

Supplemental materials are presented as separate appendices to this document.

1. **2015 Dockside Green Plan Set**
2. **2015 Development Parcels**
3. **Sun-Shade Study**
4. **Dockside Green Parking Study 2015**
5. **Dockside Green Traffic Demand Management Study 2015**
6. **Dockside Green Traffic Impact Assessment Study 2015**
7. **BETA at Dockside Green Parking Study 2015**
8. **Dockside Green's OCP Placemaking Review**
9. **Certificate of Compliance from the Ministry of Environment
for Dockside Green**

SUPPLEMENTAL MATERIALS

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Client

Dockside Green Limited

Architecture/Urban Design

HCMA Architecture + Design

Landscape Architecture/Urban Design

PWL Partnership Landscape Architects

Urban Planning

Ian Scott Planning Services

Public Engagement

Public Assembly

Sustainability

Healthy Green Building Consultants Ltd

Code Consultant

LMDG Building Code Consultants Ltd

Transportation Planning

Boulevard Transportation

Civil Engineering

Kerr Wood Leidal

Geotechnical Engineering

Ryzuk Geotechnic

Surveying

Focus Engineering

Market Analysis

Coriolis Consulting

ACKNOWLEDGMENTS



DOCKSIDE **GREEN**

www.docksidegreen.com



Mike Wilson
Senior Urban Design Planner
City of Victoria

May 19th, 2015

RE: Alternative Use for \$400,000 Sustainability Centre Contribution

In response to the City's request, Dockside Green has prepared this letter to provide additional details regarding the efforts expended by Dockside Green over the last eight years on the Sustainability Centre concept and further, why the City and Dockside Green should agree to allocate the equivalent contribution elsewhere to the benefit of both the larger Vic West and the Dockside Green neighbourhoods.

As indicated in section 10.5.4 of Dockside Green's Application Submission Book, Dockside Green has proposed that the \$400,000 contribution to the construction of the 2000 m² Sustainability Centre be allocated to the provision at Dockside Green. Staff have indicated in the Application Review Summary that Application Submission Book was not sufficiently detailed and this letter provides the additional information and rationale requested.

Sustainability Centre Concept History

Dockside Green's original 2005 proposal to contribute to and include a Sustainability Centre within the Dockside Green neighbourhood sought to facilitate existing efforts to develop a shared non-profit office centre in Victoria. At the time a number of Victoria non-profit organisations had been exploring their organisational sustainability by co-locating in shared-office space. Their vision was that this would allow for predictable, long-term office costs and open up opportunities for collaboration between organisations. The vision included the following goals:

- Non-profits would have a stable place to call "home";
- Operating costs could be reduced by sharing administration services and achieving discounts through group buying;
- Part of the centre could be rented to market tenants, to subsidize the costs to the non-profits;
- By co-locating there would be opportunities for collaboration and new-relationships, allowing mission driven organisations to achieve more than when working separately; and
- Building ownership would provide greater long-term financial sustainability.

This effort was being supported by Vancity who convened two community forums in 2003 / 2004 and when the vision for the sustainable neighbourhood of Dockside Green emerged in 2005, the shared, non-profit office centre initiative focused on locating at Dockside Green.

In 2005 / 2006 significant efforts were undertaken by both Windmill Developments and Vancity Entreprises (the Dockside Green partners) to facilitate the development of the Sustainability Centre. A Victoria Sustainability Centre Steering Committee was formed that consisted of a group of



approximately a dozen non-profit organisations. The Steering Committee worked on developing an organisational model and the appropriate legal entity for the Sustainability Centre. Examples of non-profit centres were examined in larger North American cities (e.g. The Centre for Social Innovation in Toronto and the Natural Capital Center in Portland), UVic business school students reviewed different aspects of the Sustainability Centre and the beginnings of a business plan were developed. The Steering Committee also worked with Dockside Green on building design concepts and a development pro forma. Throughout, the initiative was supported financially by Dockside Green staff or consultants. Over \$100,000 was spent by the Dockside Green partnership on consultant and staff time supporting the Steering Committee, researching non-profit centre organisations and legal frameworks, writing Victoria Sustainability Centre Society Bylaws and drafting a Business Plan. Information related to the financial costs incurred by Dockside Green to the Sustainability Centre were provided to the City in our 2007 Annual Report to further illustrate the effort and challenge expended in working with organisations toward the concept.

A Retrospective Analysis

Dockside Green Ltd. has completed a retrospective analysis of the Sustainability Centre initiative. This analysis has included review of all the Sustainability Centre documentation and meeting minutes, consultation with eight individuals involved in the original initiative, consultation with a variety of people and organisations involved in current “hub” discussions in Victoria, a review of the literature on non-profit shared-office centres and consultation with Vancity staff who have supported the launch of a non-profit office hub in Vancouver and who continue to support non-profit organisations in Victoria who are considering co-location.

No feasibility analysis was done prior to the Sustainability Centre being put forward as an amenity of Dockside Green. The working assumption for everyone involved in mid-2005 was it was a good idea and they assumed they had the outline of workable model. Efforts to make the Sustainability Centre a reality were a significant focus in the early years of the Dockside Green, however, by the end of 2006 these efforts had dissolved as further work and analysis produced illustrated the challenges to the initiative. Our analysis uncovered a number of items that highlighted why the Sustainability Centre at Dockside Green was never a truly viable concept.

Real Estate Investment vs Shared-Office

There is a large difference between non-profit groups collaborating and co-locating in leased space and collaborating, co-locating and *investing* in shared real estate. These two concepts were conflated in the case of the Sustainability Centre. While there are successful examples in larger cities of non-profit organisations collaborating to invest in shared office space, these organisations either had capital or the Centres had a patron who front-ended the costs. Most of the Victoria organisations involved in the Sustainability Centre were participating because they understood the outcome would be access to affordable office space. Only one of the non-profits at the table in 2005/2006 had money to invest in real-estate and this was not sufficient to build the Sustainability Centre. When the Sustainability Centre Steering Committee dissolved this organisation bought space in an existing building, but due to ongoing financial challenges, has since sold it.



Investing in a New Build vs An Existing Building

A confidential independent analysis by a Victoria non-profit indicated that if they were to invest in real-estate as a long-term, sustainable organisational strategy, that investing in a new building at Dockside Green was not the preferred option. This was, in part, because a new-build is a more costly approach. In our review of non-profit office centres around North America we have not found one example of a non-profit office centre being purpose-built by a non-profit organisation. Instead, where an equity position is taken by non-profits or cooperatives it is in renovated space in less costly real estate locations. This emphasises that *if* a shared non-profit office centre was to be established in Victoria, building a new LEED building at Dockside Green would not be the most cost-efficient way to do so.

Creating Organisational Sustainability

Part of the concept of the Sustainability Centre was to facilitate the long-term financial stability and sustainability of the organisations involved. However, early business planning demonstrated that the organisations involved could not afford to *increase* their monthly costs above the Class C / Class D rents they were paying. Thus to achieve the goal of organisational stability the only option would be a significant capital fundraising campaign. At the time, it was estimated that to build the Sustainability Centre would be an \$8-10 million endeavour. Even with favourable financing this would have meant raising approximately \$3-5 million in a capital campaign. Given these organisations struggles to maintain consistent year over year funding, it was not clear how this was going to be achieved. Moreover, this capital fundraising challenge is underscored by the fact that there are other high-profile organisations in Victoria (such as the Victoria Art Gallery) who have been faced with this predicament for years without finding a solution.

Organisational Capacity

A capital campaign to raise funds for the Sustainability Centre is only one part of the challenge. The other challenge is having the organisational capacity to manage and operate a building. This includes the ability to manage the risk of lease vacancies and to attract and retain tenants – both non-profit and for-profit organisations and companies. No one stepped up to take on the leadership of the initiative and this was not and is not Dockside Green's role.

In 2005/2006 efforts were made to reach out to other established non-profit organisations to find a possible willing owner/operator for the Sustainability Centre. No willing partners were found. Similarly, in 2014 Dockside Green explored the concept once again and spoke to a number of different organisations and institutions looking for interest and capacity in developing the Sustainability Centre at Dockside Green. The exploration yielded no willing parties to take on development of the Sustainability Centre.

Outside of the Dockside Green project, Vancity has made repeated efforts to support organisations who have had an interest in co-locating. None of these efforts has lead to a concrete initiative that would be able to take on the costs of a Sustainability Centre at Dockside Green.



Steps Forward

Given the retrospective analysis, it is clear to Docksider Green that at this time there is no organisation or group of organisations in Victoria with the interest or organisational mandate to develop a 2,000 m² (21,500 ft²) non-profit / cooperative office centre. Moreover, if and when such an organisation or group of organisations did emerge, it is unlikely that building a new LEED building at Docksider Green would be the right choice for such an initiative.

The MDA indicates that the Developer “will work with environmental groups to assist in the raising of capital” and “will seek low interest rate financing for the Sustainability Center from Vancity.” This work can only occur if there are groups who are ready to manage all aspects of developing, fundraising for, financing, managing and operating the Sustainability Centre. In 2005 / 2006 Docksider Green Ltd. invested considerable time and resources to the process of setting up and developing an organisation that would be positioned to do so. This is well beyond what was required by the MDA and in the end was not successful.

As established by schedule G and by reference, section 8.9 and 8.18 of the MDA, “The developer’s obligation with respect to the Sustainability Centre shall terminate upon construction of the Sustainability Centre and the transfer of the title thereto to a cooperative or other non-profit organization or upon the payment of \$400,000 in lieu thereof pursuant to section 8.9 of this Agreement”. This cash-in-lieu payment can be used by the City to enter upon Docksider Lands to complete construction of the Sustainability Centre. Alternatively, as detailed by section 8.18, the cash-in-lieu money can be used “for the provision of an alternative Amenity that benefits the Docksider Lands, as agreed to by the City and the Developer”.

Docksider Green believes now, with the 2015 update to the Neighbourhood Plan and MDA that it is the appropriate time to reallocate the Sustainability Centre amenity dollars. Waiting will put the City in the equally untenable position of building an amenity which requires either the City or a non-profit organisations to fundraise for, build and operate. The updated Neighbourhood Plan includes a number of new or expanded public amenities, which would benefit from the reallocation of the \$400,000 contribution.

Conclusion

We trust the above summary helps clarify the history and challenge of realization the Sustainability Centre concept as outlined in the current MDA. With Docksider Green’s refocus on social sustainability in our current application we feel that the updated and increase public amenity plan will yield significant benefits to the public and we look forward to working with staff on advancement of our application.

Cordially,

A handwritten signature in blue ink, appearing to read 'Ally Dewji'.

Ally Dewji, P.Eng
Docksider Green Limited



DOCKSIDE GREEN

APPLICATION FOR REZONING
RESUBMISSION - 30 JUNE 2015

2015 PLAN SET



CLIENT
DOCKSIDE GREEN LIMITED

ARCHITECTURE/URBAN DESIGN
HCMA ARCHITECTURE+ DESIGN

**LANDSCAPE ARCHITECTURE/
URBAN DESIGN**
PWL PARTNERSHIP LANDSCAPE ARCHITECTS

URBAN PLANNING
IAN SCOTT PLANNING SERVICES

PUBLIC ENGAGEMENT
PUBLIC ASSEMBLY

SUSTAINABILITY
HEALTHY GREEN BUILDING
CONSULTANTS LTD.

CODE CONSULTANT
LMDG BUILDING CODE CONSULTANTS LTD.

TRANSPORTATION PLANNING
BOULEVARD TRANSPORTATION

CIVIL ENGINEERING
KERR WOOD LEIDAL

GEOTECHNICAL ENGINEERING
RYZUK GEOTECHNIC

SURVEYING
FOCUS ENGINEERING

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SHEET LIST

COVER	AZ-0.0
CHANGES SINCE CALUC MEETING	AZ-0.1
2015 REZONING APPLICATION AREA	AZ-1.1
2005 DOCKSIDE GREEN PLAN	AZ-1.2
PROPOSED NEIGHBOURHOOD PLAN	AZ-1.3
DEVELOPMENT AREAS	AZ-1.4
PROJECT DATA: PARCELS AND PRECINCTS	AZ-1.5
PROJECT DATA CHART	AZ-1.6
MASSING: AERIAL VIEW FROM EAST	AZ-1.7
MASSING: AERIAL VIEW FROM SOUTHEAST	AZ-1.8
SITE SECTION	AZ-1.9
SITE SECTION	AZ-1.10
SITE SECTION	AZ-1.11
LAND USES	AZ-1.12
BUILDING HEIGHTS	AZ-1.13
SKYLINE	AZ-1.14
COMPOSITE VIEWS	AZ-1.15
COMPOSITE VIEWS	AZ-1.16
VIES + VIEW CORRIDORS	AZ-1.17
SOLAR ACCESS	AZ-1.18
OPEN SPACE COMPARISON	AZ-1.19
PARKING + LOADING/UNIVERSAL ACCESSIBILITY + CIRCULATION	AZ-1.20
BUILDING ENTRANCES/STREET WALLS	AZ-1.21
BETA AT DOCKSIDE GREEN: CONCEPTUAL SITE PLAN	AZ-1.22
MULTI-MODAL + TDM PLAN	AZ-1.23
FOCUS ENGINEERING: PROPOSED SUBDIVISION PLAN	

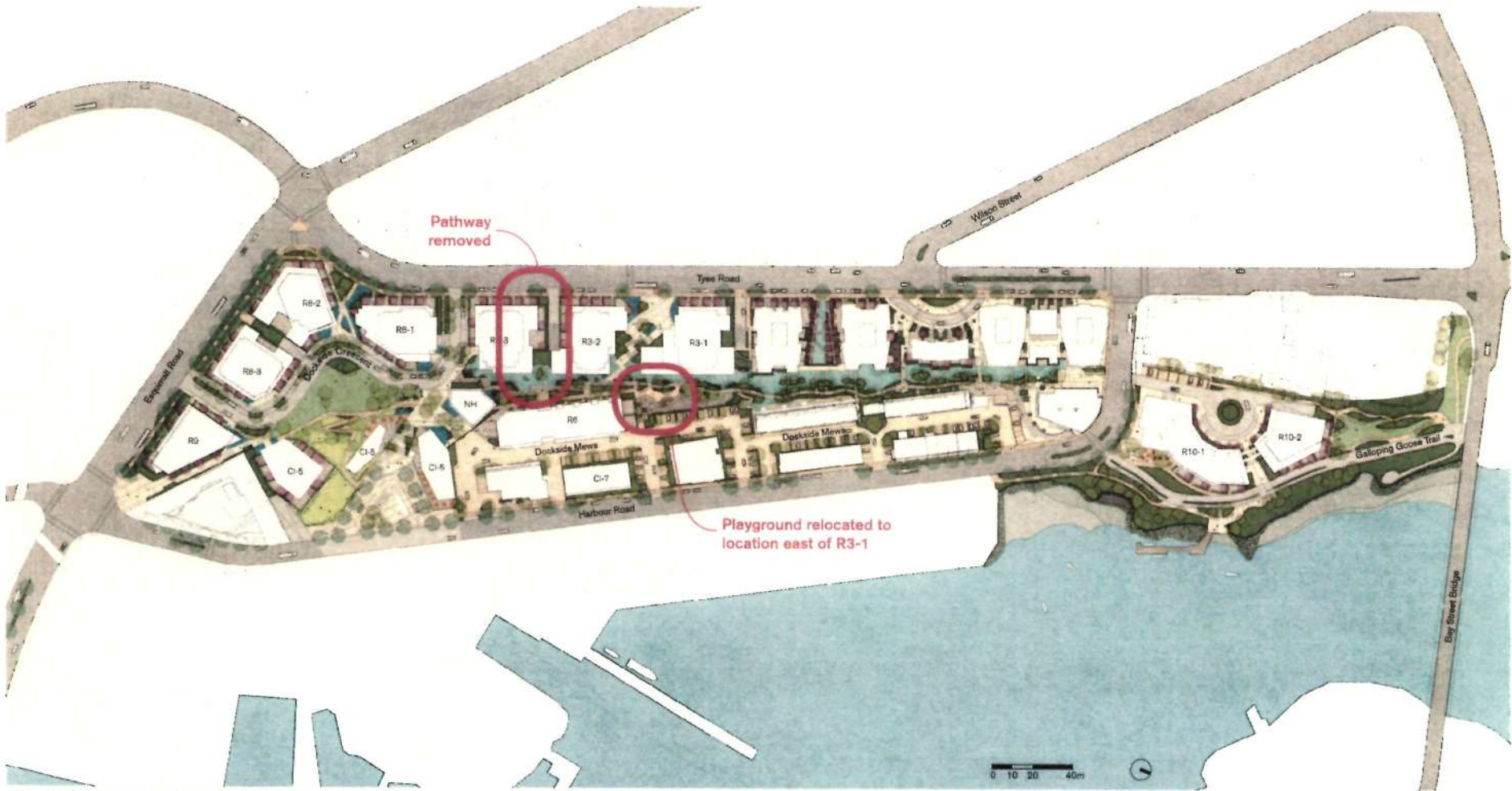


JOB TITLE
**DOCKSIDE GREEN
REZONING**

SHEET TITLE
COVER PAGE

Drawn	Date 30 JUN 2015
Checked	Scale N.T.S.
Job No.	Ref.

AZ-0.0



1 CHANGES SINCE CALUC MEETING

SCALE NTS

JOB TITLE
**DOCKSIDE GREEN
REZONING**

SHEET TITLE
CHANGES SINCE CALUC MEETING

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Job No.

Date 30 JUN 2015
Scale REFER TO DWG
Ref.

AZ-0.1

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1 2015 REZONING APPLICATION AREA
SCALE N.T.S.

JOB TITLE
**DOCKSIDE GREEN
REZONING**

SHEET TITLE
2015 REZONING APPLICATION AREA

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HCMA



1 PROPOSED NEIGHBOURHOOD PLAN

SCALE 1:2500

**DOCKSIDE GREEN
REZONING**

PROPOSED NEIGHBOURHOOD PLAN

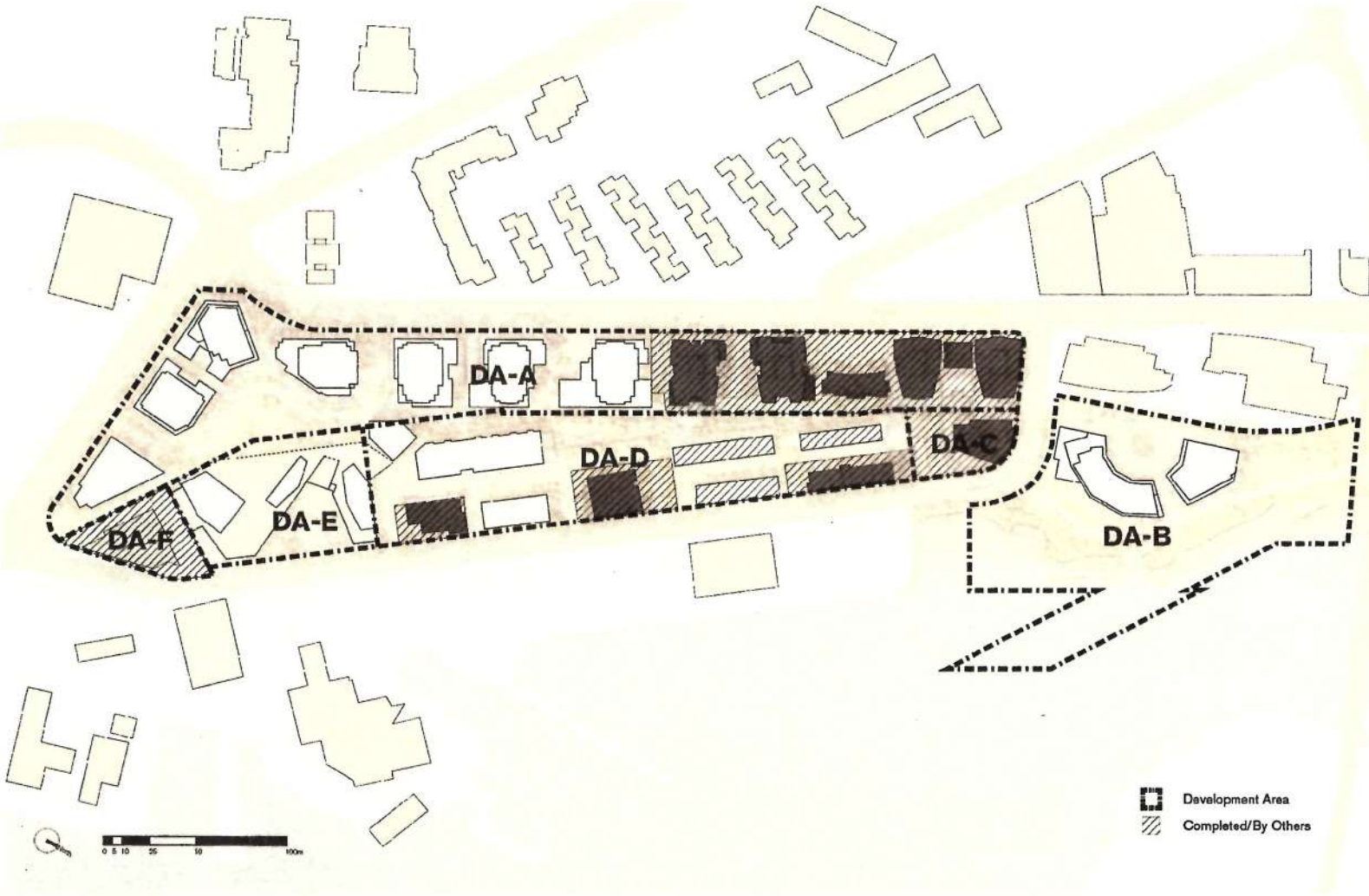
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Job No.

Date 30 JUN 2015
Scale REFER TO DWS
Ref.

AZ-1.3

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 Development Area
 Completed/By Others



1 DEVELOPMENT AREAS
SCALE N.T.S.

JOB TITLE
**DOCKSIDE GREEN
REZONING**

SHEET TITLE
DEVELOPMENT AREAS

Drawn
Checked
Job No.

Date 30 JUN 2015
Scale REFER TO DWG
Ref.

AZ-1.4



**R8-1
DOCKSIDE COMMONS
PRECINCT**

DA-A
18 Storeys (±62.4m above datum)
Parcel Size: 0.22 ha.

Residential:	11,685 m ²
Retail:	0 m ²
Office:	0 m ²
Other:	0 m ²
Total Floor Area:	11,685 m²

**R3-3
TYEE-GREENWAY
PRECINCT**

DA-A
16 Storeys (±57.1m above datum)
Parcel Size: 0.19 ha.

Residential:	11,145 m ²
Retail:	0 m ²
Office:	0 m ²
Other:	0 m ²
Total Floor Area:	11,145 m²

**R3-2
TYEE-GREENWAY
PRECINCT**

DA-A
14 Storeys (±50.8m above datum)
Parcel Size: 0.23 ha.

Residential:	9,385 m ²
Retail:	0 m ²
Office:	0 m ²
Other:	0 m ²
Total Floor Area:	9,385 m²

**R3-1
TYEE-GREENWAY
PRECINCT**

DA-A
12 Storeys (±44.5m above datum)
Parcel Size: 0.23 ha.

Residential:	8,660 m ²
Retail:	0 m ²
Office:	0 m ²
Other:	0 m ²
Total Floor Area:	8,660 m²

**R10-1
DOCKSIDE WATERFRONT
PRECINCT**

DA-B
7 Storeys (±26.5m above datum)
Parcel Size: 0.34 ha.

Residential:	6,103 m ²
Retail:	610 m ²
Office:	0 m ²
Other:	0 m ²
Total Floor Area:	6,713 m²

**R10-2
DOCKSIDE WATERFRONT
PRECINCT**

DA-B
14 Storeys (±44.0m above datum)
Parcel Size: 0.32 ha.

Residential:	8,978 m ²
Retail:	0 m ²
Office:	0 m ²
Other:	0 m ²
Total Floor Area:	8,978 m²

**R8-2
DOCKSIDE COMMONS
PRECINCT**

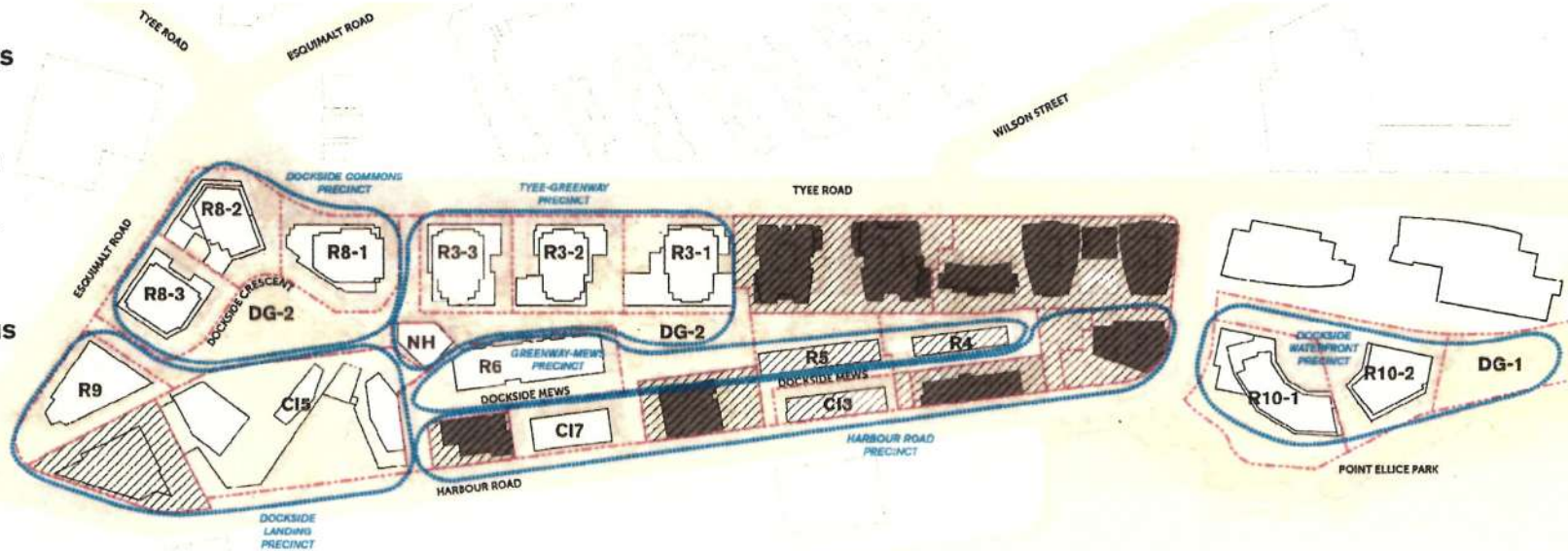
DA-A
20 Storeys (±65.8m above datum)
Parcel Size: 0.22 ha.

Residential:	12,590 m ²
Retail:	0 m ²
Office:	0 m ²
Other:	0 m ²
Total Floor Area:	12,590 m²

**R8-3
DOCKSIDE COMMONS
PRECINCT**

DA-A
13 Storeys (±42.7m above datum)
Parcel Size: 0.22 ha.

Residential:	8,305 m ²
Retail:	0 m ²
Office:	0 m ²
Other:	0 m ²
Total Floor Area:	8,305 m²



**R9
DOCKSIDE LANDING
PRECINCT**

DA-A
8 Storeys (±27.2m above datum)
Parcel Size: 0.20 ha.

Residential:	6,615 m ²
Retail:	0 m ²
Office:	0 m ²
Other:	0 m ²
Total Floor Area:	6,615 m²

**CI-5
DOCKSIDE LANDING
PRECINCT**

DA-E
7 Storeys (±26.5m above datum)
Parcel Size: 0.58 ha.

Residential:	3,035 m ²
Retail:	4,310 m ²
Office:	0 m ²
Other:	0 m ²
Total Floor Area:	7,345 m²

**NH
TYEE-GREENWAY
PRECINCT**

DA-A
1 Storey (±13.5m above datum)
Parcel Size: N/A

Residential:	0 m ²
Retail:	0 m ²
Office:	0 m ²
Other:	343 m ²
Total Floor Area:	343 m²

**R6
GREENWAY-MEWS
PRECINCT**

DA-D
4 Storeys (±15.7m above datum)
Parcel Size: 0.33 ha.

Residential:	4,136 m ²
Retail:	0 m ²
Office:	0 m ²
Other:	0 m ²
Total Floor Area:	4,136 m²

**CI-7
HARBOUR ROAD
PRECINCT**

DA-D
3 Storeys (±16.5m above datum)
Parcel Size: 0.13 ha.

Residential:	1,280 m ²
Retail:	0 m ²
Office:	0 m ²
Other:	0 m ²
Total Floor Area:	1,280 m²

Building height assumptions:
2.79m residential F-F
4.00m commercial F-F
6.00m food store F-F
Building heights measured against adjacent grade

1 PARCELS + PRECINCTS
SCALE NTS



Parcel	Predict	Floor Area (m ²)		Residential Floor Area (m ²)		Retail Floor Area (m ²)		Office Floor Area (m ²)		Other Floor Area (m ²)		Geodetic Height (m)		Minimum Setback from Type		Minimum Setback from Equipment		Residential Setback from Harbour		Residential Building Buffer		Ground Floor Residential Use			
		Permitted	Proposed	Permitted	Proposed	Permitted	Proposed	Permitted	Proposed	Permitted	Proposed	Permitted	Proposed	Permitted	Proposed	Permitted	Proposed	Permitted	Proposed	Permitted	Proposed	Permitted	Proposed		
DEVELOPMENT AREA A																									
R3-1	Type-Greenway	-	8,660	-	8,660	-	-	-	-	-	-	-	45.21	60.50*	3m	5m	-	-	-	-	-	-	-	-	
R3-2	Type-Greenway	-	9,385	-	9,385	-	-	-	-	-	-	-	45.21	60.50*	3m	5m	-	-	-	-	-	-	-	-	
R3-3	Type-Greenway	-	11,145	-	11,145	-	-	-	-	-	-	-	45.21	60.50*	3m	5m	-	-	-	-	-	-	-	-	
R8-1	Dockside Commons	-	11,685	-	11,685	-	-	-	-	-	-	-	57.25	66.00*	3m	5m	-	-	-	-	-	-	-	-	
R8-2	Dockside Commons	-	12,590	-	12,590	-	-	-	-	-	-	-	66.00	66.00*	3m	5m	-	-	-	-	-	-	-	-	
R8-3	Dockside Commons	-	8,305	-	8,305	-	-	-	-	-	-	-	45.21	66.00*	-	-	1m	5m	-	-	-	-	-	-	
R9	Dockside Landing	-	6,615	-	6,615	-	-	-	-	-	-	-	45.21	30.50	-	-	1m	5m	-	-	-	-	-	-	
Existing		-	23,704	-	23,704	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DA-A Total		-	94,441	-	92,089	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DEVELOPMENT AREA B																									
R10-1	Dockside Waterfront	-	6,713	-	6,103	-	-	-	-	-	-	-	45.66	47.00*	-	-	-	-	-	-	-	-	-	-	-
R10-2	Dockside Waterfront	-	8,578	-	8,578	-	-	-	-	-	-	-	45.65	47.00*	-	-	-	-	-	-	-	-	-	-	-
DA-B Total		-	15,592	-	14,982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DEVELOPMENT AREA C																									
DA-C Total (Existing)		-	1,810	-	1,809	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DEVELOPMENT AREA D																									
NH	Type-Greenway	-	343	-	0	-	-	-	-	-	-	-	26.51	26.51	-	-	-	-	-	-	-	-	-	-	-
R6	Greenway-Mews	-	4,186	-	4,186	-	-	-	-	-	-	-	26.51	26.51	-	-	-	-	18m	18m	Required	Partial*	No	Yes*	
C1-7	Harbour Road	-	1,280	-	0	-	-	-	-	-	-	-	26.51	26.51	-	-	-	-	-	-	-	-	-	-	
Existing		-	6,718	-	2,696	-	-	-	-	-	-	-	3,103	445	-	-	-	-	-	-	-	-	-	-	-
DA-D Total		-	18,277	-	12,477	-	-	-	-	-	-	-	-	788	-	-	-	-	-	-	-	-	-	-	-
DA-D / DA-E Total		-	-	-	6,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DEVELOPMENT AREA E																									
C1-5	Dockside Landing	-	7,345	-	3,035	-	-	-	-	-	-	-	26.51	26.51	-	-	-	-	18m	18m	Required	None*	No	No	
DA-E TOTAL		-	8,960	-	7,345	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DEVELOPMENT AREA F																									
DA-F Total (By Others)		-	4,770	-	4,366	-	-	-	-	-	-	-	-	4,366	-	-	-	-	-	-	-	-	-	-	-
SITE-WIDE TOTAL		-	134,341	-	133,678	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Permitted		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Proposed		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* Reasoning Proposed
 ** Total Floor Area by Development Area includes the plus 10% Density Transfer allowed by CD-9 Zone
 *** Proposed Maximum Height on a Precinct Basis

1 PROJECT DATA CHART

SCALE N/A

JOB TITLE
**DOCKSIDE GREEN
 REZONING**

SHEET TITLE

PROJECT DATA: PARCELS + PRECINCTS

Drawn
 Checked
 Job No.

Date 30 JUN 2015
 Scale REFER TO DWG
 Ref.

AZ-1.6

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1 MASSING: AERIAL VIEW FROM EAST
SCALE N.T.S.

JOB TITLE
**DOCKSIDE GREEN
REZONING**

SHEET TITLE
MASSING: AERIAL VIEW FROM EAST

Drawn
Checked
Job No.

Date 30 JUN 2015
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Ref.

AZ-1.7

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1 MASSING: AERIAL VIEW FROM SOUTHEAST
SCALE N.T.S.



JOB TITLE
**DOCKSIDE GREEN
REZONING**

SHEET TITLE
MASSING: AERIAL VIEW FROM SOUTHEAST

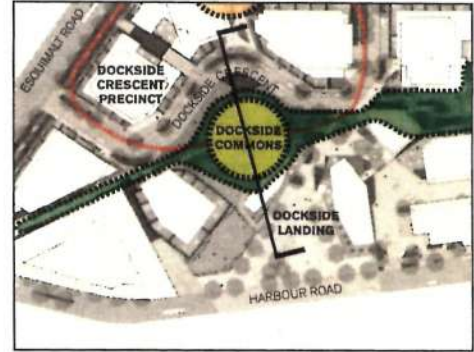
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Date 30 JUN 2015
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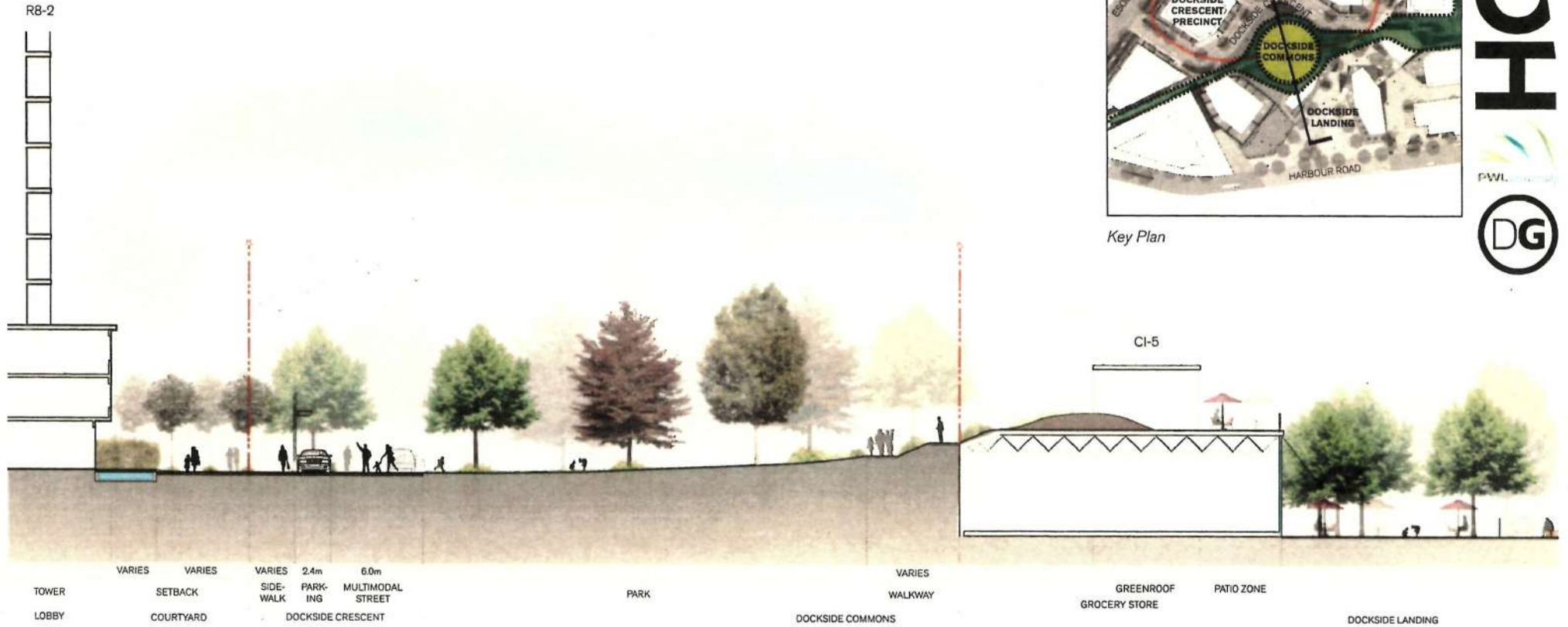
AZ-1.8

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Key Plan



1 SITE SECTION: DOCKSIDE CRESCENT TO DOCKSIDE LANDING



JOB TITLE
DOCKSIDE GREEN REZONING

SHEET TITLE
SITE SECTION: DOCKSIDE CRESCENT TO DOCKSIDE LANDING

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 Job No.

Date 30 JUN 2015
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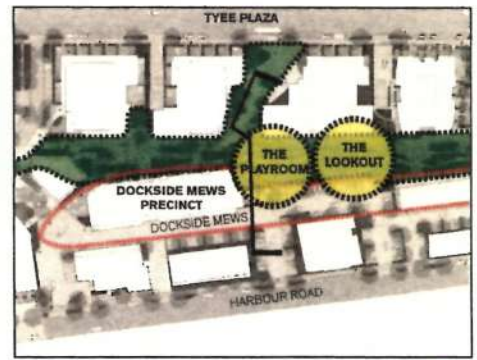
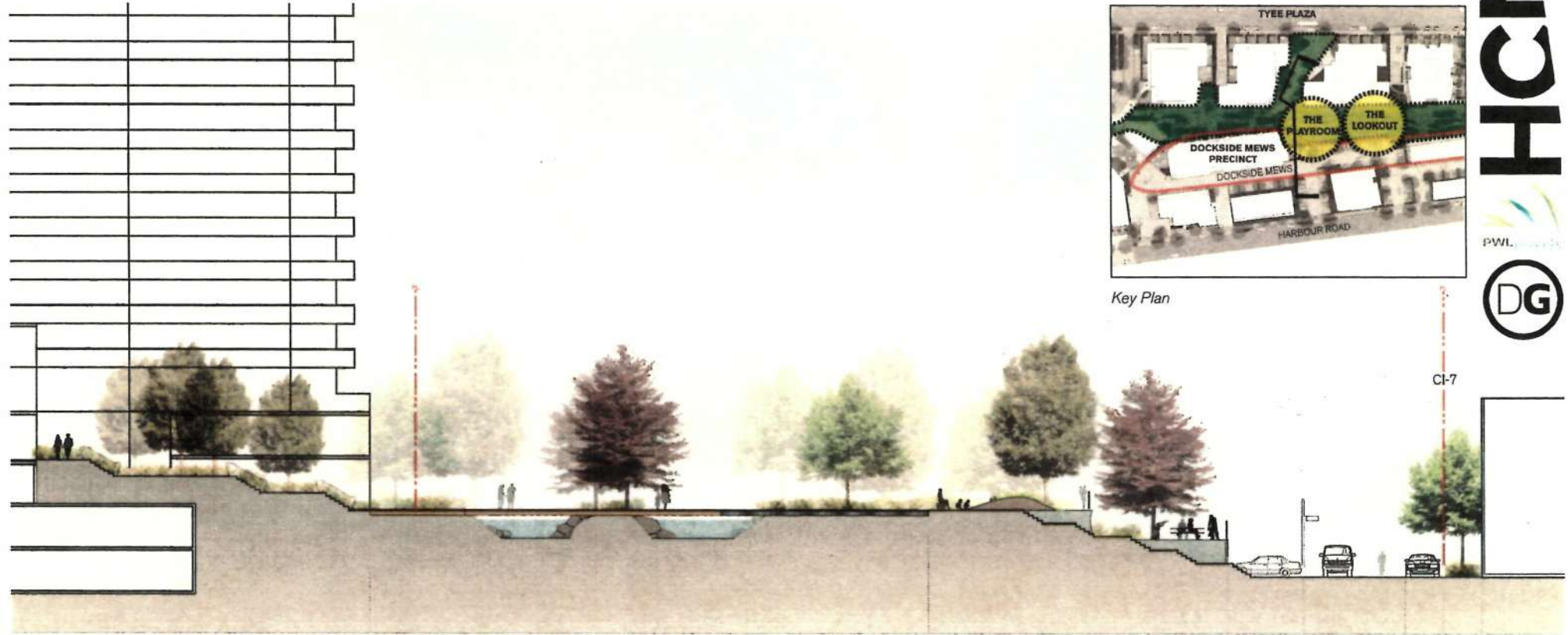
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R3-1



Key Plan

TYEE PLAZA ACCESS

THE GREENWAY

THE PLAYROOM

PARKING

MULTIMODAL STREET
MEWS

PARK- ING

PLANT- ING

EXISTING OFFICE



1 SITE SECTION: TYEE PLAZA TO DOCKSIDE MEWS

SCALE 1:250

JOB TITLE
DOCKSIDE GREEN REZONING

SHEET TITLE
SITE SECTION: TYEE PLAZA TO DOCKSIDE MEWS

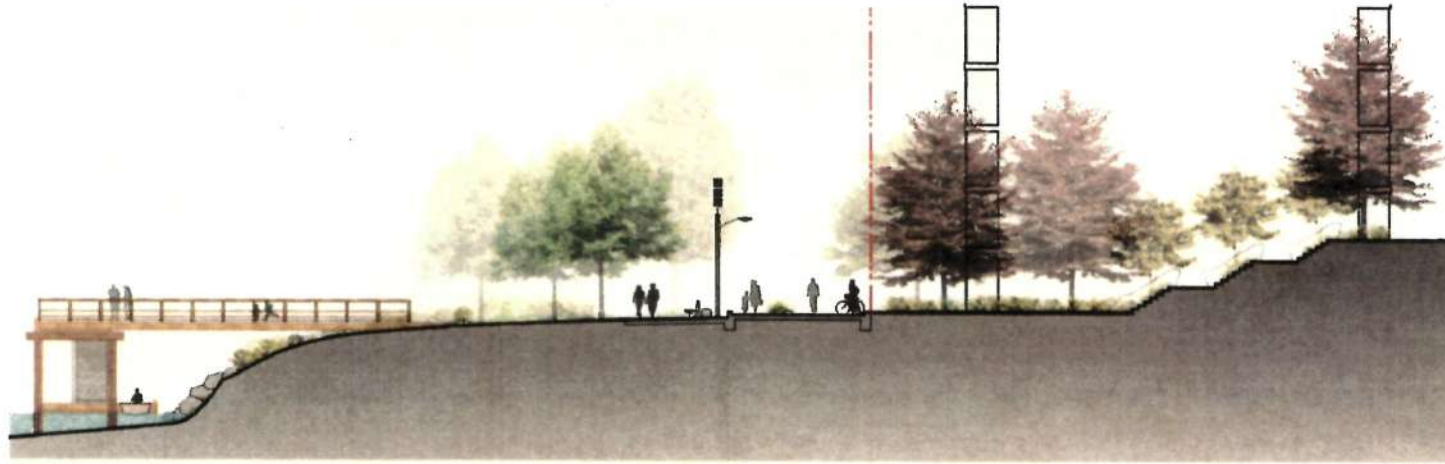
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POINT ELLICE DOCK

POINT ELLICE PARK

SHARED PATHWAY
GALLOPING GOOSE
TRAIL

DOCKSIDE WATERFRONT



1 SITE SECTION: POINT ELLICE PARK TO DOCKSIDE WATERFRONT
SCALE 1:250

JOB TITLE
**DOCKSIDE GREEN
REZONING**

SHEET TITLE
SITE SECTION: POINT ELLICE PARK TO DOCKSIDE WATERFRONT

Drawn
Checked
Job No.

Date 30 JUN 2015
Scale REFER TO DWG
Ref.

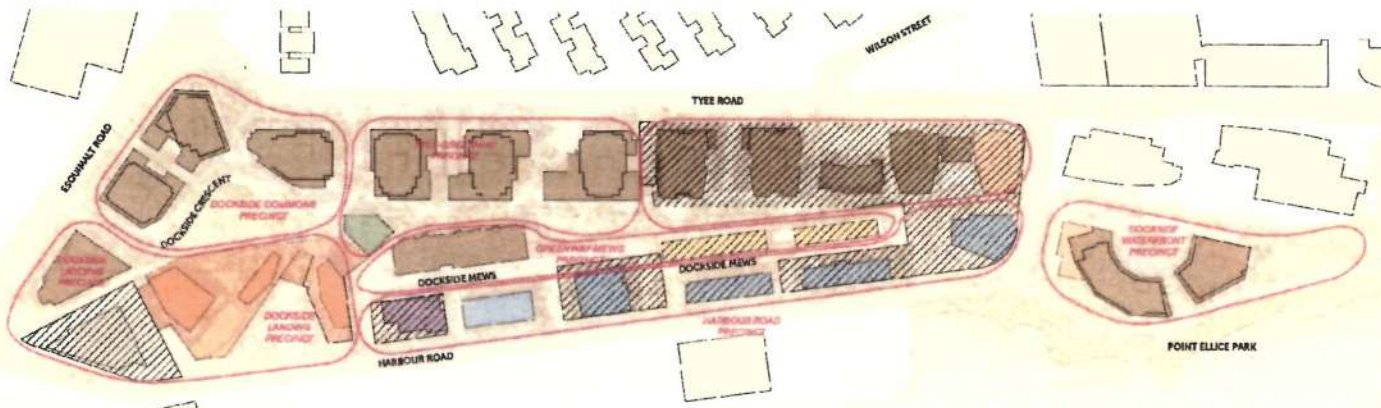
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HCMA

PWL PROFESSIONAL WORKERS LIMITED



1 2015 NEIGHBOURHOOD PLAN: LAND USES
 SCALE N.T.S.

	2005 Density (m ²)	2015 Density (m ²)
Residential	111,283	116,607
Non-Residential	18,188	12,701
TOTAL	129,471	129,308



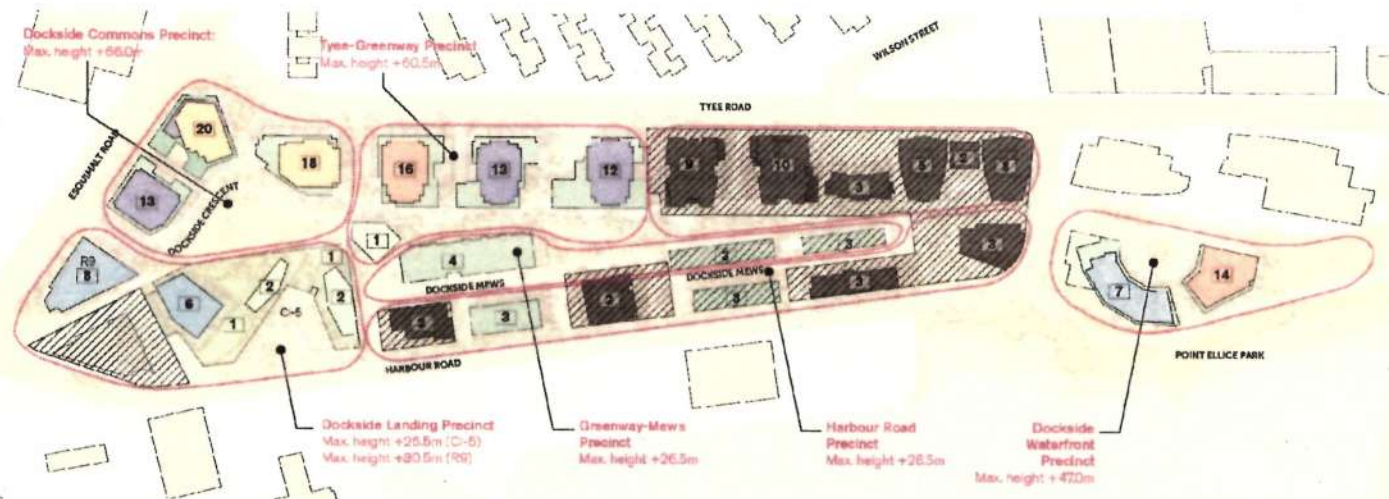
2 2005 NEIGHBOURHOOD PLAN: LAND USES
 SCALE N.T.S.

DOCKSIDE GREEN REZONING LAND USES

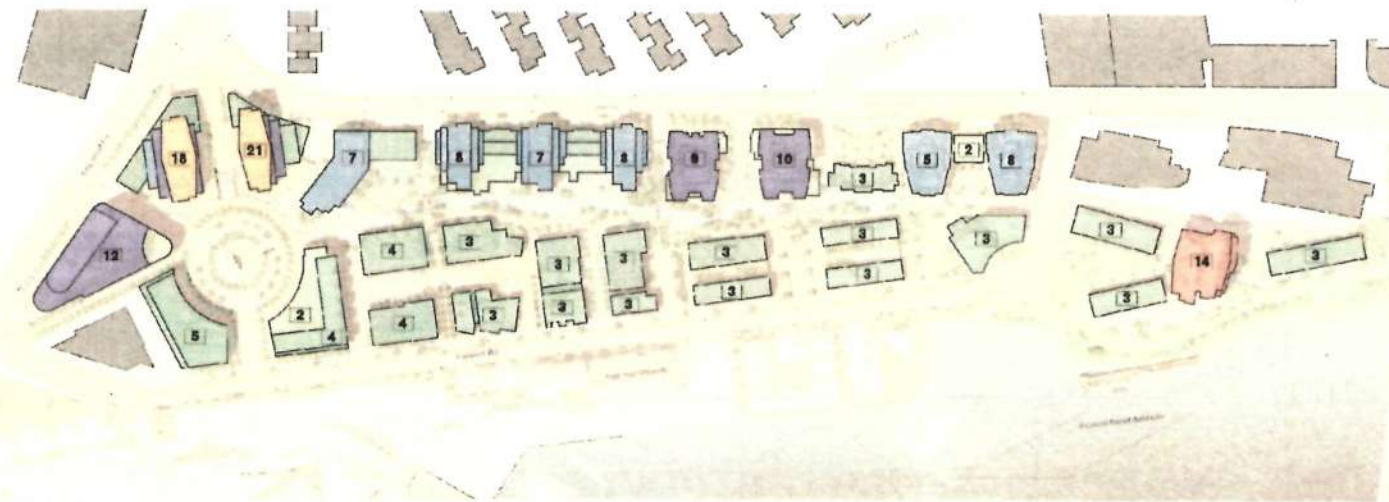
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Date 30 JUN 2015
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AZ-1.12

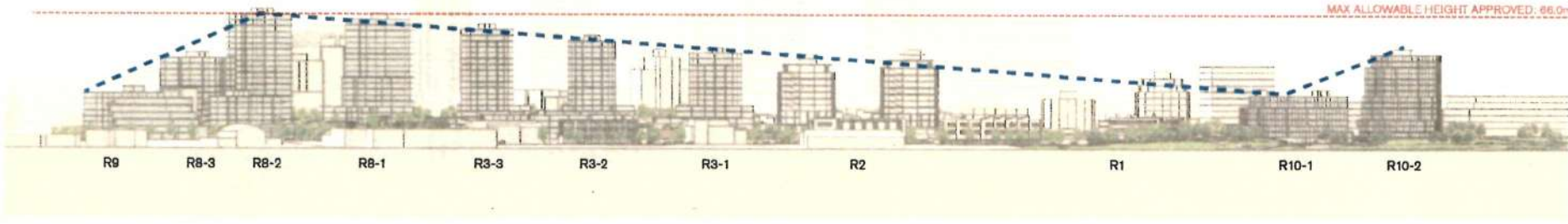


1 2015 NEIGHBOURHOOD PLAN BUILDING HEIGHTS
 SCALE N.T.S.



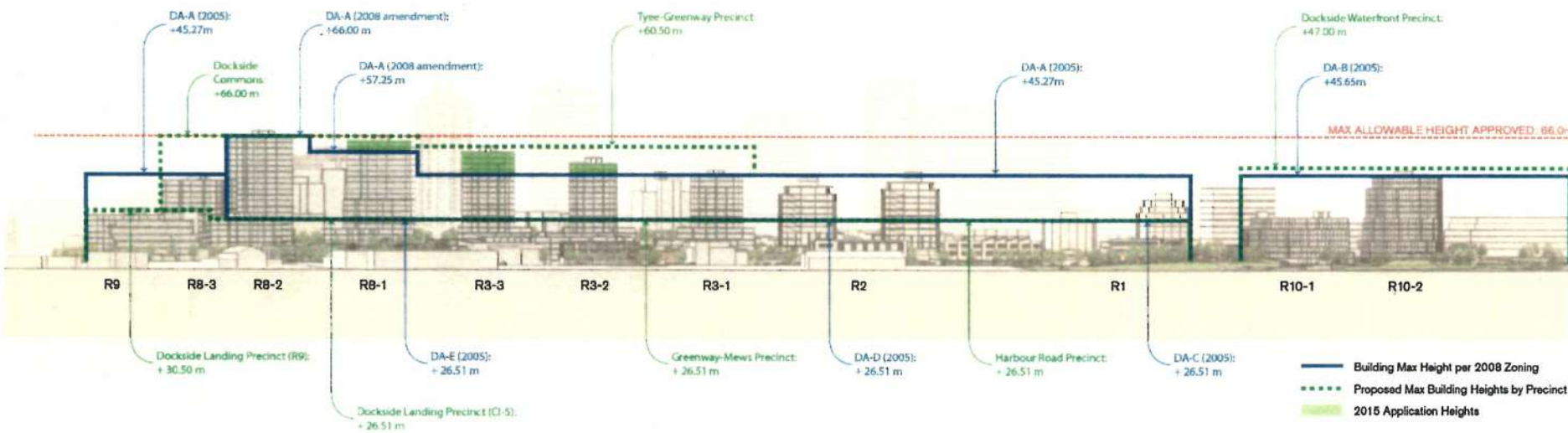
2 2008 NEIGHBOURHOOD PLAN BUILDING HEIGHTS
 SCALE N.T.S.

- 3+ Storeys
- 1-2 Storeys
- 3-5 Storeys
- 6-8 Storeys
- 9-13 Storeys
- 14-17 Storeys
- 18+ Storeys
- Completed/By Others
- * Storeys above average grade
- ** Heights not to average grade datum



1 2015 NEIGHBOURHOOD PLAN: SKYLINE CONCEPT
 SCALE: N.T.S.

--- SKYLINE CONCEPT:
 Building heights gradually increase towards the corner of Esquimalt + Tyse, with additional height at the north end of the site to reinforce the "bridge-to-bridge" concept



2 2008 vs. 2015 SKYLINE COMPARISON
 SCALE: N.T.S.

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1 (2008)



1 (2015)

1 VIEW 1: FROM FORT AND WHARF STREETS
 SCALE N.T.S.



2 (2008)



2 (2015)

2 VIEW 2: FROM THE BASE OF SWIFT STREET
 SCALE N.T.S.



3 COMPOSITE VIEW KEY MAP
 SCALE N.T.S.

* 2008 and 2015 versions are shown for comparison purposes. Note that the 2008 views may not be from the exact same position as the 2015 views.

JOB TITLE
**DOCKSIDE GREEN
 REZONING**

SHEET TITLE
COMPOSITE VIEWS

Drawn
 Checked
 Job No.

Date 30 JUN 2015
 Scale REFER TO DWS
 Ref.

AZ-1.15

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3 COMPOSITE VIEW KEY MAP
 SCALE N.T.S.



3 (2008)



3 (2015)

1 VIEW 3: FROM BAYVIEW DEVELOPMENT AT ESQUIMALT ROAD
 SCALE N.T.S.



4 (2008)



4 (2015)

2 VIEW 4: FROM PANDORA AND WHARF STREETS
 SCALE N.T.S.

* 2008 and 2015 versions are shown for comparison purposes. Note that the 2008 views may not be from the exact same position as the 2015 views.

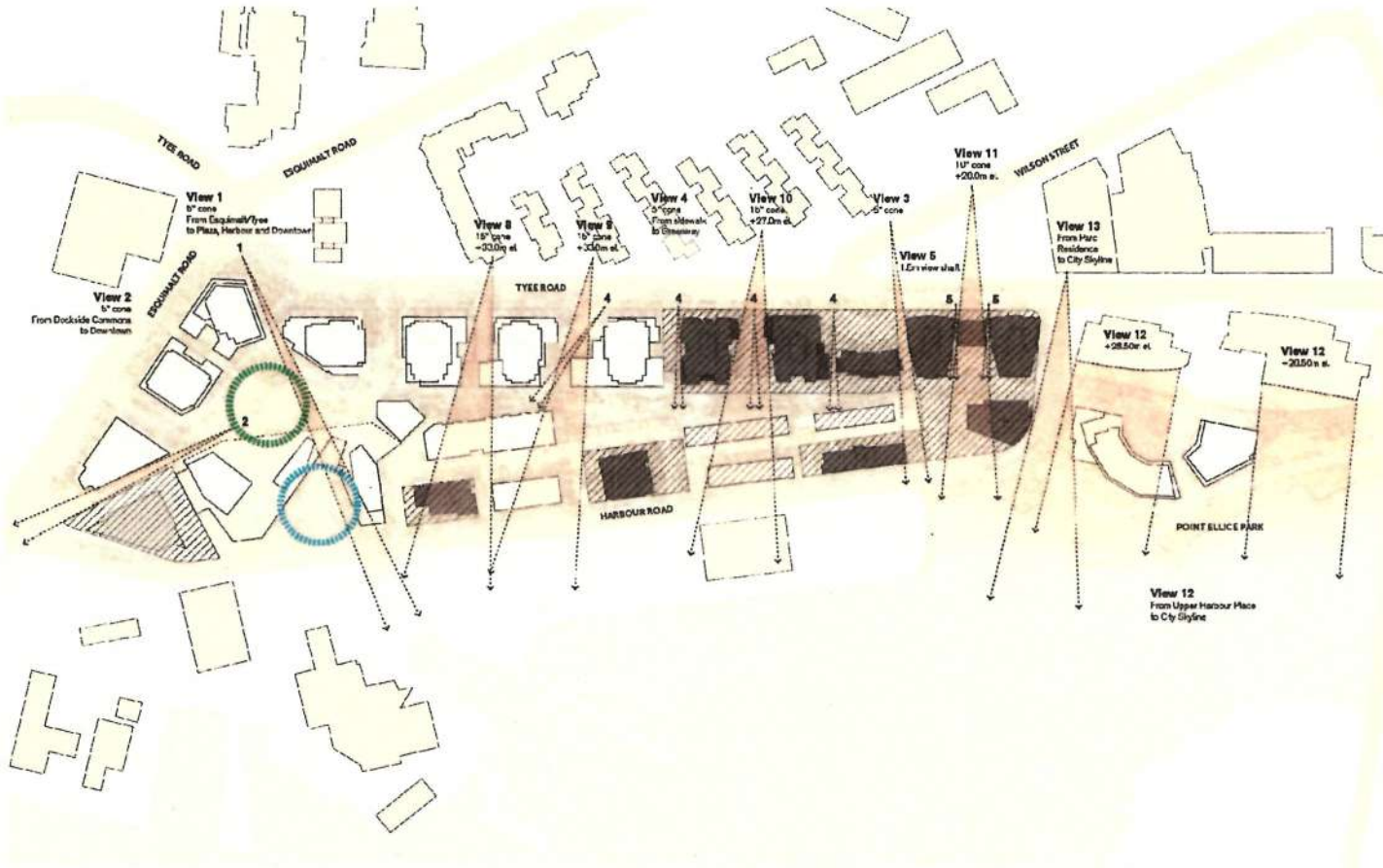
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**DOCKSIDE GREEN
 REZONING**

SHEET TITLE
COMPOSITE VIEWS

Drawn
 Checked
 Job No.

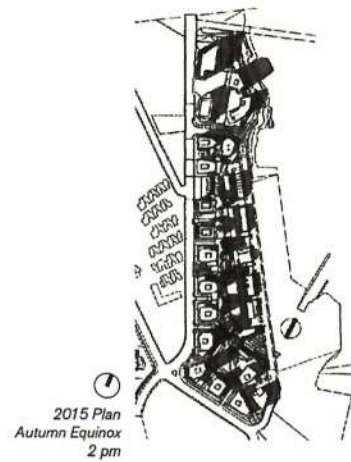
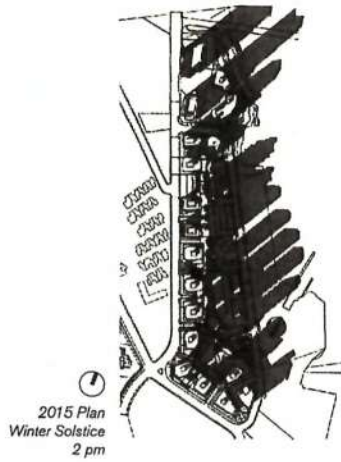
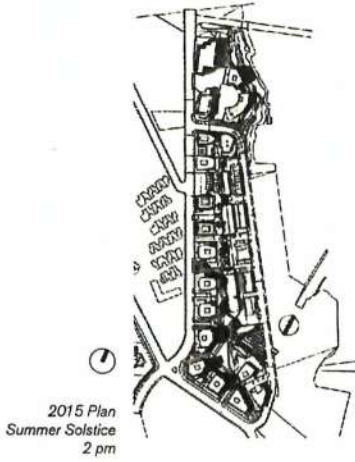
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AZ-1.16

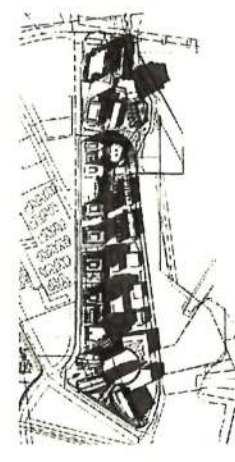
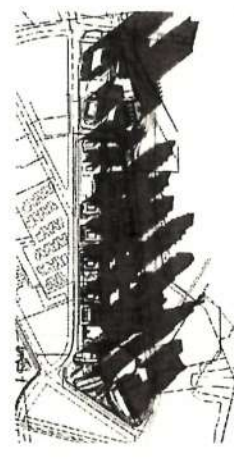
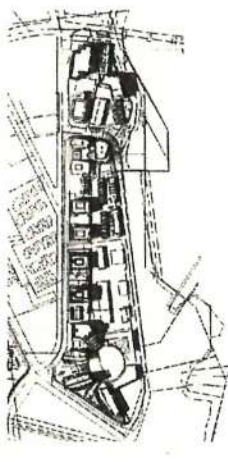


1 VIEWS + VIEW CORRIDORS
 SCALE N.T.S.

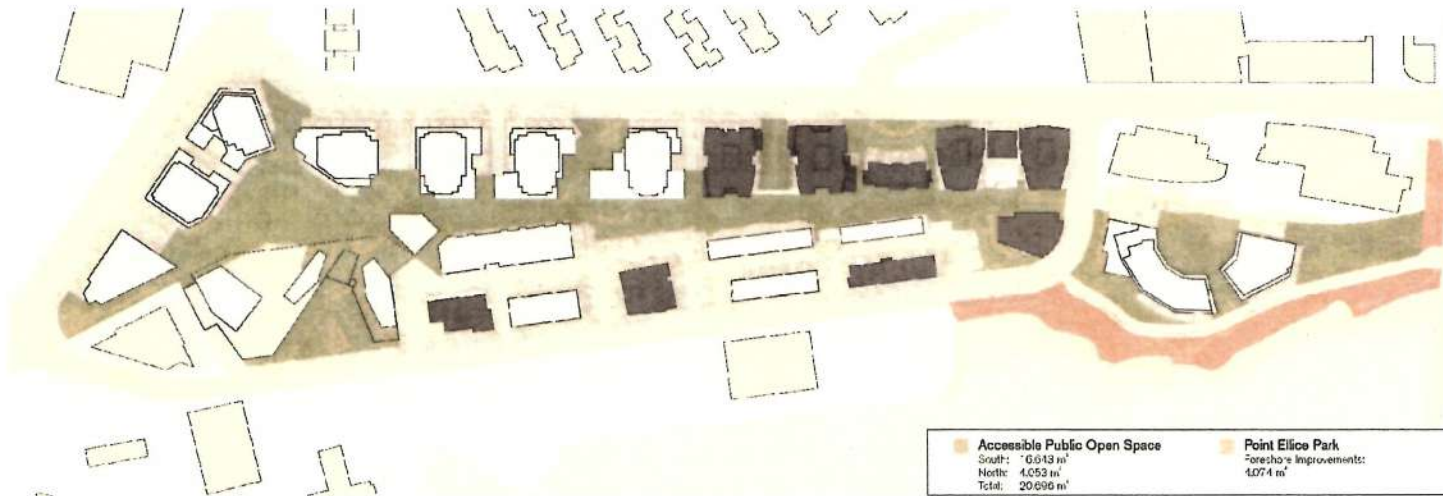
- View Corridor
- Dockside Landing
- Dockside Commons
- Completed/By Others



1 2015 NEIGHBOURHOOD PLAN: SHADOW STUDY
 SCALE N.T.S.



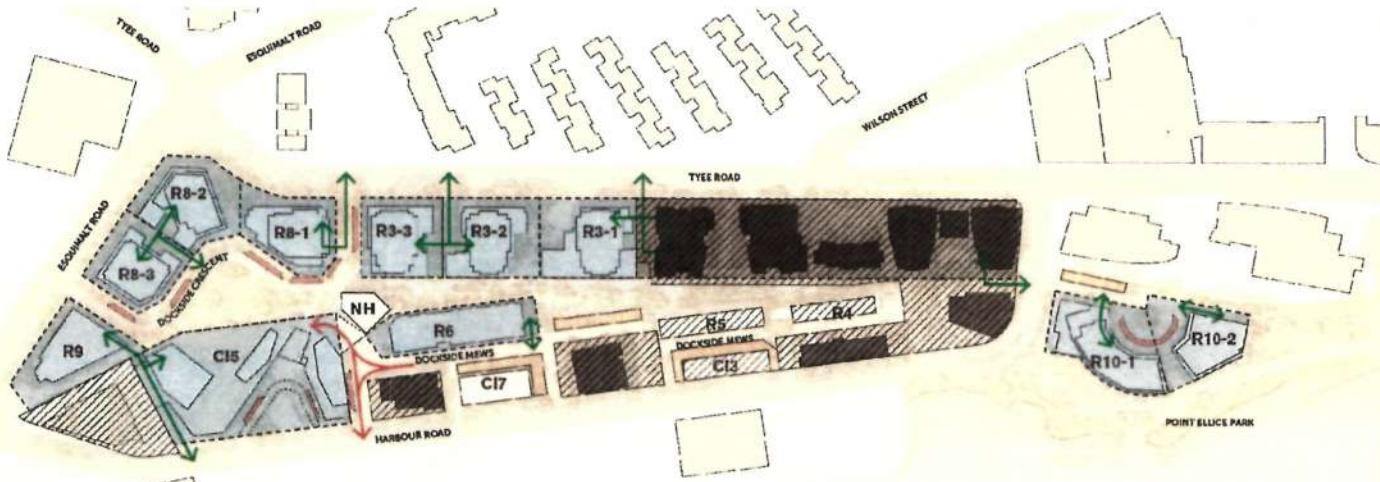
2 2008 NEIGHBOURHOOD PLAN: SHADOW STUDY (WITH 2008 HEIGHT AMENDMENTS)
 SCALE N.T.S.



1 2015 NEIGHBOURHOOD PLAN: TOTAL PUBLICLY ACCESSIBLE OPEN SPACE
 SCALE N.T.S.

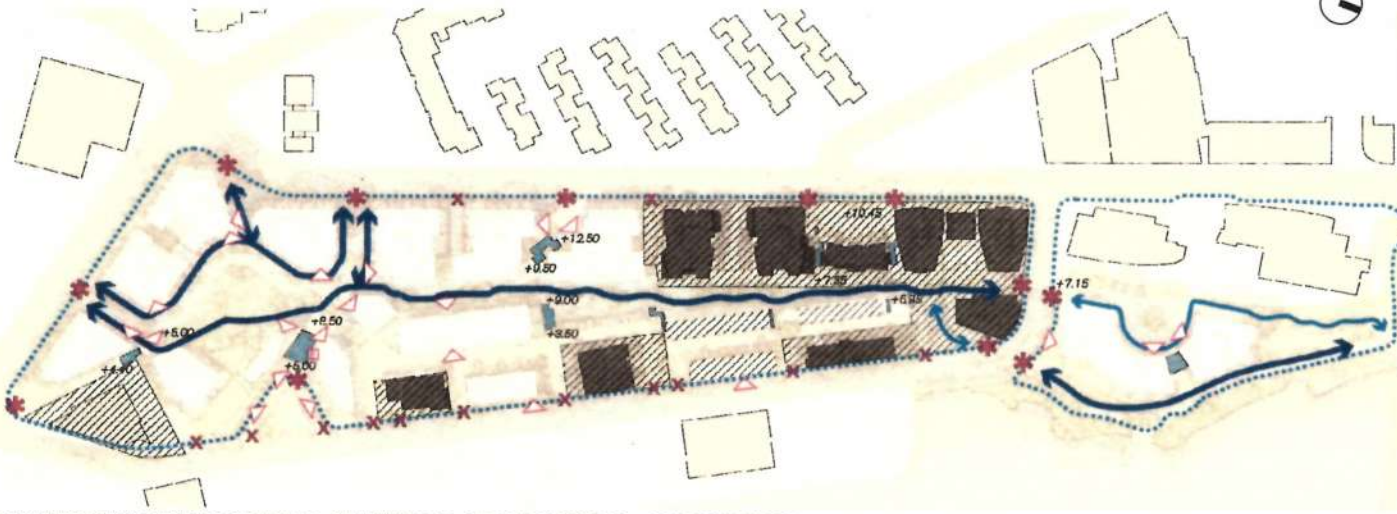


2 2005 NEIGHBOURHOOD PLAN: TOTAL PUBLICLY ACCESSIBLE OPEN SPACE
 SCALE N.T.S.



1 2015 NEIGHBOURHOOD PLAN: PARKING + LOADING
 SCALE: N.T.S.

- Pedestrian Pathways
- Mixed Traffic Pathways
- Public Elevator
- Completed/By Others



2 2015 NEIGHBOURHOOD PLAN: UNIVERSAL ACCESSIBILITY + CIRCULATION
 SCALE: N.T.S.

- ELEVATOR
- STAIR
- KEY ACCESS NODE
- VEHICULAR CROSSING
- KEY BUILDING ENTRY
- KEY SITE GRADE
- PERIMETER SITE ACCESS
- PRIMARY SITE ACCESS
- SECONDARY SITE ACCESS

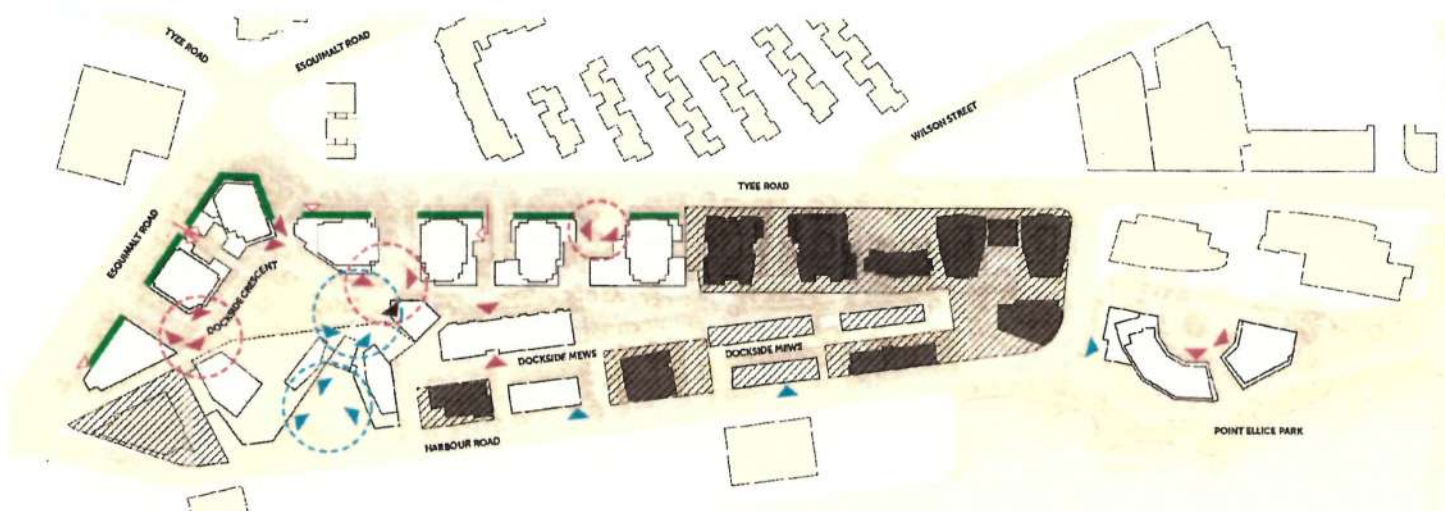
DOCKSIDE GREEN
 REZONING

PARKING + LOADING
 UNIVERSAL ACCESSIBILITY + CIRCULATION

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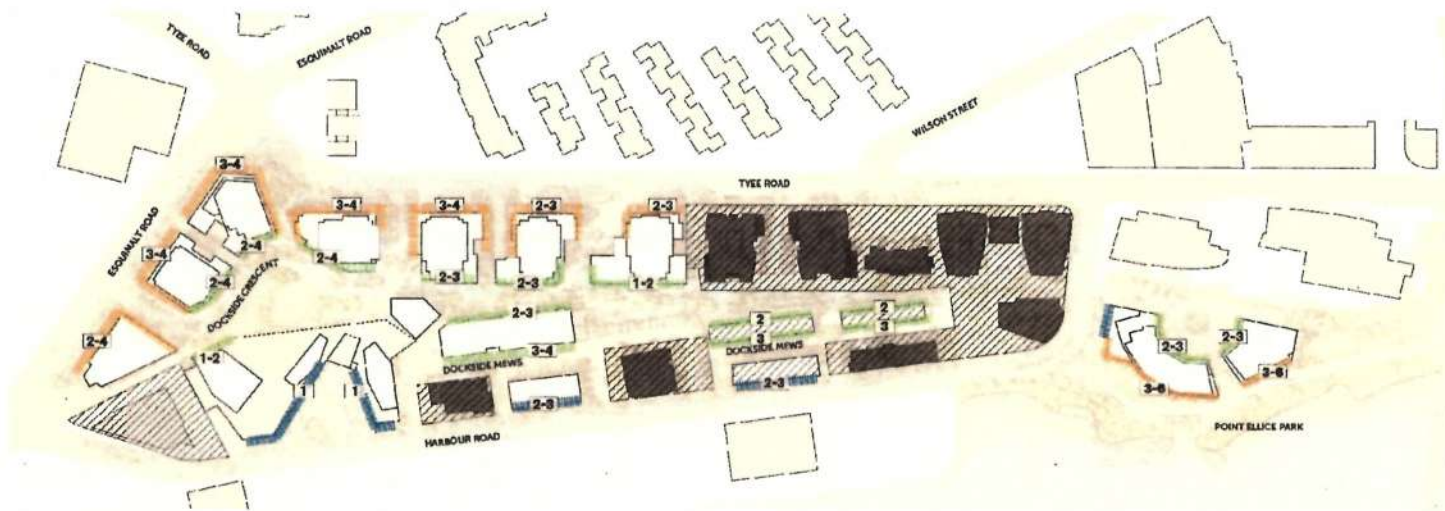
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AZ-1.20



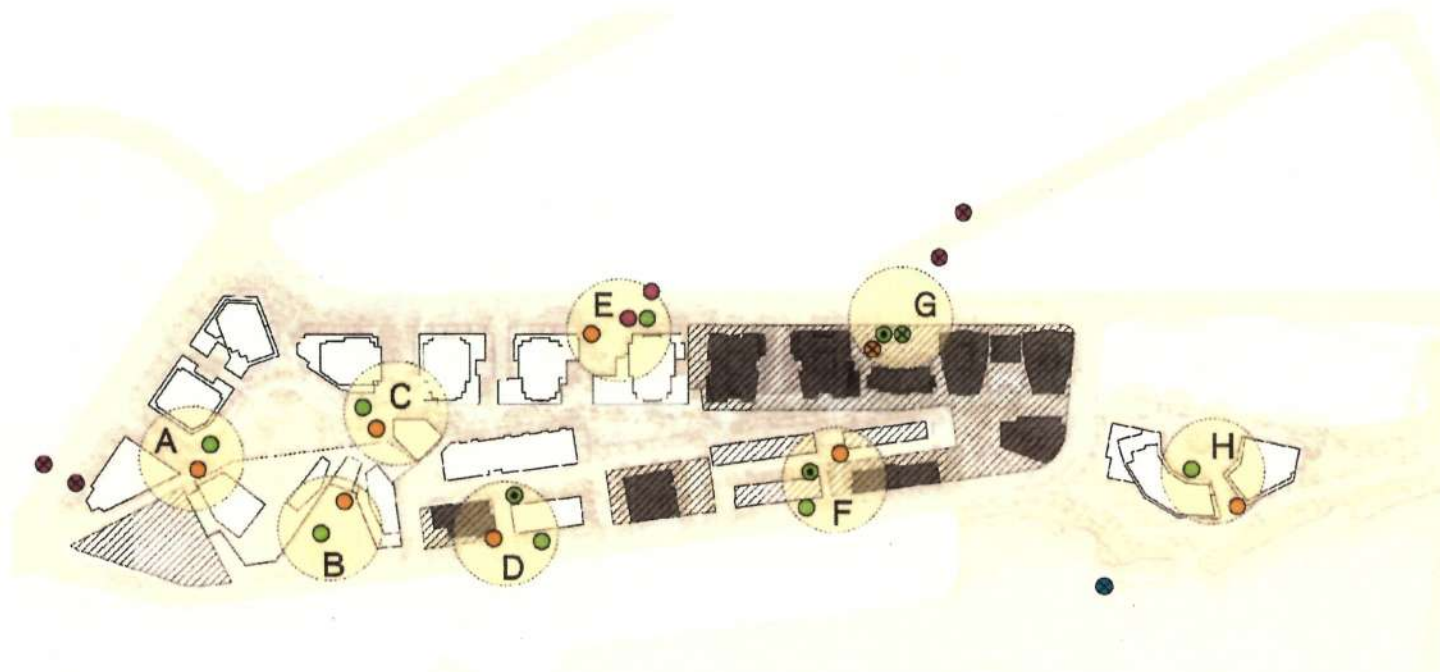
1 2015 NEIGHBOURHOOD PLAN: BUILDING ENTRANCES
 SCALE N.T.S.

- Ground-Oriented Units facing Tye + Esquimalt Roads
- ▲ Residential Lobby
- ▲ Office/Retail Entrance
- ▲ Amenity Lobby
- ▲ Parkade Entrance
- Potential Secondary Entrance
- Grouped Lobbies/Entrances
- Completed/By Others



2 2015 NEIGHBOURHOOD PLAN: STREET WALLS
 SCALE N.T.S.

- 2-3 Street Wall Height Range
- External Street Wall
- Internal Street Wall
- Commercial Street Wall



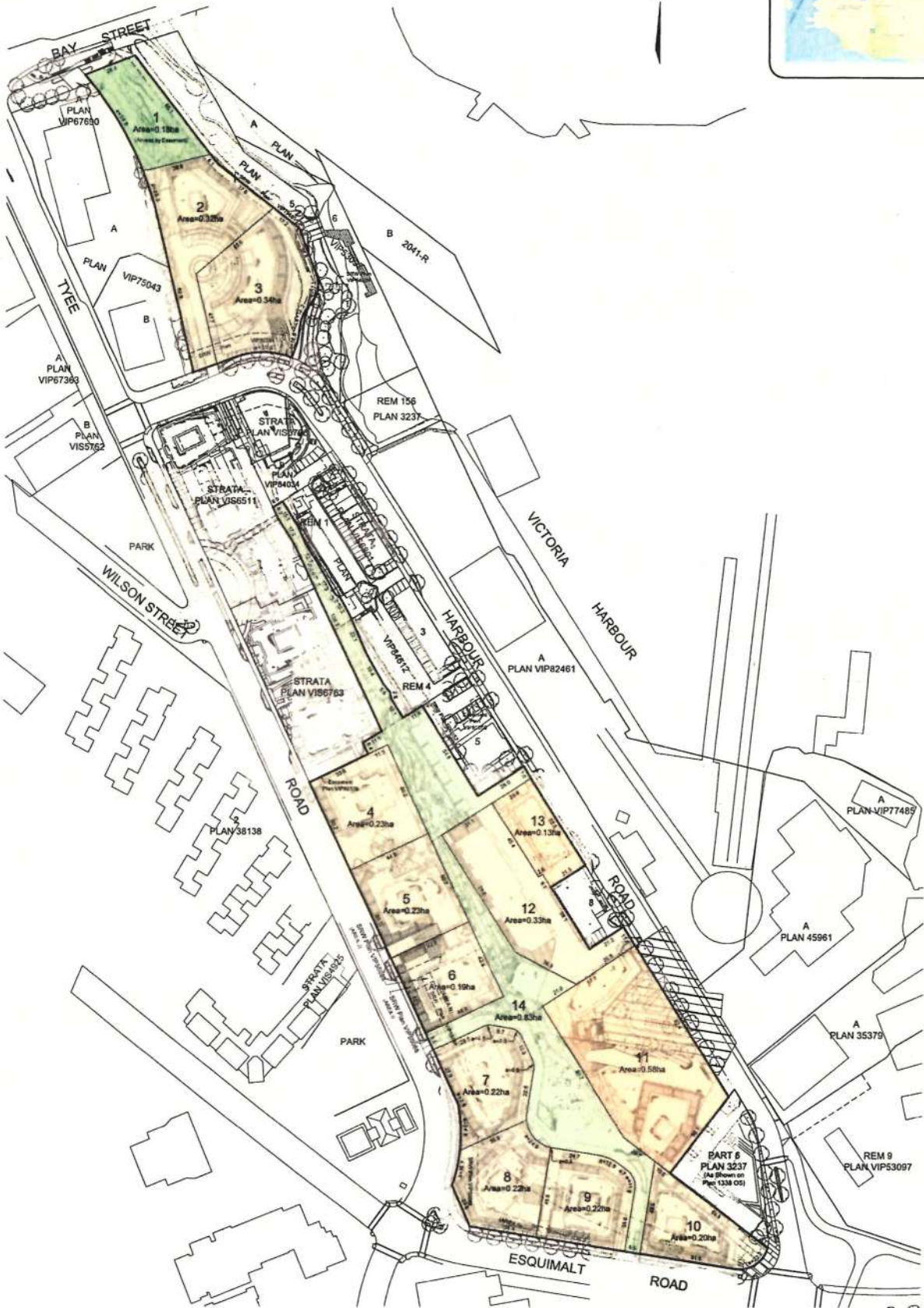
- Mobility Hub
- ⊗ Completed
- Proposed
- Car Share Vehicle
- Secondary Car Share Space
- Bike Racks
- Bus Stop
- Harbour Ferry Stop
- ▨ Phase Completed/By Others

SUMMARY OF TDM PROVISIONS, BY MOBILITY HUB

	Car Share	Bus Stops	Bike Parking	Ferry Dock	Signs, Info
A	x	x	x		x
B	x		x		x
C	x		x		x
D	x		x		x
E	x	x	x		x
F	x		x		x
G	x		x		x
H	x		x	x	x

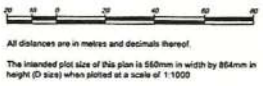
1 2015 NEIGHBOURHOOD PLAN: TDM MOBILITY HUBS
 SCALE N.T.S.

PROPOSED LAND USE	
RESIDENTIAL	2.50 ha
COMMERCIAL	0.71 ha
DOCKSIDE GREEN VICTORIA SOCIETY	1.01 ha
GROSS SITE AREA	4.22 ha



DOCKSIDE GREEN Proposed Subdivision Plan

PROPOSED SUBDIVISION OF LOT 4, PLAN VIS3097, LOT 8, PLAN VIS3097, EXCEPT PART IN PLAN VIS4612, LOT 6, PLAN VIS67690, PART OF LOTS 1 AND 4, PLAN VIS4612 AND LOTS 6, 7, 9, 10 AND 11, PLAN VIS4612, ALL WITHIN DISTRICT LOT 119, ESQUIMALT DISTRICT.



* All lot areas and dimensions are preliminary and subject to change upon final approvals from the owner/developer and applicable government agencies.



DOCKSIDE GREEN

APPLICATION FOR REZONING
RESUBMISSION - 30 JUNE 2015

SUN-SHADE STUDIES



CLIENT
DOCKSIDE GREEN LIMITED

ARCHITECTURE/URBAN DESIGN
HCMA ARCHITECTURE+ DESIGN

**LANDSCAPE ARCHITECTURE/
URBAN DESIGN**
PWL PARTNERSHIP LANDSCAPE ARCHITECTS

URBAN PLANNING
IAN SCOTT PLANNING SERVICES

PUBLIC ENGAGEMENT
PUBLIC ASSEMBLY

SUSTAINABILITY
HEALTHY GREEN BUILDING
CONSULTANTS LTD.

CODE CONSULTANT
LMDG BUILDING CODE CONSULTANTS LTD.

TRANSPORTATION PLANNING
BOULEVARD TRANSPORTATION

CIVIL ENGINEERING
KERR WOOD LEIDAL

GEOTECHNICAL ENGINEERING
RYZUK GEOTECHNIC

SURVEYING
FOCUS ENGINEERING

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SHEET LIST

COVER	AZ-2.0
2008 NEIGHBOURHOOD PLAN: SUMMER SOLSTICE SUN/SHADE STUDY	AZ-2.1A
2008 NEIGHBOURHOOD PLAN: WINTER SOLSTICE SUN/SHADE STUDY	AZ-2.1B
2008 NEIGHBOURHOOD PLAN: EQUINOX SUN/SHADE STUDY	AZ-2.1C
2015 NEIGHBOURHOOD PLAN: SUMMER SOLSTICE SUN/SHADE STUDY	AZ-2.2A
2015 NEIGHBOURHOOD PLAN: WINTER SOLSTICE SUN/SHADE STUDY	AZ-2.2B
2015 NEIGHBOURHOOD PLAN: EQUINOX SUN/SHADE STUDY	AZ-2.2C



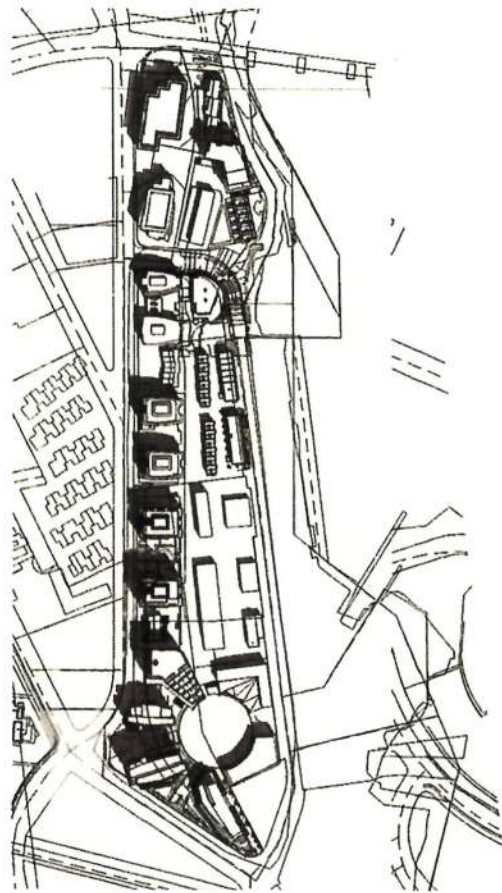
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**DOCKSIDE GREEN
REZONING**

SHEET TITLE
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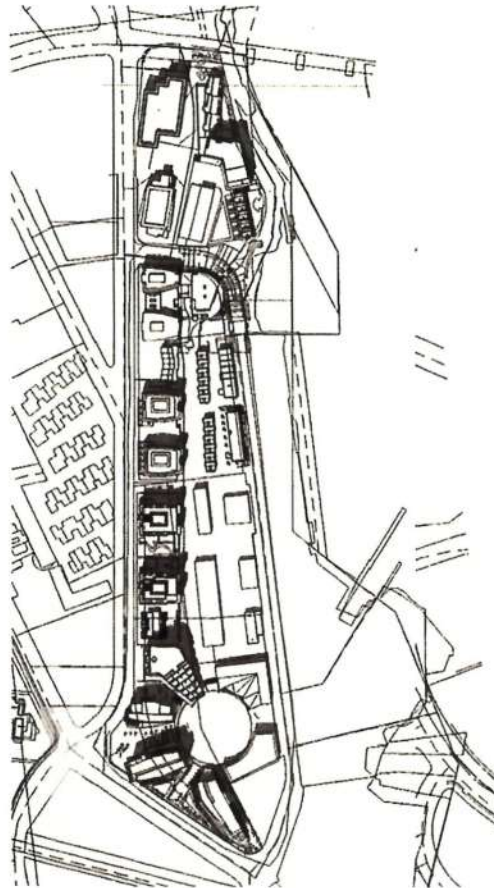
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Date 30 JUN 2015
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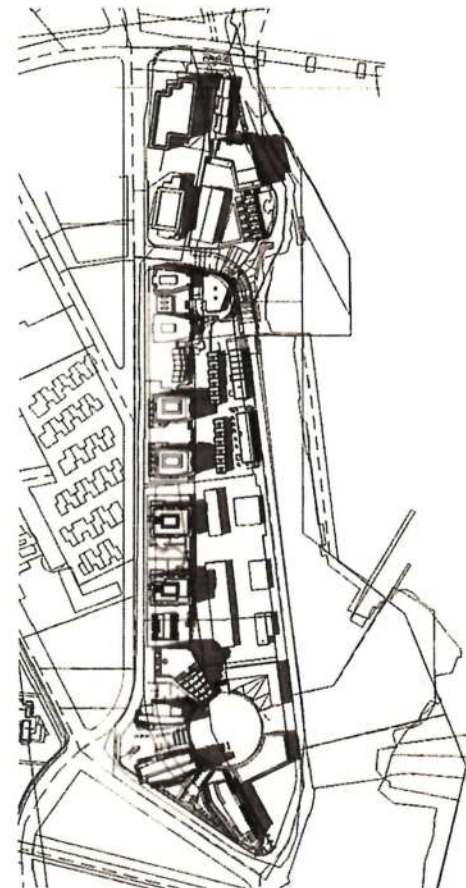
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1 SUMMER SOLSTICE (2008): 10 AM
SCALE N.T.S.

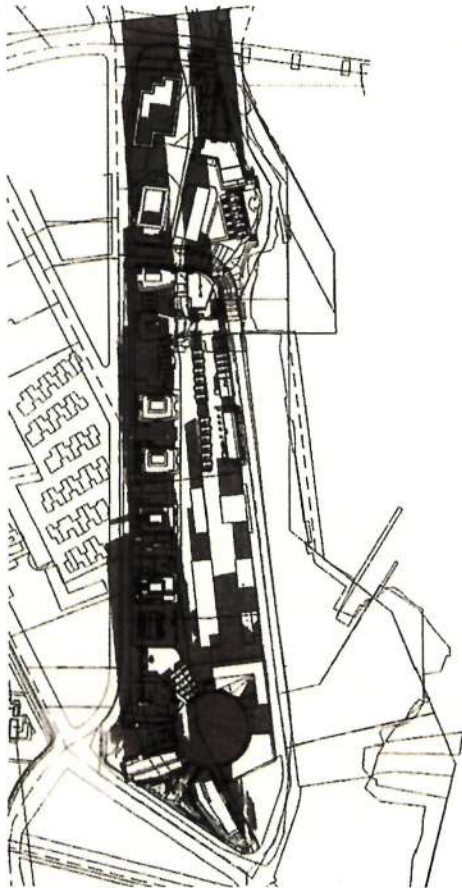


2 SUMMER SOLSTICE (2008): 12 PM
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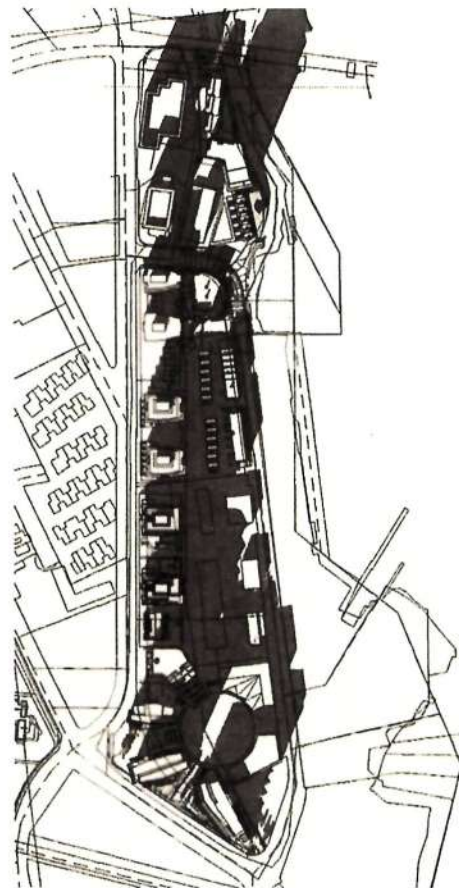


3 SUMMER SOLSTICE (2008): 2 PM
SCALE N.T.S.

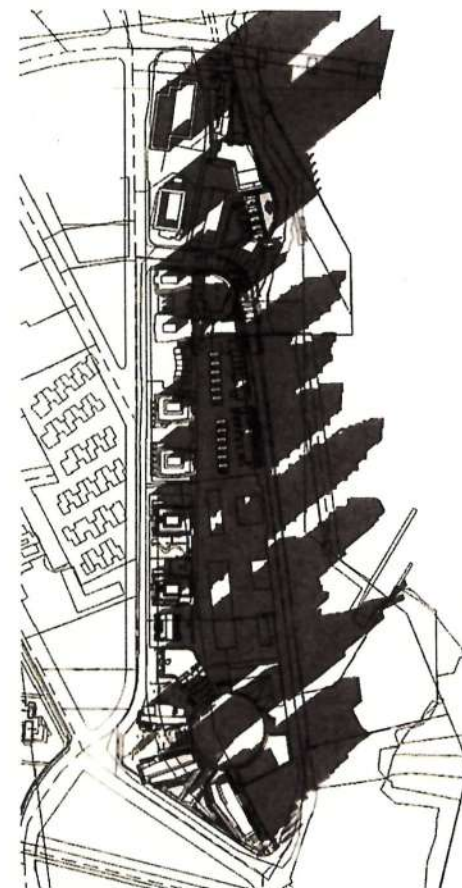




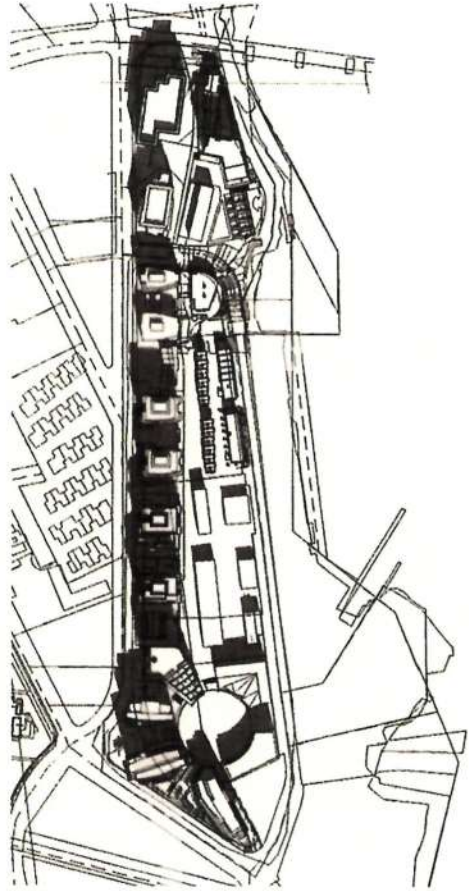
1 WINTER SOLSTICE (2008): 10 AM
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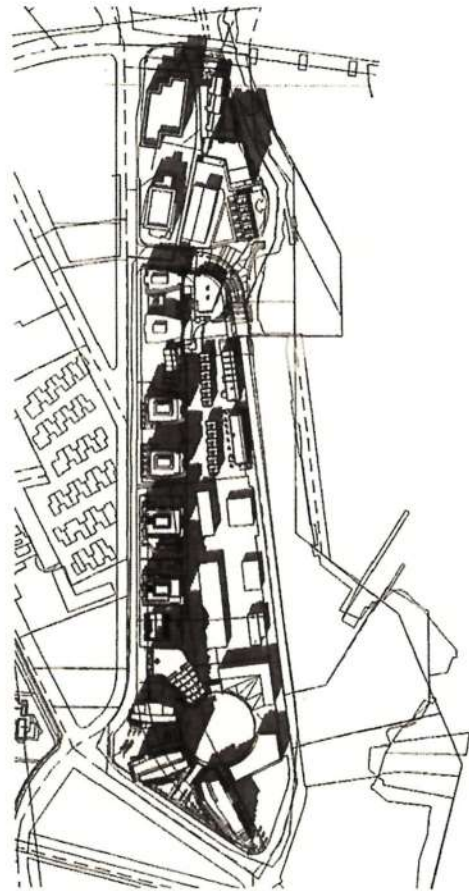
2 WINTER SOLSTICE (2008): 12 PM
SCALE N.T.S.



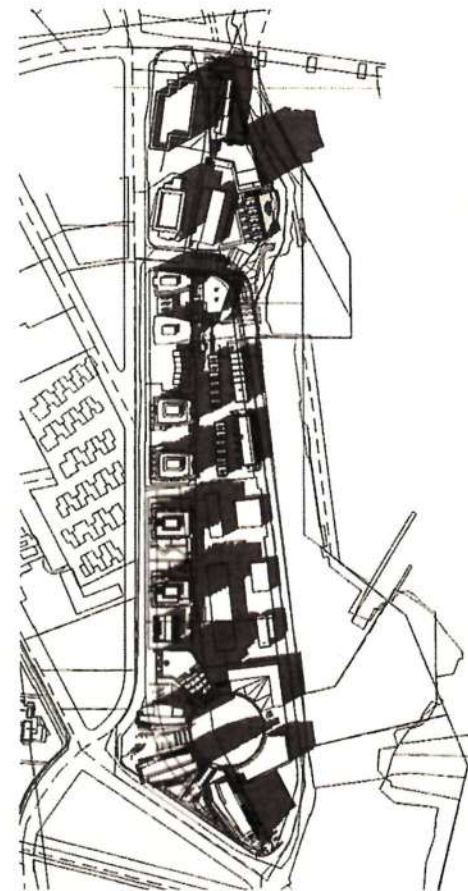
3 WINTER SOLSTICE (2008): 2 PM
SCALE N.T.S.



1 EQUINOX (2008): 10 AM
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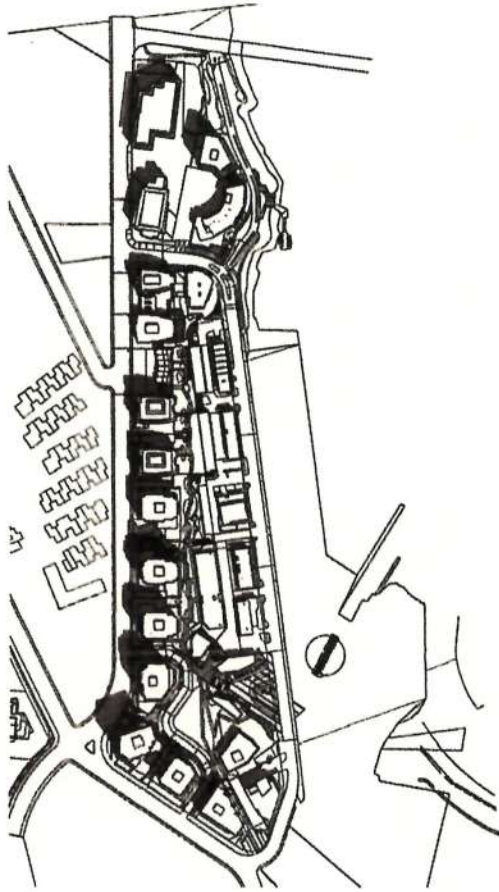


2 EQUINOX (2008): 12 PM
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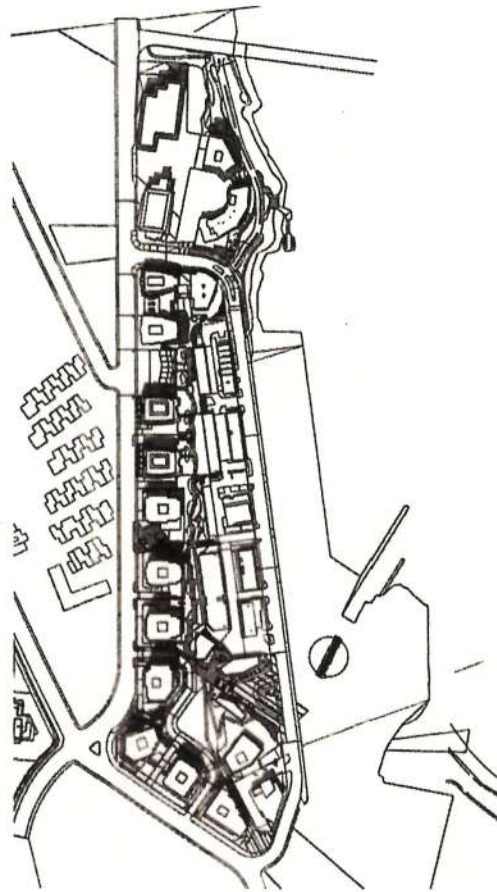


3 EQUINOX (2008): 2 PM
SCALE N.T.S.

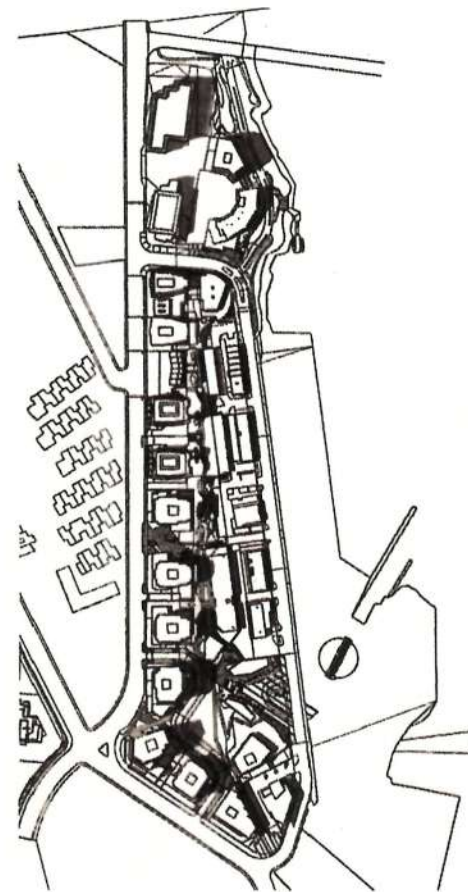




1 SUMMER SOLSTICE (2015): 10 AM
SCALE N.T.S.

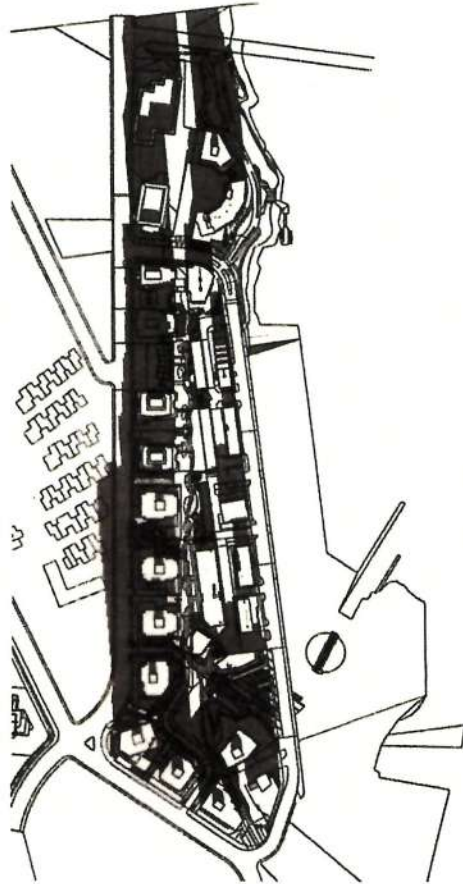


2 SUMMER SOLSTICE (2015): 12 PM
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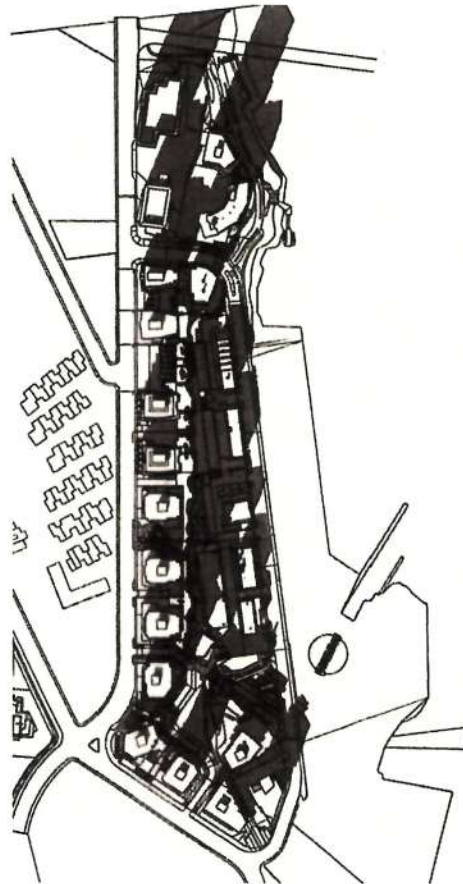


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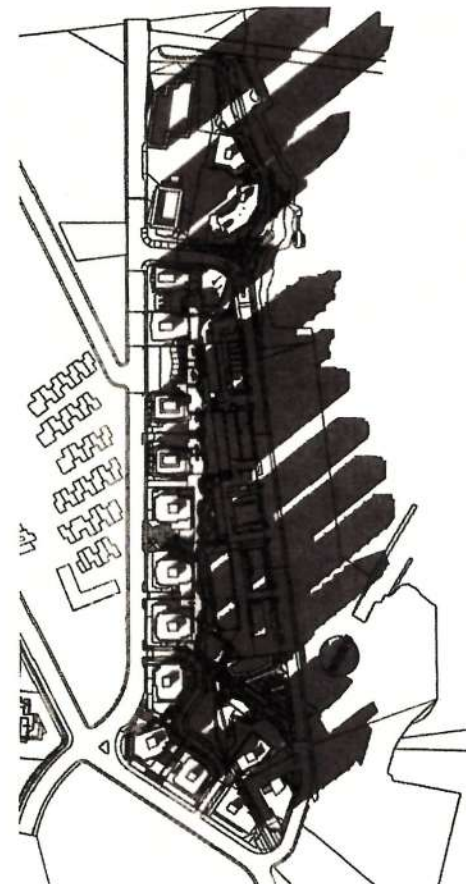




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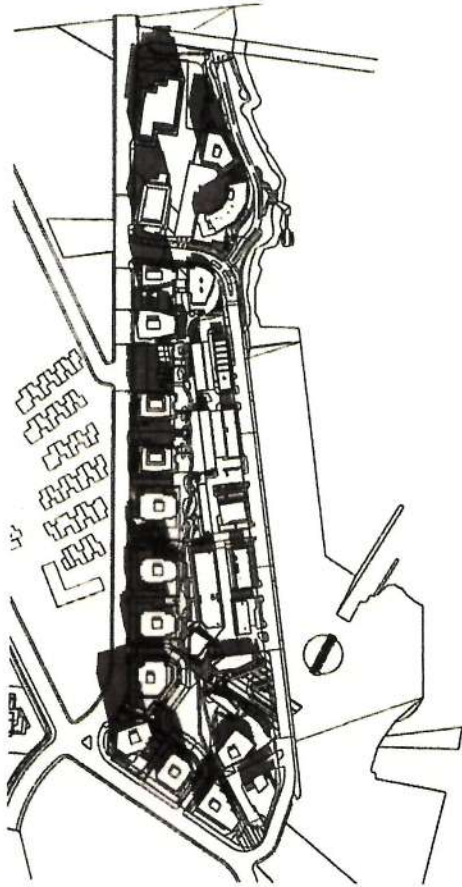


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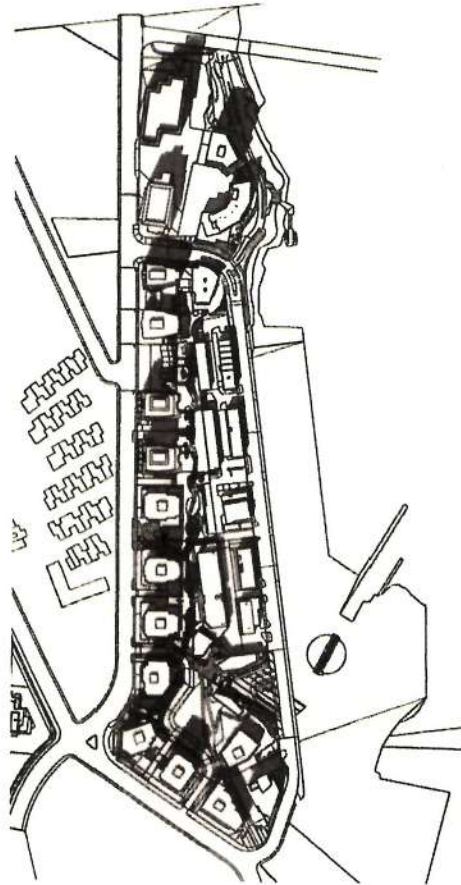


3 WINTER SOLSTICE (2015): 2 PM
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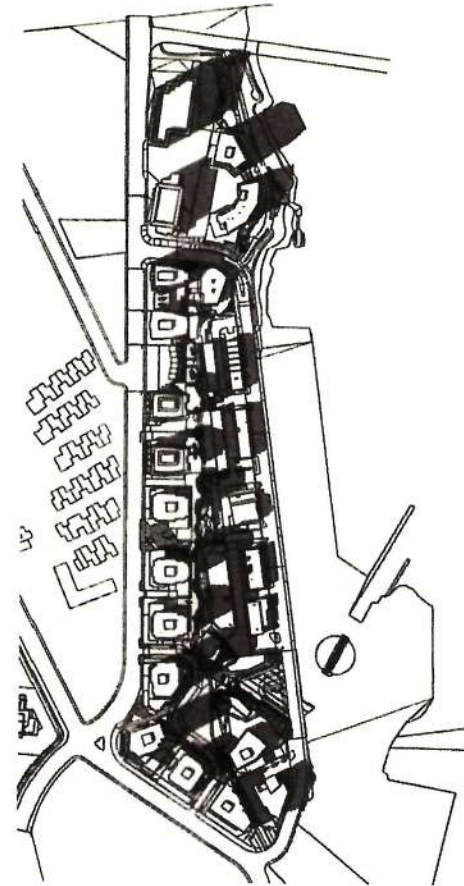




1 EQUINOX (2015): 10 AM
SCALE N.T.S.



2 EQUINOX (2015): 12 PM
SCALE N.T.S.



3 EQUINOX (2015): 2 PM
SCALE N.T.S.





DOCKSIDE GREEN TRANSPORTATION REVIEW

Parking Study

Prepared for: **Dockside Green**

Prepared by: **Boulevard Transportation, a division of Watt Consulting Group**

Our File: **1738**

Date: **June 18, 2015**

CONTENTS

1.0	Introduction	1
1.1	Proposed Development.....	1
2.0	Parking Requirement	1
3.0	Expected Parking Demand	3
3.1	Multi-Family Residential (Condominium).....	3
3.1.1	Vehicle Ownership at Existing Dockside Green Buildings	3
3.1.2	Vehicle Ownership at Representative Sites.....	3
3.1.3	Vehicle Ownership from Other Studies.....	4
3.1.4	Vehicle Ownership, by Unit Type.....	4
3.1.5	Visitors	5
3.1.6	Summary.....	5
3.2	General Commercial.....	5
3.2.1	Representative Commercial Observations	6
3.2.2	Variation Among Commercial Uses.....	6
3.2.3	Summary.....	7
3.3	Office.....	7
3.4	Other.....	7
4.0	On-Street Parking.....	10
4.1	Supply.....	11
4.2	Conditions.....	11
4.3	Summary	12
5.0	Summary.....	12
5.1	Recommendations	13
Appendix A	Summary of Study Sites.....	14
Appendix B	Summary of On-street Parking Observations.....	15

1.0 Introduction

Boulevard Transportation, a division of Watt Consulting Group, was retained by Dockside Green to review the transportation impacts of the 2014 Dockside Green Neighbourhood Plan. The review consists of four studies each under separate cover, as follows:

1. Traffic Impact Assessment;
2. Parking Study (site wide);
3. Dockside Beta Parking Study; and
4. Transportation Demand Management (TDM) Strategy.

The following is the Dockside Green site-wide Parking Study. The purpose of this study is to review the existing parking requirements for the site contained in the City's CD-9, Dockside District zoning to determine if the rates are appropriate or change is required. The study considers parking demand among existing Dockside Green buildings, representative multi-family residential and commercial sites, and relevant research in determining parking demand rates, as well as considers parking management options for the site and on-street parking conditions adjacent the site.

1.1 Proposed Development

The site is currently zoned "CD-9, Dockside District". The proposed development includes a total of 13 buildings with 1,253 multi-family residential units, 37,448 sq.ft. of commercial space and 17,715 sq.ft. office space. Parking is proposed per the CD-9 zoning rates specific to the Dockside Green site. Further information on the proposed development and land use is provided in the introductory letter.

2.0 Parking Requirement

The site's parking requirement is based on supply rates for the "CD-9, Dockside District zone. See *Table 1*. Parking supply rates in the CD-9 zone were developed during planning for the initial phase of development to reflect the site's expected parking demand based on land use, location, expected travel behavior, and transportation demand management (TDM) provisions. CD-9 rates are typically lower than general rates in the Zoning Bylaw. This study reviews parking rates for key land uses in the CD-9 zone to confirm they are appropriate for the site.

TABLE 1. SUMMARY OF PARKING REQUIREMENTS (CD-9 + ZONING BYLAW)

Classification	CD-9, Dockside Green	Zoning Bylaw
Multiple Residential (greater or equal to 70m ²)	1.0 space / unit	
Multiple Residential (40 - 70 m ²)	0.75 spaces / unit	1.3 spaces / unit
Studio Residential (less than 40m ²)	0.5 spaces / unit	
Office	1 space / 65m ²	1 space / 65m ²
Retail	-	1 space / 37.5m ²
Affordable Housing	0 spaces / unit	1.4 spaces / unit
Docks	0 spaces	-
Hotels	0.4 spaces / hotel room	1.0 space / unit
Live/Work Units	1.5 spaces / unit	-
Manufacturing	1 space / 140m ²	1 space / 140m ²
Restaurants / Pubs / Lounges	1 space / 7.5 seats	1 space / 5 seats (eating/drinking), 1 space / 3 seats (pub)
Parks	0 spaces	-
Seniors Housing	0.25 spaces / unit	0.35 spaces / unit
Wholesale/Warehouse	1 space / 140m ²	1 space / 93m ²
Wise Energy Systems	1 space / 140m ²	-
Work/Live	2 spaces / unit	-

The 2005 Master Development Agreement (MDA), Schedule F specifies that the site will provide bike racks to the LEED-ND or City Zoning standard, whichever is greater. The City's Zoning Bylaw results in a higher bicycle parking supply than LEED standards and will be met at Dockside Green. See *Table 2*.

TABLE 2. BICYCLE PARKING REQUIREMENTS

Bylaw Classification	Required Supply Rate
Multiple Dwellings	1 per unit plus a 6-space rack at each entrance of an apartment
Office, Retail Sales & Services, Restaurants, Research Establishments, & Laboratories	1 / 205m ² of GFA for the first 5,000m ² , plus 1 per 500m ² of additional GFA

3.0 Expected Parking Demand

Expected parking demand is assessed for the site's key land uses to determine whether the CD-9 supply rates are still appropriate for the site. The assessment focuses on the site's proposed multi-family residential, general commercial, and office land uses.

3.1 Multi-Family Residential (Condominium)

A total of 1,253 condominium units are proposed, distributed among 11 different buildings. See *Appendix A*. Appropriate parking rates have been considered for the site's multi-family residential (condominium) land uses below.

3.1.1 Vehicle Ownership at Existing Dockside Green Buildings

Vehicle ownership data was obtained from ICBC for existing "Synergy" and "Balance" multi-family residential buildings at Dockside Green, representing a total of 259 units at four addresses (373 Tyee Rd, 379 Tyee Rd, 391 Tyee Rd, 399 Tyee Rd). See *Table 3*. Average vehicle ownership among existing buildings is 0.82 vehicles per unit and ranges from 0.76 to 0.87 vehicles per unit.

TABLE 3. VEHICLE OWNERSHIP AT EXISTING DOCKSIDE GREEN BUILDINGS

Site	No. Units	Owned Vehicles	Ownership Rate (vehicles/unit)
373 Tyee Road	86	75	0.87
379 Tyee Road	86	65	0.76
391 Tyee Road	41	34	0.83
399 Tyee Road	46	38	0.83
	259	212	0.82

3.1.2 Vehicle Ownership at Representative Sites

Vehicle ownership data was obtained from ICBC for thirteen representative sites. See *Table 4*. Sites were chosen that are representative of the subject site based on location, type and size of units, proximity to transportation and services, and expected tenant type. See *Appendix A* for more detail on representative sites. Average vehicle ownership among representative sites is 0.88 vehicles per unit and ranges from 0.54 to 1.33 vehicles per unit. The rate at representative sites is approximately 8% higher than the subject site, but generally confirms that vehicle ownership rates in existing Dockside Green buildings is consistent with rates elsewhere.

TABLE 4. VEHICLE OWNERSHIP AT REPRESENTATIVE SITES

Site	No. Units	Owned Vehicles	Ownership Rate (vehicles/unit)
689 Bay Street*	100	54	0.54
873 Esquimalt Road*	24	32	1.33
924 Esquimalt Road*	58	34	0.59
1020 Esquimalt Road*	30	30	1.00
932 Johnson Street**	40	25	0.63
325 Maitland Street*	59	63	1.07
327 Maitland Street*	59	59	1.00
90 Regatta Landing**	78	59	0.76
455 Sitkum Road**	51	53	1.04
787 Tyee Road**	47	26	0.55
797 Tyee Road**	62	59	0.95
365 Waterfront Crescent**	23	20	0.87
160 Wilson Street**	123	130	1.06
		Average	0.88

*Vehicle ownership as of July 31, 2014

** Vehicle ownership as of April 30, 2014

3.1.3 Vehicle Ownership from Other Studies

Vehicle ownership information was obtained for condominium strata sites for similar studies in Victoria and Saanich. Average vehicle ownership rates from these studies was as follows:

- 0.80 vehicles / unit from a site in Victoria West
- 0.76 vehicles / unit from a site in Fairfield / Cook Street Village
- 0.92 vehicles / unit from a site near Douglas St (near Victoria / Saanich border)

3.1.4 Vehicle Ownership, by Unit Type

Average vehicle ownership among existing Dockside Green units is 0.82 vehicles per unit. The average vehicle ownership rate was considered relative to the known number of bachelor (13 units, 5%) one-bedroom (130, 50%), and two-bedroom+ (116, 45%) units in existing buildings to estimate ownership rates relative to unit type/size.

The Metro Vancouver study¹ found that bachelor units have a 24% lower vehicle ownership rate than one-bedroom units and one-bedroom units have a 22% lower rate than two-bedroom units. Considering the average vehicle ownership rate for existing units (0.82 per unit) among the Metro Vancouver ratios suggests that ownership rates are 0.55 vehicles per bachelor unit, 0.73 vehicles per one-bedroom unit, and 0.94 vehicles per 2-bedroom+ unit. See *Table 5*. These rates generally support the CD-9 rates.

TABLE 5. VEHICLE OWNERSHIP AT EXISTING BUILDINGS, BY UNIT TYPE

Unit Type	No. Units	Owned Vehicles (assumed)	Ownership Rate (vehicles/unit)	CD-9 Requirement
Studio	13	7	0.55	0.50
1 bedroom	130	96	0.73	0.75
2 bedroom +	116	109	0.94	1.00

3.1.5 Visitors

Vehicle ownership data represents resident vehicles but does not account for visitor parking. The Metro Vancouver study observed visitor parking demand rates of no more than 0.06 vehicles per unit and recommends a visitor parking supply rate of 0.1 spaces per unit for locations close to the downtown core with access to transportation options.

3.1.6 Summary

The CD-9 multi-family residential parking rates are representative of parking demand based on vehicle ownership rates in existing units and at representative sites. No changes to the CD-9 multi-family parking rates are required.

3.2 General Commercial

A total of 3,952m² (42,539 sqft) of mixed commercial floor space is proposed, distributed among five buildings. Exact land uses are unknown but could include a variety of retail, office, grocery and restaurant uses. Rather than identify rates for each commercial land use type, a general commercial parking rate is considered that allows for flexibility in future commercial tenants and reduces the need for parking variances with future changes in commercial occupants.

¹ Metro Vancouver, Metro Vancouver Apartment Parking Study, 2012. Available at: www.metrovancouver.org/planning/development/strategy/RGSDocs/Apartment_Parking_Study_TechnicalReport.pdf

3.2.1 Representative Commercial Observations

Observations were conducted at seven representative mixed commercial sites during weekday mid-day (Wed, August 06 at 1:00pm) and weekend mid-day (Sat, August 09 at noon). Observation periods were chosen to represent the peak period for commercial-retail land uses. Peak demand occurred during the weekday mid-day observation period. Average demand was approximately one vehicle per 45m² of commercial floor space. See *Table 6*. Detailed results are included in *Appendix A*. This rate accounts for a range of possible commercial land uses and is appropriate as a generalized parking supply rate for site planning purposes, rather than the "Retail" requirement of one space per 37.5m² in the City's zoning.

TABLE 6. SUMMARY OF COMMERCIAL OBSERVATIONS (WEEKDAY MID-DAY)

Site	Parking Supply	Estimated Floor Area (m ²)	Observed Vehicles	Demand Rate (per m ²)
"Westside Village" Bay St / Tyee Rd	274	6,500	168	1 / 39
"Esquimalt Plaza" Esquimalt Rd, Esquimalt Town Centre	171	4,800	106	1 / 45
"Head Street Plaza (Shoppers)" Head St / Esquimalt Rd	101	4,000	65	1 / 62
"Quadra Plaza (Fairways)" Quadra St / Kings Rd	111	5,000	90	1 / 56
"Harris Green" Yates St, London Drugs area only	107	3,500	102	1 / 34
"James Bay Square (Thrifty's)" Menzies St / Toronto St	138	3,600	105	1 / 34
"Cloverdale Plaza (Thrifty's)" Quadra St / Cloverdale Ave	110	3,100	67	1 / 46
			Average	1 / 45

3.2.2 Variation Among Commercial Uses

Observations suggest that mixed commercial parking demand is one vehicle per 45m². This rate accounts for a range of possible commercial land uses and is appropriate as a generalized parking supply rate for site planning purposes.

There is considerable variation in parking demand among commercial land uses. Restaurant is the highest parking generating land use, with peak demand rates in the range of one vehicle per 7m².² Office and other low intensity commercial land uses generate parking in the range of one vehicle per 65m² or less. Attention should be given as the site's commercial land uses are

² Based on ITE Parking Generation handbook, 4th Ed., "932: High-Turnover (Sit-Down) Restaurant" classification, pg 321

refined to ensure that a balanced application of high and low parking generation uses occupy the spaces allocated to general commercial land uses.

Shared parking should be encouraged among commercial land uses to minimize the impact of higher generation commercial uses and distribute demand over a larger parking supply. Commercial parking supplies may also be made available to residents outside peak commercial periods, with limitations clearly articulated to ensure residents are aware and do not park on-site during commercial peak periods.

3.2.3 Summary

Results suggest that commercial parking demand will be one vehicle per 45m², which is less than the “retail” requirement of one space per 37.5m² in the Zoning Bylaw. Accordingly, a “general commercial” land use designation should be added to the CD-9 zone with a parking supply requirement of one space per 45m². The reduction from the overall Zoning requirement is consistent with reductions in the multi-family, hotel, restaurant and other rates in the CD-9 zone.

3.3 Office

Office land uses were not considered in detail as part of this study. Rather, the City’s Zoning Bylaw will be used which specifies that office land uses must provide parking at a rate of one parking space per 65m².

Parking associated with office land uses is typically utilized between 8:00am and 6:00pm. Consideration should be given to opportunities to share office parking supplies with adjacent residential or restaurant land uses that experience parking demand after 6:00pm and on weekends.

3.4 Other

Other, specific land uses are proposed to be included in the CD-9 Zone. *Table 7* indicates the parking requirement for CD-9 Zone and the general Zoning Bylaw requirements for each specific land use. Note that the classifications shown are the closest to each land use, but may not be the best representation of the specific elements of each land use.

TABLE 7. PARKING REQUIREMENTS FOR OTHER LAND USES

Land Use ³	CD-9, Dockside Green		Zoning Bylaw	
Day Care		N/A	Kindergarten and Elementary Schools	1 space per employee plus 2
Cultural Facilities, including Museums, Theatres, Galleries, and Buildings used for Exhibits		N/A	In zones other than Commercial Exhibit Zones	1 space per 232m ² of lot area
Craft or Artisan Trades		N/A	In zones other than Commercial Exhibit Zones	1 space per 232m ² of lot area
Public Markets			In zones other than Commercial Exhibit Zones	1 space per 232m ² of lot area
Distilleries				1 space / 140m ² of GFA or 1 space / 3 employees, whichever is greater
Breweries		1 / 140m ²	Buildings for manufacturing use	
Liquor Retail Store as an Accessory to a Brewery or Distillery			Retail stores, banks personal services establishments or similar users	1 space / 37.5m ² GFA
Seniors ' Housing – Assisted Living				
	Seniors housing	0.25 / unit	Buildings containing senior citizens housing	0.35 spaces / unit
Seniors' Housing – Independent Living				
Parks and their Accessory Uses	Parks	0 stalls		N/A
Festivals and Associated Structures		N/A	Commercial Amusement Park	1 space / 9m ² of site area used for commercial amusement park and any retail establishments plus 1 space per 8 patrons
Urban Agriculture	Manufacturing	1 space / 140m ²	Buildings for manufacturing use	1 space / 140m ² of GFA or 1 space / 3 employees, whichever is greater

Recommended parking supply rates have been identified based on available research and review of Zoning Bylaw rates in other communities. See *Table 8*.

³ Land uses definition based on proposed CD-9 zone definitions, as provided by Dockside Green October 28, 2014

TABLE 8. RECOMMENDED PARKING SUPPLY RATES FOR OTHER LAND USES

Land Use ⁴	Recommended Supply Rate	Source
Day Care	1 space per 5 registered children	Consistent with zoning rates in comparable municipalities
Cultural Facilities, including Museums, Theatres, Galleries, and Buildings used for Exhibits	1 space per 40 m ²	Consistent with zoning rates in comparable municipalities
Craft or Artisan Trades	1 space per 90 m ²	Consistent with zoning rates in comparable municipalities
Public Markets	1 space per 45m ²	Consistent with recommended CD-9 "general commercial" rate
Distilleries		
Breweries	1 space per 90 m ²	Consistent with zoning rates in comparable municipalities
Liquor Retail Store as an Accessory to a Brewery or Distillery	1 space per 45 m ²	Consistent with recommended CD-9 "general commercial" rate
Seniors ' Housing – Assisted Living		
Seniors' Housing – Independent Living	0.25 spaces per unit ⁵	Consistent with existing CD-9 and CD-12 (Roundhouse District) rate
Parks and their Accessory Uses		n/a
Festivals and Associated Structures	1 space per 4 person capacity	Consistent with zoning rates in comparable municipalities
Urban Agriculture	1 space per 20 m ² for retail floor space only	Consistent with zoning rates in comparable municipalities

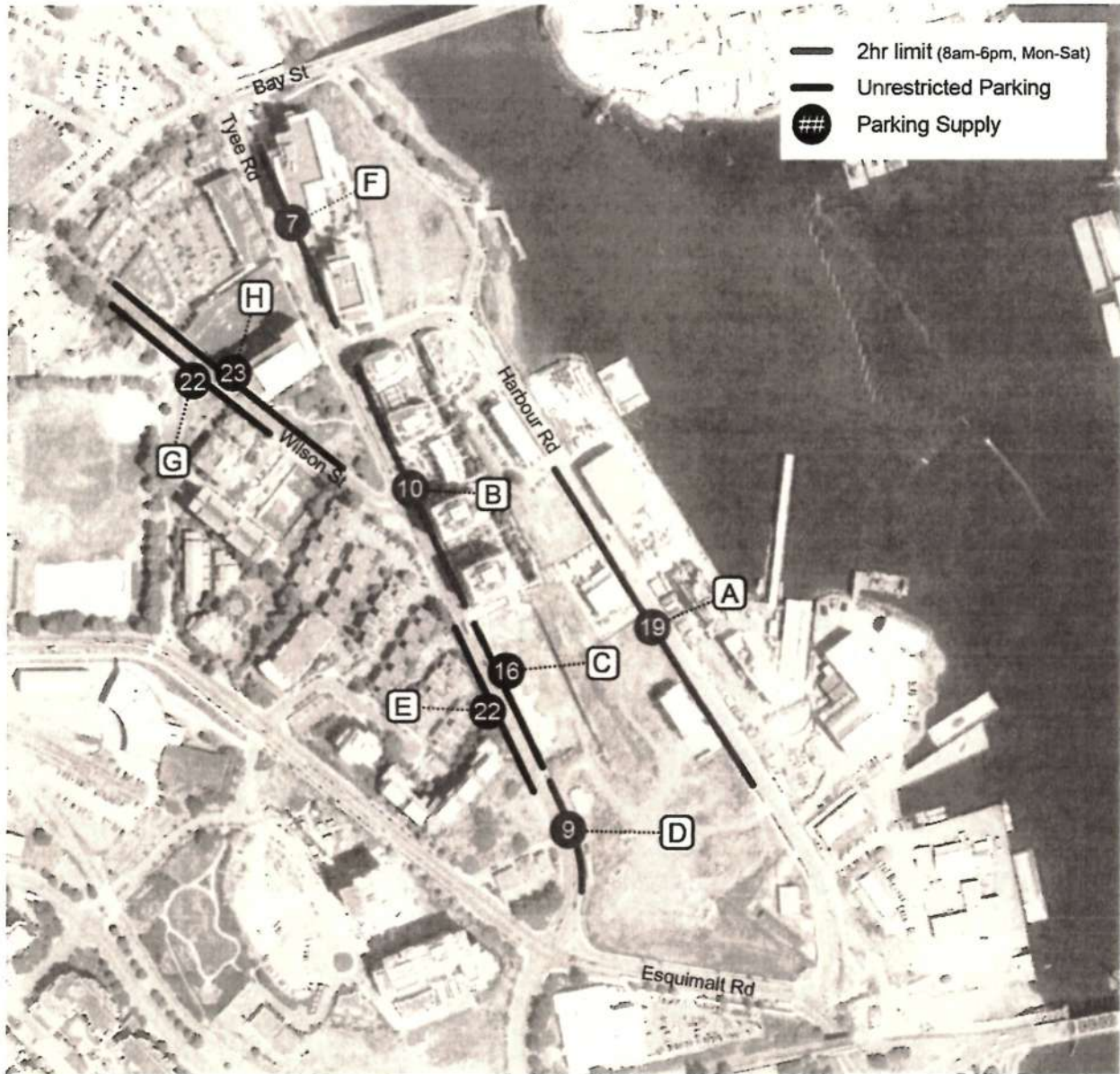
⁴ Land uses definition based on proposed CD-9 zone definitions, as provided by Dockside Green October 28, 2014

⁵ Independent living units generally have a higher rate of resident vehicle ownership and lower care worker parking demand as compared to assisted living

4.0 On-Street Parking

Observations of on-street parking conditions were conducted on Tuesday, July 29 2014 at 7:00am, 9:30am, noon, 3:30pm and 6:00pm. Observations were conducted in the vicinity of the site on Harbour Road, Tye Road and Wilson Street. See *Map 1*.

MAP 1. ON-STREET PARKING STUDY AREA (WITH SUPPLY + TIME RESTRICTIONS)



4.1 Supply

On-street parking is available on Tyee Road (35 spaces) and Harbour Road (19 spaces) immediately adjacent the site, as well as nearby on Tyee Road and Wilson Street. Parking adjacent the site on Harbour Road and portions of Tyee Road is restricted to two hours (8am to 6pm). Parking on a portion of Tyee Road adjacent the site, on the west side of Tyee Road (across from the site), and Wilson Street is unrestricted.

4.2 Conditions

Overall occupancy rates among all observed streets remain consistent throughout the day, ranging from 69% to 77% overall. Peak occupancy was observed at 9:30am. The largest increase in occupancy occurs between 7:00am and 9:30am, suggesting an influx in parked vehicles associated with employees in the area. Overall occupancy is 69% at 7:00am, which is relatively high for this time of day and suggests a number of area residents park on-street.

The Dockside Green properties fronting Harbour Road are largely undeveloped, which results in low occupancy rates on Harbour Road (Map 1, Area A). Peak occupancy was experienced at noon when 32% of available parking was occupied (6 of 19 spaces).

A two hour time restriction is in-place on parking on much of the east side of Tyee Road (D,B,F). Occupancy rates average 58% in these areas, generally remain between 40% and 80% throughout the day, and the two hour limit is generally adhered to resulting in a consistent turnover of vehicles.

Occupancy rates are highest where parking is unrestricted on Wilson Street (G,H) and the south end of Tyee Road (C,E), with rates consistently exceeding 85-90% occupancy over much of the day. Occupancy rates were high during the 7:00am observation before the majority of employees would arrive and a number of vehicles were observed parked all day, suggesting that residents utilize these on-street parking areas. Average duration is high, particularly on Tyee Road, a result of the lack of restrictions allowing vehicles to park for long periods of time. Over one-third of the unrestricted parking spaces on Tyee Road (C,E) were observed with the same vehicles parked all day (i.e. 7:00am to 6:00pm). The unrestricted portion of Tyee Road (C) is occupied at over 90% for much of the day and has a long average duration. Consideration should be given to applying a two hour limit to this area as Dockside Green develops to ensure vehicle turnover.

A detailed summary of on-street parking conditions is included in *Appendix B*.

4.3 Summary

On-street parking on the south end of Tyee Road, east side (C) should be restricted to two hours as the Dockside Green site is developed (Buildings R3-1, R3-2, R3-3, R8-1). This will ensure on-street parking is available to visitors of adjacent buildings (+/- 500 units) and create consistency with other new buildings that front Tyee Road. Vehicles that currently utilize this parking in excess of two hours will be displaced and seek parking elsewhere in the area.

Further, the City may consider a more comprehensive parking management strategy for the area. Observations demonstrate that unrestricted on-street parking areas experience high occupancy rates and vehicles park for long periods of time, suggesting on-street parking is used by area residents and employees. Consideration may be given to time restricting these areas to increase parking availability for customers and visitors and pay parking may be considered as a long-term strategy to address high parking occupancy. Such a strategy should also consider parking availability and management practices of adjacent commercial and residential properties to determine sites where a lack of parking supply or poor parking management is resulting in vehicles seeking on-street parking. Ultimately the comprehensive strategy is beyond the scope of the Dockside Green review and something the City may consider pursuing to address neighbourhood parking concerns.

5.0 Summary

Required parking supply rates were developed specific for Dockside Green and included in the site specific CD-9 zone. This study reviews the CD-9 parking rates to determine they are still appropriate or change is required to address expected parking demand.

CD-9 multi-family residential rates are 0.5 spaces per unit (less than 40m²), 0.75 per unit (40–70m²), and 1.0 per unit (more than 70m²). Vehicle ownership among existing Dockside Green residents was found to be 0.82 vehicles per unit, and is supported by similar ownership rates at nearby sites. When considered by size / number of bedrooms, assumed ownership rates are 0.55 vehicles per bachelor unit, 0.73 vehicles per one-bedroom, and 0.96 per two-bedroom. Up to an additional 0.1 spaces per unit is required to meet visitor parking demand. Results suggest that the CD-9 parking supply rates are representative of vehicles ownership rates and no changes to the CD-9 multi-family rates are required.

The CD-9 zone does not contain a parking supply rate for general commercial or retail land uses, instead reverting to the retail requirement of one space per 37.5m² in the Zoning Bylaw, Schedule C. Average parking demand among seven mixed commercial-retail sites was determined to be one vehicle per 45m², suggesting that the zoning rate exceeds parking

demand. It was also noted that commercial land uses experience varying parking demand rates and an altered parking supply may be required if land uses with particularly high or low parking demand occupy the commercial floor space.

Commercial parking supplies should be shared between businesses and sites as possible to minimize the impact of higher generation commercial uses (i.e. restaurants) and distribute demand over a larger parking supply.

On-street parking functions well where restricted to two hours (Tyee Rd west side, Harbour Rd). A two hour time limit should be applied to parking on the east side of Tyee Road south of Wilson Street as Dockside Green buildings are constructed. On-street parking surrounding the site experiences high occupancy and long average duration where parking is unrestricted (Wilson St, Tyee Rd west side south of Wilson St). A broader neighbourhood parking management approach is needed before conditions will change.

5.1 Recommendations

1. A “general commercial” or “retail” designation should be added to the CD-9 zone with a parking supply requirement of one space per 45m²;
2. Parking supply rates for specific land uses should be included in the CD-9 at rates specified in *Table 7*;
3. A two hour time limit should be applied to on-street parking adjacent future buildings on Tyee Road (east side, 373 Tyee Rd to Esquimalt Rd); and
4. The City should consider reviewing neighbourhood parking needs and on-street parking regulations in the area (Tyee Rd, Wilson St, Harbour Rd).

Appendix A Summary of Study Sites

Coastal Green Transportation Review
MAP OF STUDY SITES



Condominium Sites

- | | |
|-------------------|---------------------|
| ① 373 Tye Rd | ⑥ 327 Maitland St |
| ② 379 Tye Rd | ⑦ 873 Esquimalt Rd |
| ③ 391 Tye Rd | ⑧ 924 Esquimalt Rd |
| ④ 399 Tye Rd | ⑨ 1020 Esquimalt Rd |
| ⑤ 325 Maitland St | ⑩ 689 Bay St |

Commercial Sites

- | | |
|---------------------|--------------------|
| ① Westside Village | ⑥ James Bay Square |
| ② Esquimalt Plaza | ⑦ Cloverdale Plaza |
| ③ Head Street Plaza | |
| ④ Quadra Plaza | |
| ⑤ Harris Green | |

Summary of Study Sites, Condominiums

Location	Type	Context	Unit Types*				Total Units	Comments
			Studio	1 bedroom	2 bedroom	3 bedroom +		
1020 Esquimalt Rd	Strata	Urban		✓	✓		30	"Westport", completed in 1975
160 Wilson Street	Strata	Urban		✓	✓		123	"Parc Residences", completed in 2005
325 Maitland St	Strata	Urban		✓	✓		59	"Sea West Quay", completed in 1982
327 Maitland St	Strata	Urban		✓	✓		59	"Sea West Quay", completed in 1982
365 Waterfront Crescent	Strata	Urban		✓	✓		84	Selkirk Development, units are slightly larger, completed in 2009
373 Tyee Rd	Strata	Urban		✓	✓		86	"Balance", Dockside Green, completed in 2009
379 Tyee Rd	Strata	Urban		✓	✓		86	"Balance", Dockside Green, completed in 2009
391 Tyee Rd	Strata	Urban		✓	✓		41	"Synergy", Dockside Green, completed in 2007
399 Tyee Rd	Strata	Urban		✓	✓		46	"Synergy", Dockside Green, completed in 2007
455 Sitkum Road	Strata	Urban		✓	✓		51	Completed in 1999
689 Bay St	Strata	Urban		✓	✓		100	"Lexington Park", completed in 1994
787 Tyee Road	Strata	Urban	✓	✓	✓		47	"The Railyards", Phase 1 was completed in 2010, Phase 2 was completed in 2013
797 Tyee Road	Strata	Urban	✓	✓	✓		62	"The Railyards", completed in 2007
873 Esquimalt Rd	Strata	Urban		✓	✓		24	"Westpoint View", completed in 1994
90 Regatta Landing	Strata	Urban	✓	✓	✓		78	"The Railyards", completed in 2004
924 Esquimalt Rd	Strata	Urban		✓	✓		58	"The Skyline Condos", completed in 2012
932 Johnson Street	Strata	Downtown	✓	✓	✓		40	"The Urban", completed in 2004, commercial on first floor-Café

*Note: exact unit configuration is unknown

PARKING OBSERVATIONS, Commercial Land Uses

Shopping Plazas (mixed commercial)								
Observations at Representative Sites	Parking Supply	Est. Floor Area (m ²)	Weekday mid-day ¹			Weekend mid-day ²		
			Observed Vehicles	Demand Rate (per m ²)	Occupancy Rate	Observed Vehicles	Demand Rate (per m ²)	Occupancy Rate
A "Westside Village" Bay St / Tyee Rd	274	6,500	168	1/39	61%	110	1/59	40%
B "Esquimalt Plaza" Esquimalt Rd, Esquimalt Town Centre	171	4,800	106	1/45	62%	84	1/57	49%
C "Head Street Plaza (Shoppers)" Head St / Esquimalt Rd	101	4,000	65	1/62	64%	50	1/80	50%
D "Quadra Plaza (Fairways)" Quadra St / Kings Rd	111	5,000	90	1/56	81%	73	1/68	66%
E "Harris Green" Yates St, London Drugs area only	107	3,500	102	1/34	95%	81	1/43	76%
F "James Bay Square (Thrifty's)" Menzies St / Simcoe St	138	3,600	105	1/34	76%	55	1/65	40%
G "Cloverdale Plaza (Thrifty's)" Quadra St / Cloverdale Ave	110	3,100	67	1/46	61%	56	1/55	51%
			Average:	1/45	72%		1/59	53%
Recommended Rate: 1 parking space / 45m²								

¹Weekday Mid-day = Wednesday August 6th, 1:00pm

²Weekend mid-day = Saturday August 9th, noon

Appendix B

Summary of On-Street Parking Observations

Dockside Green Transportation Review
ON-STREET PARKING SUPPLY

- 2hr Limit (8am-6pm, Mon-Sat)
- Unrestricted Parking
- ## Parking Supply



ON-STREET PARKING CONDITIONS

Section	Side	Restrictions	No. Stalls	Occupancy						
				7:00am	9:30am	Noon	3:30pm	6:00pm	Average Occupancy	
A	Harbour Road Esquimalt Rd to Tyee Rd	West	2 Hour, 8am-6pm, Mon-Sat	19	0 0%	3 16%	6 32%	5 26%	3 16%	3.4 18%
B	Tyee Road Harbour Rd to 373 Tyee Rd	East	2 Hour, 8am-6pm, Mon-Sat	10	6 60%	7 70%	6 60%	7 70%	8 80%	7 68%
C	Tyee Road 373 Tyee Rd to 359 Tyee Rd	East	Unrestricted	16	15 94%	15 94%	15 94%	15 94%	13 81%	14.6 91%
D	Tyee Road 359 Tyee Rd to Esquimalt Rd	East	2 Hour, 8am-6pm, Mon-Sat	9	3 33%	4 44%	5 56%	5 56%	2 22%	4 42%
E	Tyee Road Esquimalt Rd to Wilson Rd	West	Unrestricted	22	21 95%	22 100%	20 91%	18 82%	21 95%	20.4 93%
F	Tyee Road Harbour Rd to Bay St	East	2 Hour, 8am-6pm, Mon-Sat	7	5 71%	4 57%	2 29%	5 71%	6 86%	4.4 63%
G	Wilson Street Tyee Rd to Bay St	West	Unrestricted	22	18 82%	21 95%	20 91%	20 91%	21 95%	20 91%
H	Wilson Street Bay St to Tyee Rd	East	Unrestricted	23	20 87%	23 100%	23 100%	22 96%	22 96%	22 96%

On-street parking conditions based on observations from Tuesday, July, 29, 2014

ON-STREET PARKING CONDITIONS

Section	Side	Restrictions	No. Stalls	Duration					Total Vehicles	Total Hours	Average Duration (hours)
				1 count < 2.5 hrs	2 counts 2.5-5 hrs	3 counts 5-8.5 hrs	4 counts 8.5-11 hrs	5 counts 11 hrs+			
A Harbour Road Esquimalt Rd to Tyee Rd	West	2 Hour, 8am-6pm, Mon-Sat	19	11	3	0	0	0	14	25.0	1.79
B Tyee Road Harbour Rd to 373 Tyee Rd	East	2 Hour, 8am-6pm, Mon-Sat	10	27	2	1	0	0	30	48.0	1.60
C Tyee Road 373 Tyee Rd to 359 Tyee Rd	East	Unrestricted	16	13	2	4	6	4	29	153.3	5.28
D Tyee Road 359 Tyee Rd to Esquimalt Rd	East	2 Hour, 8am-6pm, Mon-Sat	9	7	1	2	1	0	11	35.8	3.25
E Tyee Road Esquimalt Rd to Wilson Rd	West	Unrestricted	22	13	4	6	2	11	36	212.3	5.90
F Tyee Road Harbour Rd to Bay St	East	2 Hour, 8am-6pm, Mon-Sat	7	13	2	0	0	1	16	34.8	2.17
G Wilson Street Tyee Rd to Bay St	West	Unrestricted	22	20	8	12	3	3	46	198.3	4.31
H Wilson Street Bay St to Tyee Rd	East	Unrestricted	23	19	6	4	8	6	43	217.3	5.05

On-street parking conditions based on observations from Tuesday, July, 29, 2014



DOCKSIDE GREEN TRANSPORTATION REVIEW

Dockside BETA Parking Study

Prepared for: **Dockside Green**

Prepared by: **Boulevard Transportation, a division of Watt Consulting Group**

Our File: **1738**

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CONTENTS

1.0	Introduction	1
1.1	Proposed Development.....	1
2.0	Expected Parking Demand	2
2.1	Parking Demand Rates	2
2.1.1	Office	2
2.1.2	Retail.....	2
2.1.3	Restaurant/Brewery.....	3
2.1.4	Public Facilities	3
2.1.5	Summary.....	3
2.2	Adjustment Factors.....	3
2.2.1	Neighbourhood Residents	3
2.2.2	High Rate of Cycling.....	3
2.2.3	Shared Parking	4
2.3	Summary of Parking Demand	4
2.3.1	Demand Rate.....	4
2.3.2	Parking Supply / Land Use.....	4
2.3.3	Contingency.....	5
3.0	Demand Management	5
3.1	Bicycle Provisions	5
3.1.1	Bike Parking.....	5
3.2	Carshare.....	6
3.3	Public Transit.....	6
4.0	Summary.....	6
4.1	Recommendations.....	7

Appendix A

Parking Demand Analysis, by Time of Day

1.0 Introduction

Boulevard Transportation, a division of Watt Consulting Group, was retained by Dockside Green to review the transportation impacts of 2014 Dockside Green Neighbourhood Plan. The review consists of four studies each under separate cover, as follows:

1. Traffic Impact Assessment;
2. Parking Study;
3. Dockside BETA Parking Study; and
4. Transportation Demand Management (TDM) Strategy.

The following is the Dockside BETA Parking Study. The purpose of the study is to identify an appropriate parking supply to accompany the proposed "Dockside BETA" interim land uses.

1.1 Proposed Development

Dockside BETA is proposed as a demonstration project using shipping containers as an interim land use for the VIP84612 (CI-7) property fronting Harbour Road, immediately south of the existing Farmer Construction building. See *Figure 1*.

FIGURE 1. DOCKSIDE BETA SITE



Dockside BETA will use shipping containers in a flexible arrangement to accommodate a range of potential tenants, with the type and quantity of land uses dependent on the tenants that are attracted to the site. While unsure of exact land uses, the site is being planned to appeal to restaurant, brewery, boutique retail, office, and art/cultural tenants, and will include shared supporting amenities such as washrooms, garbage/recycling, and bicycle parking¹.

Vehicular parking will be provided in an adjacent surface lot with capacity for approximately 30 parking spaces. A shared bike parking supply will be provided.

2.0 Expected Parking Demand

2.1 Parking Demand Rates

Expected parking demand rates have been generated for the generalized land uses anticipated for the site – Office, Retail, Restaurant / Brewery.

2.1.1 Office

The City's Zoning Bylaw has a requirement of one parking space per 65m² GFA for office land uses. This rate is lower than other municipalities in the Capital Region, but considered a good representation of parking demand associated with office land uses in an urban context.

2.1.2 Retail

Retail land use is assumed to be similar to the office land uses, but with fewer employees and a larger number of customers. Retailers are likely to be "boutique" style businesses offering specialty items, rather than larger-scale businesses.

The City's Zoning Bylaw requirement is one parking space per 37.5m² GFA for retail land uses. Parking demand among similar land uses in the ITE manual ranges from 1.5 to 4.0 vehicles per 1,000 sqft, suggesting that the City's bylaw rate is an appropriate representation of expected parking demand.

Small kiosk-style retail vendors were contacted to better understand parking demand among similar businesses. Based on our conversations, we understand that peak parking demand is commonly one employee vehicle and two customer vehicles per business. Many of these businesses are in downtown or urban locations where customers frequently park in a centralized location to access numerous businesses.

¹ Assumed land uses based on description in the *Dockside BETA Application Book*

2.1.3 Restaurant/Brewery

The City's Zoning Bylaw requirement is one parking space per five seats for Restaurant / Brewery land uses. This results in an assumed requirement of one parking space per 7m² based on common restaurant space allocation of one seat per 15 sqft. The ITE manual² suggests a rate of one vehicle per 6.5m², which is consistent with the City's required rate.

It should be noted that a strictly brewery operation (i.e. without restaurant) would be considered an industrial land use and have a significantly lower parking requirement. Thus, the rate generated above is considered a "worst case".

2.1.4 Public Facilities

Public facilities consist of bicycle parking, washrooms and garbage/recycling collection. No parking demand has been generated for these uses.

2.1.5 Summary

The average parking demand rate among Office, Retail, and Restaurant / Brewery land uses is one vehicle per 16.2 m². This rate is the application of "typical" parking demand rates by land use and does not factor site-specific characteristics.

2.2 Adjustment Factors

Adjustment factors are applied to the expected parking demand to account for site specific conditions of the site - proximity to Docksider Green residential population, an anticipated high rate of cycling, and shared parking among BETA uses.

2.2.1 Neighbourhood Residents

A portion of the expected BETA parking demand is due to Docksider Green and Victoria West residents who will walk to the site and not require parking. An assumed parking demand reduction factor of 10% has been applied to account for Docksider Green and Victoria West residents walking to the BETA site.

2.2.2 High Rate of Cycling

A high rate of cycling is expected due to the provision of bike parking/ (see *Section 3*) and the site's proximity to Harbour Road (part of the Galloping Goose), which experiences bicycle volumes that are three times higher than vehicle volumes. An assumed parking demand reduction factor of 10% has been applied to account for the anticipated high rate of cycling. Observations at the existing café at the Harbour Road / Galloping Goose crossing support this assumption (cyclists represented 30% of customers during observations).

² Based on ITE manual "Coffee/Donut Shop without Drive-Through Window (936)" land use

2.2.3 Shared Parking

Parking demand was assessed by time of day (weekday and weekend) to determine the period of peak parking demand for the site as a whole. Land use is assumed to be equally split (33% each) between Office, Retail, and Restaurant / Brewery. Time of day factors are based on the Urban Land Institute (ULI) *Shared Parking, 2nd ed.* and adjusted to reflect local experience.

Results suggest that the peak parking demand experienced by the site will be approximately 6.5% less than the combined peak demand of the three land uses. This assumes that the BETA parking supply is unassigned and available to all site employees and customers. The complete analysis is included in *Appendix A*.

2.3 Summary of Parking Demand

2.3.1 Demand Rate

The adjusted parking demand rate is an average of one vehicle per 20.9 m². See *Table 1*. This accounts for average expected parking demand assuming an even allocation of floor space between Office, Retail, and Restaurant / Brewery land uses. This represents an approximately 25% reduction from the baseline demand rate.

TABLE 1. SUMMARY OF PARKING DEMAND + ADJUSTMENT FACTORS

Land Use	Baseline Parking Demand Rate (per Section 2.1)	Adjusted Parking Demand Rate (per Section 2.2)
Office	1 / 65.0 m ²	1 / 83.8 m ²
Retail	1 / 37.5 m ²	1 / 48.4 m ²
Restaurant / Brewery	1 / 7.0 m ²	1 / 9.1 m ²
Average	1 / 16.2 m²	1 / 20.9 m²

2.3.2 Parking Supply / Land Use

As noted, the proposal includes a gravel parking area with capacity for approximately 30 parking spaces (+/-). The exact parking supply is still to be determined. Applying the expected parking demand rate to the site and assuming a parking supply of 30 spaces, it is recommended that the site contain a total floor area of approximately 625m² (6,700 sqft) This is estimated to be approximately 20 full-size containers (8' x 40'). The total floor area may increase if the site contains a large proportion of Office or Retail floor area and decrease if a large proportion of Restaurant / Brewery floor area.

It is also recommended that further data collection and study is undertaken once the site reaches 450m² floor area (approximately 75% of the recommended total) to determine if the site's parking supply is appropriate or if the supply rate should be altered by varying site floor area and/or parking supply.

2.3.3 Contingency

Harbour Road on-street parking conditions were reviewed as part of the site-wide *Dockside Green Parking Study* and found that the 19 parking spaces on Harbour Road are no more than one-third occupied with at least 13 spaces available at all times. Parking spaces at the northern end of Harbour Road are more heavily used than spaces on the south end adjacent the Dockside BETA site. There are approximately five on-street spaces directly adjacent the site (all 25m or less) that are currently without adjacent parking generating land uses and under-utilized that will likely be used by Dockside BETA customers / guests. This increases the site's functional parking supply by approximately 15%.

3.0 Demand Management

Transportation demand management (TDM) provisions are proposed for Dockside BETA, coordinated with the broader site-wide *Transportation Demand Management (TDM) Strategy*. TDM initiatives will broaden travel options to the site and encourage reduced parking demand beyond reduction factors applied for shared parking, high density residential nearby, and anticipated high rate of cyclists (see *Section 2.2*).

3.1 Bicycle Provisions

The Dockside BETA site is located on Harbour Road, which forms part of the Galloping Goose Regional Trail and is an important regional cycling route. Harbour Road cyclist volumes are approximately 440 cyclists in the PM peak hour and exceed vehicle volumes by approximately three times. The site should include appropriate facilities to accommodate the expected high proportion of cycling trips.

3.1.1 Bike Parking

Bike parking would be supplied at an approximate rate of one space per 200 m² using a conventional approach³, resulting in three or four total spaces. This provision is inadequate given the site's unique land uses and proximity to a major regional cycling corridor. A shared bike parking supply is recommended that may be accessed by site employees and visitors / customers. The developer's desire to locate bike parking in containers is supported,

³ The City's requirement for "office, retail sales and services, restaurants..." is one space per 205m² for the first 5,000m² and one space per 500m² for additional floor area

assuming it is centrally located and altered to permit constant surveillance. A shared bike parking supply of 25 spaces is considered appropriate for the site. This will result in at least one space per container / tenant and a supply rate of approximately one space per 25m², which far exceeds any conventional supply requirements. Additionally, each container should be accompanied by a Class 2 bike rack located adjacent the container entrance that is visible, well lit and weather-protected when possible. The combination of a large shared bike parking supply and small individual racks at each container is expected to meet site demand for bike parking.

3.2 Carshare

One carshare vehicle operated by the Victoria Carshare Cooperative (VCSC) is proposed to be stationed on Harbour Road adjacent the Dockside BETA site. This is one of eight vehicles proposed for the broader Dockside Green development and should remain in this location as long as Dockside BETA is operational. The on-street parking space should be identified as a dedicated carshare parking space. Close proximity of the carshare vehicle to the bicycle parking will help facilitate multi-modal trips.

3.3 Public Transit

Bus stops are located approximately 300m from the Dockside BETA site on Esquimalt Road at Harbour Road. These stops are served by frequent transit via the no. 15, 24, and 25 routes, with potential rerouting of the no.14 in the future to also travel via Esquimalt Road.

Transit does not operate on Harbour Road adjacent the site.

4.0 Summary

The Dockside BETA proposal is a unique concept that requires a distinct approach in developing appropriate parking ratios. Major factors of the project that will impact parking demand include its proximity to the Galloping Goose trail and to residential and office units in Victoria West and Downtown. Results suggest average parking demand will be one vehicle per 20.9 m² floor area. This assumes an even allocation of Office, Retail, and Restaurant / Brewery land uses, and significant variation in floor area allocation would vary parking demand.

The Dockside BETA proposal includes a parking area with capacity for approximately 30 vehicles. Applying the expected parking demand rate to the site and assuming a parking supply of 30 spaces, a total floor area of approximately 625m² (6,700 sqft) is considered appropriate. This includes only parking generating land uses (office, retail, restaurant / brewery), and not shared amenities such as bike parking, washrooms, and utilities. The total floor area may

increase if the site contains a large proportion of Office or Retail floor area and decrease if a large proportion of Restaurant / Brewery floor area. Further data collection and study should be undertaken once the site reaches 450m² floor area (approximately 75% of the recommended total) to determine if the site's parking supply is appropriate.

Demand management measures are being proposed, consistent with the site-wide Dockside Green TDM strategy. A shared bike parking supply of 25 spaces will be provided and a small bike rack with each container. The provision of TDM will support increases in alternative travel modes.

The Dockside BETA proposal includes a bicycle hub (bike parking) and carshare vehicle, both of which are consistent with the site-wide approach to transportation demand management (TDM) and reflect the increase rate of cycling expected at the site.

4.1 Recommendations

1. Total floor area should be approximately 625m² (6,700 sqft) accompanied by 30 parking spaces;
2. Parking conditions should be studied at 75% build-out (approximately 450 m²) and supply rates adjusted, if required.
3. Placement of TDM measures be as accessible as possible to encourage and promote alternative transportation options.

Appendix A
PARKING DEMAND ANALYSIS,
BY TIME OF DAY

Parking Demand, by Time of Day

Parking Demand Rates

Land Use	Demand Rate*
Office	1 vehicle per 78.7m ²
Retail	1 vehicle per 45.4 m ²
Restaurant / Brewery	1 vehicle per 8.5m ²

* After adjustments for adjacency to Dockside Green and high rate of cycling

Parking Demand, by Time-of-Day

Time	Weekday							Weekend						
	Office		Retail		Restaurant / Brewery		Overall Rate	Office		Retail		Restaurant / Brewery		Overall Rate
	Factor	Rate	Factor	Rate	Factor	Rate		Factor	Rate	Factor	Rate	Factor	Rate	
6:00 AM	0%	0.0000	0%	0.0000	0%	0.0000	0.0000	0%	0.0000	0%	0.0000	0%	0.0000	0.0000
7:00 AM	25%	0.0032	25%	0.0055	25%	0.0294	0.0127	0%	0.0000	0%	0.0000	25%	0.0294	0.0098
8:00 AM	50%	0.0063	25%	0.0055	25%	0.0294	0.0138	0%	0.0000	25%	0.0055	25%	0.0294	0.0116
9:00 AM	75%	0.0095	25%	0.0055	50%	0.0588	0.0246	25%	0.0032	25%	0.0055	50%	0.0588	0.0225
10:00 AM	100%	0.0127	50%	0.0110	50%	0.0588	0.0275	50%	0.0063	50%	0.0110	50%	0.0588	0.0254
11:00 AM	100%	0.0127	50%	0.0110	75%	0.0882	0.0373	50%	0.0063	50%	0.0110	75%	0.0882	0.0352
12:00 PM	100%	0.0127	100%	0.0220	75%	0.0882	0.0410	50%	0.0063	100%	0.0220	75%	0.0882	0.0389
1:00 PM	100%	0.0127	100%	0.0220	75%	0.0882	0.0410	50%	0.0063	100%	0.0220	75%	0.0882	0.0389
2:00 PM	100%	0.0127	100%	0.0220	75%	0.0882	0.0410	50%	0.0063	100%	0.0220	75%	0.0882	0.0389
3:00 PM	100%	0.0127	100%	0.0220	75%	0.0882	0.0410	50%	0.0063	100%	0.0220	75%	0.0882	0.0389
4:00 PM	100%	0.0127	75%	0.0165	75%	0.0882	0.0392	25%	0.0032	75%	0.0165	75%	0.0882	0.0360
5:00 PM	75%	0.0095	75%	0.0165	100%	0.1176	0.0479	25%	0.0032	75%	0.0165	100%	0.1176	0.0458
6:00 PM	50%	0.0063	50%	0.0110	100%	0.1176	0.0450	25%	0.0032	50%	0.0110	100%	0.1176	0.0439
7:00 PM	25%	0.0032	50%	0.0110	75%	0.0882	0.0341	0%	0.0000	50%	0.0110	100%	0.1176	0.0429
8:00 PM	0%	0.0000	25%	0.0055	75%	0.0882	0.0312	0%	0.0000	25%	0.0055	100%	0.1176	0.0411
9:00 PM	0%	0.0000	25%	0.0055	50%	0.0588	0.0214	0%	0.0000	25%	0.0055	75%	0.0882	0.0312
10:00 PM	0%	0.0000	0%	0.0000	25%	0.0294	0.0098	0%	0.0000	0%	0.0000	50%	0.0588	0.0196
11:00 PM	0%	0.0000	0%	0.0000	25%	0.0294	0.0098	0%	0.0000	0%	0.0000	50%	0.0588	0.0196
12:00 PM	0%	0.0000	0%	0.0000	25%	0.0294	0.0098	0%	0.0000	0%	0.0000	25%	0.0294	0.0294

Note: Time-of-day factors based on Urban Land Institute's (ULI) "Shared Parking" and adjusted to reflect location experience.

Summary

Rate: One vehicle per 20.9 m² (0.0479), experienced Weekday 5:00pm

Differential: Approximately 6.5% reduction (0.0512 to 0.0479)



DOCKSIDE GREEN TRANSPORTATION REVIEW

Transportation Demand Management (TDM) Strategy

Prepared for: **Dockside Green**
Prepared by: **Boulevard Transportation, a division of Watt Consulting Group**
Our File: **1738**
Date: **July 31, 2015**

CONTENTS

1.0	Introduction	1
1.1	What is Transportation Demand Management (TDM)?.....	1
2.0	TDM Commitment (2005 MDA) + Progress	2
2.1	Financial Commitment.....	2
2.2	Progress.....	3
3.0	Updated TDM Strategy	5
3.1	Carshare Program.....	6
3.2	Bike Parking.....	7
3.3	Public Transit / Mini Transit.....	8
3.4	Education / Signage.....	13
3.5	Summary of Updated TDM Strategy.....	14
3.6	Comparison of 2005 + 2015 TDM Strategy.....	15
4.0	Summary	17

Appendix A

Master Development Agreement (2005), Schedule F

Appendix B

“Mobility Hub” Concept

1.0 Introduction

Boulevard Transportation, a division of Watt Consulting Group, was retained by Dockside Green to review the transportation impacts of Dockside Green, Phase II. The review consists of four studies each under separate cover, as follows:

1. Traffic Impact Assessment;
2. Parking Study (site wide);
3. Dockside BETA Parking Study; and
4. Transportation Demand Management (TDM) Strategy.

The following is the Transportation Demand Management (TDM) Strategy. The purpose of the TDM Strategy is to review commitments in the 2005 Master Development Agreement (MDA), gauge the effectiveness of current TDM programs, and identify an updated TDM strategy that makes best use of available resources.

1.1 What is Transportation Demand Management (TDM)?

Transportation demand management refers to policies, programs, and services that influence whether, why, when, where, and how people travel¹. Applied to Dockside, TDM will be used to expand travel options, encourage walking, cycling, public transit, and other alternative options, and minimize parking demand and vehicle trips generated by the site.

¹ Definition based on Transport Canada, TDM for Canadian Communities, March 2011

2.0 TDM Commitment (2005 MDA) + Progress

The Master Development Agreement (MDA) was established in 2005 between Docksideroad and the City of Victoria to clarify the terms and conditions under which Docksideroad will be developed. The MDA, Schedule F specifies that the following TDM provisions will be provided:

- **Carshare:** Ten (10) carshare vehicles will be provided and operated by Victoria Carshare.
- **BC Transit:** Docksideroad will work with BC Transit to improve service during peak hours, encourage smaller buses, and explore strategies to promote ridership (i.e. subsidized passes).
- **Mini-Transit:** A shuttle vehicle will be purchased and operate between Docksideroad and downtown, and can be administered through Victoria Carshare or other alternative company. The main target is for seniors as it will give residents with mobility challenges a drop off service to key locations within the City.
- **Bicycle Storage:** Bike racks will be provided to the LEED or City standard, whichever is greater. A total of 150 bike racks will be provided at-grade.
- **Education:** Travel options information will be posted on the Docksideroad website and distributed to residents and employees, including route maps (cycling, transit), cycling user information, and carpool and carshare information. Information has been recently updated, and will be continually updated in future.
For more information, visit: <http://www.docksideroad.com/development/places/>

The MDA, Schedule F is included in *Appendix A* for reference.

2.1 Financial Commitment

A total of \$376,000 was committed specifically to TDM in the 2005 MDA. See *Table 1*.

TABLE 1. SUMMARY OF FINANCIAL COMMITMENTS TO TDM (2005 MDA)²

Program	Budget
Mini-Transit	\$60,000
Carshare	\$240,000
Bicycle Storage	\$76,000
Total	\$376,000

2.2 Progress

Progress on the 2005 TDM commitments is summarized in *Table 2*³ and includes provision of two carshare vehicles, 280 carshare memberships for residents, 4 carshare memberships for commercial tenants and bicycle parking.

TABLE 2. STATUS OF TDM PROGRAMS

Program	Status
Mini-Transit	A mini-transit / shuttle service has not been established and is not being pursued
Carshare	<ol style="list-style-type: none"> Two vehicles were purchased for carsharing (SmartCar, Honda Insight), one of which has been moved to a different location (\$17,031) 280 Victoria Carshare memberships were purchased for residents (\$100 each) 4 commercial memberships were purchased (\$700 each) Applicable legal, administrative and marketing costs (\$20,000) Two parking spaces have been allocated to carshare vehicles (off Tyee Rd)
Bicycle Storage	<ol style="list-style-type: none"> Customized bike racks created and installed at Synergy, Balance and commercial buildings Bicycle lockers are provided underground parking for resident bicycles Shower/change areas available for retail employees in Synergy building

² Cost figures from 2005 MDA, Schedule D: Development/Amenity Schedule

³ TDM progress is summarized most recently in the Docksiderg Annual Sustainability Report, 2013

Approximately \$87,000 has been invested in TDM at Dockside Green to-date and approximately \$290,000 remains from the financial commitment in the 2005 MDA. See *Table 3*. The following section considers an updated TDM approach to maximize the effectiveness of TDM resources.

TABLE 3. SUMMARY OF TDM EXPENDITURES

Program	Commitment	Expenditure	Remaining
Mini-Transit	\$60,000	\$0	\$60,000
Carshare	\$240,000	\$67,831	\$172,169
Bike Racks	\$76,000	\$19,760	\$56,240
Total	\$376,000	\$87,591	\$288,409

3.0 Updated TDM Strategy

The following section identifies an updated TDM strategy for Dockside Green (Phase 2). The goal is to review the TDM commitments from the 2005 MDA, provide updates to meet the intent of those commitments, and provide alternatives to maximize effectiveness of the TDM strategy in 2015.

In 2015, Dockside Green continues to view TDM as a key element of their overall Neighbourhood Design Strategy. The underlying approach of the revised 2015 TDM Strategy is to concentrate travel options and TDM investments into “mobility hubs” located adjacent to high density land uses or at key access points to the site, recognizing the surrounding neighbourhood context and existing transportation infrastructure. See *Figure 1*. Concentrating travel options around hubs is expected to increase awareness of travel options, strengthen connections between modes to facilitate multi-modal trips, and provide desirable alternatives to single-occupant vehicle travel.

Eight “mobility hub” locations are identified, each with a specific set of TDM provisions that include a variety of travel options including bike parking, carshare vehicles, bus stops, harbour ferry access, and signage/information. See *Table 4*. Each TDM strategy/provision is explained in more detail on the following pages.

Refer to *Appendix B* for a map of mobility hub locations.

FIGURE 1. MOBILITY HUB LOCATIONS

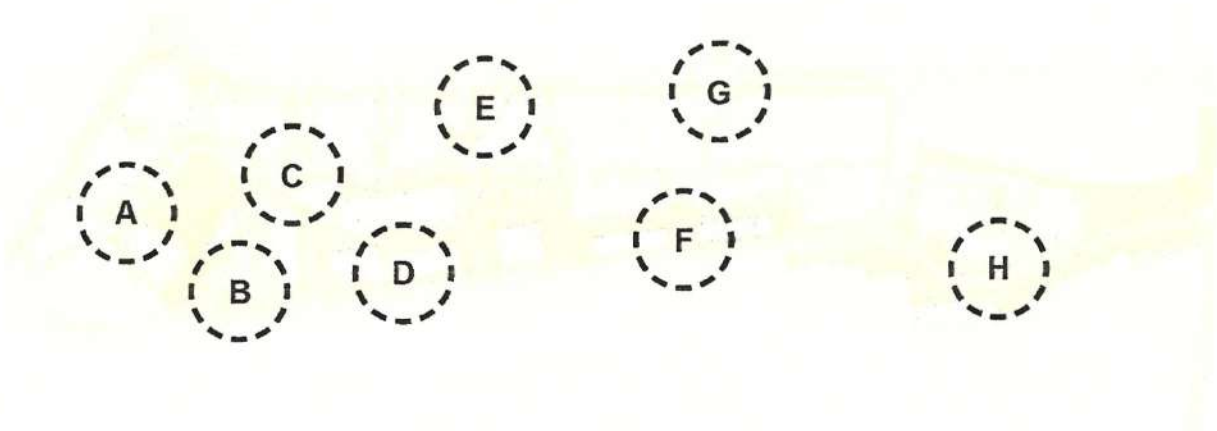


TABLE 4. SUMMARY OF MOBILITY HUB LOCATIONS

Location	TDM Provisions				
	Car Share	Bus Stops	Bike Parking	Ferry Dock	Signs, Info
A Dockside Cres (south end) adjacent R8-3, R9, CI-6					
B Harbour Road at commercial plaza adjacent CI-5, CI-6					
C Dockside Cres (north end) adjacent R8-1, R3-3, CI-5					
D Harbour Road adjacent CI-7, R6 and existing biomass building					
E Tyee Road south of Wilson Street, adjacent R3-1, R3-2					
F Harbour Road (mid-way) adjacent commercial-retail buildings					
G Harbour Road at Wilson Street, adjacent existing residential buildings					
H Galloping Goose trail north of Harbour Road, adjacent R10-1, R10-2					

3.1 Carshare Program

As noted in *Section 2.2*, two carshare vehicles were purchased and contributed to the Victoria Carshare Cooperative (VCSC) fleet, two dedicated carshare parking spaces were assigned adjacent Tyee Road, and 270 VCSC membership purchased for Docksideroad residents at a cost of \$100 each. One of the vehicles has been relocated elsewhere, but remains part of the VCSC fleet. This represents an estimated expenditure of \$66,000 to-date and an estimated \$174,000 remaining from the initial commitment.

Approximately 22% of the 270 memberships available to residents have been activated (59 memberships) and 15% of available memberships are currently activated (41 memberships). VCSC notes that membership uptake rates at Docksideroad are the strongest of any new development in the area⁴. The remaining unused memberships from the pre-existing pool will be available to future residents up to a maximum of 270 memberships, representing memberships for approximately 21.5% of all multi-family units.

Utilization statistics were provided by VCSC for the vehicle stationed at Docksideroad. In February 2014 the vehicle was booked on average 25% of the time (6hrs / day) and in July 2014 it was booked on average 34% of the time (8hrs / day). VCSC notes that a second vehicle will soon be stationed at Docksideroad to address demand⁵.

⁴ Based on conversation with the Director of Victoria Carshare Cooperative, by way of email dated August 20 2014

⁵ *ibid.*

The current carshare vehicle supply rate is one vehicle per 270 residential units. Five additional vehicles are needed at full build-out to maintain this supply rate among the proposed 1,253 multi-family residential units, although it is noted that the current vehicle supply rate may under-represent the site's need. VCSC has confirmed that, by their estimation, a total of eight vehicles is an appropriate allocation at full build-out⁶. Accordingly, a total of eight carshare vehicles are recommended – two existing vehicles, six new vehicles. This is two less vehicles than in the 2005 MDA and new expenditure of approximately \$148,000.

Future vehicles should be located adjacent developed buildings and added at a rate of one vehicle per 200 to 225 multi-family residential units. Each mobility hub should have a carshare vehicle located in on-street parking spaces and signed accordingly, which will make them highly visible, available to all area residents, and convenient for multi-modal trips. Those proposed on-street parking spaces that are not on site will act as a "primary" parking space, and a "secondary" parking space should be located on site in close proximity to each other.

3.2 Bike Parking

The 2005 Master Development Agreement (MDA), Schedule F specifies that bike racks will be provided to the LEED or City Zoning standard, whichever is greater. The City's Zoning requirement is higher than the LEED standard, as summarized in *Table 5*. Long-term bicycle parking should be provided per the City's required rates.

TABLE 5. SUMMARY OF CITY VS. LEED-ND BIKE PARKING RATES

Land Use	City's Zoning Bylaw		LEED-ND Standard	
	Rate	Total	Rate	Total
Multi-Family Residential 1,253 units	One per unit plus a 6-space rack at each entrance	1,253	Short-term for 2.5% of peak visitors, long-term for 30% of all occupants	738 ⁷
Commercial 3,480m ²	1 / 205m ² GFA for the first 5,000m ² plus 1 / 500m ² of additional GFA	16	2 short-term spaces for every 465m ² , long-term spaces for 5% of occupants, one on-site shower with change facility for the first 100 occupants and 1 shower for every 150 after that	42 ⁸
Office 1,646m ²			Short-term for 2.5% of visitors, long-term at 5% of occupants, 1 on-site shower with change facility for the first 100 occupants and 1 shower for each 150 occupants after	8 ¹²
Total		1,277		788

⁶ Ibid.

⁷ Estimated based on typical residents per household measure from Metro Vancouver Apartment Parking Study

⁸ Estimated based on assumed occupancy figure of one person per 10m²

The 2005 MDA includes a commitment of an additional 150 bike racks at the surface at a total cost of \$76,000 (\$500 each rack) and phased in accordance with *Schedule D*. This provision of bike parking is above-and-beyond the Zoning requirement. Approximately \$56,000 remains from the original commitment and will result in approximately 110 additional bike racks.

At minimum, three bike racks should be provided in each identified mobility hub. Consideration should be given to locating racks under cover and in visible locations. Additional bike racks may be provided if demand warrants. The remaining bike racks may be supplied at mobility hubs, adjacent building entrances, or in other locations where demand warrants.

3.3 Public Transit / Mini Transit

Dockside Green initially committed to a mini-shuttle service between the site and downtown Victoria. The MDA clarified that seniors assisted living housing was to be located near the site's commercial village to ensure easy access for seniors and other residents to the mini-transit service, which would have also served the commercial shopping center located off Bay Street. The idea was to ensure seniors can walk to nearby commercial services on-site and offer flexible, convenient access to off-site destinations via the mini-shuttle.

The financial commitment to this program was \$60,000 presumably for the purchase of a vehicle. It is unclear who was responsible for funding on-going operations and maintenance (a letter from BC Transit⁹ suggests that \$190,000 is required annually in addition to vehicle purchase costs). There were concerns over the long-term financial viability of a shuttle and redundancy with BC Transit service and handyDART. The mini-shuttle service has not been implemented.

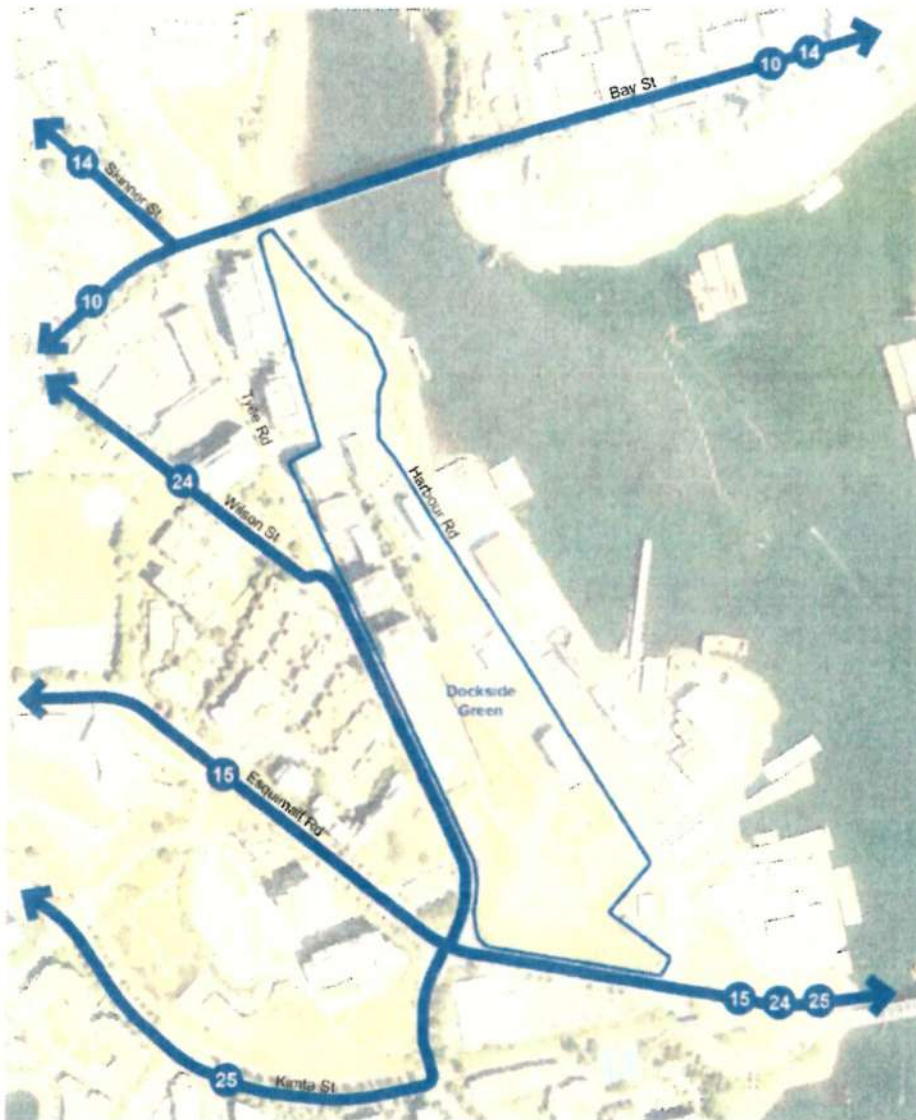
There is now no specific location proposed for exclusive seniors housing, rather seniors housing or other housing that might accommodate seniors may be located at different locations throughout the site. Rather than provide a dedicated mini-shuttle, transportation improvements will be available to all Dockside Green residents, employees, and visitors. This includes car share vehicles spread throughout the site to be in close proximity to users, improved transit service with a new stop and service on Tyee Road, high-quality bus stops adjacent the site with shelters / waiting areas, significant bike parking and multiple pedestrian and cycling connections. In addition, handyDART is available for those individuals unable to walk to access conventional public transit (mobility challenged), which replicates the door-to-door convenience that the mini-shuttle would have provided. The site is well located for able-bodied seniors, including those with scooters to access the site and surrounding amenities (Westside Village, Downtown Victoria, Songhees) as pedestrians and cyclists.

⁹ Letter dated December 8 2005

3.3.1 Transit Service

Five (5) routes travel directly adjacent the site: no.10 – Royal Jubilee/Dockyard, no.14 – Vic General/UVic, no.15 – UVic/Esquimalt, no.24 – Cedar Hill/Admirals Walk, no.25 – Maplewood/Admirals Walk/Western Exchange. See *Figure 2*. The no.14 is expected to be re-routed along Tye Road once the Johnson Street Bridge is complete¹⁰ (estimated 2017). Service frequency is approximately one bus every three minutes (each direction) during peak periods. Routes 14, 15, 24 and 25 provide service between the site and the downtown Victoria, replicating the shuttle service but with greater frequency.

FIGURE 2. TRANSIT ROUTES ADJACENT DOCKSIDE GREEN



¹⁰ Based on conversation with BC Transit Strategic Planning staff

3.3.2 Bus Stop Improvements

New bus stops will be required on Tye Road to accommodate the new routing of Route no. 14. BC Transit suggests that bus stops should be spaced 200 to 365m apart in urban areas¹¹. Spacing between bus stops on Skinner Street at Bay Street and Esquimalt Road at Harbour Road (currently under construction) is approximately 850m, thus new bus stops are needed on Tye Road. The preferred location is immediately south of the Wilson Street intersection, which is approximately half way between the existing stops and is aligned with the key east-west pedestrian corridor through the Dockside Green site. See *Figure 3*. This location may also be used by the no.24 bus route and the existing bus stops at the south end of Wilson Street may be removed, providing opportunity for increased on-street parking supply.

The re-allocation of monies initially identified for mini-transit to fund bus shelters and amenities at new Tye Road bus stops is supported as part of the “Tye Gateway” and strengthening public transit ridership among Dockside Green residents. Confirmation should be sought from BC Transit that the no.14 route will re-route along Tye Road prior to finalizing.

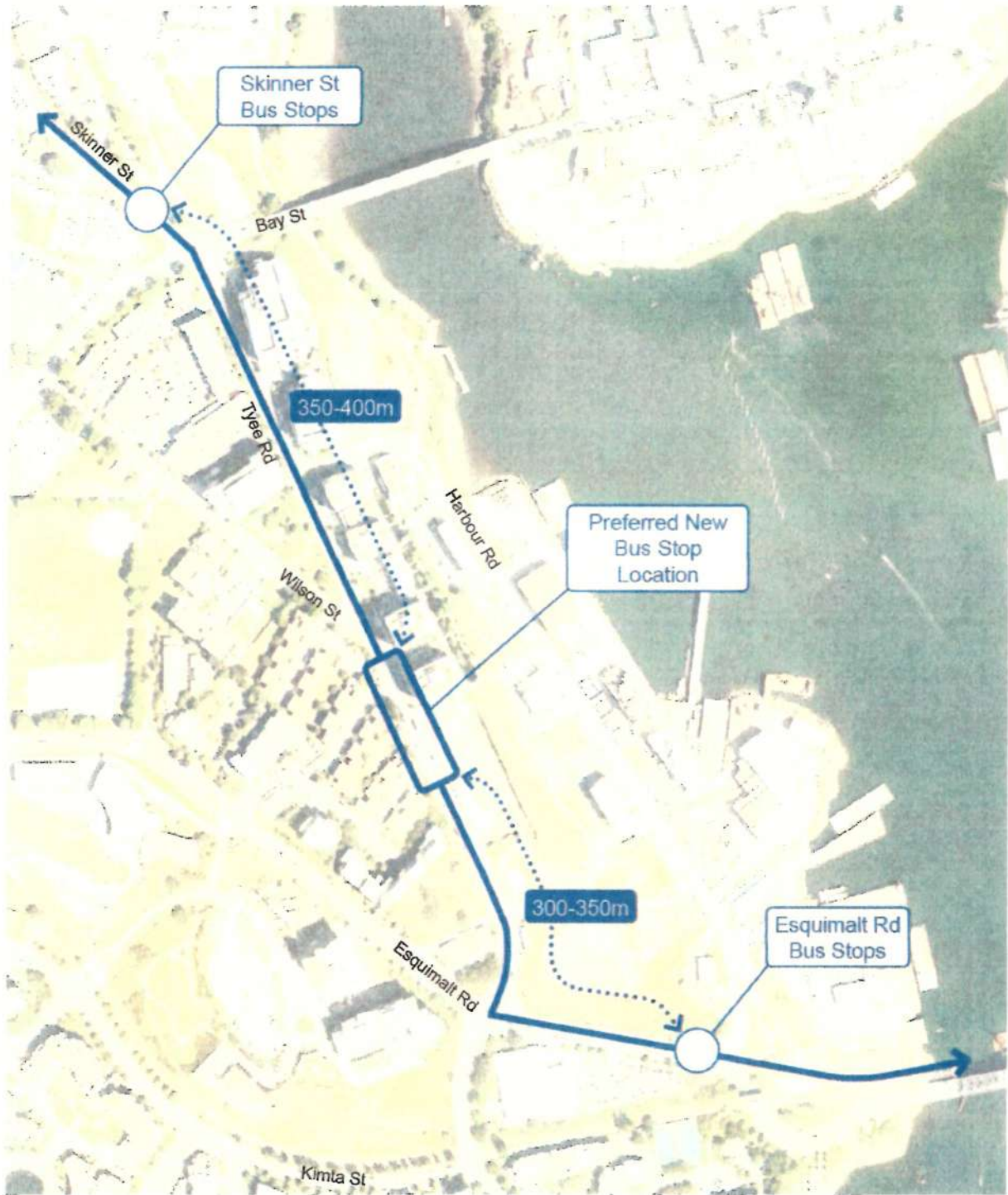
Refer to the *Traffic Impact Assessment* for further consideration of pedestrian crossing of Tye Road relative to the proposed bus stops and site pedestrian desire lines.



Example of the bus shelter that may be provided at Tye Road bus stops

¹¹ BC Transit, Infrastructure Design Guidelines, p15

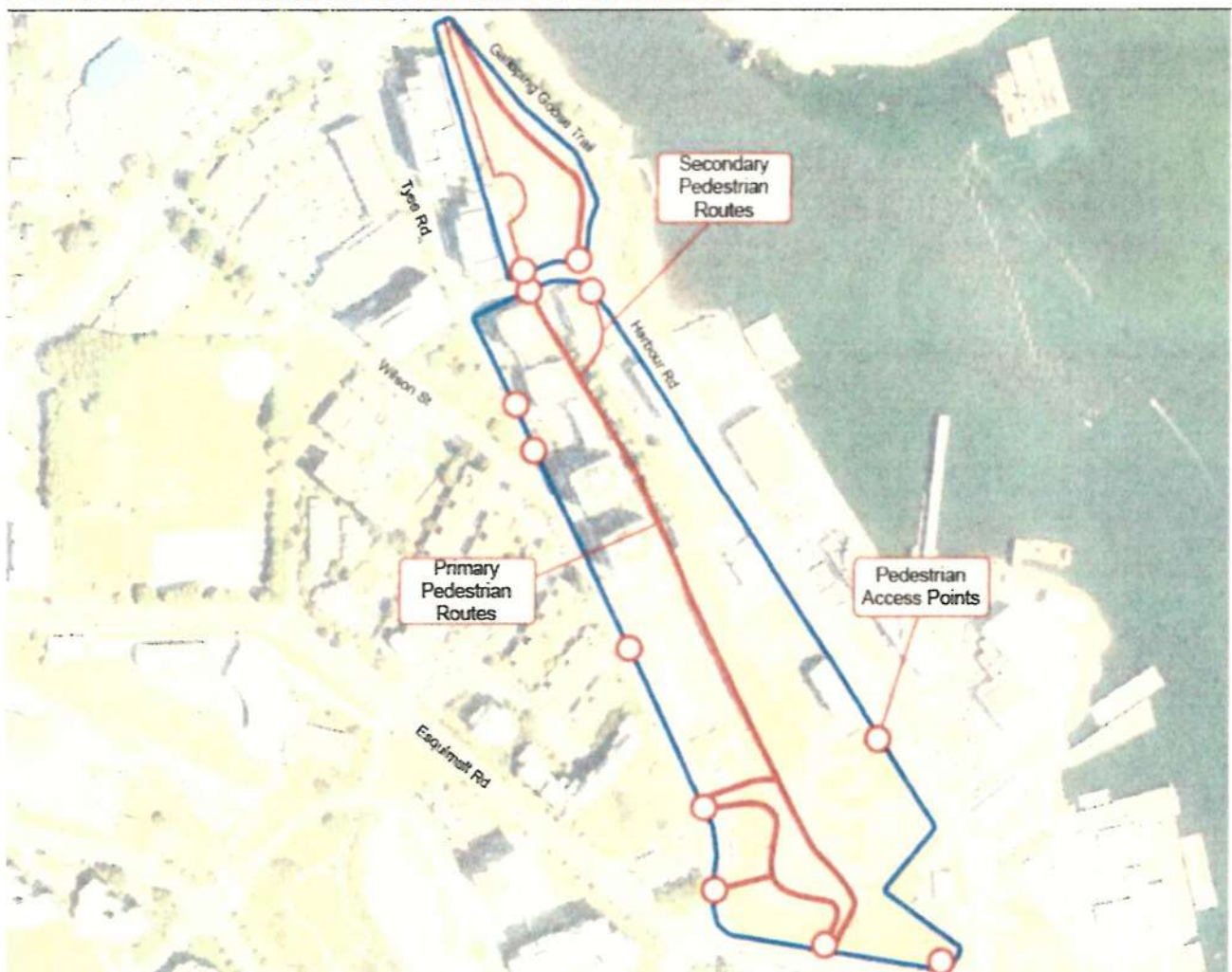
FIGURE 3. RECOMMENDED TYEE ROAD BUS STOP LOCATIONS



3.3.3 Pedestrian Accommodation

Direct and accessible pedestrian routes and accesses are provided throughout the site that accommodates pedestrians of all ages and abilities. See *Figure 4*. This information is included in the *Dockside Green Universal Accessibility and Circulation Plan*. Routes were developed that connect to key destinations externally and internally. Internally, there is a route that goes through the center of the site, with additional routes at the south end of the site to provide access to the commercial center. Access points are located in areas that provides direct routes to destinations externally including bus stops, and commercial services.

FIGURE 4. PEDESTRIAN ACCESS POINTS AND ROUTES



3.3.4 HandyDART

BC Transit's handyDART service will provide door-to-door service for individuals with physical disabilities. This service replicates the function of the previously proposed mini-shuttle for all eligible mobility-challenged Dockside Green residents.

Information should be provided to residents regarding the handyDART program provided by BC Transit. Individuals must register for this program prior to usage. This service will shuttle individuals door to door to their desired location. Trip types include subscription trips that are scheduled once a week or more at the same location and time for an extended period of time; or reservation trips that are one time or occasional trips.

BC Transit also has Taxi Saver coupons that can be used by registered handyDART users for one-time trips. The coupons provide a 50% subsidy towards the cost of taxi rides.

3.4 Education / Signage

3.4.1 Education

As set out in the current version of the MDA, an important component of the overall TDM strategy for Dockside Green was working with interest groups such as bicycle associations, BC transit, etc., to explore innovative approaches that Dockside Green can support, or test on-site. Further to this end, Dockside Green has suggested it establish an annual grant (which would run for 10 years) focused on promotional or education events on-site related to cycling, transit and pedestrian travel. The intent would be that by providing this grant, new ideas, discussion and concepts will evolve to support continued growth of alternative travel options at Dockside Green and more broadly within the City. An annual budget of \$2,000 (\$20,000 over ten years) is considered appropriate.

3.4.2 Mobility Hub Kiosks

Informational kiosks should be provided at the centre of each mobility hub that provide directional information to walking and cycling routes on-site and adjacent the site, and to nearby travel options such as bus stops, carshare vehicles, and the harbor ferry. Kiosks may also include supporting information such as transit rate, route and schedule information, carshare instructions and rates, and weblinks (or QR codes) to additional information online. \$16,000 is considered an appropriate budget for eight kiosks.



Examples of representative kiosks from Vancouver (left), Calgary (centre), and the University of Victoria (right)

3.5 Summary of Updated TDM Strategy

The TDM strategy from the 2005 MDA has been updated to reflect the TDM provisions that have been implemented and to identify a revised strategy to make best use of the remaining \$290,240 committed to TDM. See Table 6.

TABLE 6. SUMMARY OF UPDATED TDM STRATEGIES + BUDGET

Program	Description	Budget
Carshare	Purchase six additional carshare vehicles (approx. \$25,000 each)	\$148,000
Bike Racks	Bike racks to be installed on-site in excess of Zoning required bike parking	\$56,000
Bus Stops	Contribute \$41,240 to provide bus shelters and related amenities for new bus stops on Tye Road, which is the approximate cost of two "Class 3" bus shelters	\$41,240
Education	\$2,000 annual grant related to TDM education, with a commitment over ten years	\$20,000
Signage	\$25,000 budget assigned to provide signage at eight kiosks and planning/design of kiosk content	\$25,000
	Total	\$290,240

3.6 Comparison of 2005 + 2015 TDM Strategy

A summary of the committed TDM program in 2005 and the proposed TDM program in 2015 is shown in *Table 7*. A comparison of the each set of programs was conducted to determine the impact on parking demand on site.

- **Carshare.** Based on utilization it was calculated that providing ten carshare vehicles on the site was unnecessary due to current demand. The impact on parking demand is expected to stay the same; however, reducing the amount of vehicles provided will essentially be saving money as the other two vehicles would be unused. This money is proposed to be reallocated for other TDM programs.
- **Bike Racks.** The proposed bike rack program is expected to have more of an impact as the proportion of bike racks to residents/employees is increasing.
- **Education.** The proposed education program is a more concrete program with allocated budget that will improve the awareness of travel options to and from the site.
- **BC Transit.** Although a formal TDM program is not proposed to coordinate with BC Transit on improving service, several recent changes have been implemented which improves transit service surrounding the site.
- **Mini-Transit.** The mini-transit/shuttle program was deemed unfeasible for the site. Adequate transit and handyDART provides frequent service to and from the site to downtown.
- **Bus Stops.** Improving transit amenities surrounding the site will allow passengers to feel safer, and is expected to increase amount of transit riders.
- **Signage.** Providing signage at mobility hubs will assist individuals seeking information regarding alternative travel options, and further encourage usage.

TABLE 7. SUMMARY OF 2005 + 2015 TDM EFFECTIVENESS

Committed 2005 TDM Program		Proposed 2015 TDM Program	
Program	Description	Program	Description
Carshare	Ten (10) carshare vehicles will be provided and operated by Victoria Carshare.	Carshare	Purchase six additional carshare vehicles (approx. \$25,000 each)
Bicycle Storage	Bike racks will be provided to the LEED or City standard, whichever is greater. A total of 150 bike racks will be provided at grade.	Bike Racks	Bike racks to be installed on-site in excess of Zoning required bike parking
Education	Travel options information will be posted on Docksider Green website and distributed to residents and employees, including route maps (cycling, transit), cycling user information, and carpool and carshare information.	Education	Annual grant related to TDM education, with a commitment over ten years
BC Transit	Docksider Green will work with BC Transit to improve service during peak hours, encourage smaller buses, and explore strategies to promote ridership (i.e. subsidized passes)		
Mini-Transit	A shuttle vehicle will be purchased and operate between Docksider Green and downtown, and can be administered through Victoria Carshare or other alternative company.	Bus Stops	Provide bus shelters and related amenities for new bus stops on Tyee Road, which is the approximate cost of two "Class 3" bus shelters
		Signage	Budget assigned to provide signage at eight kiosks and planning/design of kiosk content

Based on the above assessment, it is expected that the proposed TDM program will have a comparable or greater impact on parking demand on site.

4.0 Summary

Dockside Green is committed to fulfilling the TDM commitment outlined in the 2005 MDA, both in terms of the monetary commitment and realizing equal or greater effectiveness. To-date, approximately \$85,000 has been invested in TDM including the purchase of two vehicles for the VCSC carshare fleet and on-site bike parking. The remaining financial commitment to TDM from the 2005 MDA is approximately \$290,000.

A revised TDM strategy is proposed that is centred on eight “mobility hubs” and is considered a more effective use of the remaining committed TDM resources, as follows:

- Purchase six additional carshare vehicles and contribute to VCSC fleet;
- Install new bus stops on Tye Road;
- Allocate \$56,000 to install bike racks on-site (beyond Zoning required bike parking);
- Establish a \$2,000 annual grant to fund TDM promotions for a period of ten years; and
- Install eight information kiosks on-site (one at each mobility hub).

The proposed TDM strategy includes a reallocation of budget which is intended to meet the effectiveness of the previous TDM program as it produces a more viable and implementable approach to reducing vehicle and parking demand on site.

Appendix A
MASTER DEVELOPMENT AGREEMENT (2005), SCHEDULE F

SCHEDULE F

TRANSPORTATION DEMAND MANAGEMENT STRATEGIES

1. Car Share Program

The parties will work together to ensure that residents have minimum impediment to joining the car share. The Developer will provide a minimum of 10 car share vehicles for the Development in phases as outlined in Schedule D of this Agreement to be operated by a car co-op entity or other non-profit organization. Alternatively, the Developer will buy car share co-op memberships to the value of \$240,000 for Docksider Green residents and not charge the residents for such membership fees.

The vehicles will be a mixture of neighbourhood electric vehicles and high fuel-efficient vehicles (60 mpg+). The operation and maintenance of vehicles will be through a car share co-op or other non-profit organization.

The car share program will be available to both residential and commercial uses on site.

The City will incorporate into the parking planning for Tyee Road and Harbour Road provisions for the encouragement of car share vehicles and other alternative use methods of transportation such as free parking for car share vehicles, shorter parking stalls to encourage parking for smaller forms of transportation such as high fuel-efficient vehicles, motorcycles, mopeds, etc.

As a part of the information package the Developer is required to provide to prospective purchasers from the Developer promotional material on the car share program provided on site.

2. BC Transit

The project will work closely with BC transit to address peak hours (7:30 am to 8:30 am and 4:00 pm to 5:00 pm, Monday to Friday excepting holidays) and encourage BC Transit to provide smaller shuttle bus service for the Development.

Bus routes information will be provided to residents via the Developer's website. The Developer will also explore other strategies with BC transit (such as subsidized bus passes) to promote ridership and to ensure bike racks exist on buses servicing the Development.

It is understood by the Developer that amenities and facilities such as lay-bys and shelters may require easements and the Developer will consent to such reasonable easements at no cost to the City.

The Developer's obligations under this section 2 shall terminate on the Substantial Completion of all improvements in the Development.

3. Mini-Transit

The project will establish a Dockside mini-transit service through the car share company or other alternative company. As per the amenity Schedule D, the Developer will purchase a mini-transit vehicle(s) at the value of \$60,000. The vehicle(s) will be run during the day and possibly at night depending on demand. This strategy will be balanced with the provision of on-site car share program to monitor the most effective strategy and increase service for either service as required.

Transportation to downtown will focus on key drop off points where people work and key locations like the float planes. In addition, senior assisted living housing will be located near the site's commercial village to ensure easy access for seniors and other residents to the mini transit service, which will also service the commercial shopping center located off Bay Street. The idea is to ensure seniors have pedestrian access to the commercial resources on-site and flexible, convenient access to offsite destinations.

4. Bicycle Traffic and Storage

The Developer will provide bicycle racks to the LEED or City standard whichever is greater. The requirement as defined by LEED is Bicycle racks provided for 15% of residential occupants, bicycle racks and shower facilities provided for 5% of commercial, office, industrial uses. The Developer will provide additional lock up racks if demand warrants.

In addition, bike racks will be provided above grade throughout the development to allow easy movement within Dockside. Bikes will also be provided for hotel guest users. The 150 additional bike racks will be phased in accordance with the Development Amenity Schedule D.

5. Education

A key to the Developer's strategy is working with key interest groups like bicycle associations, BC transit etc. to explore innovative approaches that the Developer can support or test on site. The Development should be a leader in alternative transportation.

Education and informational support will also be a key component in promoting bikes, transit, pedestrian modes of traffic. The Dockside website will highlight the main routes for the various uses and information on car share and carpooling programs. Individual information will also be given to residents and employees on the Development.

Working with the CRD and bicycle associations online bicycle user information will be provided on the Dockside web. Information on the type of bikes, how to pack, be prepared for weather changes, safety tips etc will be provided.

The Developer's obligations under this section 5 shall terminate on the Substantial Completion of all improvements in the Development.

8. **Internal Road/Pedestrian areas for Industrial areas along Harbour Road:** Two sets of stairs from greenway trail system to industrial areas will be included. Also included are the road/parking surfaces with natural swales.
9. **Pervious paving/walkways in Parking Areas:** Parking areas will include natural swales and vegetated areas. Installation to align with buildings.
10. **Extensive Tree Planting:** The project includes extensive tree planting throughout the development. A formal treed boulevard along Esquimalt Road contrasts with fluid wilds off the internal greenway. Industrial parking/loading areas will have trees between parking stalls to create shade and calm the spaces. Pockets of shade trees will be clustered at the south and west facades of residential buildings to reduce solar heat gain. Plazas will include high canopy trees to provide shading, enclosure and clear low level site lines. Indigenous or adaptive species will be used to reinforce the west coast marina character of the project. A total of 400 trees will be planted on site of various sizes.
11. **Improvement to the Galloping Goose Trail:** The Galloping Goose Trail is an important regional connection through the site. Its alignment along Harbour road provides key pedestrian and bicycle linkages south to the City centre via the Johnson Street Bridge and north through Point Ellice Park. The designated bike route provided on each side of Harbour Street will be identified by a different colour scheme to easily identify the trail and highlight its importance. The Galloping Goose bike trail will be enhanced with the traffic calming structures on the south and north end of the site to allow safe passage for bikes and slow traffic (see site plan on Schedule C). In addition textured paving will be introduced across Harbour Road on the North end of site (but not on the bicycle path) to slow traffic for cyclists. Signage will also be provided.

The Developer will also provide traffic islands at the north and south end of Harbour Road.

The Galloping Goose, between the Point Ellice Bridge and Harbour Road, shall be upgraded to be consistent with the City of Victoria Greenways Plan and the waterfront pathway approved for the Railyards Project. This will include a four (4) metre wide multipurpose path and a two (2) metre wide pedestrian path separated by a landscape median. The minimum width of the landscape median will be one (1) metre.

12. **Waterfront walkway (dock) and small boat launch:** A waterfront walkway along Lot 4 at Point Ellice Park. The walkway will be cantilevered from shore or piled and a floating dock for the harbour ferry will be provided. The dimensions of dock walkway must be 3 meters by 74 meters. The harbour ferry dock must accommodate 12 people and must be 2 meters by 10 meters. The waterfront will be cleared of the current invasive scrub and replaced as outlined in "Shoreline Enhancement and Restoration" below. The design must be approved by the City prior to construction and be certified by a structural engineer upon completion.

SCHEDULE G

AMENITIES

The following is a list of amenities being provided for the Development. Certain of the amenities described in this Schedule are generally depicted on Schedule C.

1. **Accesses across Harbour Road:** The site plan attached as Schedule C identifies several grade crossings in numerous locations that are identified with textured paving changes. These are located at:
 - (a) At the corner of Esquimalt Road and Harbour Road where the pedestrian staircase from the bridge accesses the site at a location approved by the City.
 - (b) Across Harbour Road at northeast corner of Lot 3 to Lot 4 where the traffic calming device is located across the traffic calming device on the south end of the Site.
2. **Staircase on south east end of site from Johnson Street Bridge:** A concrete pedestrian staircase and pathway will be provided from the Johnson Street Bridge to the intersection of Harbour Road and Esquimalt Road. This connection will reinforce the pedestrian entry and plaza at the south end of Lot 1 as a major focal point when approaching the site from downtown Victoria. The City will maintain this staircase.
3. **Improvements to Esquimalt Road:** Trees will be planted along Esquimalt Road per site plan – see Schedule C.
4. **North South Greenway:** The greenway will be constructed in accordance with the Design Guidelines.
 - (a) **North South Pedestrian trails and connections:** This represents the sidewalk through the site north/south along the greenway including benches along sidewalks.

The primary north/south and the east west greenway linkages will focus primarily on pedestrian access. The trail will be barrier-free. Separation of public open space from adjacent residential uses would be achieved with natural planted areas, and water bodies comprised of a linear system of detention ponds and water channels. This will be a major ecology feature for the development with a constant flow of water.
 - (b) **Green Space:** This includes a mixture of plantings, high performance irrigation, rainwater collection for green way system and other miscellaneous planting on site.

A small boat launch will also be provided similar to the Selkirk Waterfront development for small non-motorized craft access such as kayaks or appropriate launch from the waterfront walkway dock.

- 13. Shoreline Enhancement and Restoration:** The north end of the property – Point Ellice Park – consists of undeveloped land largely covered by scrub vegetation (dominated by broom and noxious weedy species). The shoreline is an undulating edge of abandoned concrete wharf abutments, rock-stack rip-rap and rocky outcroppings. The shoreline plant community also is dominated by weedy species and mature broom. The inter-tidal zone consists of an unstable cobble, gravel, sandy benthic complex largely devoid of seaweeds or other marine species.

The re-development of the Point Ellice parkland portion of the project would restore the upland plant community by replacing the existing weedy species with a mix of native and adaptive species approved by the Director Parks, consistent with the expected capital budget outlined in Schedule D. The intent would be to provide an aesthetic plant community that maximized a range of habitat values for small mammals and avian species. The upslope plant community would be designed to provide nesting and rearing species, together with a range of food species (e.g. berry and seed producing). The shoreline will require the use of small segments of rip-rap to be installed to stabilize the upper inter-tidal zone. These sections will be integrated with the existing concrete abutments; the latter provide continuity with the Docklands history as a working harbour. This zone – the boundary between sea and land – provides a varied habitat for a richly diverse assemblage of plants and the animals that depend upon them.

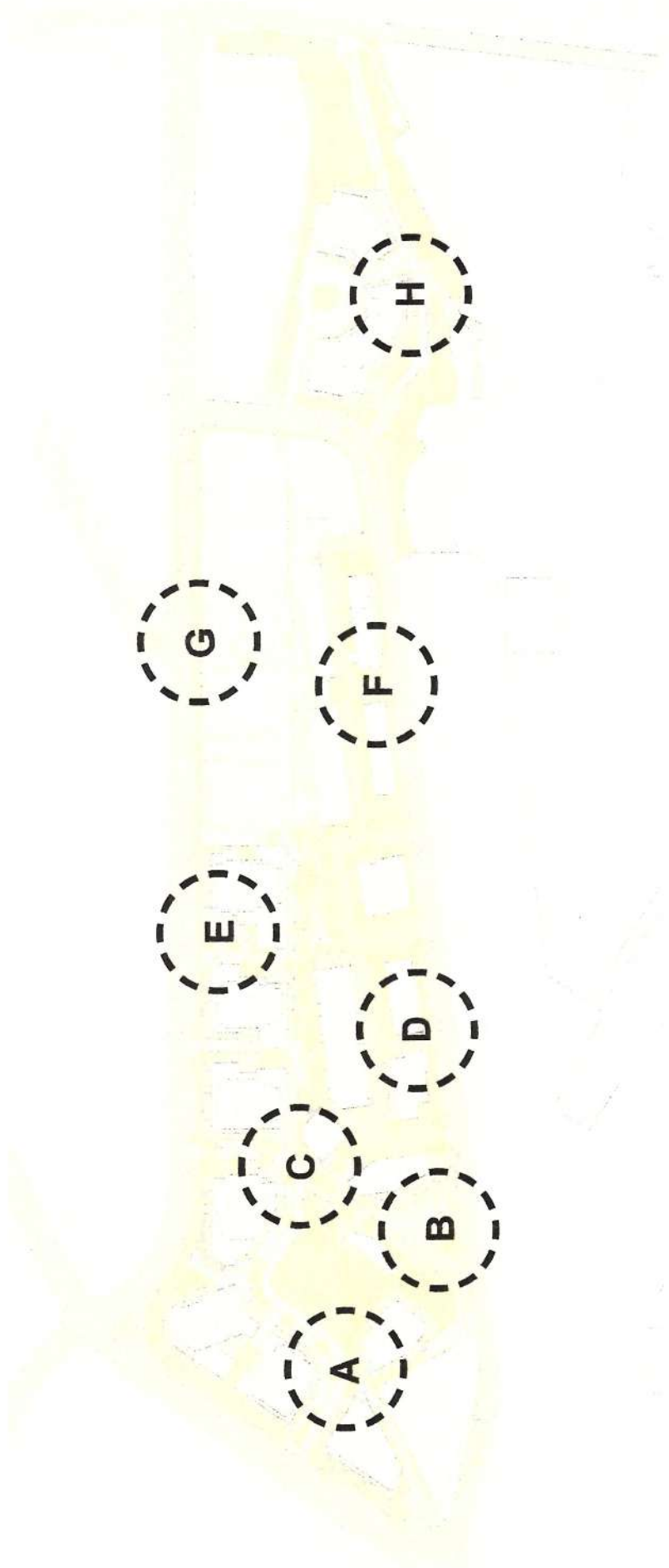
The inter-tidal zone should be assessed for its potential to be restored as a functional marine ecosystem through the creation of large rocky habitat complexes. These structures would provide stable surfaces for the algal community that, in turn, provide the luxuriant growth for a wide range of marine animal species (e.g. star fish, crabs, urchins, fish, etc.).

Species and habitat using a large diversity of flora and fauna will help restore and enhance the shoreline along Point Ellice Park. Where possible existing rip rap would be reconfigured with pockets of native tree and shrub planting and combined terraced beds of aquatic vegetation.

Native and adaptive species planted to the satisfaction of the Director of Parks.

- 14. Play Area:** In the central North/South Greenway, a neighbourhood play area will be provided and maintained within close surveillance of neighbouring residential units. The play area and equipment will be constructed and maintained to CSA standards to a plan approved by the City, such approval to be within the expected capital budget as outlined in Schedule D. For certainty the materials used, to the extent possible and practical, will be non-toxic, biodegradable, reusable, recyclable and durable.

Appendix B “MOBILITY HUB” CONCEPT



A

B

C

D

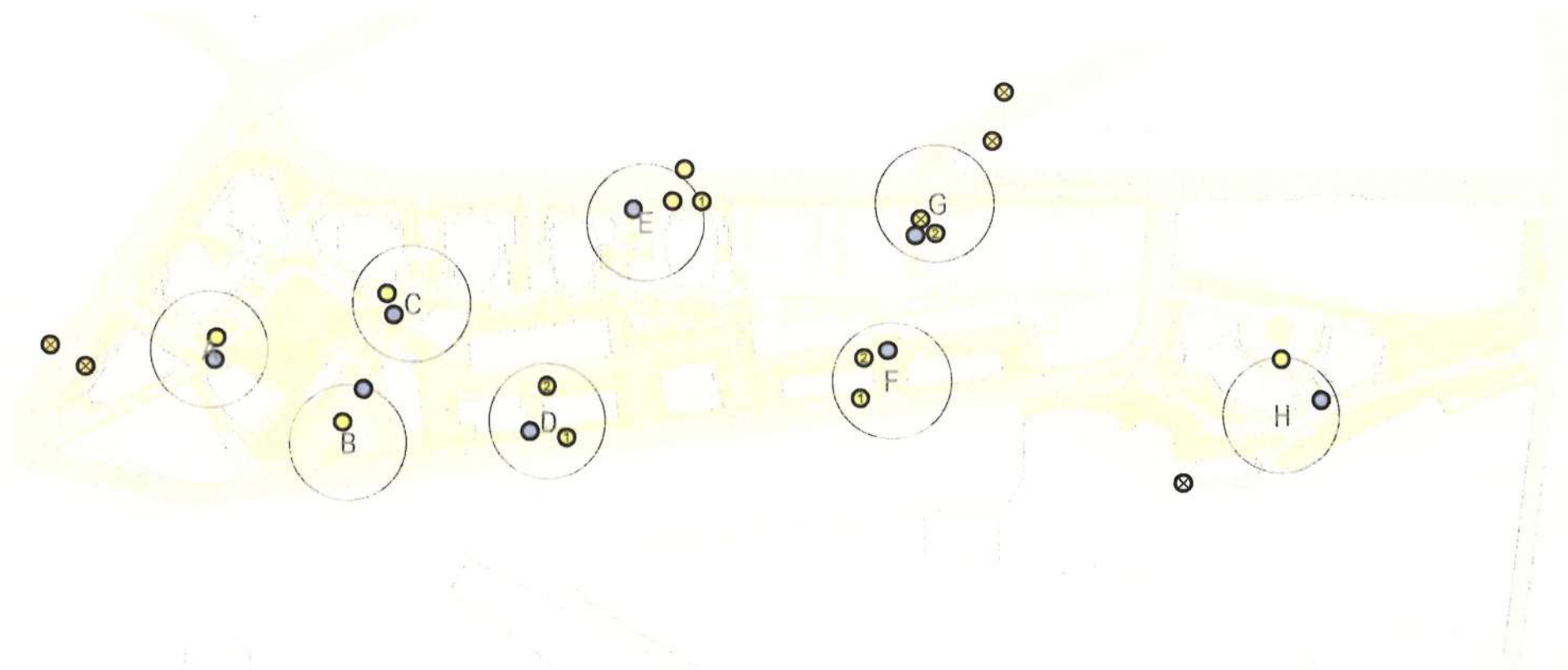
E

F

G

H

Dockside Green Transportation Review
TDM STRATEGY



- ⊗ Existing
- Proposed
- Carshare Vehicle
- 1 Primary Parking Space
- 2 Secondary Parking Space
- Bike Parking
- Bus Stop
- Harbour Ferry Stop

SUMMARY OF TDM PROVISIONS, BY MOBILITY HUB

	Car Share	Bus Stops	Bike Parking	Signs, Info
A	x	x	x	x
B	x		x	x
C	x		x	x
D	x		x	x
E	x	x	x	x
F	x		x	x
G	x		x	x
H	x		x	x



Amolak Nijjar, CPA, CA
Business Development Manager
Dockside Green
710 - 815 West Hastings Street,
Vancouver, BC V6C 1B4

July 23, 2015

Dear Amolak Nijjar,

RE: CAR SHARING AGREEMENT FOR DOCKSIDE GREEN

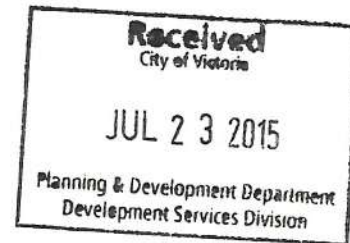
Thank you for your interest in partnering with MODO to expand car sharing with future development phases of Dockside Green.

Currently, there are 280 residential and 4 commercial MODO car share memberships at Dockside Green, along with two parking spaces (one EV charging station). MODO will deliver the first EV in its Victoria fleet to this location next month.

For future phases, MODO is in support of Dockside Green's offer of \$148,000 in funding to purchase six (6) MODO car sharing vehicles along with parking spaces. The total number of vehicles on site will grow to eight (8). We believe that 8 vehicles is adequate for full build out on this site, and if demand increases for car sharing, MODO will be placing more vehicles in and around the site. This will allow us to deliver a quality car sharing service to the development and should have a positive impact in reducing demand for private vehicle ownership on the site.

Regards,

Pam Hartling
Developer Liaison (Victoria)



February 17, 2015

Mayor and Council
City of Victoria Planning and Development Department
1 Centennial Square
Victoria, BC V8W 1P6

Re: Dockside Green Proposed Rezoning and Modification to Development Agreement

The Victoria West Community Association – Land Use Committee hosted a Community Meeting on September 16, 2014 to consider a proposed and significant zoning modification at the Dockside Green development site. The room was filled to capacity. The meeting followed a series of community workshops that were organized by the Dockside Green development team to solicit suggestions on how the existing zoning and development concept may be modified to better support a resurrection of construction activity.

The professional design team made thorough presentation regarding the overall neighbourhood design concept, including a re-orientation of public space, shifting of building density (including an overall reduction in floor plates and increase in the number of buildings), use (both commercial and residential), and view corridors. The community also heard that 75% of committed amenities had been delivered, and that the remaining committed amenities would be delivered during build out, with some additional amenities being added as a result of the recent public consultation workshops (e.g. dog park). However, a discussion about the Sustainability Centre revealed some ambiguity in what can be expected for that community amenity. As well, the developer's commitment to building-level certified LEED NC Platinum was to be abandoned.

Overall, the community responded relatively positively to the re-zoning and development scheme as presented. Appreciation was expressed for the thoughtful engagement process conducted by the developer, and the visionary re-thinking that took place. Of particular interest to the community is the possibility of interim on-site amenities that could render the site at least somewhat functional and at the very least introduce a creative element to an otherwise inaccessible area during the remaining years of construction.

There were **three significant concerns** raised at the meeting, and subsequently reinforced by follow-up comments to the Land Use Committee Chair. They include lack of on-site parking provisions, the short-term view of the Sustainability Centre, and the lack of commitment to building-level LEED NC Platinum certification.

Parking is a major concern in the Victoria West neighbourhood generally. Within the proximity of the Dockside Green development site, parking issues are especially

punctuated because of the closeness to the downtown core, the businesses situated onsite, the popularity of on-site businesses (i.e. Fol Epi and Café Fantastico), and lack of existing or planned parking infrastructure. Lack of parking is already creating vacancy issues for existing commercial space, and is causing serious concern for residents. With the build-out of additional commercial space and public amenities, the current parking issue is expected to be even more significantly exasperated and will need to be addressed.

All parties seem to agree that the Sustainability Centre is intended to provide access to facilities and networking opportunities by individuals or groups when advancing triple bottom-line sustainability interests. The concept itself was incorporated into the Master Development Agreement, and considered to be a reflection of the philosophy for the overall neighbourhood design. The Victoria West Community Association was meant to be a partner in determining the manifestation and occupation of the Sustainability Centre, as well as having access to space. Although innovative, the concept as presented by the developer would provide only a temporary solution, and is not considered adequate or (ironically) sustainable. Permanent infrastructure required to accommodate a go-to "centre" of sustainability business that is inherently woven into the fabric of the new development must still be provided.

Finally, the developer's lack of commitment to LEED NC Platinum certification on a building level is considered a big disappointment to many members of the Community, and should be a concern for the reputation of the City. Among multi-building urban developments, Dockside Green is a notable for one reason – because of the aggressive commitment to triple bottom-line sustainability pitched by the owners when they were one of the proponents bidding on the development agreement; a commitment that was accepted by the City. Without upholding this commitment to building level LEED NC Platinum certification, there is no assurance (in fact it would be unlikely because of lack of accountability) that future onsite development will meet leadership in energy and environmental design standards. Building-level design is what causes the possibility of high performance over time and there is no justifiable reason to relax the commitment to building-level certification. A developer who is apprehensive about the requirement of LEED NC certification will not have the conviction or vision required to continue building this world-class model of environmentally sustainable development, which the community strongly believes should be upheld.

Modifications to the proposal that accommodates ample easily accessible parking for tenants and public patrons, requirement to uphold a commitment to establish a long-term Sustainability Centre, and maintain a commitment to LEED NC would be well-received by the Victoria West community, and should be required before re-zoning approvals are offered.

Sincerely,

Bernie Gaudet
President, Victoria West Community Association



July 30, 2015

Jim Handy
City of Victoria
1 Centennial
Square Victoria, BC
V8W 1P6



Re: Dockside Green LEED ND Supplemental Information

Dear Jim,

I am pleased to provide you with a copy of a letter we received from Thomas Mueller, President and CEO, of the Canadian Green Building Council (CAGBC). Mr. Mueller's letter addresses staff's central question and confirms that LEED ND and LEED BD&C (which has replaced LEED NC) have equally demanding performance targets.

I thought it would be useful to also provide additional information so as to more fully answer some of the questions about LEED ND that have been posed by staff. I trust this will be useful to you as you write your staff report. We have consolidated here the information provided in our Rezoning Submission Book and the additional information provided by way of letter to Mike Wilson on June 17, 2015. We are also including information on Dockside Green's LEED ND v.4 scorecard so that staff can see how we intend to achieve LEED ND Platinum Certification.

Covered in this letter are the following topics.

- Dockside Green LEED ND Background
- LEED ND Background
- Dockside Green LEED ND Strategy
- Proposed Modified LEED Penalty Clause

DOCKSIDE GREEN LEED ND COMMITMENT BACKGROUND

When the MDA was signed by the City and Dockside Green Limited in 2005 LEED was only just emerging as a green building certification system. Nevertheless, the concept of LEED Neighbourhood Development (ND), which focuses on the type of actions required to develop truly sustainable communities and neighbourhoods, was only just emerging. The MDA provides the option for Dockside Green to change from the LEED NC standard to the LEED ND standard provided LEED ND has performance standards that are equally rigorous to LEED NC (see section 11.3 below).

11.3 *In the event that the United States Green Building Council or the Canada Green Building Council releases a LEED for Neighbourhood ("LEEDND") rating system with performance standards that are at least equivalent to, or more stringent than, the Applicable LEED Standard, then with the approval of the City, the Developer may substitute the LEEDND for the Applicable LEED Standard, and from the date of the City's approval the LEEDND shall for all purposes be substituted as the Applicable LEED Standard.*



In 2008, Dockside Green Limited indicated that it was pursuing LEED ND certification under the new LEED ND Pilot program and upon certification would be applying to change the applicable standard from LEED NC to LEED ND. This was confirmed in an MDA amendment approved by Council and Dockside Green in 2008. Dockside Green applied for and received in November 2009 *Stage 2 LEED ND Platinum Certification* under the LEED ND Pilot program with a score of 82 points (80 is required for Platinum).

Our request with this Rezoning Application logically follows from that history. Dockside Green was always conceived of as a sustainable neighbourhood development and it follows that it would be certified under the world's leading neighbourhood sustainability certification system – LEED ND. This approach also aligns with Dockside Green's current focus as the master neighbourhood developer rather than a developer of individual building sites. It is also consistent with the reality that builders will not purchase land, or will look for deep discounts, where there is a LEED Platinum Certification requirement. The continued enforcement of LEED BD&C Certification for residential buildings is not possible if this project is to proceed.

As Mr. Mueller has confirmed, certifying the project to LEED ND will require Dockside Green to meet a set of equally rigorous standards as with LEED BD&C. LEED ND Platinum certification will confirm Dockside Green as one of the most sustainable neighbourhood developments in the world.

LEED ND BACKGROUND

LEED ND is fully integrated into the LEED system which now encompasses 5 urban development spheres – Building Design and Construction, Interior Design and Construction, Building Operations and Maintenance, Neighbourhood Development and Homes. Each of the 21 LEED systems in these five urban development spheres has been customized with prerequisites and credit points based on the following LEED goals:

- To reverse contribution to global climate change
- To enhance individual human health and well-being
- To protect and restore water resources
- To protect, enhance, and restore biodiversity and ecosystem services
- To promote sustainable and regenerative material resources cycles
- To build a greener economy
- To enhance social equity, environmental justice, community health, and quality of life

Each LEED system is developed through a collaborative process involving green building and sustainable development experts who identify appropriate credit categories and performance standards. Each credit in the rating system is allocated points based on the relative importance of its contribution to the LEED goals. Platinum Certification under LEED ND and LEED NC, means similar progress towards achieving the LEED goals, though operating at different scales of urban development.

LEED ND takes the green certification concept beyond individual buildings and applies it to the neighbourhood context. LEED ND contains a set of measurable standards that collectively identify whether a development can be deemed environmentally superior considering its location and access, its internal pattern and design, and its use of green technology and building techniques. When used for



certification, LEED ND is rigorous and complex. Integrating principles of smart growth, urbanism, and green building into neighborhood design the rating system includes prerequisites and credits in the following category areas:

1. Smart Location and Linkage
2. Neighborhood Pattern and Design
3. Green Infrastructure and Buildings
4. Innovation and Exemplary Performance
5. Regional Priority

LEED ND v.4 is divided into two systems – LEED ND Plan and LEED ND Built Project. LEED ND Plan allows for certification of an approved neighbourhood plan or a partially built project. LEED ND Built Project allows for certification of completed neighbourhood developments.

DOCKSIDE GREEN LEED ND STRATEGY

Dockside Green is committing to achieving LEED ND v.4 Built Project Platinum Certification. To do so, we have developed a strategy for achieving 83 points under LEED ND v.4 (see the attached scorecard). We also intend to pursue LEED ND v.4 Plan Platinum Certification, which will allow Dockside Green to be recognized for its ongoing commitment to sustainable neighbourhood development and will establish the parameters for our Built Project Platinum Certification at the end of the project.

You will see in examining the LEED ND v.4 scorecard that Dockside Green is targeting points throughout the LEED ND system and includes actions and commitments at the neighbourhood, site, infrastructure and building levels. It is a balanced approach that requires significant commitments from both Dockside Green, and our partner builders. Builders will be required to develop buildings and sites with significant green building commitments to support our LEED ND certification. This is a process that we will facilitate and support and in some cases will push our partner builders to actions they might not have contemplated otherwise. We have identified in the attached LEED ND scorecard the LEED ND credits that we propose form the basis for our Sustainability Report, which will be provided to the City every three years. The report would be prepared by a LEED Accredited Professional.

Currently there are 5 buildings at Dockside Green that have achieved LEED Platinum Certification under the LEED NC or LEED C&S. As part of achieving LEED ND Built Project Platinum Certification we will be requiring all future commercial and office buildings to be LEED BD&C Gold Certified. Where LEED ND only requires 1 building to be LEED Certified, by the end of project, 8 buildings at Dockside Green will be LEED Platinum and Gold Certified.

MODIFIED LEED PENALTY CLAUSE

We have discussed with staff, but not settled on an approach to modify the existing penalty clause to align with our commitment to LEED ND. Given the structure of LEED ND it is not possible to confirm LEED ND Platinum compliance on a building by building approach. Many of the credits are site-wide and rely on additive actions across the whole site or compliance for a certain percentage of buildings. Instead, we propose that the possible penalty be linked to both LEED ND v.4 Plan and Built Project Platinum Certification and the required 80 point threshold.



The possible penalty to Dockside Green would remain at \$1 a square foot of building area. On achieving a LEED ND v.4 Plan Platinum Certification the penalty would be reduced to \$0.50 per square foot of building area. At the end of the project achieving Built Project Platinum Certification (a minimum of 80 points) would result in no penalty. If Dockside Green were to fall short of the 80 point threshold for Platinum Certification, but still achieve LEED ND v.4 Built Project Certification, then the penalty would be reduced by the percentage of points achieved. For each point below the 80 point threshold the \$0.50 penalty would be \$0.00625 (1.25%). This penalty structure would recognize Dockside Green for making every effort to achieve Platinum Certification.

While our three year Sustainability Report is designed to rigorously check our compliance as we move through the development there is some risk, as there is with all the LEED rating systems, that the LEED certifiers will interpret the rules differently and not reward Dockside Green with certain points we were expecting. The proposed structure of the penalty clause will hold Dockside Green accountable to those decisions, but without establishing an all or nothing scenario that does not recognize all that we have accomplished.

Conclusion

LEED ND Platinum Certification of Dockside Green will be an achievement that the City of Victoria, Dockside Green and the Vic West Community will celebrate. It will recognize the triple-bottom line approach that has informed the development of the Dockside Lands from the beginning. The MDA is clear that the City of Victoria and Dockside Green recognized the financial challenges of the LEED certification and provided a number of exemptions. The agreement also recognized that LEED ND can replace LEED NC, provided both rating systems are equally rigorous. I believe Dockside Green has provided the information necessary for staff to support Dockside Green's request to formally switch the applicable standard in the MDA to LEED ND v.4. As indicated by Mr. Mueller from CAGBC, the LEED ND v.4 rating system has performance standards that are equally rigorous to LEED BD&C (which has replaced LEED NC).

If you require anything further regarding any of the items provided in this letter please feel free to let me know.

Kind Regards,

Norm Shearing
Dockside Green Ltd.

Encl.

1. July 29, 2015 Letter from Thomas Mueller to Jack Meredith
2. Dockside Green LEED ND V.4 Compliance Strategy – July 20, 2015.
3. LEED v4 for Neighborhood Development Built Project Dockside Green Project Checklist – July 20, 2015.

July 29, 2015



Jack Meredith
Healthy Green Buildings Consultants Ltd.
1003 McCaskill Street
Victoria, BC V9A 4C1

Re: Dockside Green LEED Certification

Dear Jack:

Thank you for letter dated June 28, 2015 about Dockside Green's green building and LEED strategy. We appreciate your efforts to share the direction and sustainability targets of the next phase of the Dockside Green development. The Canada Green Building Council certified the buildings of the original project and, at the time promoted Dockside Green as a leading example of sustainable community development.

The Canada Green Building Council's mandate is to support the industry in increasing environmental performance of buildings and entire developments, and to review and certify projects consistent with the requirements of the LEED rating system. Setting environmental performance targets for buildings and community developments is at the sole discretion of the developer/owner based on project objectives and desired outcomes. As the only national organization advocating for green building in Canada, we encourage developers/owners to target the highest level of environmental performance for a given project. Third party verification and certification under a credible green building rating system is recommended as the best way to validate follow through on proposed sustainability strategies.

With regard to the question about the stringency and rigour of different LEED systems, the following provides clarification. LEED is now recognized as the most credible and widely used rating system in Canada and the world with projects in over 150 countries. This wide spread use is due to many factors including its focus on providing market based, economically viable solutions and flexibility to project developers/owners. LEED provides a stringent approach to improving environmental performance in buildings and considerable rigour in the certification process.

There are currently over 25 LEED building rating systems in the marketplace covering different types of construction (e.g. new construction, retrofit & operation, tenant improvements, community developments) and specific building classes/types such as retail, schools, data centres.

LEED BD&C (Building Design & Construction) focuses on improving the performance of new construction buildings. LEED ND (Neighbourhood Development) focuses on improving the performance of community development practices beyond individual buildings.

Both rating systems set equally demanding performance targets which become more stringent with the level of certification i.e. a LEED Platinum certified project has higher performance targets than a LEED Silver project. All LEED projects undergo a rigorous third-party certification process where specific documentation required for each credit is reviewed by green building experts before certification is awarded. The rigour of certification reviews is consistent regardless of the level of certification while stringency can vary depending on the level of achievement targeted.

One of the key differences between LEED BD&C and LEED ND is that building performance credits in the latter are largely optional since only one building in the development would need to be LEED certified. The next phase of Docksider Green could meet this requirement as it intends to target LEED Gold for all commercial buildings. New residential buildings would still have to meet minimum performance targets consistent with prerequisite requirements in LEED ND. We appreciate that you have developed sustainability targets for the residential portion. We have not assessed the proposed Docksider Green Standards with regard to their stringency as these have neither been developed nor will they be verified by CaGBC.

I hope this letter is helpful in setting and implementing sustainability targets of the next phase of Docksider Green.

Best regards.



Thomas Mueller
President & CEO



Dockside Green LEED ND V.4 Compliance Strategy – July 20, 2015.

Strategy is targeting 83 points for Platinum Certification. Table also includes proposed 3 year reporting criteria.

Pre-requisite or Credit	Category	Target Points	Specific Building Site Action / Percent Requirement	Description/Comments	3 Year Report Criteria
Smart Location & Linkage					
PR	Smart Location			Achieves as urban, infill site.	
PR	Imperiled Species and Ecological Communities			There are no imperiled species or ecological communities identified on site.	
PR	Wetland and Water Body Conservation			There were no on-site that had to be considered. The project completed shoreline restoration in Point Ellice Park.	
PR	Agricultural Land Conservation			This is an infill site with no agricultural land.	
PR	Floodplain Avoidance			As a coastal site and with consideration of sea level rise due to climate change, a minimum building elevation based on the 100 year flood event has been established and buildings (e.g. foundations) in this zone designed to withstand flood events.	Summary of measures taken for any buildings constructed in flood hazard zone during 3 year reporting period.
CR	Preferred Locations	10		Achieves these points a redevelopment infill site, with a high level of connectivity in the circulation network both on-site and within 800 metres of the Dockside Green lands. Also achieves points based on the Dockside Green lands being a high priority brownfield redevelopment site.	Summary of circulation network improvements completed during 3 year reporting period.
CR	Brownfield Remediation	2		Achieves these points as a brownfield remediation project and Dockside Green lands being a High Priority Location brownfield redevelopment site.	Summary of remediation activities during 3 year reporting period.
CR	Access to Quality Transit	7		Achieves these points based on frequency of transit service to Dockside Green lands.	
CR	Bicycle Facilities	2		Achieves these points based on number of interior and exterior bicycle parking spots and change room / shower facilities in commercial buildings.	Summary of number of bicycle parking spots and interior storage, change room and shower facilities constructed during 3 year reporting period.
CR	Housing and Jobs Proximity	3		Achieves these points based on project with an affordable housing component and based on number of jobs both at Dockside Green and within 800 metres walking distance equalling number of dwelling units on-site.	Summary of number of jobs based on Dockside Green lands.
CR	Site Design for Habitat or Wetland and Water Body Conservation	1		Achieves this point based on lack of existing habitat, wetlands or water bodies requiring conservation	



Pre-requisite or Credit	Category	Target Points	Specific Building Site Action / Percent Requirement	Description/Comments	3 Year Report Criteria
Neighborhood Pattern & Usage					
PR	Walkable Streets			Achieves as project is meeting 1) requirement that 90% of buildings have functional entries on circulation network or other public space, 2) 15% of block length has building-height-to-street-centreline ratio of 1:1.5, 3) continuous sidewalks or equivalent all-weather walking route for 90% of circulation network, and 3) no more than 20% of the block length is faced directly by garage or service bays.	
PR	Compact Development			Requirement is for at least 30 DUs per hectare and 0.80 FAR for land within transit walking distances. And 17.5 DUs per hectare and 0.50 FAR for sites outside of walking distance.	Summary of Dockside Green dwelling units per acre and FAR at the date of the 3 year report.
PR	Connected and Open Community			Requirement that internal connectivity is at least 54 intersections per square kilometre.	Summary of internal intersections per square kilometer at the date of the 3 year report.
CR	Walkable Streets	8		Achieves these points based on 1) 80% of building facade length facing circulation network is no more than 7.5 meters from property line 2) 50% of building facade length facing circulation network is no more than 5.5 meters from property line 3) 50% mixed-use and non-residential building facade length facing circulation network is within 1 foot of a sidewalk or equivalent 4) Functional entries for mixed-use / non-residential buildings occur on average every 23 meters 5) All ground level retail / commercial facing a public space have clear glass on at least 60% of their facades between 3 and 8 feet 6) Any facade only a sidewalk, not more than 40% or 50 feet, is blank 7) Any ground-level retail / commercial must be kept visible at night (stipulated in covenants) 8) Continuous sidewalks or equivalents on both sides of entire circulation network 9) 50% of ground floor dwelling units elevated at least 60 centimetres above the sidewalk grade 10) 50% or more the total # of office buildings has ground-floor retail along 60% of street facade. and 100% of mixed-use buildings include retail, live-work or ground-floor dwelling units along 60% of street facade 11) 40% of block length has building-height-to-street-centreline ratio of 1:1.5 12) 75% of residential-only motorized circulation network is designed for 30 km/h or less 13) 70% of mixed-use/non-residential motorized circulation network is designed for 40 km/h or less 14) At-grade driveway crossings no more than 10% of project sidewalk length.	
CR	Compact Development	5		Achieves these points based on density – dwelling units per hectare & FAR - at 5 years into project.	Summary of Dockside Green dwelling units per acre and FAR at the date of the 3 year report.
CR	Mixed-Use Neighborhoods	3		Achieves these points based on number of distinct uses within 400-meter walk distance once project is 50% of floor area is constructed.	Summary of number of distinct uses within walking distance of project once project is 50% complete.



Pre-requisite or Credit	Category	Target Points	Specific Building Site Action / Percent Requirement	Description/Comments	3 Year Report Criteria
CR	Housing Types and Affordability	6		Achieves these points based on housing diversity (measured by Simpson Diversity Index) and % of affordable rental dwelling units priced up to 60% or 80% of annual median income.	Simpson Diversity Score
CR	Connected and Open Community	2		Achieves these points based on internal connectivity exceeding 154 intersections per square kilometre.	Summary of internal intersections per square kilometer at the date of the 3 year report.
CR	Transit Facilities	1		Achieves these points based on required transit stops / facilities (two-years post completion) being completed within the Dockside Green project.	Summary of transit stops and / or facilities constructed during 3 year report period.
CR	Access to Civic and Public Spaces	1		Achieves this point as 90% of dwelling units and nonresidential entrances within 400 meters of least one civic space or passive use space at least 0.067 hectares. Median size of qualifying spaces must be 0.4 hectares.	
CR	Access to Recreation Facilities	1		Achieves this point as 90% of dwelling units and nonresidential entrances within 800 meters of least one outdoor recreation facility of at least 1 acre.	
CR	Visitability and Universal Design	1		Achieves this points as 20% of the new DUs will have select universal design features throughout the home or select universal design kitchen features or select universal design bedroom and bathroom features.	Summary of number of dwelling units that meet this requirement in 3 year report period.
CR	Community Outreach and Involvement	2		Achieves this based on DG neighbourhood predesign, preliminary design and ongoing community outreach and communication, as well as holding of neighbourhood design charrette.	Summary of outreach and communication activities during 3 year report period.
CR	Tree-Lined and Shaded Streetscapes	2		Achieves this as trees are provided at interval of no more 50 feet along at least 60% of the total existing and planned block length.	Summary of any tree planting and tree planting interval for completed portion of project as the date of the report.
Green Infrastructure & Buildings					
PR	Certified Green Building			Achieves pre-requisite as at least one building is LEED certified	Summary of number of buildings constructed during 3 year reporting period that achieved LEED or other eligible green building certification.
PR	Minimum Building Energy Efficiency			Achieves as 90% of all nonresidential buildings, mixed-use buildings and multi-unit buildings four stories or more will demonstrate 5% improvement for new buildings, 3% for major building renovations and 2% for core and shell buildings over ASHRAE 90.1-2010 and 90% of multi-unit building three stories or fewer must meet LEED for Home v4 EA Prerequisite Minimum Energy Performance.	Summary of building energy efficiency (e.g. % better than ASHRAE) for buildings built during 3 year report period.



Pre-requisite or Credit	Category	Target Points	Specific Building Site Action / Percent Requirement	Description/Comments	3 Year Report Criteria
PR	Indoor Water Use Reduction			Achieves as nonresidential buildings, mixed-use buildings and residential four stories or more will reduce total indoor water usage by 20% from a baseline. and 90% of residential building 3 stories or fewer must earn at least 2 points under LEED for Homes v4 WE Credit Indoor Water Use Reduction.	For buildings build during 3 year reporting period summary of indoor water calculation against baseline for that building or achievement under LEED for Homes criteria.
PR	Construction Activity Pollution Prevention			Achieves as all building sites will have and implement an erosion and sedimentation control plan.	
CR	Certified Green Buildings	3		Achieves as plan is to have at more than 3% of total building area green building certified (under LEED or other qualifying system)	Summary of number and of buildings constructed during 3 year reporting period that achieved LEED or other eligible green building certification and percentage constructed to report date.
CR	Building Energy Efficiency	2		Achieves as 90% of all nonresidential buildings, mixed-use buildings and multi-unit buildings four stories or more will demonstrate 20% improvement for new buildings, 18% for major building renovations and 15% for core and shell buildings over ASHRAE 90.1-2010 and 90% of multi-unit building three stories or fewer must reduce the LEED energy budget by 20%.	Summary of building energy efficiency (e.g. % better than ASHRAE) for buildings built during 3 year report period
CR	Indoor Water Use Reduction	1		Achieves as nonresidential buildings, mixed-use buildings and residential four stories or more will reduce indoor water usage by 40% from a baseline and 90% of buildings 3 stories or less must earn at least 4 points under LEED For Homes v4 WE Credit Indoor Water Use Reduction.	For buildings build during 3 year reporting period summary of indoor water calculation against baseline for that building or achievement under LEED for Homes criteria.
CR	Outdoor Water Use Reduction	2		Achieves as project will achieve 30% reduction from baseline using plant selection and irrigation system efficiency only and at least 50% reduction from the baseline when grey water re-use from the wastewater treatment plant is considered.	Summary of outdoor water use reduction from the baseline for project sites constructed during 3 year reporting period.
CR	Minimized Site Disturbance in Design and Construction	1		Achieves as development footprint is on previously developed land.	
CR	Rainwater Management	4		Cannot meet requirements, but can meet credit intent - reduce runoff volume and improve water quality by replicating the natural hydrology and water balance of the site, based on historical conditions and undeveloped ecosystems in the region. DG will apply for Credit Interpretation Ruling for these points. A positive result was previously achieved under LEED ND Pilot application.	



Pre-requisite or Credit	Category	Target Points	Specific Building Site Action / Percent Requirement	Description/Comments	3 Year Report Criteria
CR	Heat Island Reduction	1		Achieves point based on a combination of at weighted average based on target of 75% of roof area being vegetated or using high reflectance materials and 50% of non-roof paved areas achieving high reflectance or minimal absorption (e.g. because covered with planters or shade structures).	Summary of heat island reduction measures included in project sites built within 3 year reporting period and weighted average % achievement to date.
CR	On-Site Renewable Energy Sources	3		Achieves these points 20% of annual electrical demand and thermal energy cost will be offset by biomass District Energy System.	
CR	Infrastructure Energy Efficiency	1		Will achieve 15% annual energy reduction below an estimated baseline energy use for any new energy-using equipment outside the buildings such as street light, traffic lights, water and wastewater pumps, utility systems, bus stop lighting, and signage lighting. Excludes District Energy System (except the pumps for distribution of hot water) and exterior lighting within the property lines of building sites.	
CR	Wastewater Management	2		Achieves this credited by re-using at least 50% of this treated wastewater on site through on-site irrigation and flushing toilets.	Summary of any features installed as part of project phases completed during 3 year reporting period that will contribute to achieving this credit.
CR	Solid Waste Management Infrastructure	1		Achieves this credit based on 1) recycling in each building, 2) hazardous waste drop-off facilities, 3) food and yard waste composting available to each building and 4) recycling containers located at least every mixed-use or residential block.	Summary of any features installed as part of project phases completed during 3 year reporting period that will contribute to achieving this credit
CR	Light Pollution Reduction	1		Achieves this credit by meeting the light pollution reduction requirements for exterior lighting in residential areas, exterior lighting for the circulation network, uplight and light trespass requirements and establish covenants, conditions and restrictions that require continued adherence to the above requirements. .	Confirmation that phases constructed during the reporting period have met the credit requirements.
Innovation & Design Process					
CR	Innovation and Exemplary Performance: 1	3		Dockside Strategy for these points dependent on future analysis, but likely to include some of the following: 1 point – Innovation - Sound attenuation as per terms of the MDA. 1 point – Innovation - BETA and urban agriculture - use of vacant development land Exemplary performance (2 of these) 1 point - Exemplary performance for transit frequency 1 point - for 55% reduction in non-residential building indoor water use	



Pre-requisite or Credit	Category	Target Points	Specific Building Site Action / Percent Requirement	Description/Comments	3 Year Report Criteria
				1 point - for 75% reduction in outdoor water use 1 point - 30% reduction in infrastructure energy efficiency	
CR	LEED Accredited Professional	1		Achieves as at least one LEED NEED AP will be part of DG project team	
Regional Priority Credit					
CR	Regional Priority Credit	0		These are still being developed for Canada, DG may or may not be able to meet any of these (4 points possible).	



LEED v4 for Neighborhood Development Built Project

Project Checklist

Project Name: Dockside Green

Date: July 20, 2015

No			
3	Smart Location & Linkage		28
	Prereq	Smart Location	Required
	Prereq	Imperiled Species and Ecological Communities	Required
	Prereq	WetlandS and Water Body Conservation	Required
	Prereq	Agricultural Land Conservation	Required
	Prereq	Floodplain Avoidance	Required
	Credit	Preferred Locations	10
	Credit	Brownfield Remediation	2
	Credit	Access to Quality Transit	7
	Credit	Bicycle Facilities	2
	Credit	Housing and Jobs Proximity	3
1	Credit	Steep Slope Protection	1
	Credit	Site Design for Habitat or Wetland and Water Body Conservation	1
1	Credit	Restoration of Habitat or Wetlands and Water Bodies	1
1	Credit	Long-Term Conservation Management of Habitat or Wetlands and Water Bodies	1

No			
8	Neighborhood Pattern & Design		41
	Prereq	Walkable Streets	Required
	Prereq	Compact Development	Required
	Prereq	Connected and Open Community	Required
1	Credit	Walkable Streets	9
1	Credit	Compact Development	6
	Credit	Mixed-Use Neighborhoods	4
1	Credit	Housing Types and Affordability	7
1	Credit	Reduced Parking Footprint	1
	Credit	Connected and Open Community	2
	Credit	Transit Facilities	1
2	Credit	Transportation Demand Management	2
	Credit	Access to Civic & Public Space	1
	Credit	Access to Recreation Facilities	1
	Credit	Visitability and Universal Design	1
	Credit	Community Outreach and Involvement	2
1	Credit	Local Food Production	1
	Credit	Tree-Lined and Shaded Streetscapes	2
1	Credit	Neighborhood Schools	1

22	2	7	Green Infrastructure & Buildings				31
Y			Prereq	Certified Green Building			Required
Y			Prereq	Minimum Building Energy Performance			Required
Y			Prereq	Indoor Water Use Reduction			Required
Y			Prereq	Construction Activity Pollution Prevention			Required
3	2		Credit	Certified Green Buildings			5
2			Credit	Optimize Building Energy Performance			2
1			Credit	Indoor Water Use Reduction			1
2			Credit	Outdoor Water Use Reduction			2
		1	Credit	Building Reuse			1
		2	Credit	Historic Resource Preservation and Adaptive Reuse			2
1			Credit	Minimized Site Disturbance			1
4			Credit	Rainwater Management			4
1			Credit	Heat Island Reduction			1
		1	Credit	Solar Orientation			1
3			Credit	Renewable Energy Production			3
		2	Credit	District Heating and Cooling			2
1			Credit	Infrastructure Energy Efficiency			1
2			Credit	Wastewater Management			2
		1	Credit	Recycled and Reused Infrastructure			1
1			Credit	Solid Waste Management			1
1			Credit	Light Pollution Reduction			1

4	2	0	Innovation & Design Process		6
3	2		Credit	Innovation	5
1			Credit	LEED® Accredited Professional	1

0	4	0	Regional Priority Credits		4
	1		Credit	Regional Priority Credit: Region Defined	1
	1		Credit	Regional Priority Credit: Region Defined	1
	1		Credit	Regional Priority Credit: Region Defined	1
	1		Credit	Regional Priority Credit: Region Defined	1

83	9	18	Project Totals (Certification estimates)	110

Certified: 40-49 points, Silver: 50-59 points, Gold: 60-79 points, Platinum: 80+ points