
**8902, 9001 Heather St and 502 W Kent Ave South (COMPLETE APPLICATION)
DP-2022-00957 – M-2 Zone**

CS/BC/OE/KI

DEVELOPMENT PERMIT STAFF COMMITTEE MEMBERS

Present:

*J. Greer, Development Services (Chair)
M. Au, Development Services
M. So, Development Services
J. Olinek, Urban Design & Development Planning
**R. Grover, Engineering Services

Also Present:

*C. Stanford, Urban Design & Development Planning
*C. Yee, Engineering Services
L. Dotto, Engineering Services
A. Cheng, Engineering Services
**J. Lee, Engineering Services
B. Casidy, Development Services
*M. Cheng, Development Services
C. Celeste, Development Services
*O. Eriksson, Urban Design & Development Planning
**V. Harms, Urban Design & Development Planning
K. Yamashita, Parks & Recreation
K. Imani, Development Services

* **March 29 DPSC Only**

** **April 12 DPSC Only**

APPLICANTS:

WSP
1000-840 Howe St.
Vancouver, BC V6Z 2L2

PROPERTY OWNER:

South Coast British Columbia Transportation
Authority
400 – 287 Nelson’s Ct.
New Westminster, BC
V3L 0E7

EXECUTIVE SUMMARY

Proposal: To develop this site as a public authority with ancillary office for vehicle maintenance and operations centre, comprising a total of six buildings (maintenance, bus fueling and washing, parking for employees and fleet of buses, storage of equipment and machinery) pursuant to the existing M-2 site.

See Appendix A Standard Conditions
 Appendix B Standard Notes and Conditions of Development Permit
 Appendix C Building Review Branch and Fire & Rescue Services Comments
 Appendix D Plans and Elevations
 Appendix E Landscape Plans
 Appendix F Applicant’s Design Rationale
 Appendix G Letter from Musqueam Indian Band
 Appendix H Shape Your City Report

Issues:

1. Addressing issues of Reconciliation and cultural sensitivity.
 2. Enhancements to public realm contribution.
 3. Improvements to the proposal’s massing and expression.
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DEVELOPMENT PERMIT STAFF COMMITTEE RECOMMENDATION: APPROVE

THAT the Board APPROVE Development Application No. DP-2022-00957 submitted, the plans and information forming a part thereof, thereby permitting the proposed development serving as a Public Authority Use (with ancillary Office Use) for vehicle maintenance and operations centre, comprising a total of six buildings (maintenance, bus fueling and washing, parking for employees and fleet of buses, storage of equipment and machinery) pursuant to the existing M-2 Zoning District Schedule, subject to the following conditions:

1.0 Prior to the issuance of the development permit, revised drawings and information shall be submitted to the satisfaction of the Director of Planning, clearly indicating:

1.1 provide an updated design rationale addressing the symbolic, spiritual, practical, historic and present importance of the Fraser River Foreshore to the Musqueam Indian Band, illustrating how areas of concern from the engagement and consultation process have been considered;

Note to Applicant: Strategies may include plans and initiatives for sustainable water management, access and use. The applicant may refer to the *United Nations Declaration on the Rights of Indigenous Peoples* and pertinent sections of the policy framework for reference.

1.2 design development to improve the public realm contribution including the following:

- i. maximizing the physical and visual connection to and along the waterfront, particularly along the eastern edge;
- ii. incorporating environmental educational and interpretative wayfinding signage informed by engagement with the Musqueam Indian Band; and
- iii. providing planted boulevards to accommodate street trees, landscaping, and integrated green rainwater infrastructure (GRI) strategies to mitigate the urban heat island effect of large areas of hardscaping.

Note to Applicant: Per the *Fraser River & Burrard Inlet Waterfront Policies*, development should prioritize public access to the riverfront, and visual and physical openness are important design considerations in the *Marine Landing Policy Updates*. The applicant should minimize the impact of raised elevations impacting visual access with additional site design measures.

1.3 design development to the architectural expression with particular attention to providing visual interest on prominent façades and points of transition, especially on the long unarticulated building frontages visible from the public realm;

Note to Applicant: Design strategies might include modulating the depth of the proposed fins to vary light and shadow, changing the gradient colour or finish of the fins or laser cut perforations in interesting patterns. Long building frontages and prominent massing intersections are an opportunity for visually-appealing façade treatments that are legible from near and distant aspects, such as from the Canada Line Bikeway Bridge. Exploration of creative and prominent design moves at these frontages is encouraged.

2.0 That the conditions set out in Appendix A be met prior to the issuance of the Development Permit.

- 3.0 That the Notes to Applicant and Conditions of the Development Permit set out in Appendix B be approved by the Board.**

Technical Analysis:

PERMITTED / REQUIRED		PROPOSED	
Technical review for 8902 and 9001 Heather Street, and 502 West Kent Avenue South		DP-2022-00957	
M-2 District Schedule			
Site Area ¹		Per Survey Plan	85,729.00 m ²
Use		Institutional Use	Public Authority with ancillary office
Density ²	Uses other than manufacturing, transportation and storage, and wholesaling - class A Maximum floor space ratio 1.00 FSR		0.89 FSR
Floor Area ²	Uses Maximum area 85,729.00 m ² Ancillary office Maximum area 21,432.25 m ² Maximum percentage 25.00 %	Public Authority with ancillary office Maintenance Building 11,153.00 m ² Operations and Tire Storage 63,223.00 m ² Pedestrian Access Building 503.00 m ² Bus Wash 694.00 m ² Vault Pull 56.00 m ² Fuel Bay 953.00 m ² Total 76,582.00 m ² Ancillary office only 7,972.00 m ² 10.41 %	
Height ³	Maximum 30.5 m	Maintenance Building 13.35 m Operations Building 20.97 m Pedestrian Access Building 22.16 m Bus Wash 9.18 m Vault Pull 7.05 m Fuel Bay 9.08 m	
Setback	Side yard 0.9 m Rear yard 3.1 m	Side yard 3.0 m Rear yard 7.8 m	
Parking	<i>Figures per consultant's report</i>		<i>Figures per applicant</i>
Loading	Parking - total incl. accessible, visitors 361 spaces	Parking - total incl. accessible, visitors	378 spaces
Bicycle	Accessible 4 spaces	Accessible only	7 spaces
Passenger ⁴	Loading 2 Class A - Class B - Class C	Loading - total	2 spaces
	Bicycle 34 Class A - Class B	Bicycle - total	56 spaces
	Passenger - Class A - Class B - Class C	Passenger	Not proposed

Notes:

1 Note on Site Area:

Site area is based on Survey Plan, consists of 5 lots excluding Heather Street portion. Standard condition A.1.13 is seeking verification of the site area.

2 Note on Density and Floor Area:

Standard condition A.1.11 is seeking additional details to demonstrate compliance with floor area.

3 Note on Height:

Listed heights are measured from the finished grades provided by the applicant. Standard condition A.1.13 is seeking additional information on building height.

4 Note on Parking, Loading, Bicycle, and Passenger:

Public Authority Use is not a listed use per Parking By-law. The required number of spaces is determined by the Director of Planning in consultation with City Engineer. Standard condition A.1.12 is seeking additional information such as type and class to demonstrate compliance with the Parking By-law.

Accessible spaces have been determined based on the accessory office use areas only.

Legal Description

Lot B, Blocks C, D, Y and Z District Lot 319 Plan and 22095; Lot E, Blocks 4, C, D, Y and Z, District Lots 311, 319, 323 and 324 Plan 22094; Lot B, Block 4, District Lot 311, Plan 4803; Lot A (Explanatory Plan 1976), Except Part in Reference Plan 3327 South Part of Block 5, District Lot 311, Plan 847; That Part of Block 6 Lying to The South of Part in Reference Plan 3328, District Lot 311, Plan 847

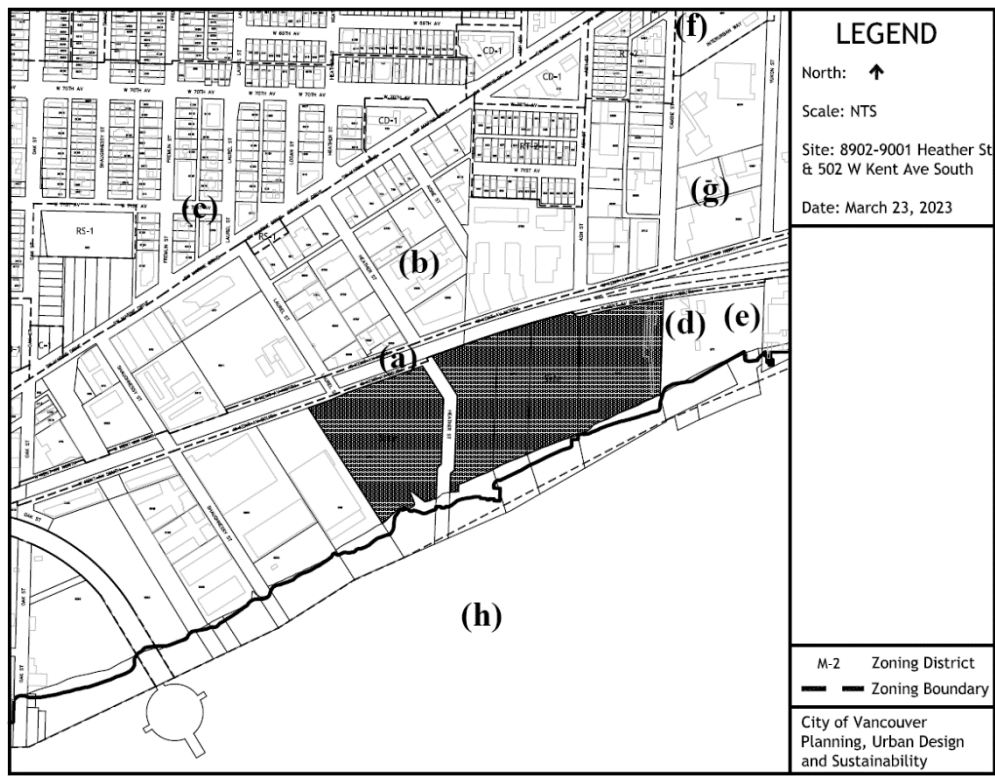
History of Application

Dec. 21, 2022 Complete DP submitted
 Mar. 29, 2023 Development Permit Staff Committee
 Apr. 12, 2023 Development Permit Staff Committee

Site: The site is comprised of five legal parcels, located between W Kent Avenue South and the Fraser River, adjacent to the Canada Line Bridge and bisected by Heather Street. The proposal involves the closure and conveyance of the southerly portion of Heather Street with a corresponding dedication to the City of the westerly 20 metre wide portion, thereby creating a new road access to the Fraser River (“Laurel Street extension”), in order to consolidate into a single contiguous parcel of land.

Context: Significant adjacent development includes no distinctive architectural buildings but has natural features, structures, character, and use as described below:

- (a) Canadian Pacific Railway line to the north.
- (b) Two-storey M-2 Industrial to the north.
- (c) Two-storey Residential (RT-2) along W 71st Avenue to the north.
- (d) Canada Line elevated guideway to the east.
- (e) BC Hydro Kidd 1 substation is located east of the Canada Line elevated guideway.
- (f) Canada Line Marine Drive Station to the north east.
- (g) Two-storey M-2 industrial zoning to the east.
- (h) North Arm of the Fraser River to the south.



Background:

Pursuant to the M-2 District Schedule of the Zoning and Development By-law, this application proposes to construct the Marpole Transit Centre ('MTC'), a vehicle maintenance and operations centre designated as a Public Authority Use (with ancillary Office Use) comprised of six buildings including: maintenance, bus fueling and washing facilities; parking for fleet of buses and employee vehicles; and equipment and machinery buildings. The application is adjacent the foreshore of the Fraser River, a site of significant symbolic, spiritual, historical and present importance to the Musqueam Indian Band.

Site:

The site is currently bisected by a portion of Heather Street, which TransLink is requesting to close and acquire from the City with a corresponding dedication to the City of the westerly 20 metre wide portion, thereby creating a new road access to the Fraser River ("Laurel Street extension"), in order to consolidate into a single contiguous parcel of land. This land exchange process is anticipated to set out the various property rights (dedications, SRWs and foreshore improvements) and obligations to deliver works (relocate utilities, construct roads/widenings, access to/along Fraser River, flood protection, shoreline and habitat). This process requires Council approval following negotiation and agreement between the City and Translink.

The north of the project site is bound by the Canadian Pacific Rail Right-of-Way (ROW) and W Kent Avenue North, which itself is bound on the north by I-2 zoning that consists of low-rise light industrial, storage, and commercial structures. The closest properties zoned as residential (RT-2) to the site are the houses along W 71st Avenue, about 160 m north of the site. The closest arterial road is SW Marine Drive, more than 250 m north of the site. The east of the site is bound by the Canada Line's elevated guideway ROW, and by the existing concrete bikeway ramp leading up to the guideway and bridge that cross over the river south to Richmond. BC Hydro's Kidd 1 substation is located east of the Sky-Train elevated guideway. The Canada Line Marine Drive station also sits just ½ km to its north along the elevated guideway. M-2 industrial zoning continues east beyond the elevated guideway. The west of the site is bound by the planned extension of Laurel Street to the foreshore of the river. Coast Mountain Bus Company buses and delivery vehicles will enter the MTC campus from this extension of the street, which acts as a driveway that is completely separated from other traffic (namely, vehicles driven by employees and visitors, pedestrians and cyclists entering the campus) for operational concerns. The south of the site flows along the North Arm of the Fraser River, which is about 300 m wide at this point. Industrialized Mitchell Island sits to the southeast of the site, while industrialized areas of the City of Richmond (including Canada Line maintenance yards) occupy the south bank of the river. Other than Canada Line passengers, there is currently no recreational, pedestrian, and vehicular traffic that interacts with the site from the south. The river itself holds significant symbolic, spiritual, and historical importance to the Musqueam Indian Band.

Foreshore Restoration and Access:

The foreshore is located mostly on Crown Land and not within the boundaries of the development site. As such, the foreshore restoration is not included in this development permit application and is subject to separate approvals processes. The design of the foreshore, including access, will be determined as part of implementation of the Fraser River Special Study Area of the *Vancouver* Plan, and will be the result of a collaborative process with the Musqueam Indian Band, the public and City staff governed by the *United Nations Declaration on the Rights of Indigenous Peoples* ('UNDRIP') under the direction of the City of Vancouver UNDRIP Strategy. This design process will balance Reconciliation, ecological responsibility, climate change resilience and access priorities.

The drawings included with this application for the foreshore are for reference only and do not provide the detail necessary to determine ultimate compliance for the foreshore design.

Flood Plain:

The site is located within the Fraser River floodplain with a Flood Construction Level ('FCL') of 4.6m (15 ft.) including a 0.2m (0.6 ft.) allowance for subsidence. This subsidence allowance is as typically accepted in other areas of the city, including East Fraser Lands, when a subsidence analysis hasn't been provided by a qualified Professional Engineer.

Flooding on Kent Avenue (North & South) immediately north of this site is prone to flooding during heavy rainfall and high tides. This overland flooding is due to the flat topography of the Fraser River floodplain and will not be eradicated with the raising of the shoreline parcel. In response, TransLink has indicated intent to construct a flood wall and coastal flood protection infrastructure at the south side of the development site. Drawings and details of this infrastructure have not been provided as part of this DP application as it is understood reviews and approvals will be resolved through the subsequent building permit phase, pursuant to the Vancouver Building Bylaw.

Typically in Vancouver, dike designs are approved by the City. However, this site is unusual as Translink is intending to build the flood protection asset on Crown Land before the asset is transferred to the City. TransLink has made an application to the Ministry of Forests (referenced as Crown Land File: #2412167) for tenure of the adjacent portions of Crown Land water lots to construct approximately 445m section of floodwall along south property line. This process includes notification and engagement with First Nations. The proposed floodwall is to be designed in compliance with the *Vancouver Shoreline Flood Protection Design Reference* and the *BC Provincial Diking Design & Construction Guidelines*. Although the floodwall design concepts are not submitted in this application, a "superdike" appears to be contemplated and the transit facility will be raised to 4.6m elevation. It has been noted that approval of the floodwall by both the City and the Province may be required and, if the floodwall will be a City asset, then the City will require access to the full extent of the floodwall in order to conduct condition inspections, maintenance, and repairs. An SRW is required to encompass the asset for maintenance and access as per Condition **A.2.1**. Construction or changes to the shoreline or work within the river channel (such as riprap placement) may require approvals from Fisheries and Oceans Canada and Ministry of Forests.

Applicable By-laws and Guidelines:

- M-2 District Schedule
- Land Title Act (Division 2, Subsection 75) (Province of British Columbia)
- Subdivision By-Law 5208 and Appendix A
- Parking By-Law 6059
- Flood Plain Standards and Requirements
- Fraser River and Burrard Inlet Waterfront Policies and Guidelines

Other Policies:

- United Nations Declaration on the Rights of Indigenous Peoples ('UNDRIP')*
- Marpole Community Plan
- Marine Landing Policy Updates
- Coastal Adaptation Plan (Fraser River Foreshore)
- Flood-Proofing Policies
- Climate Emergency Action Plan
- City of Vancouver Shoreline Flood Protection Design Reference (2021)
- Dike Maintenance Act (Province of British Columbia)

**Though neither a by-law nor guideline, the United Nations Declaration on the Rights of Indigenous Peoples is included here due to its relevance regarding sites of cultural sensitivity and expect impact on City processes.*

Response to Applicable By-laws and Guidelines:

It is important to acknowledge the location of the site is of critical importance to Musqueam First Nations and will necessitate further engagement with Musqueam Indian Band to better understand implications

and identify opportunities for collaboration. The result of this engagement will interact with the policy framework application and could impact the proposal. The application will also require Council approval of the Road Closure and Conveyance, the Ministry of Forests acceptance of the Water Lot Tenure application, and subdivision and consolidation of the site.

M-2 District Schedule

The proposal generally complies with the zoning requirements for land use and form of development. Prior to development permit issuance, confirmation of site boundaries and supporting infrastructure is a condition of approval. We anticipate this may include:

- The closure of Heather Street through a road closure application and conveyance of lands to the applicant through the appropriate Council process, and with equivalent access.
- The subdivision of Heather Street, lot consolidations, and road dedications through a subdivision application.
- Access as per the provincial requirements to the waterfront and the municipal policy for access along the waterfront of the subject property, or a suitable alternative option provided.

Fraser River and Burrard Inlet Waterfront Policies and Guidelines/ Flood Plain Standards etc.

Under the Burrard Inlet and Waterfront Policy the developer is required to construct flood protection infrastructure and access along the river. TransLink has made application with the Ministry of Forests. Application proposes locating the flood protection infrastructure within portions of the crown water lots. As part of the Building Permit review, the proposal must meet the Flood Plain Standards and Requirements. A Flood Protection Works Agreement (prepared by the City and agreed to by TransLink and/or the Province) will need to capture the design and work proposed along the foreshore. This agreement will contain provision for access by the City for inspection and maintenance of flood wall and includes proposed habitat works, currently under consideration with Ministry of Forest and Department of Fisheries and Oceans.

The [Fraser River and Burrard Inlet Waterfront Policies and Guidelines](#) provides additional specific considerations for the site including:

1. *Future Fraser River trail subject to engagement with the Musqueam Indian Band*
2. *Laurel Street End Enhancement*
3. *Cambie Street End Enhancement*
4. *Identified Underutilized space opportunity*

In addition, the [Fraser River and Burrard Inlet Waterfront Policies and Guidelines](#):

- (d) It requires applicants to commit to maximum public penetration and access to the river waterfront and developing recreational precincts.
- (f) At the time of rezoning or **subdivision**, developers be required to construct, at their expense, shoreline protection and a 25-foot-wide [7.6 m] walkway along the river.
- (g) The City require the developer to enter into an agreement, satisfactory to the Director of Legal Services, to ensure provision of a ROW guaranteeing access to the public along the waterfront walkway, prior to the enactment of any rezoning by-law."

As a further note in this policy, "The Director of Planning is instructed to require the provision of landscaping treatment as a condition of development permit applications for all conditional use developments along the Fraser River and the Burrard Inlet waterfronts."

City of Vancouver's United Nations Declaration on the Rights of Indigenous Peoples/ UNDRIP Strategy

The United Nations Declaration on the Rights of Indigenous Peoples is a comprehensive international instrument on the rights of Indigenous Peoples. It is a framework for reconciliation to uphold and protect Indigenous Peoples' rights and the enjoyment of those rights. As a City of Reconciliation, Vancouver has committed to the implementation of *United Nations Declaration on the Rights of Indigenous Peoples Act (UNDRIP) Strategy* at the municipal level. This site, through preliminary discussions with Musqueam Indian Band, has been identified as of significant cultural importance.

Within the framework of the City's UNDRIP Strategy, staff are exploring opportunities, in collaboration with Musqueam Indian Band and TransLink, for further enhancement and potential access to and along the foreshore, highlighting the importance of shoreline rehabilitation and implementation of Musqueam's vision for the foreshore area. The focus of this engagement is to prioritize access to cultural sites for Musqueam Indian Band and identifying ways to support the practice of their traditions on the land.

It should be noted that staff recommended the applicant complete their engagement with the Musqueam Indian Band prior to the submission of the design. The implementation of procedures resulting from the strategic objectives of the City of Vancouver's UNDRIP Strategy are ongoing and this application preceded the finalization of that work.

Marpole Community Plan (2014)

The Marpole Community Plan provides guidance on land use in the area and anticipates access to 10 acres of park near the foot of Cambie close to the Fraser River. The 10-acre park has proven difficult to achieve despite sustained efforts. Through the development of the Marine Landing Policy Updates the City deemed it was unlikely to happen in the short- or mid-term future. As a result, language related to policy 10.3.2 of the Marpole Community plan was updated to reflect the desire to continue exploring opportunities for park space in Marpole to meet park access gaps. Furthermore the plan was amended to the following: *"Explore provision of street end enhancements in combination with the walking/cycling connection at the foot of the Cambie Street Bridge" and "continue to explore opportunities for a large riverfront park on the Fraser River near Marpole, as well as opportunities for new park space within Marpole"*.

Marine Landing Policy Updates (MLPU)

These policies typically apply to rezoning applications, and not projects proceeding under existing zoning. However, the public realm chapter of the Marine Landing Policy is applicable to development permits because they are area-wide aspirations and objectives that live in the community plans and in various other City and Park Board policies and strategies.

The *Marine Landing Policy Updates (MLPU)* inform improvements in the public realm. City staff have recommended to the applicant that the the Marine Landing public realm objectives be reflected in their site plan. The MLPU supplement these existing City plans and strategies with additional priorities to support this growing community.

'Marine Landing Policy Updates' Open Space Direction:

Open space on development sites should reinforce the network of public spaces (3.2.6). Design considerations include consultation with Musqueam Indian Band, increase of urban tree canopy, new and existing public views, reintroduction of water to open spaces, and encouraging lively building edges and/or green public-private realm interfaces. Where public realm improvements are located within a statutory ROW it is the responsibility of the owner to maintain infrastructure within the SRW (2.2.22)

'Marine Landing Policy Updates' Foreshore Direction:

MLPU notes that public access along a continuous Fraser River Foreshore has been identified across various City plans and strategies, but that collaboration and partnership with First Nations, primarily the Musqueam Indian Band, will be key to determining the public access to the water's edge (p 27). Further design considerations for the foreshore include enhancing and re-establishing the foreshore as a functioning ecological system, reflecting planning and design principles from the *Coastal Adaptation Plan – Fraser River Foreshore*, adaptability to sea level rise, provision of street end enhancements, interpretive signage through engagement with Musqueam Indian Band, increasing urban tree canopy, and working with City, First Nations and regional partners to develop policy, acquisition and design solutions.

'Marine Landing Policy Updates' Street End Enhancement Direction:

Open space on development sites should reinforce the network of public spaces (3.2.6). Design considerations include consultation with Musqueam Indian Band, increase of urban tree canopy, new and existing public views, reintroduction of water to open spaces, and encouraging lively building edges and/or green public-private realm interfaces. Where public realm improvements are located within a statutory ROW it is the responsibility of the owner to maintain infrastructure within the SRW (2.2.22)

'Fraser River and Burrard inlet Waterfront Policies' Foreshore Direction:

MLPU notes that public access along a continuous Fraser River Foreshore has been identified across various City plans and strategies, but that collaboration and partnership with First Nations, primarily the Musqueam Indian Band, will be key to determining the public access to the water's edge (p 27). Further design considerations for the foreshore include enhancing and re-establishing the foreshore as a functioning ecological system, reflecting planning and design principles from the *Coastal Adaptation Plan – Fraser River Foreshore*, adaptability to sea level rise, provision of street end enhancements, interpretive signage through engagement with Musqueam Indian Band, increasing urban tree canopy, and working with City, First Nations and regional partners to develop policy, acquisition and design solutions.

'Fraser River and Burrard inlet Waterfront Policies' Street End Enhancement:

Explore street end enhancements to improve public access and connectivity to the Fraser River in strategic locations along the riverfront. Size will vary based on location, adjacencies and ability to utilize the public ROW (p 27). Further design considerations include visual and physical openness to the riverfront, street and adjacent developments, flexible use, integrated streetscape elements, opportunities to engage with nature and water, balance between public access and habitat enhancement and heritage preservation, and biodiversity

The Fraser River and Burrard Inlet Waterfront Policies and Guidelines provides further specific considerations for review as indicated below.

By-law, Guidelines, & Policy Response Summary

This application is generally in compliance with the regulatory framework for land use and form of development in the M-2 zoning with anticipated further development through subsequent approvals. The applicant's response to the above is ongoing through the multiple approval streams and other levels of government. Conditions of approval in this report are specific to the Development Permit and the relevant regulations including the Zoning and Development By-Law, Parking By-Law, Land title Act and Subdivision By-law.

Future approvals will be subject to internal workshops and with the Musqueam Indian Band to ensure their design concerns are addressed. City staff note the concerns expressed throughout the development permit pre-application and approvals process including appropriate reconciliation engagement, cultural sensitivity, flood plain resiliency measures, and the critical infrastructure's exposure in a flood plain,

habitat protection impact, and comments on the shoreline restoration being separate to this application. Staff also note this development is a piece of critical infrastructure for Translink and the region's transportation objectives.

Form of Development

The MTC campus will comprise approximately six separate structures of varying heights as summarized in the Technical Analysis Table (Page 4) of this report.

The nominally flat existing site (currently +2.5 to 3.3 m) will be built-up to a platform ('super-dyke') of +4.6m (with 0.2m subsidence allowance) above sea level to mitigate against potential flooding. This will require mitigation measures to the perception of a large walled perimeter with appropriate landscape transitions. The super-dyke will be supported on the south perimeter by a flood protection wall along the river foreshore.

The project will be elevated for flood protection and therefore Pedestrians, cyclists, and non-revenue vehicular traffic will enter the project's campus from the northeast corner of the site, which is anchored by the entry and access tower that provides a direct path into the operations building and the rest of the Marpole Transit Centre campus. The MTC campus is being elevated approx. 2 m above W Kent Avenue South and will be visible to train passengers travelling from the airport to enter the city. Passengers riding on the Canada Line Sky-Train can view the entire campus from an elevated perspective, particularly as they are crossing the river from the south and entering the City of Vancouver. Therefore, the southeast portion of the campus, particularly the Operations building, will become the focal public face of the project providing first impressions to visitors coming to Vancouver.

The bus fleet assigned to the Marpole Transit Centre facility includes diesel hybrid buses and at a later date battery electric buses (BEBs), with the balance shifting toward a majority of BEBs at a period not yet specified. The site surface features large extents of impervious paving, with an underground storm water system designed to collect potential spills and to control the quality of water discharged to the Fraser River. Combined with the floodwall and the raising the site to 4.6 m elevation, opportunities for rainwater infiltration are reduced.

The project has three primary operations: bus dispatch, bus service, and bus maintenance. Agency employee and visitor parking is separated at grade from bus traffic. Bus dispatch and maintenance functions are systematically separated from each other with their own circulation paths. TransLink or CMBC employees, enter the project from the northeast corner of the site. This is the point to entry to the campus, which is anchored by the access tower and bridge that takes users directly up to the third level of the Operations building, thereby bypassing circulating vehicles on campus.

The main Operations building is broken up by vertical fins, made up of wire mesh or perforated metal panels, onto which the applicant plans to showcase indigenous art and motifs. These fins display one colour or pattern on one side, and another colour or pattern on the other side to add interest to the homogenous extent of repeating long façade. Functionally speaking, these fins create visual screening while allowing required ventilation for motorized vehicles, natural lighting, and views to the outside. In addition, the use of mass timber pitched roofs, girders, rafters, glulam beams, and soffits visually unify the various building forms that comprise the MTC campus. The use of the timber design vocabulary extends to the office components of the Operations building and the Maintenance building, as well as to all other auxiliary buildings and structures, such as the stair and access towers, as well as all the various bus servicing elements on the campus.

The road dedication along W Kent Avenue South will accommodate a 6 m wide, bi-directional, landscaped bike and pedestrian path. The 3m wide transition between this path and the project property line includes soft landscaping elements between the built-up project elevation of +4.6 m, and the elevation of the path at +2.55 m. The north side of the path is bound by the CP Rail ROW, and W Kent Avenue North beyond that. Laurel Street is planned to be extended south toward riverfront to allow

agency buses to access the campus. There is currently a row of 14 existing deciduous trees on the west side of Laurel Street ROW that the applicant seeks to mirror and line the western perimeter of this site. On the south perimeter of site, the construction of the super-dyke is proposed by the applicant for landscape reclamation along the water lots owned by the Ministry of Forests. On the east perimeter, foreshore access is allocated by a 10 m wide dedication for a landscaped buffer zone between MTC campus and the Sky-Train elevated guideway.

The project makes accommodations for a landscape riverfront reclamation treatment as required by the *City of Vancouver Fraser River and Burrard Inlet Waterfront Policies and Guidelines* along the south perimeter flood protection wall, located on water lots south of the MTC site, currently owned by the Ministry of Forests, with access secured through an SRW agreement. The design and provision for access will require additional engagement with the Musqueam Indian Band.

URBAN DESIGN PANEL

Following staff consultation with management, it was decided that an Urban Design Panel session would not be scheduled for this project on the basis of its M2 zoning and use. M2 zoned sites are not typically taken to the Urban Design Panel.

ENGINEERING SERVICES

The recommendations of Engineering Services are contained in the prior-to conditions noted in Appendix A attached to this report.

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED)

The recommendations for CPTED are contained in the prior-to conditions noted in Appendix A attached to this report.

LANDSCAPE SERVICES

The recommendations of Landscape Services are contained in the prior-to conditions noted in Appendix A attached to this report.

ARCHAEOLOGICAL SERVICES

The recommendations of Archaeological Services are contained in the prior-to conditions noted in Appendix B attached to this report.

ENVIRONMENTAL PROTECTION BRANCH

The recommendations of Environmental Protection Branch are contained in the prior-to conditions noted in Appendix A attached to this report.

BUILDING REVIEW BRANCH

This Development Application submission has not been fully reviewed for compliance with the Building By-law. The applicant is responsible for ensuring that the design of the building meets the Building By-law requirements. The options available to assure Building By-law compliance at an early stage of development should be considered by the applicant in consultation with Building Review Branch staff.

To ensure that the project does not conflict in any substantial manner with the Building By-law, the designer should know and take into account, at the Development Application stage, the Building By-law requirements which may affect the building design and internal layout. These would generally include: spatial separation, fire separation, exiting, access for physically disabled persons, type of construction materials used, fire fighting access and energy utilization requirements.

Further comments regarding Building By-law requirements are contained in Appendix C attached to this report.

FIRE & RESCUE SERVICES

The recommendations of Vancouver Fire & Rescue Services are contained in the prior-to conditions noted in Appendix A and C attached to this report.

NOTIFICATION

This application underwent an enhanced public engagement process, initiated on February 3rd, 2023, which included 1619 notification postcards mailed to businesses and residents in the vicinity informing them of the proposal and offering additional information on the City's Shape Your City webpage. Signage was also installed on-site, at the intersection of W Kent Avenue South and Laurel St, and another at Ash St. and W Kent Avenue South to inform passersby of the proposed development. Further, a virtual open house was held through the Shape Your City platform from February 13th – 19th to help address potential questions from public. Email notifications were also distributed to Marpole Business Association, Marpole-Oakridge Community and Musqueam Indian Band advising them of the application and offering additional information on the City's website. A total of 26 responses were received through the Shape Your City portal, with nine (9) responses in support, five (5) being mixed and twelve (12) in opposition. Those who opposed the proposal expressed the following comments.

Parkland to serve Marpole residents

This site was identified in the 2014 Marpole Community Plan as public park space.

Staff response:

The *Marpole Community Plan (2014)* provides guidance on achieving numerous community goals related to transportation, parks, and community amenities. The Plan as approved in 2014 included guidance on new parkland of approximately 10 acres close to the Fraser River. At the time the Plan was developed, the TransLink site by the Fraser River was a potential option for acquisition for future parkland. Efforts from the Park Board, Real Estate and Facilities Management and Planning, Urban Design and Sustainability staff to establish a park in this area have been ongoing since completion of the *Marpole Community Plan*. Despite these efforts, TransLink has deemed their site necessary for operations to meet environmental targets (Low Carbon Fleet Strategy) and to serve customers in Vancouver and the broader region. Recognizing that the delivery of the park in this specific location is no longer an option, staff recommended a revised parks and open space strategy in the *Marine Landing Policy Updates* (approved by Council in 2021). The revised public realm plan focuses on opportunities for small, incremental changes to develop an interconnected network of green public spaces as buildout of the area occurs. Access to and along the Fraser River also remains a priority. Larger park space is still considered a priority, with the City actively exploring opportunities for a large riverfront park on the Fraser River near Marpole, as well as opportunities for new park space within Marpole.

Foreshore trail

The proposal lacks publicly accessible trail along the Fraser River.

Staff Response:

As a City of Reconciliation, Vancouver has committed to the implementation of *United Nations Declaration on the Rights of Indigenous Peoples Act (UNDRIP) Strategy* at the municipal level. Through preliminary discussion with Musqueam Indian Band, this site is identified as significant importance.

Within the framework of the City's UNDRIP Strategy, staff are exploring opportunities, in collaboration with Musqueam Indian Band and TransLink, for further enhancement and potential access to and along the foreshore, highlighting the importance of shoreline rehabilitation and implementation of Musqueam's vision for the foreshore area. The focus of this engagement is to prioritize access to cultural sites for Musqueam Indian Band and identifying ways to support the practice of their traditions on the land.

The extension of Laurel Street and the Easterly portion of site are intended to be captured as part of the subject Development Permit application, whereas improvements located on Provincial Water Lots necessitates Ministry of Forests approval.

Refer to conditions **1.1**, **A.1.1** and **A.2.1 ii**

For further information on the City's UNDRIP Strategy, please visit the following link: <https://vancouver.ca/people-programs/undrip-task-force.aspx>

Flooding impacts

How will the City address flooding issues in this area?

Staff Response:

City staff are in the process of studying the flood and drainage hazards in this area and exploring potential solutions. It is a complex mix of tidal flooding occurring through City drainage system, overland coastal flooding, and overland rainfall flooding. The situation is further exacerbated by climate change (sea level rise and increasing rainfall intensity). As a result, staff are conducting flood and drainage mitigation option studies for the Fraser River floodplain as part of the upcoming capital plan, which is anticipated to involve landowner engagement in the near future when decision-making is contemplated.

Traffic impact

TransLinks proposed facility will cause more traffic in the area.

Staff Response:

City staff are working closely with TransLink to accommodate and mitigate bus access to the site and improve traffic safety, with the provision of upgrades including:

- Safe at-grade rail crossings/intersection improvements along West Kent Avenue
- New traffic signal at Laurel Street and Southwest Marine Drive.
- Bikeway improvements along Heather Street between Southwest Marine Drive and West Kent Avenue South.
- Public realm improvements along West Kent Avenue South, including new and widened sidewalks and boulevards and protected bike lanes.
- Rail grade crossing upgrades and the re-opening of the Heather Street rail crossing to support site access.

Refer to off-site improvements as listed under condition **A.2.2**

Lighting impacts and bird friendly design

How will site lighting affect adjacent properties and any mitigating features to avoid bird strikes?

Staff Response:

City Staff have established specific conditions and recommendations as a condition of Development Permit approval to mitigate light spillage onto neighbouring properties and incorporate design features pursuant to the *Bird Friendly Design Guidelines*. Refer to conditions **A.1.6** and **A.1.20**, respectively.

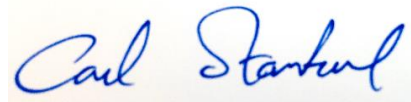
DEVELOPMENT PERMIT STAFF COMMITTEE COMMENTS:

The Staff Committee has considered the approval sought by this application and concluded that with respect to the Zoning and Development By-law it requires decisions by both the Development Permit Board and the Director of Planning.

With respect to the decision by the Development Permit Board, the application requires the Development Permit Board to exercise discretionary authority as delegated to the Board by Council.

With respect to the Parking By-law, the Staff Committee has considered the approval sought by this application and concluded that it does not seek a relaxation of the By-law provisions.

J. Greer
Chair, Development Permit Staff Committee



C. Stanford
Development Planner

B. Casidy
Project Coordinator

Project Facilitator: K. Imani

DEVELOPMENT PERMIT STAFF COMMITTEE RECOMMENDATIONS

The following is a list of conditions that must also be met prior to issuance of the Development Permit.

A.1 Standard Conditions

Urban Design Conditions

- A.1.1 provide detailed design for all elements of the “eastern connection” of the site including landscape improvements, and with particular consideration to;
- i. provide all program requirements, landscape approach improvements and access considerations intended for the proposal, subject to further design exploration and engagement with the Musqueam Indian Band; and
 - ii. ensure an unimpeded accessible waterfront adaptable to sea levels rise by working with City staff, the Musqueam Indian Band and regional partners to develop design solutions.

Note to Applicant: This should include comprehensive drawings detailing open space and street end enhancements required. Refer to the *Marine Landing Policy Updates*, the *Fraser River and Burrard Inlet Waterfront Policies and Guidelines* and the City of *Vancouver’s UNDRIP Strategy* (October 2022) etc. The design of these spaces is to meet City goals and objectives, and is subject to further engagement with Musqueam Indian Band in order to balance reconciliation, ecological resilience, climate change resilience, and access priorities. Refer to Marine Landing Planning Policy Updates Section 3.2.

- A.1.2 ensure all Laurel Street end enhancements maintain and improve public visual access to the Fraser River;

Note to applicant: The Laurel Street design and street end enhancements should accommodate street end enhancement, future pump station outside of the site access. The street end enhancement design should be informed by the Marine Landing Policy Updates (3.2) and specific program requirements identified by Musqueam Indian Band. The extent and type of access is to be subject to design exploration and further engagement in consideration of existing policy and UNDRIP Implementation Strategy. The design must meet City goals and objectives, balancing reconciliation, ecological, climate change resilience, and access priorities.

- A.1.3 consideration to maximize access and usability of roof-tops with a more varied sustainable roof-top use, including urban agriculture, alternative energy systems, outdoor enjoyment, and intensive / extensive green roofs;

- A.1.4 provide universally accessible connections where so ever reasonable for pedestrians and people using wheelchairs, to all common open space areas throughout the site;

- A.1.5 ensure provision of functional industrial development;

Note to Applicant: This can be achieved through the objectives of the M and I Districts - *Development Criteria for Functional Industrial Space* bulletin. Generally, office use should provide 3.7 m (12 ft.) floor-to-floor heights and industrial uses should provide minimum floor-to-floor heights between 5.2 m to 6.1 m (17-20 ft.) or 8 m (26 ft.) with a minimum floor-to-floor height of 4 m (13 ft.) above and below a mezzanine.

- A.1.6 provide a conceptual lighting strategy facilitating seasonal activity, ensuring appropriate lighting levels, optimizing Crime Prevention Through Environmental Design (CPTED) performance and minimizing glare;

Note to Applicant: Refer to condition **A.1.21**

A.1.7 provide large scale detail drawings of the major architectural elements sufficient to fully reflect the articulation of the proposal including but not limited to the following items:

- i. feature elements;
- ii. cladding elements; and
- iii. weather protection or canopy details at building entrances as applicable.

Fire and Rescue Services

A.1.8 design development to easterly access ramp to provide secondary emergency and fire-fighting access point from the city road network to main level to the satisfaction of the Fire Chief;

Note to Applicant: The East main entrance to the site is to be redesigned to facilitate fire apparatus access on to the yard. Design must be in accordance with the Building By-law Article 3.2.5.6. (6 m wide, 12 m centerline radius, 5 m overhead clearance, structurally sufficient for load of fire truck, etc.). Refer to Fire and Rescue Services Comments in Appendix C.

Development Review Branch Conditions

A.1.9 arrangements shall be made, to the satisfaction of the General Manager of Engineering Services and Chief Building Official for a Flood Plain Covenant prior to Development Permit issuance;

A.1.10 inclusion of the following spaces in the computation of floor area:

- i. Exterior Cleaning Position (190 m²);
Note to Applicant: Refer to A-FB-2.01.
- ii. Employee Patio (33 m²);
Note to Applicant: Refer to A-MB-2.04.
- iii. bus parking area on Level 1 in Operations Building;
- iv. staff parking on Levels 2 and 3 in Operations Building; and
- v. all ramps and exterior circulation;

Note to Applicant: Regarding iii to v, Applicant to clarify the areas and to confirm they are counted as floor area.

A.1.11 demonstration of compliance with Sections 3.1.1.1(b) and 3.1.1.1(b)(ii) - *Density and Floor Area*, of the M-2 District Schedule of the Zoning and Development By-law;

Note to Applicant: Clarify the proposed floor space ratio and total floor area, and ancillary office area. Refer to design rationale and project statistics where different figures such as 74257 m², 73052 m², 72273 m², and 73273 m² were specified as total floor area. Provide a detailed summary table to demonstrate compliance with 1.00 FSR. Consider using a similar Area Schedule per A1.04 to confirm the total floor area. Demonstrate the area of ancillary general office (as proposed on Levels 1 and 2 in Maintenance Building, and on Level 3 in Operations Building) does not exceed the greater of 235 m² or 25% of the total gross floor area.

A.1.12 clarification of the following items related to parking, loading, bicycle, and passenger spaces:

- i. define "NRV Parking";

Note to Applicant: Refer to A1.05.

- ii. clarify the location of loading and bicycle spaces; and
- iii. provide at least 10% of the Class A bicycle spaces as bicycle lockers in accordance with Section 6.3.13A;

A.1.13 clarification of the following items:

- i. verify the site area;

Note to Applicant: Site plan indicated a total of 85729 m². Project statistics indicated 83621 m².

- ii. verify Gross Floor Area; and

Note to Applicant: This figure is Site Coverage and was mislabeled as Gross Floor Area. Refer to project statistics.

- iii. verify building height;

Note to Applicant: Discrepancy in design rationale and project statistics, such as 25.02 m and 20.39 m. List the height of each building in project statistics. Demonstrate the height does not exceed the maximum permitted building height, by interpolating City building grades.

A.1.14 notation on plans of the following:

- i. *"All building dimensions, setbacks and yards are to the outside of cladding";*
- ii. *"Mechanical equipment (ventilators, generators, compactors, and exhaust systems) will be designed and located to minimize noise impacts on the neighbourhood and comply with Noise By-law No. 6555";*
- iii. *"All signs shown for reference only and requires a separate permit";* and
- iv. *"Provision of energized outlets in accordance with Section 4.14 and 6.3.21 (Electric Vehicle Charging Infrastructure Requirements) of the Parking By-law";*

A.1.15 design development to locate, integrate and fully screen any emergency generator, exhaust or intake ventilation, electrical substation and gas meters in a manner that minimizes their visual and acoustic impacts on the building's open space and the public realm;

Landscape Conditions

A.1.16 consideration to improve the landscape treatment, as follows:

- i. enhance the environmental performance of the site by providing tree canopy on site in accordance with the City of Vancouver Urban Forest Strategy; and

Note to Applicant: Explore opportunities to incorporate tree canopies in strategic locations on site to break up the large hardscaped surface and to mitigate the Urban Heat Island Effect. Also, refer to Urban Design Condition **A.1.3**.

- ii. improve perimeter landscape treatment to ensure a friendly expression to public realm;

Note to Applicant: Strategies may include incorporating suitable treatments around flood walls such as terracing or by buffering with planting, provision of fencing complementing the architecture and provision of additional landscaping on site to highlight entry points and to improve wayfinding.

A.1.17 revisions to the arboricultural documentation to include the following:

- i. a tree management plan, to be included in the landscape plan set, complete with dimensioned tree protection barriers and critical arborist comments for contractor's clear reference;
- ii. an arborist Letter of Assurance, signed by the contractor, to ensure arborist supervision for any work impacting trees-to-be-retained; and
- iii. impact assessment for trees-to-be-retained, to ensure adequate measures are taken to ensure safe tree retention.

Note to applicant: The arboricultural documentation should reflect the land ownership at the time when work is performed. Trees that will ultimately be located on street Right-of-Way (ROW) after the road exchange should be addressed as per Engineering/Park Board standards.

A.1.18 revisions to the plan material to clarify the work scope, ensure coordination between consultants and to include industry standard landscape plans complete with materials plan, grading plan, plant lists and proposed locations of plant material, construction details of landscape features, sections (as applicable) confirming adequate soil depth in planters on slab and confirming use of durable, quality materials;

Note to Applicant: Ensure the extent of the work area is clearly delineated in the drawings to clarify the scope of work included under this development permit.

A.1.19 indication on plans of proposed underground infrastructure impacting tree retention, including utility lines, storm sewer etc. Coordination with Park Board and Engineering department is required if proposed trenching conflicts with street trees;

A.1.20 identification on the architectural and landscape drawings of any built features intended to create a bird friendly design;

Note to Applicant: Development permits should reference the Bird Friendly Design Guidelines for examples of built features that may be applicable, and provide a design rationale for the features noted. For more information, see the guidelines at <https://guidelines.vancouver.ca/B021.pdf> . Adding on-site tree canopy would improve the general environmental performance of this large site, contribute opportunity for bird habitat which in turn adds quality to and further enhances the adjacent Fraser river foreshore. Refer to Condition **A.1.16**.

Crime Prevention Through Environmental Design (CPTED)

A.1.21 design development to incorporate CPTED measures including the following:

- i. ensure clear view lines and good lighting around building access points including elevator and entry entries and fire exits;
- ii. include lighting for pedestrians around the site on shared access points to improve safety;
- iii. provide white walls in parking areas;
- iv. avoid deep alcoves and concealed spaces; and
- v. reduce opportunities for intentional damage around the building with deterrent paint, planting, murals or artworks on blank walls;

Note to Applicant: Measures should reflect the specific risks in the area.

A.2 Standard Engineering Conditions

A.2.1 arrangements to the satisfaction of the General Manager of Engineering Services and the Director of Legal Services for the following:

- i. the closing of, stopping up and conveying to the owner, the required portion of the Heather Street south from West Kent Avenue South, subject to Council approval; and the relocation or decommissioning of any utilities within this area;
- ii. secure tenure from the Province for the adjacent Crown lots to facilitate the foreshore flood protection works and the foreshore trail and access, to the satisfaction of the General Manager of Engineering and the Director of Legal Services;

Note to Applicant: The Flood Protection, Shoreline and Habitat Works Agreement is required for foreshore flood protection and may include provisions for an accessible foreshore trail, which is to be determined through engagement with Musqueam Indian Band. Additional arrangements, including but not limited to, License of Occupation and Statutory Right of Ways (SRW) may be necessary to facilitate access along shoreline.

- iii. written confirmation and agreement from all affected utility companies;
- iv. consolidation of the closed portion Heather Street, with the MTC Lands to form a single development parcel, and subdivision of that site, to the Satisfaction of the Subdivision Approving Officer, to result in the dedication of:
 - a. the westerly 20 m wide portion of Lot B Blocks C, D, Y and Z DL 319 Plan 22095, including the corner curve, thereby creating a new road access to the Fraser River;
 - b. dedication of the northerly 10 m of the MTC Lands between Heather Street and Ash Street for the West Kent Avenue South extension; and
 - c. the dedication of the northerly 3 m of the MTC Lands from Ash Street to the easterly boundary of the MTC Lands for the widening of West Kent Avenue South.

Note to Applicant: A Subdivision Application is required to address the dedication and consolidation of the site.

- v. registration of a temporary SRW agreement over the Road Portion for public utility purposes, to be discharged once all utilities impacted by the road closure have been abandoned, relocated or otherwise protected, as necessary, and any associated street

and lane reconstruction works have been completed to the satisfaction of the General Manager of Engineering Services;

- vi. dedication of an additional area at the southwest corner of the site as required to accommodate fire truck access and turnaround;

Note to Applicant: The dimensions of this dedication will be based on the finalized road design to be delivered by the applicant which will need to be reviewed by COV Transportation and the Fire & Rescue Services.

- vii. provision of a minimum 10 m wide surface SRW on the east side of the site (offset from the existing SRW) between W Kent Avenue South and the Fraser River to accommodate access to the waterfront;
- viii. provision of a surface SRW on the south side of the site for use of the waterfront access along the Fraser River;
- ix. provision of written approval from the Canadian Pacific Railway for the re-opening of the rail grade crossing at the intersection of Heather Street and W Kent Avenue; and
- x. release of the following prior to building occupancy
 - a. Covenant J16562 – Flood Plain Covenant to be replaced;
 - b. Encroachment Agreement J16565 – for perimeter fencing, blacktopping, drainage apparatus and a portion of existing concrete block warehouse;
 - c. Indemnity Agreement 55742M, as modified by Indemnity Agreement 66567M and extended by Indemnity Agreement GC11456 and Indemnity Agreement GC11457, in favour of the City related to the lease over Heather Street;
 - d. Indemnity Agreement 74848M, as extended by Indemnity Agreement GC11458, in favour of the City related to the lease over Heather Street;
 - e. Easement and Indemnity Agreement 77708M, as extended by Indemnity Agreement GC11459, in favour of the City related to the lease over Heather Street;
 - f. Indemnity Agreement 80074M, as extended by Indemnity Agreement GC11460, in favour of the City related to the lease over Heather Street;
 - g. Indemnity Agreement 86134M, as extended by Indemnity Agreement GC11461, in favour of the City related to the lease over Heather Street;
 - h. Easement and Indemnity Agreement 281043M, as extended by Easement and Indemnity Agreement GC11480, in favour of the City for Commercial Crossings; and
 - i. Easement & Indemnity Agreement 533570M is for commercial crossings over sidewalk and boulevard.

Note to Applicant: Arrangements are to be secured prior to issuance of the development permit, with release to occur prior to issuance of an occupancy permit for the site. Provision of a letter of commitment will satisfactorily address this condition at the DP stage. Prior to building occupancy the applicant is to supply a written request to the City, a fresh title

search and a copy of the documents along with executable discharge documents to affect the releases.

- A.2.2 Services Agreement is required for on-site and off-site works and services necessary or incidental to the servicing of the site (collectively called the “Services”) such that they are designed, constructed and installed at no cost to the City and all necessary street dedications and rights-of-way for the Services are provided all to the satisfaction of the General Manager of Engineering Services. No development permit for the site will be issued until the security for the services are provided. The timing for the delivery of the Services shall be determined by the General Manager of Engineering Services in his sole discretion and holds shall be placed on such permits as deemed necessary in his sole discretion. Except as explicitly provided for in Condition A.2.3, the Services are not excess and/or extended services and the applicant is not entitled to a Latecomer Agreement.

Note to Applicant: For general Latecomer Policy information refer to the website at <https://vancouver.ca/home-property-development/latecomer-policy.aspx#redirect>

- i. design and construction of the Laurel Street extension between W Kent Avenue South and the Fraser River and appropriate transitions generally including the following:
 - a. concrete curb and gutter on both sides of the street;
 - b. 7.5 m wide vehicular travel lane;
 - c. 2.6 m wide front boulevard with GI features and street trees where space permits on the east side of the street;
 - d. 3.0 m wide raised asphalt bi-directional protected bike lane on the east side of the street;
 - e. 3.0 m wide broom finish saw-cut concrete sidewalk on the east side of the street with 0.15 m concrete Type E curb separation between the bike lane and sidewalk;
 - f. curb ramps;
 - g. construction of a retaining wall or other embankment structures required to support the road elevation changes to meet the site elevation (at 4.6 m); and

Note to Applicant: An encroachment agreement will be required between the City and the applicant if the supporting structures only serve the site and no other City infrastructure.

- h. mitigate impacts to any existing infrastructure and landscaping on public and private properties resulting from the grade changes on Laurel Street extension to meet the site elevation (at 4.6 m). These include but are not limited to:
 - protection and/or removal of existing trees as required for the construction works.
 - provision of written confirmation that all necessary consultation with adjacent private property owner for any removal of existing trees is accepted or completed.
- ii. design and construction of W Kent Avenue South between Laurel Street and Ash Street and appropriate transitions generally including the following:

- a. 0.6 m wide landscape buffer planted with grass or low ground cover along the south side of the sidewalk as a buffer between the sidewalk and the planted slope located on private property;
 - b. 3.0 m wide broom finish saw-cut concrete sidewalk;
 - c. 1.2 m wide boulevard with street trees where space permits between the bike path and sidewalk;
 - d. 3.0 m wide asphalt bi-directional bike path;
 - e. the remainder of the street ROW between the bike path and the rail ROW shall be landscaped including low ground cover or grass for the 0.9 m portion adjacent the bike path; and
 - f. curb ramps;
- iii. design and construction of street improvements along W Kent Avenue South between Ash Street and the site's eastern property line and appropriate transitions generally including the following:
- a. minimum 2.4 m wide broom finish saw-cut concrete sidewalk;
 - b. 0.3 m wide type E curb;
 - c. minimum 2.7 m wide raised asphalt bi-directional protected bike lane;
 - d. minimum 0.6 m wide front boulevard;
 - e. 7.0 m wide vehicular travel lanes;
 - f. concrete curb and gutter on both sides of the street, including any required road reconstruction to current standards; and
 - g. curb ramps;
- iv. provision of pavement design analysis and propose a new pavement structure due to increase in the volume of heavy vehicles in the following segments of the block;
- a. W Kent Avenue between Oak Street and Cambie Street;
 - b. Laurel Street between SW Marine Drive and the site (including the new Laurel Street extension);
 - c. Heather Street between SW Marine Drive and the site; and
 - d. Ash Street between SW Marine Drive and the site.

Note to Applicant: The applicant shall implement the proposed pavement structure to the satisfaction of the General Manager of Engineering Services or the City's standard bus lane pavement structure, whichever is deemed more resilient through analysis.

- iv. provision of street improvements on Heather Street between SW Marine Drive and W Kent Avenue South, including the full intersection of Heather Street and SW Marine Drive, as required to mitigate the impacts of site traffic on the safety of this existing bikeway;

Note to Applicant: the City will provide a geometric design for the required street improvements on this section of Heather Street and the intersection, which may generally include new sidewalks, boulevards, curb, gutter, bike lanes, curb ramps, protected intersection, and signal upgrades.

- v. design and construction of intersection improvements and geometric changes, as required, to provide safe transitions between the streets surrounding the site and the existing street network at:
 - a. Laurel Street and W Kent Avenue North, including the railway crossing(s);
 - b. Laurel Street extension and W Kent Avenue South, including the railway crossing(s);

Note to Applicant: The street design is to accommodate heavy vehicular turning movements through Laurel Street and W Kent Avenue South, as well as pedestrian and cyclist connections, without the need to encroach on adjacent properties. The finalized road design to be delivered by the applicant could include dedications or alternative measures to satisfaction of the General Manager of Engineering Services.

- c. Laurel Street and SW Marine Drive;
Note to Applicant: Further analysis of the TAMS report is required for this condition.
 - d. Heather Street and W Kent Avenue North, including the railway crossing(s);
 - e. Ash Street and W Kent Avenue North, including the railway crossing(s); and
 - f. Ash Street and W Kent Avenue South, including the railway crossing(s).

Note to Applicant: Intersection improvements must include all required safety upgrades to the railway warning system. Refer to traffic signal conditions.

- vi. design and construction of a waterfront access along the south edge of the site;

Note to Applicant: Waterfront access to be determined through engagement with Musqueam Indian Band.

- vii. design and construction of an access to water connection within the SRW area at the eastern edge of the site;

- viii. design and installation of new traffic signals at the following intersections:

- a. Ash Street and W Kent Avenue North & South;
 - b. Heather Street and W Kent Avenue North & South;

Note to Applicant: Currently this rail crossing is closed. This application will require the reopening of the rail crossing for transit bus egress.

- c. Laurel Street and W Kent Avenue North & South; and

Note to Applicant: Further analysis of the TAMS report is required to determine this condition.

- d. Laurel Street and SW Marine Drive.

Note to Applicant: Further analysis of the TAMS report is required to determine this condition.

Note to Applicant: These new traffic signals are to be triggered by the new development's traffic and/or by the requirements of the Grade Crossing Regulations.

- ix. design and installation of all required safety upgrades to the railway warning system as warranted by the Transport Canada Grade Crossing Safety Assessment for the post-development scenario at the following intersections:

- a. Ash Street and W Kent Avenue North & South;

- b. Heather Street and W Kent Avenue North & South; and

Note to Applicant: Currently this rail crossing is closed. This application will require the reopening of the rail crossing for transit bus egress.

- c. Laurel Street and W Kent Avenue North & South.

Note to Applicant: Additional consideration should be taken towards the complexity of upgrading these intersections. Improvements per the grade crossing warrants for the post-development scenario will be required, and may include an active warning system with flashing bells, lights, gates. Given the close proximity of the railway crossings to adjacent intersections, the installation of a new interconnected traffic signals may also be triggered by the requirements of the Grade Crossing Regulations). Canadian Pacific has noted that there is insufficient space at the location for railway pole(s) to be placed. Transport Canada has indicated that there is a potential to install a traffic signal to be interconnected with railway signaling devices to allow an approaching train to trigger a pre-emption phase in traffic signal in lieu of a crossing warning system.

- x. upgraded street lighting (roadway, sidewalk and bikeway) adjacent to the site to current City standards and Illuminating Engineering Society of North America (IESNA) recommendations;

- xi. provision of entire intersection lighting upgrade to current City standards and IESNA recommendations at the following:

- a. Laurel Street and W Kent Avenue North;

- b. Laurel Street and W Kent Avenue South;

- c. Heather Street and W Kent Avenue North;

- d. Heather Street and W Kent Avenue South;

- e. Ash Street and W Kent Avenue North; and

- f. Ash Street and W Kent Avenue South.
- xii. provision of new or replacement duct bank adjacent to the development site that meets current City's standards. Duct banks are to consist of electrical and communication ducts and cables, and connected to existing electrical and communication infrastructure;
- xiii. provision of new electrical service cabinet/kiosk on W Kent Avenue South. The kiosk shall be fed by BC Hydro underground infrastructure, as such ROW space shall be provided on-site to accommodate BC Hydro pad mounted transformer;
- xiv. design and construction of the following new water mains, complete with associated appurtenances;
 - a. approximately 200 m of water main in the new westerly Laurel Street extension; and
 - b. approximately 240 m of water main in W Kent Avenue South, from Heather Street to Ash Street.

Note to Applicant: The Applicant shall submit the developments domestic water demands, NFPA 13 sprinkler demands, and required fire flow calculations based on the latest version of the Fire Underwriters Survey (FUS) document *Water Supply for Public Fire Protection* (collectively the development's "water demands") to the General Manager of Engineering Services for evaluation. Should additional water main upgrades be required to supply development's water demands, the Applicant is responsible for 100% of the water upgrades.

- xv. construction of a gravity trunk and outfall into the Fraser River with a tide gate or backflow prevention at the outfall. The gravity trunk has two (2) segments:
 - a. W Kent Avenue North or South (Heather Street to new Laurel Street extension); and
 - b. New Laurel Street extension to the Fraser River.

Note to Applicant: Refer to City Memos issued:

- Heather Street Storm Sewer and Outfall Relocation Plan and Planning-Level Flows (November 23, 2022); and
- Storm and Sanitary Sewer Main Design Submission Requirements; Sewer Permit Submission Requirements (March 15, 2023).

- xvi. development's sanitary connection to be serviced to the existing 200mm SAN in W Kent Avenue South (west of Laurel Street); and

Note to Applicant: The sanitary sewers on W Kent Avenue South may be surcharged therefore it may affect the location of the connection and on-site servicing. Applicant to coordinate with City staff on connection location. Applicant should adhere to the Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw (No.299,2007) and apply for the Wastewater Discharge Permit if required.

- xvii. site to discharge stormwater directly into Fraser River via an independent outfall.

Note to Applicant: Storm connections to the City storm sewer system are not permitted. The independent outfall is subject to Provincial and Federal approvals.

Note to Applicant: No development permit for the site will be issued until the security for the services are provided. The timing for the delivery of the Services shall be determined by the General Manager of Engineering Services in his sole discretion and holds shall be placed on such permits as deemed necessary in his sole discretion. Except as explicitly provided for in Condition **A.2.3** the Services are not excess and/or extended services and the applicant is not entitled to a Latecomer Agreement.

A.2.3 a Latecomer Agreement is required to the satisfaction of the General Manager of Engineering Services and the Director of Legal Services for and only if the following works constitute excess and/or extended services:

- i. design and installation of a new traffic signal at the intersection of Ash Street and W Kent Avenue North and South;
- ii. intersection lighting upgrade at Ash Street and W Kent Avenue North and South;
- iii. design and installation of a new traffic signal at the intersection of Heather Street and W Kent Avenue North and South;
- iv. intersection lighting upgrades at Heather Street and W Kent Avenue North and South;
- v. design and installation of a new traffic signal at the intersection of Laurel Street and W Kent Avenue North and South;
- vi. design and installation of a new traffic signal at the intersection of Laurel Street and SW Marine Drive;
- vii. street improvements on Heather Street between SW Marine Drive and W Kent Avenue South, including full intersection of Heather Street and SW Marine Drive:
 - a. protected bike lanes; and
 - b. protected intersection, and signal upgrades.
- viii. new electrical service cabinet/kiosk on W Kent Avenue South.

Note to Applicant: The benefitting area for these works is under review. An administrative recovery charge will be required from the applicant in order to settle the latecomer agreement. The amount, which will be commensurate with the costs incurred by the City to administer the latecomer scheme, will be provided by the City and specified in the latecomer agreement.

A.2.4 provision of approved building grades shown on plans;

Note to Applicant: apply for official building grades and show these grades on Site Plan Sheet 182009-01 A1.01 with your next drawing submission.

Provision of a signed letter by the applicant acknowledging the owner will accept all risks of proceeding with a development permit without the final approved off-site civil design and final approved Building Grades. This includes all revisions, costs and efforts relating to redesign, development permit minor amendments, and/or reconstruction associated with the risks of proceeding without the final civil design and building grades.

The Final Building Grade design must be reviewed and approved by the City prior to construction tie-in works. The Final Building Grades must also be coordinated with the final off-site civil improvement designs that may impact the Building Grades. Once the future civil improvements are approved by the City, the Building Grades on the Development Permit Plans may require revisions. If revisions are required, the Development Permit Plans must be resubmitted to show the revised approved Building Grade plans for the City's review and approval.

A.2.5 design elevations (DE) interpolated between approved building grades required along property line across:

- i. middle of: entrances, stairs, utility access, pathways, etc.; and
- ii. corners of: driveways, individual parking stalls, plazas, retaining wall, planters;

Note to Applicant: See building grade letter for details once building grades have been issued. For further information on this requirement please contact building.grades@vancouver.ca

A.2.6 provision of improved access and design of loading spaces and compliance with the Parking and Loading Design Supplement, including the following:

- i. convenient, internal, stair-free loading access to/from all site uses;
- ii. confirmation that the slope of the loading bay must not exceed 5%; and
- iii. 4.3 m (14.1 ft.) of vertical clearance is required for access and maneuvering to Class C loading spaces;

Note to Applicant: Overhead projections into loading spaces are not permitted.

A.2.7 provision of improved access and design of the parkade layout and compliance with the Parking and Loading Design Supplement to the satisfaction of the General Manager of Engineering Services, including the following:

- i. improved two way flow for vehicles on the ramp and in the parking areas through provision of the following:
 - a. minimum 6.7 m (22 ft.) wide ramp where a center enter phone/RFID reader is proposed.
- ii. modification of grades on the ramp and in parking areas to ensure the following:
 - b. ramp slopes must not exceed 12.5% after the first 6.1 m (20 ft.) from the (property line/back of sidewalk);

Note to Applicant: 15% slopes may be acceptable if a 7.5% to 10% transition ramp is provided at the bottom for at least 4 m (13.1 ft.) in length.

- iii. confirmation that the drive aisle gate is a minimum 6.1 m (20 ft.) wide; and

Note to Applicant: Column encroachments, setbacks and parking space widths to comply with the Parking and loading design Supplement. Column encroachments are not permitted in single module stalls.

- iv. confirmation that 2.3 m (7.5 ft.) of vertical clearance is provided for access and maneuvering to all accessible spaces.

Note to Applicant: Overhead projections into accessible spaces are not permitted.

A.2.8 clarification of the following information as part of the drawing submission to facilitate a complete Transportation review:

- i. a complete tech table showing the calculations for the minimum required parking, loading, bicycle spaces and end-of-trip facilities, and the number of spaces being provided;

Note to Applicant: Project Data shown on the cover sheet A-0.00 presents insufficient information, calculation, and reference to specific sections of the Parking Bylaw applied. Provision breakdown of the various types of parking (visitor/accessible), loading (Class A, B or C), and bicycle spaces (Class A or B) are required.

- ii. all types of parking and loading spaces individually numbered, and labelled on the drawings;
- iii. dimension of columns and column encroachments into parking stalls;
- iv. identification of all columns in the parking layouts;
- v. dimensions for typical parking spaces;

Note to Applicant: Provision of a summary page of all types of design vehicle dimensions (standard / small / accessible car, motorbike, vans, SU-9 / WB / garbage / fire trucks, standard / articulated / shuttle / handyDART / double-decker buses, and etc.), and dimensions for their respective parking/loading spaces proposed are recommended.

- vi. dimensions of additional setbacks for parking spaces due to columns and walls;
- vii. dimensions of manoeuver aisles and the drive aisles at the parkade entrance and all gates;

Note to Applicant: Provision of all dimension of widths for maneuvering in/out of buildings and facilities, including all garage gates for each of the proposed buildings.

- viii. section drawings showing elevations and minimum vertical clearances for parking levels, loading bays, ramps, and security gates. These clearances must consider mechanical projections and built obstructions;
- ix. areas of minimum vertical clearances labelled on parking levels;
- x. design elevations on both sides of the ramps and drive aisles at all breakpoints, loading bays, disability spaces, and at all entrances;

Note to Applicant: The slope and length of the ramped sections at all breakpoints to be shown on the submitted drawings.

- xi. indication of the stair-free access route from the Class A bicycle spaces to reach the outside;

Note to Applicant: Stair ramps are not generally acceptable.

- xii. existing street furniture including bus stops, benches etc. to be shown on plans; and

- xiii. the location of all poles and guy wires to be shown on the site plan.
- A.2.9 provision of an updated landscape and site plan to reflect the public realm changes including all of the off-site improvements sought for this development permit, and shall include the following items and notes:
- i. inclusion of a note on the landscape plans that states “*design of all street improvements will be to current COV standards and reviewed and approved by COV Engineering*”;
 - ii. inclusion of a note on the landscape plans that states “*design of public pathways adjacent to the site will be in consultation with COV Engineering*”; and
 - iii. update the landscape plans to show the most current available street design for the required street improvements that has been designed in consultation with COV Engineering;
- A.2.10 provision of the following Green Infrastructure (GI) requirements to be shown on the landscape and civil drawings;
- i. 2.6 m wide, 70 m length, 0.45 m deep linear bioretention system on the east side Laurel Street Extension in the front boulevard;

Note to Applicant: the design is to be shown as per the standard detail drawing specifications <https://vancouver.ca/files/cov/green-infrastructure-standard-drawings.pdf> . Cross section to be revised and coordinated with the corresponding Transportation Planning improvements
 - ii. add the following notes to the drawing sets:
 - a. “Bioswale within the Laurel Street boulevard sized to meet Rain City Strategy targets to be designed and implemented to the satisfaction of the City Engineer”; and
 - b. “GI to be designed and installed to the satisfaction of the City Engineer”.
 - iii. schematically show GI bioswale on all consultant drawings;
 - iv. consideration of inslope on roadway grading to maximise total catchment area and maximise GI benefits; and
 - v. provision of the following GI details to the landscape or civil drawings:
 - a. GI 2.4 - Curb cut inlet;
 - b. GI 3.2C - Monitoring well (in bioretention);
 - c. GI 3.4B - Cleanout in soil;
 - d. GI 2.6 - Sediment trap pad (alternative detail to GI2.5, to be provided separately by GI branch); and
 - e. add content of template detail GI7.2 to consultant drawing set.

Note to Applicant : See Engineering detail drawings page for reference <https://vancouver.ca/files/cov/green-infrastructure-standard-drawings.pdf> and GI design and construction standards <https://vancouver.ca/home-property-development/green-rainwater-infrastructure-design-and-construction.aspx>

Green Infrastructure branch to provide alternative sediment trap pad (detail GI2.5), conceptual GI planting plan, and sizing requirements for GI practice. Contact Green Infrastructure Implementation Branch for further information at ESRGGIDL@vancouver.ca

A.2.11 provision of a finalized Transportation Assessment and Management Study (TAMS) to the satisfaction of the General Manager of Engineering Services, including the following revisions:

- i. turning swaths:
 - a. multi-point turn into Class C Loading Space, and the expected travel path for Class C delivery trucks in, through, and out of site; and
 - b. two-way flow for the full length of the ramp/driveway access and maneuvering aisles through the parkade.

Note to Applicant: Two-way flow not shown in updated Arch drawing A-1.08 and A-OB-2.02.

- ii. updated Synchro operational and TAC signal warrant(s) at all study intersections, as follows:
 - a. adjust for and include pedestrian volumes for all analysis horizon scenarios;
 - b. use hourly turning movement counts, instead of peak period vehicle volumes in the existing pre-development scenario; and
 - c. include additional scenario assuming that Heather Street crossing remains closed indefinitely and Laurel Street driveway and intersections used as primary access for both bus ingress and egress.

Note to Applicant: In this scenario, additional signal upgrades may be required at the intersections of Laurel Street to facilitate turning volumes post-development.

- iii. updated analysis, as required, as a result of any changes to the development plan as part of the application; and
- iv. study to be signed and sealed by a Transportation Consultant.

A.2.12 provision of updated Transport Canada Grade Crossing Safety Assessment for the post-development scenario at all three grades crossing locations at Laurel Street, Heather Street, and Ash Street;

A.2.13 provision of a finalized large site Transportation Demand Management (TDM) Plan, to the satisfaction of the General Manager of Engineering Services. A TDM Plan with a minimum of 30 points is required. Provide TDM Plan as a separate package and provide completed TDM worksheets;

Note to Applicant: The TAMS outlines potential feasible TDM strategies for the MTC, however does not include a full plan or worksheets indicating which measures shall be implemented. For

those measures which shall be implemented, the following additional information and clarifications are required:

- i. ACT-01 – Additional Class A bicycle parking:
 - a. updated TDM Plan/Architectural plans to clearly identify of the number and location of additional Class A bicycle spaces.

Additional Class A bicycle parking spaces proposed as part of the TDM Plan, and any additional Class A bicycle parking must meet the standards and minimums identified in the Parking By-law.
- ii. ACT-02 – Improved Access to Class A bicycle Parking:
 - a. The proposed bicycle elevator is not acceptable as a TDM measure. Bicycle elevators are a requirement when bicycle spaces are not provided at grade or on P1.
- iii. ACT-06 – Improved End-of-Trip Amenities:
 - a. updated TDM Plan/Architectural plans to identify the location, number and type of end-of-trip amenities being provided. Total, and any additional, number of end-of-trip facilities must be provided as required by the total number of Class A bicycle spaces provided, including those provided to meet TDM requirements.

Note to Applicant: A single TDM measure may count towards multiple land uses if it is usable by each land use. Refer to [Schedule B](#) of the TDM policy for detailed requirements for each measure.

A.2.14 subject to the acceptance of the finalized TDM Plan, entry into a TDM agreement, to the satisfaction of the General Manager of Engineering Services and the Director of Legal Services, which identifies the following:

- i. secures provision of funding towards long-term TDM monitoring funding the amount of \$2 per square metre of gross floor area;
- ii. secures the provision of TDM measures on the site:
 - a. FIN-02 – Public Transit Passes;
 - b. ACT-01 – Additional Class A bicycle parking;
 - c. ACT-02 – Improved Access to Class A bicycle Parking;
 - d. ACT-06 – Improved End-of-Trip Amenities; and
 - e. ACT-09 – Walking Improvements.
- iii. permits the City to access and undertake post occupancy monitoring of the Transportation Demand Management (TDM) measures proposed; and
- iv. agrees to make reasonable adjustments to the TDM measures as requested by the City, based on the TDM monitoring results.

Note to Applicant: The above noted TDM measures are draft until a final TDM plan is provided.

A.2.15 provision of compliance with the Transportation Demand Management (TDM) Plan, as per the finalized TDM agreements;

A.2.16 confirmation that all proposed retaining walls and footings avoid encroachment onto existing and future City ROWs;

Note to Applicant: Landscape section drawings must remove any footing encroachments onto future City ROWs.

A.2.17 confirmation of the design and footprint of the proposed flood protection wall including location and setbacks (or offsets) from existing property lines and proposed on-site structures;

Note to Applicant: The submitted Architectural Drawings illustrate the flood protection wall as a single line which is inconsistent with the previous flood wall sketches submitted by TransLink. These previously submitted sketches were not approved by the City; however, the previously submitted drawings show a 2-part vertical wall with a space of 15 m between the shoreline wall face and the rear anchor face. In this example, the combined structure results in a 15 m thick flood wall.

A.2.18 provision of a Final Hydrogeological Study, to the satisfaction of the Director of Planning, which addresses the requirements outlined in the Groundwater Management Bulletin, including but not limited to:

i. an updated Groundwater Management Plan which includes:

a. permanent groundwater management plans for the subject site and Laurel Street pump station, including recommendations for drainage measures for the flood protection wall. Please provide the findings of the more in-depth hydrogeological modelling analyses for the Flood Protection Wall detailed design, as discussed in Section 8.1 of the final hydrogeological report (dated October 31, 2022) and a quantitative estimate (in litres per minute) of the permanent dewatering/drainage rate to limit groundwater mounding on the north side of the flood protection wall; and

b. There are several historic streams noted as running through the property, therefore it is likely that a Watercourse Covenant will be registered on the land title for the subject property. As both the Covenant and Hydrogeological Study must address the historical streams, we require specific details on how the Groundwater Management Plan fits into the plan to address the requirements of the Watercourse Covenant.

ii. an Impact Assessment which achieves the following objective:

a. In conjunction with the hydrogeological modelling analysis for the Flood Protection Wall, re-analysis to confirm that there are no significant risks from groundwater extraction/diversion. This includes associated risks of offsite settlement and groundwater table drawdown which may result from the planned construction works.

Note to Applicant: The City recognizes that the applicant is not contemplating diverting groundwater to the City's storm system. However, it is expected that any diversion on the north face of the Flood Protection Wall does not drawdown groundwater levels below existing elevations on and off-site (per Section 6.2.3 of the final hydrogeological report). Furthermore, discussion of measures to safeguard against backflow through the Flood Protection Wall into the floodplain are expected.

Note to Applicant: This site is located within the Province of BC's Flowing Artesian Conditions Well Drilling Advisory area. A qualified contractor should be retained and take the necessary precautions associated with the potential flowing artesian conditions at this location. Contact groundwater@vancouver.ca if flowing artesian conditions are encountered and controlled, however, contact 3-1-1 if there is uncontrolled groundwater flow and/or flooding. For additional information see https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/water-wells/flowing_artesian_advisory_-_vancouver_bc_final.pdf

A.2.19 provision of a letter of commitment stating that all impacted utility companies will be contacted and notified of the following requirements:

- i. all utility services (e.g., BC Hydro, Telus and Shaw) shall be underground;
- ii. BC Hydro service shall be primary with pad mounted transformer (PMT or LPT) installed on private property; and
- iii. all required electrical plants (e.g., PMT, LPT, Vista, etc.) provided for entirely within private property.

Note to Applicant: The review of third party utility service drawings (e.g., BC Hydro, Telus and Shaw) will not be initiated until all drawings have been received by the Utilities Management Branch (UMB). For questions on this requirement, please contact the Utilities Management Branch at umb@vancouver.ca.

A.3 Standard Licenses & Inspections (Environmental Protection Branch) Conditions:

A.3.1 the property owner shall:

- i. submit a Site Disclosure Statement to Environmental Services;
- ii. as required by the Manager of Environmental Services and the Director of Legal Services in their discretion, do all things and/or enter into such agreements deemed necessary to fulfill the requirements of Section 571(B) of the Vancouver Charter and Section 85.1(2)(g) of the Land Title Act, if applicable; and
- iii. if required by the Manager of Environmental Services and the Director of Legal Services, in their discretion, enter into a remediation agreement for the remediation of the site and any contaminants which have migrated therefrom on terms and conditions satisfactory to the Manager of Environmental Services and Director of Legal Services, including a Section 219 Covenant that there will be no occupancy of any buildings or improvements on the site constructed pursuant to this development, until a Certificate of Compliance for each of the on-site contamination and the dedicated lands, if any, have been issued by the Ministry of Environment and provided to the City.

Note to Applicant: A Site Disclosure Statement has been received and indicates an exemption applies due to the site being subject of an existing Certificate of Compliance. The following documentation is required in support of the exemption:

Copy of correspondence from the Ministry of Environment confirming that the existing Certificate of Compliance has not been rescinded.

- a. if confirmation required above is provided, this condition will be met; and

- b. if confirmation required above is provided, a remediation agreement will not be required for development lands.

B.1 Standard Notes to Applicant

- B.1.1 The applicant is advised to note the comments of the Building Review Branch contained in the Staff Committee Report dated **April 12, 2023**. Further, confirmation that these comments have been acknowledged and understood, is required to be submitted in writing as part of the “prior-to” response.
- B.1.2 It should be noted that if Conditions 1.0 and 2.0 have not been addressed on or before **November 1, 2023**, this Development Application may be refused, unless the date for compliance is first extended by the Director of Planning.
- B.1.3 This approval is subject to any change in the Official Development Plan and the Zoning and Development Bylaw or other regulations affecting the development that occurs before the permit is issuable. No permit that contravenes the bylaw or regulations can be issued.
- B.1.4 Revised drawings will not be accepted unless they fulfill all conditions noted above. Further, written explanation describing point-by-point how conditions have been met, must accompany revised drawings. An appointment should be made with the Project Facilitator when the revised drawings are ready for submission.
- B.1.5 A new development application will be required for any significant changes other than those required by the above-noted conditions.
- B.1.6 The issuance of this permit is subject to the archaeology monitoring program identified by WSP Golder in the Archaeological Impact Assessment Update for the Proposed Marpole Transit Centre Project in Vancouver BC (2022), and subsequent management recommendations resulting from ongoing field results during construction.

B.2 Conditions of Development Permit:

- B.2.1 All approved off-street vehicle parking, loading and unloading spaces, and bicycle parking spaces shall be provided in accordance with the relevant requirements of the Parking By-law prior to the issuance of any required occupancy permit or any use or occupancy of the proposed development not requiring an occupancy permit and thereafter permanently maintained in good condition.
- B.2.2 All landscaping and treatment of the open portions of the site shall be completed in accordance with the approved drawings prior to the issuance of any required occupancy permit or any use or occupancy of the proposed development not requiring an occupancy permit and thereafter permanently maintained in good condition.
- B.2.3 Any phasing of the development, other than that specifically approved, that results in an interruption of continuous construction to completion of the development, will require application to amend the development to determine the interim treatment of the incomplete portions of the site to ensure that the phased development functions are as set out in the approved plans, all to the satisfaction of the Director of Planning.
- B.2.4 The issuance of this permit does not warrant compliance with the relevant provisions of the Provincial Health and Community Care and Assisted Living Acts. The owner is responsible for obtaining any approvals required under the Health Acts. For more information on required approvals and how to obtain these, please contact Vancouver Coastal Health at 604-675-3800 or visit their offices located on the 12th floor of 601 W. Broadway. Should compliance with the health Acts necessitate changes to this permit and/or approved plans, the owner is responsible for obtaining approval for the changes prior to commencement of any work under this permit. Additional fees may be required to change the plans.
- B.2.5 The owner or representative is advised to contact Engineering to acquire the project's permissible street use. Prepare a mitigation plan to minimize street use during excavation & construction (i.e. consideration to the building design or sourcing adjacent private property to construct from) and be aware that substantial lead time for any major crane erection / removal or slab pour that requires additional street use beyond the already identified project street use permissions.
- B.2.6 **This site is affected by a Development Cost Levy By-law and levies will be required to be paid prior to issuance of Building Permits.**

The following comments are based on the preliminary drawings prepared by Architecture 49 on December 15, 2022 for the proposed development permit application. This is a preliminary review in order to identify major issues which do not comply with Vancouver Building Bylaw #12511 as amended (VBBL 2019).

The following information should be included at Building Permit Application Stage:

Building Review Comments

1. Every building shall be provided with fire department access route conforming to 3.2.5.6. to the building face having a principal entrance. Based on the drawings provided, it is unclear where the principal entrance/firefighters response point for each building is located.
2. According to 3.4.2.5., the travel distance to at least one exit shall be not more than 45m in a floor area that contains an occupancy other than a high-hazard industrial occupancy, provided it is sprinklered throughout. Travel distance shall be demonstrated on floor plans for each building at Building Permit Application.
3. Sliding door located in the facility providing access to exit shall be designed and installed to swing on the vertical axis in the direction of travel to the exit when pressure is applied and be identified as a swing door by means of label or decal affixed to it.
4. The space above a mezzanine need not be considered as a storey in calculating the building height if it conformed to 3.2.1.1.(3) and (4). According to the drawings, the maintenance building will be considered as a 2-storey building.
5. Means of egress from mezzanines shall conform to 3.4.2.2. For medium-hazard occupancy, maximum travel distance from any point on the mezzanine to the top of egress stairs shall not exceed 10m.
6. Ramps, if accessible, shall not be more than 9m along its length and shall not be without a level area not less than 1500mm long by at least the same width as the ramp.
7. If fire truck is expected to travel onto the parking levels to reach the offices at the operation building, the parking deck shall be designed for fire truck loading and their outrigger loads, as well as fire access route design provisions per 3.2.5.6.
8. Tire storage shall conform to 3.3.6.5.
9. Storage and dispensing rooms for flammable liquids and combustible liquids shall conform to 3.3.6.4.
10. Means of egress from every roof which is intended for occupancy shall conform to the requirements in Article 3.3.1.3.
11. Two means of egress shall be provided from every room or suite that is intended for an occupant load more than 60.
12. The door swings from any room or suite intended for an occupant load more than 60 shall swing in the direction of travel to the exit.
13. The project site is located within the Designated Flood Plains. Buildings constructed on designated flood plans shall conform to Division C Subsection 2.2.9. of the Vancouver Building Bylaw. The flood construction level for the Fraser River flood plains is 4.6m. Additional elevation allowance above 4.6m may be required for land subsidence, please refer to City's Engineering Department for guidance in additional elevation allowance.

14. According to 3.8.2.8.(3), in building and occupancies in which water closets are required in accordance with Subsection 3.7.2., at least one universal washroom complying with Subsection 3.8.3. shall be provided in the entrance storey, unless an accessible path of travel is provided to a universal washroom complying with Subsection 3.8.3. elsewhere in the building.
15. Location(s) of new Fire Hydrant installed on private property will be reviewed by Fire Department.
16. This project requires the services of a registered architect. Architectural Schedule B and sealed drawings should be submitted.
17. All new architectural, mechanical and electrical components are required to comply with the energy and emissions requirements of the Vancouver Building By-law #12511. Please add to your drawings the Energy Statements per the “Energy Statements on Drawings” requirements found within the City of Vancouver energy webpage (<http://vancouver.ca/building-energy-requirements>).

Fire & Rescue Services Comments

1. Fire access route marking on the yard to be provided.
2. Hydrants to be located adjacent to the fire access route.
3. Each principal building is to have a principal entrance that is visually prominent, and be within 15 m of the fire access route.
4. The principal entrance is to be located in the vicinity of an exit stair that serves all floors of the building. The fire department connection (siamese) is to be within 5 m of the principal entrance.
5. Design of site underground water mains and location of hydrants in the yard to be reviewed for approval by the Building Department and Fire Department prior to installation.

Note to Applicant: This condition will need to be addressed prior to Building Permit application to ensure below grade infrastructure design for water mains and hydrant location is acceptable.