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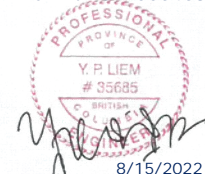
DATE: August 15, 2022
PROJECT NO: 04-21-0341
PROJECT: **Woodland Park Phases 2 & 3**
SUBJECT: **Transportation Demand Management (TDM) Update**

TO: Matthew McClenaghan, Parker Forch
Edgar Development

CC: Matthew Woods, Matthew Fellows
Acton Ostry Architects

PREPARED BY: Hugo Johnston, B.Sc.
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Permit No. 1000468



1. INTRODUCTION

This Transportation Demand Management (TDM) memo has been prepared specifically for Phase 2 (The Gardens) & 3 (The Hub) of Woodland Park development. This TDM Memo expands on the strategy identified in the *Transportation Demand Management Strategy & Parking Variance Rationale Memo* prepared on November 12, 2021, and the *Summary Table* dated November 16, 2021, for the entire Woodland Park development.

As set out in the Development Agreement between the City of Port Moody and Edgar Development dated December 7, 2021, a detailed TDM, to the satisfaction of the City, shall be submitted with the first development permit application of each Phase of development. Therefore, this TDM memo details the proposed TDM that will be implemented as part of the development within Phases 2 & 3 and has been updated to reflect the latest residential unit counts.

2. PROPOSED DEVELOPMENT

Table 2.1 summarizes the current development plans for Phases 2 & 3 which represent approximately 16% of the overall site.

Table 2.1: Proposed Development Plans

LAND USE	PHASE 2	PHASE 3
Residential – Market Ownership	219 units	
Residential – Market Rental		138 units
Commercial – Group Child Care		12,344 ft ²
Commercial – Retail (net)		14,001 ft ²

The unit breakdown for Phase 2 residential market ownership is summarized in **Table 2.2**.

Table 2.2: Proposed Unit Breakdown for Phase 2 Market Ownership

UNIT TYPE	# UNITS
1-bed	68
2-bed	104
3-bed	47
TOTAL	219

2.1 Vehicle Parking

The vehicle parking requirements for the development are based on the City of Port Moody Zoning Bylaw No.3306 (CD83), 2021, which was amended to the Zoning Bylaw No. 2937 to facilitate rezoning of the Woodland Park properties. The applicable parking requirement rates are summarized in **Table 2.3** below.

Table 2.3: Zoning Bylaw No. 3306 (CD83) Requirement Rates

LAND USE	SUBCATEGORY	BYLAW PARKING RATES
Residential	Apartment / Townhouses – Rental	1.0 spaces per dwelling unit
		0.1 visitor spaces per dwelling unit
	Apartment / Townhouses – Ownership	1.0 spaces per studio & 1-bed unit
		1.17 spaces per 2-bed unit 1.25 spaces per 3-bed unit
Commercial		0.1 visitor spaces per dwelling unit
	Child Care	1.8 spaces per 93sqm
	Retail, including Retail Food Service	1 space per 33sqm

The calculated parking provision required for the Phase 2 and phase 3 development is presented in **Table 2.4** below.

Table 2.4a: Parking Supply Requirements - Phase 2

USE	REQUIRED STALLS	PROPOSED STALLS	SURPLUS/DEFICIT
Resident	249	249	+0
Visitor	22	24	+2
TOTAL	271	273	+2

Table 2.4b: Parking Supply Requirements - Phase 3

USE	REQUIRED STALLS	PROPOSED STALLS	SURPLUS/DEFICIT
Resident	138	139	+1
Visitor	14	16	+2
Child Care	22	22	0
Retail	40	44	+4
TOTAL	214	221	+7

A total of 494 spaces are being provided across Phase 2 and 3, which is 9 spaces in excess of the minimum parking supply required. The intention of this TDM in these phases is not to account for a reduction in parking levels, but to provide alternate transportation modes and reduce reliance on private cars especially during the peak period.

2.2 Bicycle Parking

Tables 2.5 and 2.6 below outline the proposed development's bicycle parking requirements based on the City of Port Moody Zoning Bylaw No. 2937 as the site-specific CD Bylaw does not specify different bicycle parking rates.

Table 2.5a: Long Term Bicycle Parking Requirements & Provision - Phase 2

LAND USE	DENSITY	BYLAW RATE	BYLAW SUPPLY REQUIREMENT	PROVIDED	DIFFERENCE
Apartment	172 units	1.5 / unit	258	258	0
Townhouses	47 units	2.0 / units	94	94	0
TOTAL	219 UNITS		352	352	0

Table 2.5b: Long Term Bicycle Parking Requirements & Provision - Phase 3

LAND USE	DENSITY	BYLAW RATE	BYLAW SUPPLY REQUIREMENT	PROVIDED	DIFFERENCE
Apartment	138 units	1.5 / unit	207	232	+25
Commercial - Retail	1,310sqm	1 space per 750 sqm	2	2	0
TOTAL			209	234	+25

Table 2.6a: Short-Term Bicycle Parking Requirements & Provision – Phase 2

LAND USE	DENSITY	BYLAW RATE	BYLAW SUPPLY REQUIREMENT	PROVIDED	DIFFERENCE
Residential	219 units	6 per building with >50 units	12	12	0

Table 2.6b: Short-Term Bicycle Parking Requirements & Provision – Phase 3

LAND USE	DENSITY	BYLAW RATE	BYLAW SUPPLY REQUIREMENT	PROVIDED	DIFFERENCE
Residential	138 units	6 per building with >50 units	12	12	0

Phases 2 & 3 will be providing a total of 610 bicycle spaces, made up of 586 Class-A long-term spaces and 24 Class-B short terms spaces.

The long-term bicycle parking would be provided in the form of bike lockers stored in P1 level. The majority will be in vertical type with a number of lockers in horizontal type. The short-term spaces will be provided at grade near the building entrances.

2.3 Loading Requirements

The loading requirements for the proposed site are based on the CoPM bylaws, these are set out in **Table 2.7**.

Table 2.7a: Loading Space Requirements & Provision – Phase 2

LAND USE	BYLAW SUPPLY REQUIREMENT	REQUIRED	PROVIDED	DIFFERENCE
Residential	No requirement	0	1 large size On-street 1 passenger car size Underground	+2

Table 2.7b: Loading Space Requirements & Provision – Phase 3

LAND USE	BYLAW SUPPLY REQUIREMENT	REQUIRED	PROVIDED	DIFFERENCE
Residential	No requirement	0	2 passenger car size Underground	+2
Commercial - retail	464.5m ² to 2,322.5m ² (25,000ft ²)	1	1 On-Street Class B loading bay	0
Commercial - Childcare		1	1 On-Street Class B loading bay 1 passenger car size Underground	+1
TOTAL		2	5	+3

The loading requirement for the site is being provided above and beyond the minimum bylaw requirements. The development is proposing on-street loading spaces for the commercial elements of the site, which can also be used for residential move-in/move-out as needed. Additional Class A or car-sized loading spaces are also provided on level P1 for each use within the phase, to accommodate courier, building maintenance service, etc.

3. TDM PLAN

TDM Strategy and Summary Memos were produced previously outlining the proposed TDM plan for Woodland Park. The purpose of these documents set out the proposed measures that would be implemented across the overall development site. The measures were split into three brackets:

- TDM Measures that are delivered independently within each phase of the development.
- TDM Measures that are delivered independently in the initial phase, but evolve as the overall development proceeds; and
- TDM Measures that are coordinated as part of an overall development schedule.

To maintain consistency, the same headings will be used to introduce the measures and details associated with each strategy. As this TDM plan is related to Phase 2 and 3 only, the third TDM Measures above is not detailed here.

The preliminary locations for all TDM measures proposed for Phases 2 and 3 are shown in **Appendix A**.

3.1 TDM Measures that are delivered independently within each phase of the development

3.1.1 Realtime Information

The project will provide real-time transportation information on displays in prominent locations through the project site to highlight sustainable transportation options and support informed trip-making for the life of this TDM strategy. One screen will be provided at each Phase of the development. The proposed location of the screens will be confirmed in due course; however it is anticipated to be within a central location for residents and staff. This will ensure that it is in an accessible location to all residents.

The displays will include the available sustainable transportation choices in the vicinity of the site, such as real-time info on local bus routes, Millennium Line, West Coast Express, and potentially availability of car share vehicles within the neighbourhoods. All of which will help residents and visitors better understand their mobility options and the associated accessibility of each mode.

An example of this amenity is provided below in **Figure 3.1**.

Figure 3.1: Real-Time Information Amenity (Example)



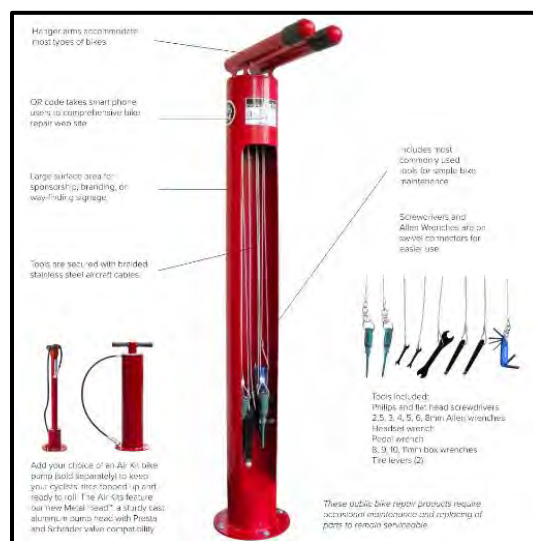
3.1.2 End of Trip Cycling Facilities

The project will provide two bike repair rooms that hold tools for residents and staff to use as needed. The repair rooms will be located within the bike storage room on level P1 of each phase as shown in **Appendix A**. The locations of the bike repair facilities in each parkade will be as follows:

- **Phase 2 – The Gardens:** The bike repair facility will be situated in the northwest bicycle storage within Parkade 1. The bike parking facility is provided close to the entrance of the bike storage area.
- **Phase 3: The Hub:** The repair facility is located in the primary bike storage located within Parkade 1; the bicycle maintenance facility is located close to the southern access to the bike storage.

Figure 3.2 illustrates an example of the bicycle maintenance equipment to be provided in the room and please note that the model shown is generally indicative of the type of equipment to be supplied but may not be the exact model/brand eventually procured.

Figure 3.2: Bicycle Maintenance Equipment



The stand will accommodate universal bicycle mounting and will include the following tools securely attached by retractable braided stainless-steel cables: Phillips screwdriver, stubby Phillips screwdriver, slotted screwdriver, stubby slotted screwdriver, 2 x tire levers, adjustable wrench, combination wrench, multi-torx set, multi-hex set (metric).

Within the Level P1 parkade of both Phase 2 and Phase 3 a bike wash facility will be provided in the same location as the car wash facility.

3.1.3 Parking Supply Management

The proposed level of parking within Phase 2 and Phase 3 is above the minimum requirements. Upon occupation of each phase, the TDM coordinator shall monitor parking demand conditions to understand the level of parking being used or required by each building.

For the rental units, monthly parking leases will be offered for renters separately from the unit rental. If parking spaces remain unused for a long period in the rental building, the developer of the rental building can either convert the unused parking spaces to bicycle parking spaces or storage spaces. The decision will be dependent on if additional bicycle spaces are required. Alternatively, the unused bays can become new car-sharing spaces.

For strata units, parking spaces will be offered/sold separately from the unit sale. The decision to convert the unused or unsold parking spaces after a long period will fall upon the property manager who will be made aware of the option to convert the unused stalls to either bike parking or additional car-sharing spaces.

3.2 TDM Measures that are delivered independently in the initial phase but evolve as the overall development proceeds

3.2.1 TDM coordinator

Upon completion of Phase 1 of development and in advance of occupation of the first residents, a TDM coordinator will be nominated for the site. The coordinator will be in charge of ensuring that all the TDM measures are implemented, the maintenance of any facilities is upheld, and undertaking monitoring of the usage of the facilities.

It is anticipated that one coordinator will be employed to work on the complete site. The contact details of the TDM coordinator will be provided to the CoPM and all other stakeholders operating at the site.

3.2.2 Car Share Spaces and Vehicles

Following discussion with Modo representative, Modo has indicated they're interested in the Woodland Park Site and willing to accommodate 1 car share vehicle per phase. It is therefore proposed to provide 2 spaces within Phases 2 & 3.

2 x Modo car share vehicles (@ \$50,000 each) = \$100,000

2 x surface car share stalls (estimated construction cost @ \$13,500 each) = \$27,000

The following should be noted with regards to the calculated value of these TDM initiatives:

- The cost of the Modo car share vehicles will go towards the purchase of free Modo memberships. The exact number of memberships will depend on the cost of cars and the on-going negotiations with Modo.

- The cost to the developer of constructing surface car share stalls has been estimated using high-level estimates provided by Read Jones Christoffersen Ltd. (RJC) for Bunt in support of the City of Coquitlam's City-Wide Parking Review.

Modo offer Electric Vehicles, therefore, both car share spaces are proposed to have EV charging capabilities. The charging facilities and capabilities infrastructure will be provided by Modo.

It is likely that one car will be deployed first as part of the first Woodland Park phase upon occupancy. More cars will be deployed when demand increases with the completion and occupancy of subsequent phases. All Modo vehicles are proposed to be located on-street for easy access, not only to the Woodland Park residents, but also to neighbouring residents. It is proposed that both car share vehicle spaces will be located on Cecile Drive, to the south of the driveway letdowns. Preliminary locations of Modo car share vehicles are shown in **Appendix A**.

3.2.3 E-Bike Shared Fleet

E-bikes are becoming increasingly popular travel options for people and a key reason for that is their ability to expand a person's trip distance beyond a conventional, non-motorized bike. In the case of Woodland Park, which is located atop a hill, e-bikes also help to reduce the physical barriers to travel outside the neighbourhood to key locations, such as Moody Centre.

Five (5) e-bike spaces are proposed on level P1 of each phase 2 and phase 3. These bikes will be available to residents within the Private Strata unit. Adequate charging infrastructure, as well as clear information related to the rules and operations for the fleet. Should the scheme be deemed successful by Strata and the residents respond positively to the rentals, additional E-bikes will be provided for Strata residents in the future. The location of the E-Bikes is demonstrated in Appendix A.

An online booking service would be an effective way to manage the resident demand and allow people to trip plan, similar to car share programs.

Two E-Bike companies have been contacted to determine their interest in providing the facilities on-site and provide an understanding of the costs required for such a system. The following organisations were contacted:

- Vaast Bikes;
- OHM Bikes; and
- Velofix

The conversations with these organisations are ongoing and a signed agreement will be submitted to the CoPM before occupation of the site. Depending on the organisation selected, a mix of bikes will be selected, with at least as one Cargo bike provided.

3.2.4 Pedestrian Infrastructure Improvements

The Master Plan links together a variety of amenities and parks through the delivery of a comprehensive trail network that will primarily support recreational trips, but also offers an alternative to conventional sidewalks along the road edge. The improvements that are recommended within each of the Phases will be brought forward to be operational at the end of each phase.

All the site frontages along the site (i.e. Angela & Cecile Drive) will be rebuilt to include protected cycling infrastructure and an improved public realm experience for people walking along the site edge. Park trail will be provided within Phase 2 the Gardens as well as Phase 3 the Hub. All new infrastructure will be shared use off-road trails, which will be used by both pedestrians and cyclists.

3.2.5 Transportation Marketing Services

Upon completion of each Phase of development, the TDM Coordinator will organise the production and distribution of Welcome Packages for all new residents and staff outlining the options and benefits of the development and neighbourhood (interim and future). This includes a map with descriptions pointing to any on-site bicycle maintenance facilities and bicycle parking, as well as information on the nearby bus routes and rapid transit connections. This tailored welcome package will also link to other transportation-related resources, such as car share programs, e-bike share and trail networks.

New staff within the retail units will also be provided a Welcome Pack indicating the choice of multi-modal travel options available for them to travel to work.

The TDM coordinator will be responsible to update the Welcome Pack as necessary and distribute on an ongoing basis to ensure the information remains accurate and reflects any updated changes to the content, such as bus route changes or car-share service availability in the community.

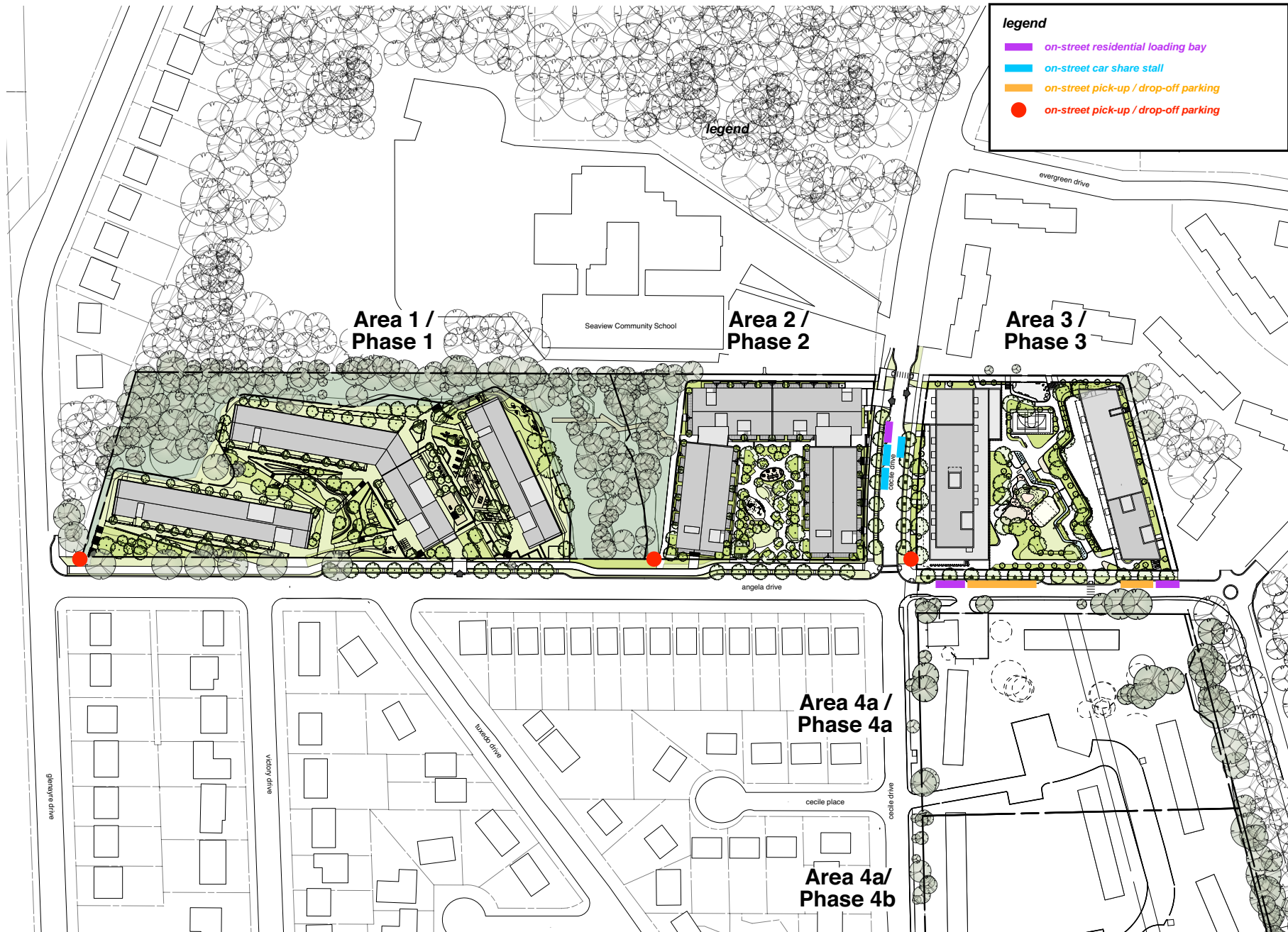
3.2.6 Walking and Cycling Wayfinding

Given the size and scale of development, as well as the significant park and open spaces being delivered with the overall redevelopment effort, it will be helpful to provide wayfinding signage as a means for people to get oriented with their surroundings. This can include a wide variety of different-sized signs as part of a broader site design theme that are complementary to each location and will include key information such as maps, pathways, cycling routes, distance to key destinations. This wayfinding strategy also offers educational opportunities, particularly for young children to learn more about the natural environment that surrounds the Woodland Park site.

The preliminary locations for wayfinding signs are shown in Appendix A: one sign just west of Phase 2 site fronting Angela Drive multi-use path and one sign at the corner of Angela Drive and Cecile Drive.

APPENDIX A

Proposed TDM Measures Location



- legend**
- on-street residential loading bay
 - on-street car share stall
 - on-street pick-up / drop-off parking
 - on-street pick-up / drop-off parking

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ISSUES

08 Mar 2022	Issue for DP application
08 Mar 2022	Issue for Subdivision application
12 Aug 2022	Issued for Response to DP Comments

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**Woodland Park
Area 3 / Phase 3
The Hub**

Edgar Development & BC Housing
Port Moody, BC

scale	date
1:800	12 Aug 2022
project code	status
WPH3	D0
drawn	checked
AC/DG	MW / MD



Context Plan

drawing number
A011



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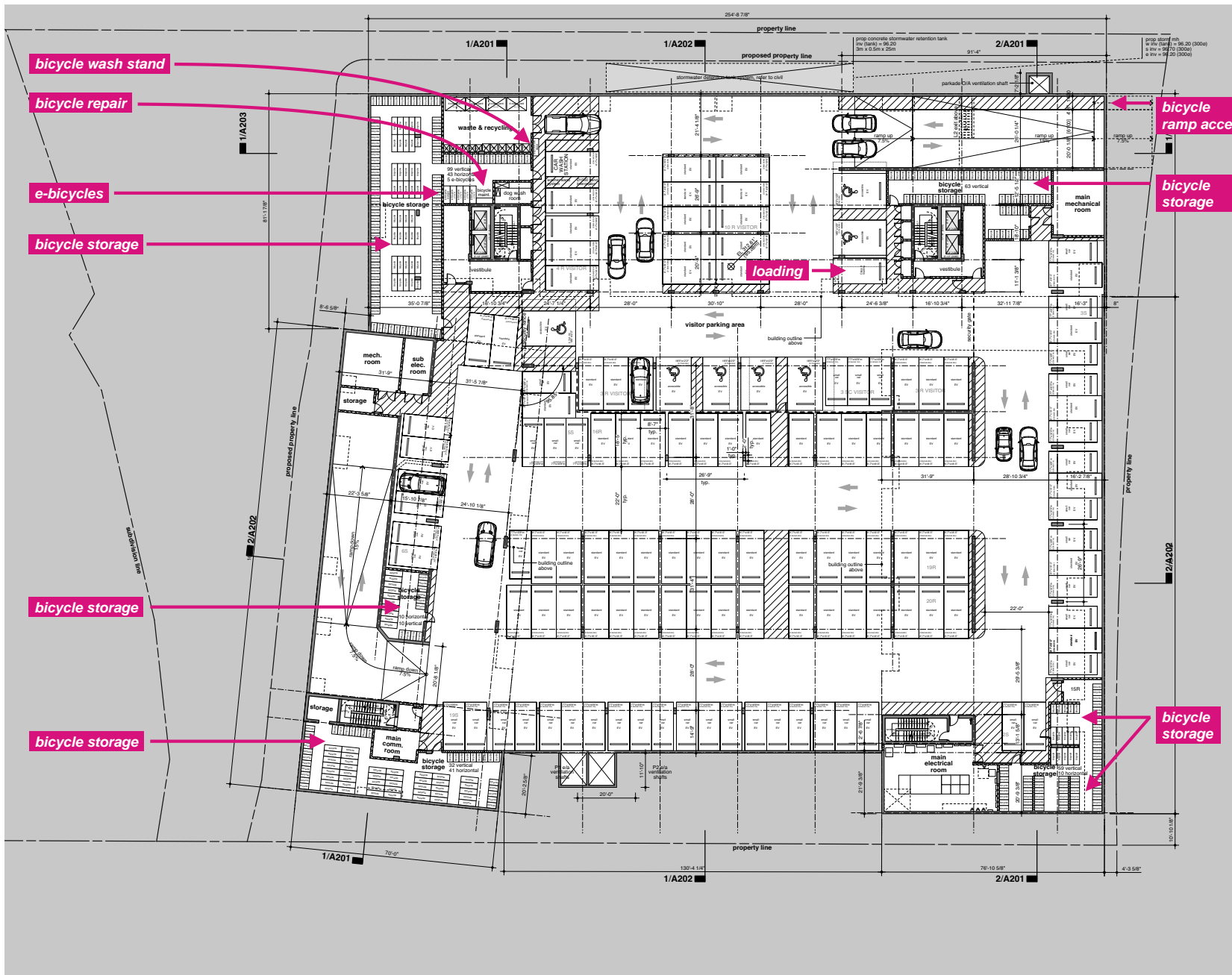
scale	date
1/16" = 1'-0" (1:192)	12 Aug 2022
project code	status
WPH2	D0
drawn	checked
AC	MW / MD



Ground Floor Plan

drawing number
A111

Note:
Building and unit measurements are taken from
center line of framing walls (pilot walls and
pilot corridor), and to outside face of exterior wall
sheathing.



P1 parkade summary

vehicle parking & loading

market strata regular stalls	58
market strata small car stalls	43
visitor regular stalls	20
visitor small car stalls	15
accessible stalls	7
class A loading	1
car wash station	1
*within secure visitor area	

long term bicycle storage

horizontal (6'x2')	104
vertical (3'x2')	283
total	387
e-bicycle (6'x2')	5

residential storage

locker (4'x4')	0
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Area 2 / Phase 2
The Gardens**

Edgar Development
Port Moody, BC

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project code	status
WPH12	D0
drawn	checked
AC	MW / MO

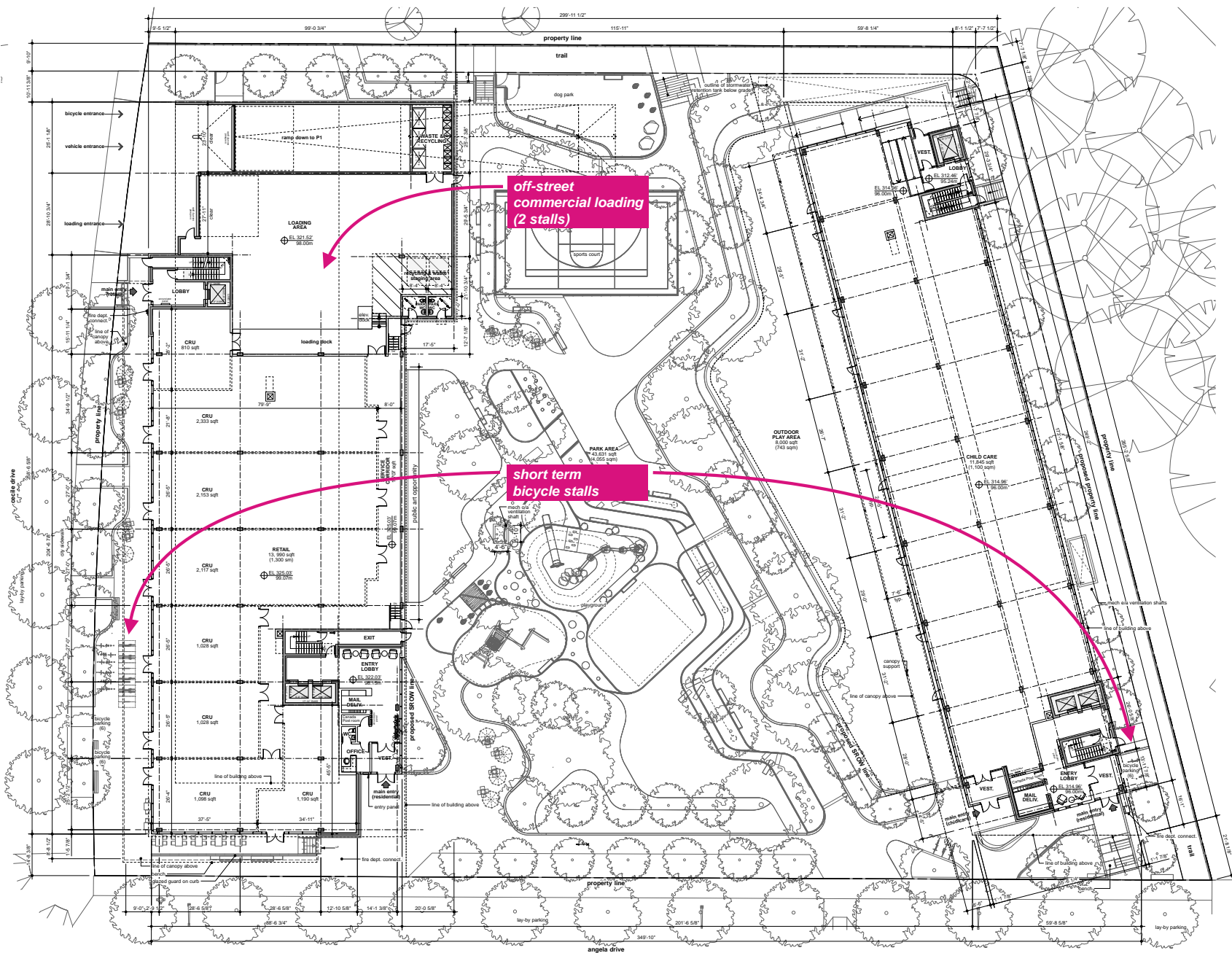


P1 Parkade Plan

drawing number
A102

Note:

Building and unit measurements are taken from center line of framing walls (pulle scale and scale-corridor), and to outside face of exterior wall sheathing.



off-street
commercial loading
(2 stalls)

short term
bicycle stalls

Note:
Building and unit measurements are taken from
center line of demising wall (suite-suite and
suite-corridor) and to outside face of exterior wall
sheathing

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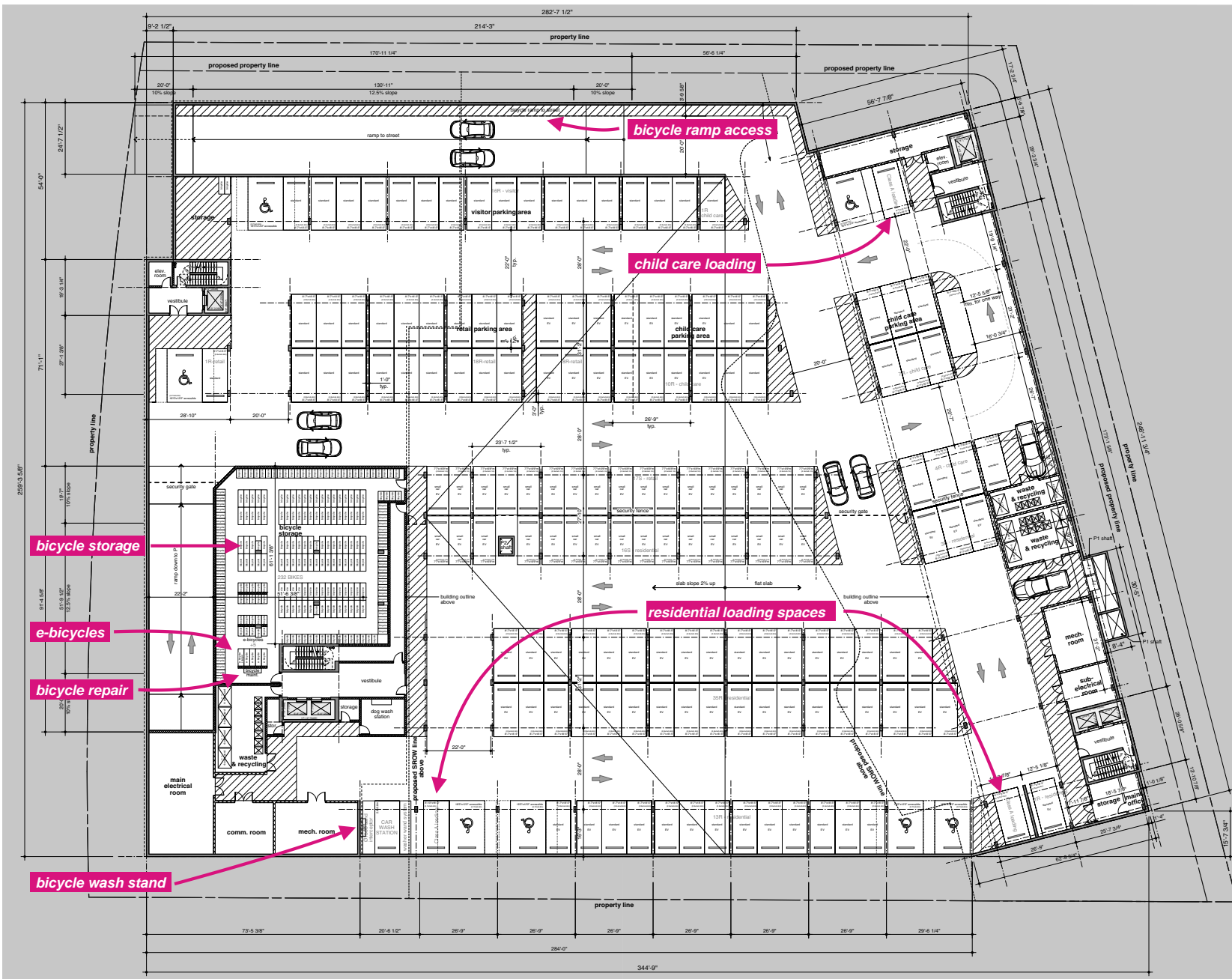
**Woodland Park
Area 3 / Phase 3
The Hub**

Edgar Development & BC Housing
Port Moody, BC

scale	date
1/16" = 1'-0" (1:192)	12 Aug 2022
project code	status
WPH3	D0
drawn	checked
MF	MW / MO



Ground Floor Plan
drawing number
A111



P1 parkade summary

vehicle parking & loading

residential regular stalls	52
residential small car stalls	16
visitor regular stalls	16
retail regular car stalls	27
retail small car stalls	17
child care regular car stalls	22
accessory stalls	8
flora & loading	2
car wash station	1

long term bicycle storage

horizontal (8'x2')	109
vertical (9'x2')	120
total	229
e-bikes	5

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1/16" = 1'-0" (1:192)	12 Aug 2022
project code	status
WPH3	D0
drawn	checked
MF	MW / MO



P1 Parkade Plan

drawing number
A102

Note:
Building and unit measurements are taken from center line of framing walls/side/side and side/corner), and to outside face of exterior wall sheathing.