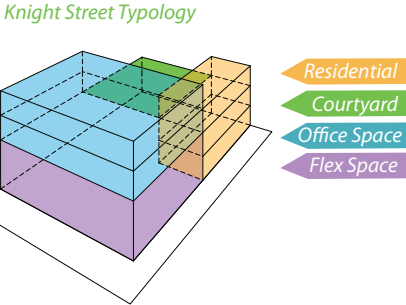
### Key Concepts

- Interconnection between the green spots and the stream riparian zone.
- Movement of people and water.
- Highlighting different qualities of the landscapes in the site.
- Creating a gradient of public and semi public open spaces along the corridors.

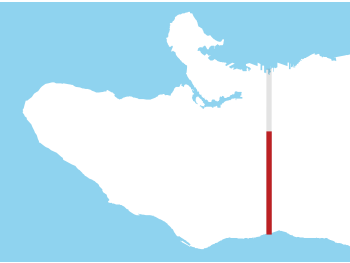


**Production, Distribution, Repair (-PDR) Typology**  
 Adaptability is the key to the future, and flexible features such as high ceilings and generous floor space will cater to a variety of users. This may include food wholesalers, fashion manufacturers, building material suppliers, and gallery-studios. Topped by two stories of office space, sided by 2 residential units, and built with underground parking, the collective typology makes a gradual transition to the existing residential fabric.

**Mid-block Bikeway**  
 Many of Vancouver's parks and schools can be accessed by mid-block transects. These strategic corridors accommodate green transportation for bicycles and pedestrians.



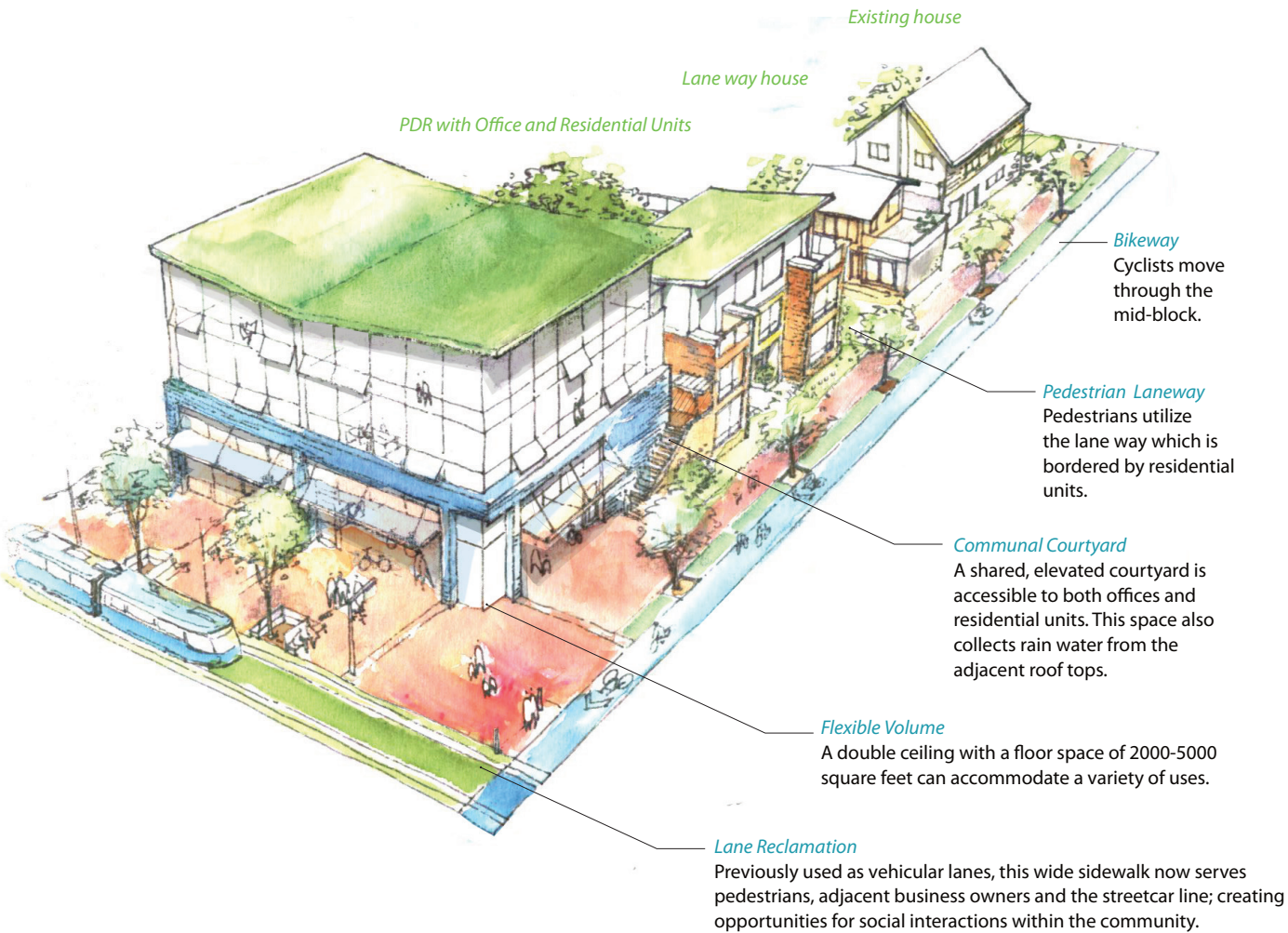
**Below**  
 (Top) Defined by residential fronts on either side, the notion of the traditional back lane is revisited. This back lane is prioritized for pedestrians with limited vehicle access, those travelling a short distance to an underground parkade. (Bottom) With a widened sidewalk and permeable front, the community will easily access the local businesses, fostering a place of social exchange.



Back lane with residential fronting



Social scene along Knight corridor



## Vancouver SOUTHEAST

6.6

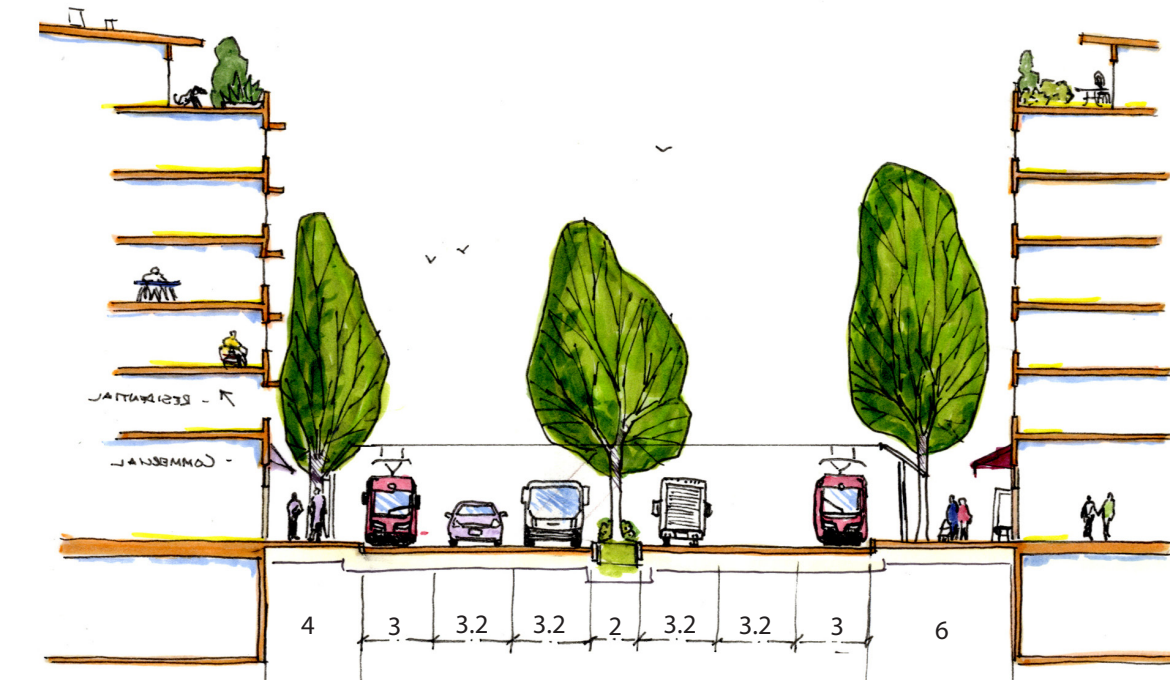
TEAM MEMBER: Mary Wong

### Built for Flexibility

Knight street is an arterial connecting two major ports. This corridor accommodates light industrial use with office space and residential units:

- Knight street is connected to the larger network of greenways that provide pedestrian and bicycle access to schools and parks.
- As Vancouver's economy shifts from resource management to knowledge based, the need for adaptable spaces becomes a priority. This design proposes innovative and flexible green job facilities.
- By enabling local production and short delivery distances, Knight Street is a local solution to the larger goal of reducing our GHG emissions.



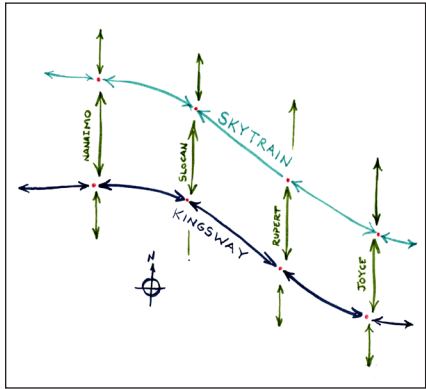


*Left: Kingsway at Rupert*

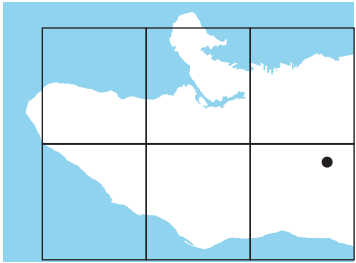
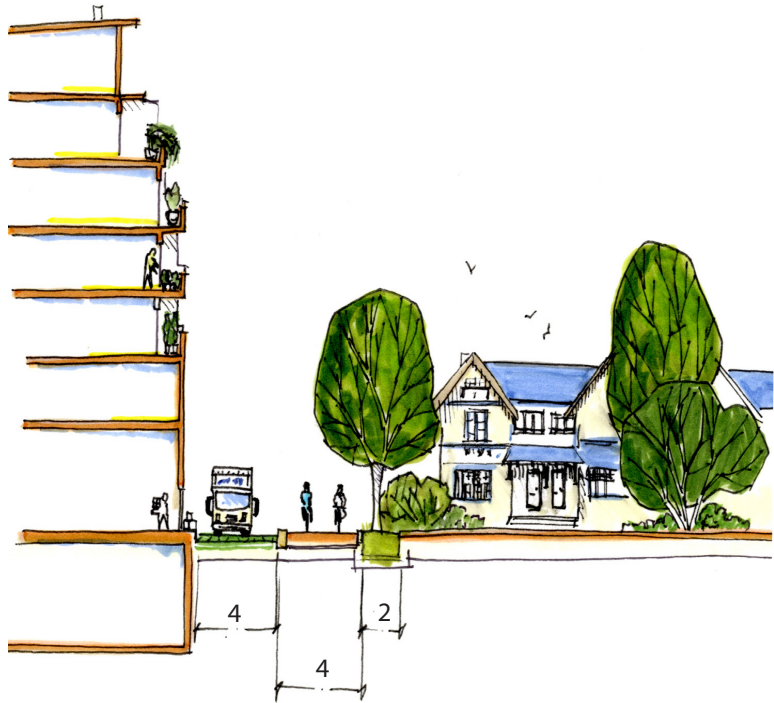
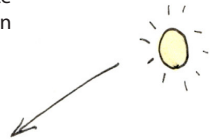
The flatiron shape of the PDR and live-work space at Kingsway and Rupert announces the vitality of the Neighborhood and its high street. This is the new Kingsway, greener vibrant and mode-flexible.

*Left: Kingsway at Killarney*

Kingsway, still for cars but without brutal car infrastructure. Green medians, street trees and dedicated streetcar lanes softens the concrete jungle up for pedestrians. Lanes gain a little width to accommodate street trees and bike paths. Rowhouse with mews that open onto these lanes are prime real estate for cyclist and pedestrian the use the green network on a daily basis.



*Above: Parallel circuits and points of contact*



Vancouver  
**SOUTHEAST**  
Kingsway at Kerr

6.6

Niall MacRae

**Key Concepts**

**Kingsway becomes a satellite urban core. Jobs are in easy reach of the Skytrain and streetcar systems. Neighborhoods are walkable, urbane and intimate all at the same time.**

The potential for transit and significant increases in density along the Kingsway corridor will lead to big growth, vibrant communities, and transit-fostered urban amenities. The key is the parallel people-moving arterials and the connections between them. Joyce, Rupert, Slokan and Naimo make the parallel circuit happen. Where they meet one arterial or the other, urban form synergies start to happen.

On Kingsway, this takes the form of big-city-like high streets. And around them PDR industrial and live-work opportunities exist along side or within the mixed-use high streets. With Kingsway itself dedicated to transit and transportation, the lanes to the south become alternative green arterials for bike and pedestrian oriented lifestyles.