



To: Development Permit Panel
From: Wayne Craig,
Director, Development
Date: July 4, 2019
File: RZ 11-593871
Re: IBI Architects (Canada) Inc. on behalf of South Coast British Columbia Transportation Authority (TransLink) - 6302 No. 3 Road and 6411 Buswell Street

This Memorandum provides information in response to the referral motion from the June 26, 2019 meeting of Development Permit Panel.

That the Development Permit application on 6302 No. 3 Road and 6411 Buswell Street (DP 11-593871) be referred back to staff to:

- 1. Review the noise impacts of the proposed Bus Mall to neighbouring residents with the applicant; and*
- 2. Coordinate with the applicant to address concerns reported by neighbouring residents; and report back to the July 10, 2019 Development Permit Panel meeting.*

In response, to the above referral motion, the applicant has undertaken the following:

1. A letter dated July 4, 2019 has been provided from the applicant's acoustical engineer, Brown Strachan Associates, that includes comments with regards to the Emporio Building at 6351 Buswell Street (Attachment 1). The letter notes that the outside noise design level would be 65dB from bus movements and that noise within the line of sight to buses through the proposed acoustic screen barrier is predicted to be 5-10 dB lower. The acoustical engineer further comments that upgraded glazing had been specified during the previous design approval for the Emporio Building to satisfy the City's interior design criteria (e.g. 35 dB for bedrooms) based on 65dB external noise. The acoustical engineer advises that the CMHC recommended noise level for outside recreation is 55bB which will likely be satisfied for those seated behind the glass railings on the fourth floor rooftop patios.

For the residential building located at 6380 Buswell Street (east side of the street), the noise levels from the Bus Mall are estimated to be 60dB which is similar to the existing traffic on Buswell Street.

For the office building located at 6411 Buswell Street (on Translink property adjacent to the Bus Mall), the acoustic engineer notes that interior noise levels would likely be higher than at the Emporio building, but should not impede the personal office communication.

2. Translink spoke with the residents of the Emporio Building (6351 Buswell Street) just after the June 26, 2019 Development Permit Panel. TransLink has followed up with emails with a previous letter dated December 9, 2015 from their acoustic engineer, attached diagrams of the acoustic screen, and an offer to meet with Emporio residents (Attachment 2).

Further to other comments and questions from the Development Permit Panel, TransLink has also provided the following information:

1. The Coast Mountain Bus Company (CMBC) vehicle idling policy that limits idling to three minutes at bus loops to avoid unnecessary air emissions and noise (Attachment 3).
2. Graphs showing bus trips on the weekdays, Saturdays and Sundays based on bus route traffic from April, 2019 (Attachment 4).

As requested by Development Permit Panel, the applicant's acoustic engineer will be attendance at the July 10, 2019 Panel meeting.

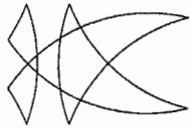
Should you have any questions or concerns regarding this information, please do not hesitate to contact me directly.



Wayne Craig
Director, Development
(604-247-4625)

WC:mm
Att. 4

pc: Suzanne Smith, Program Coordinator, Development
Mark McMullen, Senior Coordinator – Major Projects



Brown Strachan Associates
Consulting Engineers in Acoustics

Project: 125.111

July 4, 2019

IBI Group
700 - 1285 West Pender Street
Vancouver, BC V6E 4B1

Attention: Mr. Salim Narayanan, Studio Principal

Dear Mr. Narayanan:

Re: Brighthouse Station Bus Mall, Richmond

The following is in response to the email of 27 June 2019 from Mark McMullen at the City of Richmond. For reference, appended are copies of our letters dated 9 December 2015 and 22 June 2017.

At the ground and fourth floor levels of the Emporio townhouses, and at all tower levels, the outside design sound level was 65 dB from bus movements. Upgraded glazing was originally specified to satisfy the City's interior design criteria, e.g. 35 dB for bedrooms. Where the line of sight to buses is through the proposed barrier, sound levels are predicted to be about 5-10 decibels lower. The difference between an 8ft or 12ft barrier height is minimal acoustically. The CMHC recommended criterion for outside recreation areas is 55 dB and is likely satisfied for individuals seated behind the glazed ballustrade on the fourth floor rooftop patios.

At 6380 Buswell, we estimate sound levels from bus movements to be similar to traffic on Buswell Street, or about 60 dB. Standard thermal glazing would normally satisfy the City's interior design criteria for facade design.

Offices at 6411 Buswell have a similar exposure to bus movements as the Emporio development. Inside levels could be higher than at Emporio but will likely satisfy office speech intelligibility criteria, i.e. space requiring face to face communication across a desk, telephone use, etc.

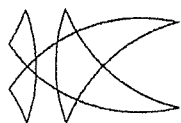
Please call if you have any questions.

Yours very truly,

BROWN STRACHAN ASSOCIATES

Aaron Peterson, P.Eng.

Encl. AP/sb/19Jul/IBI2.let



Brown Strachan Associates
Consulting Engineers in Acoustics

Project: 125.111

December 9, 2015

COPY

IBI Group Architects
700 - 1285 West Pender Street
Vancouver, BC V6E 4B1

Attn: Mr. Salim Narayanan

Dear Mr. Narayanan:

Re: Brighthouse Bus Loop - Emporio Townhouses Acoustical Screen

Further to our telephone discussion of 8 December 2015, the following confirms our advice with respect to the acoustical screen proposed for the townhouses at Emporio, 6351 Buswell, facing south towards the bus loop turn around (appended).

Our original work on the Emporio was to evaluate the proposed design and to recommend facade details considering possible future bus loop noise. In the City of Richmond, the relevant reference for transportation noise design is the Official Community Plan (OCP), Section 14.4.7. Richmond's OCP criteria are based on CMHC's Road and Rail Noise: Effects on Housing, the recognised Canadian standard developed by the National Research Council, published in 1986.

Our design evaluation considered traffic, the Canada Line, two possible bus loop scenarios and YVR aircraft. The bus loop evaluation was based on a future volume of 2,000 bus movements per day with 90% diesel and 10% community shuttle buses.

Based on the bus volume and other sources, the exterior design level for the facade facing the bus loop was 65 dB, i.e. the 24 hour average level as specified in the OCP (BSA Report 798.051, 24 March 2006). The OCP interior design criterion is 35 dB for bedrooms. To meet the OCP criterion, the recommended facade was 6-13-3 thermal glazing, designed to reduce the noise by 30 decibels. Our records indicate 6-13-3 glazing was specified by the architects.

The proposed acoustical screen represents an additional noise reduction measure beyond Richmond's normal OCP requirements. We understand the intent is to provide additional noise reduction for lower level townhouses closest to the moving buses. We understand the screen material will be glass, which meets acoustical requirements.

.../2

Mr. Salim Narayanan

December 9, 2015

Discussion

CMHC describes quiet interior levels as ranging from 25 to 35 dB. For reference, 0 dB is the threshold of perception for a young person with good hearing. With respect to subjective impressions, bus noise cannot be accurately compared to any other source such as construction, office noise, etc. The bus loop will sound like buses, inside or outside the townhouses.

As discussed above, the design level for the facade facing the bus loop was 65 dB. Subjectively, a reduction of 30 decibels through the townhouse facade is equivalent to about a 90% reduction in the outside level. By comparison, the design level for traffic on Buswell was 60 dB. The same 6-13-3 glazing was specified for the Buswell facade as access details to the bus loop were uncertain during the original design.

Most noise heard behind a screen is transmitted over the top and the expected noise reduction from a typical screen is 5-10 decibels. Subjectively, a 5 decibel reduction is noticeable and a 10 decibel reduction is about half as loud. Behind a barrier, buses would sound as though they are 2-3 times as far away. The barrier reduction would also apply to the residual noise transmitted through the facade of the lower townhouses.

Please call if you have any questions.

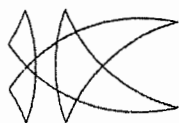
Yours very truly,

BROWN STRACHAN ASSOCIATES

A handwritten signature in black ink, appearing to read 'DW Brown', with a horizontal line underneath.

David W. Brown, P.Eng.

Encl. DWB/II/15Dec/IBIBrighthouse.let



Brown Strachan Associates
Consulting Engineers in Acoustics

Project: 125.111

June 22, 2017

IBI Group Architects
700 - 1285 West Pender Street
Vancouver, BC V6E 4B1

COPY

Attn: Mr. Roman Binenbaum

Dear Mr. Binenbaum:

Re: Brighthouse Bus Loop - Acoustical Screen

Further to your email of 21 June 2017, the proposed 8 ft screen height at the bus loop is considered a reasonable design to reduce noise at the townhouses. Our original estimate of the effect of the screen was 5 - 10 decibels. A 12 ft screen would not change this estimate.

Our evaluation of noise from the buses is based on CMHC's Road and Rail Noise: Effects on Housing, the recognised Canadian standard. For heavy vehicles at low speeds, CMHC recommends a design source height of 2m. This design height considers noise radiated directly from the engine together with exhaust noise.

While a CMHC evaluation indicates increasing the screen height to 12 ft would further reduce direct noise transmitted over the screen for buses in close proximity to the townhouses, on-site factors limit the overall noise reduction such as reduced barrier effect for more remote buses, reflections behind the barrier, reflections from nearby buildings, etc.

Please call if you have any questions.

Yours very truly,

BROWN STRACHAN ASSOCIATES

David W. Brown, P.Eng.

Encl. DWB/sf/17June/IBIBrighthouse1.let

McMullen, Mark

From: Ferrari, Drew <Drew.Ferrari@Translink.ca>
Sent: Wednesday, 3 July 2019 14:56
To: 'ctung001@gmail.com'
Cc: Vyas, Chit; McMullen, Mark
Subject: RE: Richmond Brighthouse Bus Exchange

Good afternoon Mr. Tung. I wanted to follow up with you regarding my e-mail last week about the proposed Richmond-Brighthouse Bus Exchange.

I had provided you with additional background information, but wanted to reiterate that we would also be pleased to meet with you in person and take you through all of the measures taken to minimize any impacts to your residence as a result of the arrival of the bus exchange next to Emporio.

If you'd like additional information, speak on the phone, or to meet in person please do not hesitate to contact me.

Best regards,
Drew Ferrari

DREW FERRARI, Arch Tech, BES (Arch), MRAIC, IAP2
Senior Advisor, Public Affairs
Government & Public Affairs
T: 778-375-6766 | C: 604-362-1824 | translink.ca

TransLink
400-287 Nelson's Court, New Westminster, BC, V3L 0E7, Canada



From: Ferrari, Drew
Sent: June 27, 2019 1:39 PM
To: 'ctung001@gmail.com' <ctung001@gmail.com>
Cc: Vyas, Chit <chit.vyas@translink.ca>; 'McMullen, Mark' <MMcMullen@richmond.ca>
Subject: Richmond Brighthouse Bus Exchange

RE: Richmond Brighthouse Bus Exchange
ATTN: Mr. Jeff Tung

Good afternoon Mr. Tung,
I understand that you attended yesterday's City of Richmond Development Permit Panel, and spoke regarding your concerns about the acoustic treatment proposed for the Richmond Brighthouse Bus Exchange.

On April 25th, we provided a presentation to your strata council, but I wanted to reach out to you directly to see if there is additional information that we may provide on the plans for the bus exchange.

I specifically wanted to share the report of the acoustical consultant on the design of the proposed acoustic wall adjacent to Emporio Strata. The report describes the design noise standard of 65 decibels (dB) at the face of your

building facing the bus exchange, and the ability of the acoustic wall to achieve a reduction of 30 decibels. The acoustic consultant confirms that the proposed noise wall material and height will provide noise reduction for lower level townhouses closest to the moving buses, to a level additional to the normal requirements of Richmond's Official Community Plan (OCP).

I also attach details of the acoustic wall itself. You will notice on the cross-section drawing, lines which emanate from the bottom of the wheels of the bus. The point of contact where the wheels meet the pavement is typically the primary source of noise. The height of the acoustic fence is such that it shields the lower 4 floors of Emporio from this direct noise.

While we move hundreds of thousands of people each day, TransLink always strives to be good neighbours. We would be pleased to meet with you and take you through all of the measures taken to minimize any impacts to your residence as a result of the arrival of the bus exchange next to Emporio.

If you'd like additional information, speak on the phone, or to meet in person please do not hesitate to contact me.

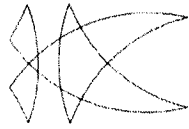
Best regards,
Drew Ferrari

DREW FERRARI, Arch Tech, BES (Arch), MRAIC, IAP2
Senior Advisor, Public Affairs
Government & Public Affairs
T: 778-375-6766 | C: 604-362-1824 | translink.ca

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400-287 Nelson's Court, New Westminster, BC, V3L 0E7, Canada



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Brown Strachan Associates
Consulting Engineers in Acoustics

Project: 125.111

December 9, 2015

IBI Group Architects
700 - 1285 West Pender Street
Vancouver, BC V6E 4B1

Attn: Mr. Salim Narayanan

Dear Mr. Narayanan:

Re: Brighthouse Bus Loop - Emporio Townhouses Acoustical Screen

Further to our telephone discussion of 8 December 2015, the following confirms our advice with respect to the acoustical screen proposed for the townhouses at Emporio, 6351 Buswell, facing south towards the bus loop turn around (appended).

Our original work on the Emporio was to evaluate the proposed design and to recommend facade details considering possible future bus loop noise. In the City of Richmond, the relevant reference for transportation noise design is the Official Community Plan (OCP), Section 14.4.7. Richmond's OCP criteria are based on CMIIC's Road and Rail Noise: Effects on Housing, the recognised Canadian standard developed by the National Research Council, published in 1986.

Our design evaluation considered traffic, the Canada Line, two possible bus loop scenarios and YVR aircraft. The bus loop evaluation was based on a future volume of 2,000 bus movements per day with 90% diesel and 10% community shuttle buses.

Based on the bus volume and other sources, the exterior design level for the facade facing the bus loop was 65 dB, i.e. the 24 hour average level as specified in the OCP (BSA Report 798.051, 24 March 2006). The OCP interior design criterion is 35 dB for bedrooms. To meet the OCP criterion, the recommended facade was 6-13-3 thermal glazing, designed to reduce the noise by 30 decibels. Our records indicate 6-13-3 glazing was specified by the architects.

The proposed acoustical screen represents an additional noise reduction measure beyond Richmond's normal OCP requirements. We understand the intent is to provide additional noise reduction for lower level townhouses closest to the moving buses. We understand the screen material will be glass, which meets acoustical requirements.

.../2

Mr. Salim Narayanan

December 9, 2015

Discussion

CMHC describes quiet interior levels as ranging from 25 to 35 dB. For reference, 0 dB is the threshold of perception for a young person with good hearing. With respect to subjective impressions, bus noise cannot be accurately compared to any other source such as construction, office noise, etc. The bus loop will sound like buses, inside or outside the townhouses.

As discussed above, the design level for the facade facing the bus loop was 65 dB. Subjectively, a reduction of 30 decibels through the townhouse facade is equivalent to about a 90% reduction in the outside level. By comparison, the design level for traffic on Buswell was 60 dB. The same 6-13-3 glazing was specified for the Buswell facade as access details to the bus loop were uncertain during the original design.

Most noise heard behind a screen is transmitted over the top and the expected noise reduction from a typical screen is 5-10 decibels. Subjectively, a 5 decibel reduction is noticeable and a 10 decibel reduction is about half as loud. Behind a barrier, buses would sound as though they are 2-3 times as far away. The barrier reduction would also apply to the residual noise transmitted through the facade of the lower townhouses.

Please call if you have any questions.

Yours very truly,

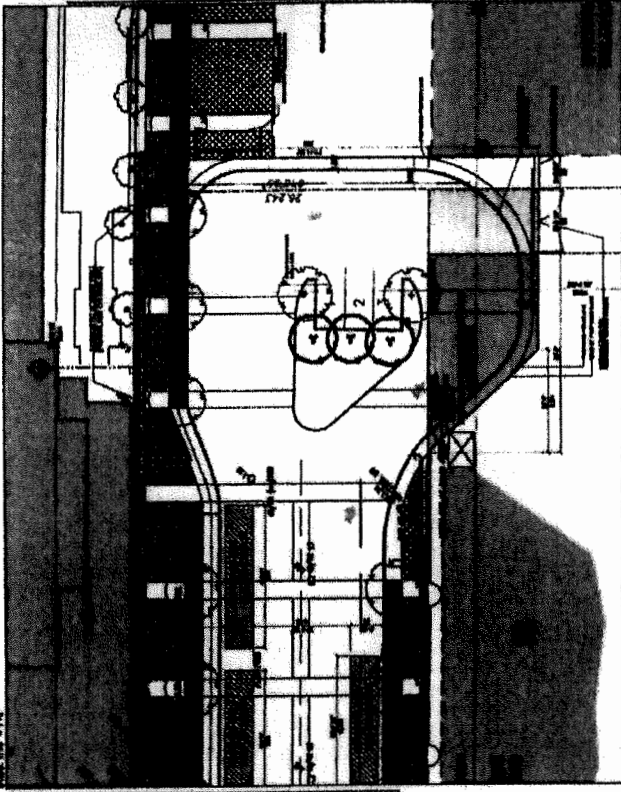
BROWN STRACHAN ASSOCIATES

A handwritten signature in black ink, appearing to read 'DW Brown', with a horizontal line underneath.

David W. Brown, P.Eng.

Encl. DWB/11/15Dec/IBIBrighthouse.let

Key Plan
Scale: 1/8" = 1'-0"



ACRYLITE® Soundproof Noise Barrier (formerly PARALUS SOUNDSTONE®)

ACRYLITE® Soundproof Noise Barrier is a revolutionary new soundproofing technology that has been developed by Acrylic Systems, Inc. (ASI). ASI is a leading manufacturer of soundproofing products and has been recognized by the U.S. Department of Transportation as a leading manufacturer of soundproofing products. ASI's ACRYLITE® Soundproof Noise Barrier is a revolutionary new soundproofing technology that has been developed by Acrylic Systems, Inc. (ASI). ASI is a leading manufacturer of soundproofing products and has been recognized by the U.S. Department of Transportation as a leading manufacturer of soundproofing products.

Product 101 (2008) - Acrylic Systems, Inc. (ASI)
Product 102 (2008) - Acrylic Systems, Inc. (ASI)
Product 103 (2008) - Acrylic Systems, Inc. (ASI)
Product 104 (2008) - Acrylic Systems, Inc. (ASI)
Product 105 (2008) - Acrylic Systems, Inc. (ASI)



Image 1: North Neighbour

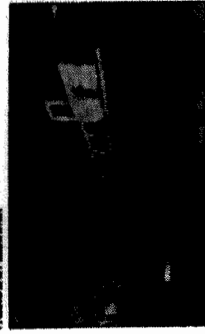
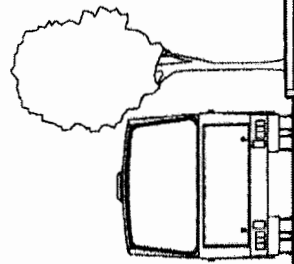


Image 2: North Neighbour

RECEIVED

NOV 19 2015

BROWN STRACHAN ASSOCIATES



BUS LOOP

WALKWAY

NEIGHBORING PROPERTY

ACOUSTIC SCREEN

Acoustic Screen
Scale: 1/8" = 1'-0"



TRANSLINK



ENGINEERING CONSULTING
DEVELOPMENT / PROJECT MANAGEMENT
NOVEMBER 18, 2015

ACOUSTIC SCREEN
SCALE

UTP-C-F

Acoustic Screen Design
Consulting Engineers in Association

Project: 125.011

December 9, 2015

IBI Group Architects
700 - 1285 West Pender Street
Vancouver, BC V6E 4H1

Attn: Mr. Salim Narayan

Dear Mr. Narayan,

Re: Brindane, Ben Low - Property Termination Acoustic Screen

Letter to us re telephone discussion of 5 December 2015, the following confirms our advice with respect to the acoustic screen proposed for the terminations at Brindane, 6331 Russell, facing south towards the bus stop turn around (perpetual).

Our original work on the Brindane was to evaluate the proposed design and to recommend a facade design in considering possible future bus stop noise. In the City of Richmond, the relevant reference for transportation noise design is the Official Community Plan (OCP), Section 6.4.7. Richmond's OCP criteria are based on CMHC's Road and Rail Noise Effects not Flanking, the integrated Canadian standard developed by the National Research Council, published in 1996.

Our design evaluation considered traffic, the Canada Line, two possible bus stop scenarios and VTR details. The bus stop evaluation was based on a future volume of 2,000 bus movements per day with 90% diesel and 10% community shuttle buses.

Based on the bus volume and other sources, the relative design level for the facade facing the bus stop was 65 dBA, i.e. the 24 hour average level as specified in the OCP (BAA Report 798-05: 24 March 2006). The OCP facade design criterion is 55 dBA for bedrooms. To meet the OCP criterion, a recommended facade was 6-13.5 thermal glazing designed to reduce the noise by 10 decibels. Our records indicate 6-13.5 glazing was specified by the architects.

The proposed acoustic screen represents an additional noise reduction measure beyond Brindane's normal OCP requirements. We understand the intent is to provide additional noise reduction for future level downhouses closest to the moving buses. We understand the screen material will be glass, which meets acoustic requirements.

Yours faithfully,
David W. Brown, P.Eng.

Mr. Salim Narayan

December 9, 2015

Enclosure

CMHC describes quiet interior levels as ranging from 75 to 95 dBA. For reference, 6 dBA is the threshold of perception for a young person with good hearing. With respect to subjective impressions, bus noise cannot be accurately compared to any other noise such as construction, office noise, etc. The bus stop with sound like buses, noise or outside the neighbourhood.

As discussed above, the design level for the facade facing the bus stop was 65 dBA. Subjectively, a reduction of 10 decibels through the facade design is equivalent to about a 40% reduction in the noise level. By comparison, the design level for Brindane was 60 dBA. The same 6-13.5 glazing was specified for the Brindane facade as noise details in the bus stop were uncertain, due to the official design.

Most noise heard behind a screen is transmitted over the top and the expected noise reduction for a typical screen is 5-10 decibels. Subjectively, a 5 decibel reduction is noticeable, and a 10 decibel reduction is about half as loud. Behind a barrier, some sound waves pass through them as they are 2-3 times as far away. The barrier reduction would also apply to the residual noise transmitted through the facade of the lower downhouses.

Please call if you have any questions.

Yours very truly,

David W. Brown, P.Eng.

David W. Brown, P.Eng.

David W. Brown, P.Eng.

David W. Brown, P.Eng.

Elevation
Scale: 1" = 1'-0"

Plan
Scale: 1" = 1'-0"

Proposed Elevation
Scale: NTS

Acoustic Screen
Scale: 1" = 1'-0"
Complete glass and securing to be engineered by glass wall supplier / installer

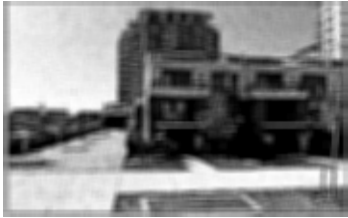
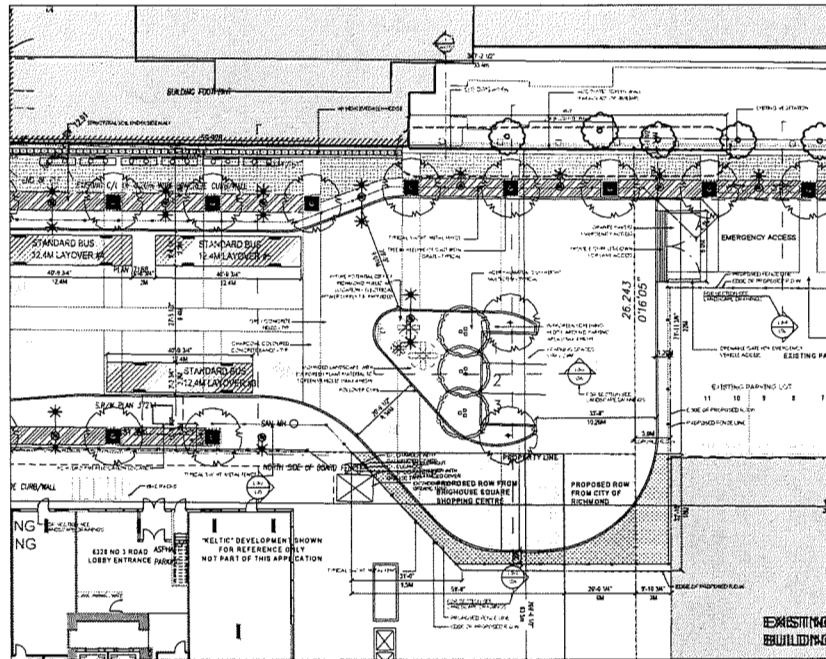


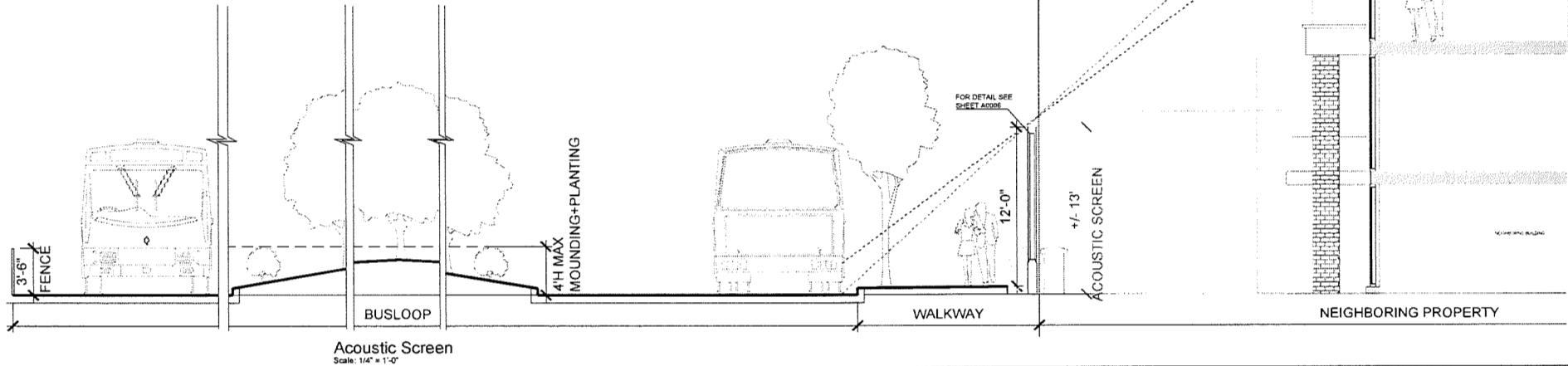
Image 1: North Neighbour
FACING EAST ELEVATION



Image 2: North Neighbour
FACING SOUTH-EAST ELEVATION



Key Plan
Scale: 1/16" = 1'-0"



Acoustic Screen
Scale: 1/4" = 1'-0"

VEHICLE IDLING - COAST MOUNTAIN BUS COMPANY POLICY -

ISSUE DATE:	January 2010
LATEST REVISION:	May 2010
SPONSORED BY:	Executive Director, Corporate Service
BUSINESS OWNER:	Director, Safety, Environment, and Emergency Management
WORKING CONTACT:	Manager, Environmental Sustainability

1. PURPOSE

Coast Mountain Bus Company (CMBC) will reduce vehicle idling to the greatest extent possible in an effort to avoid unnecessary air emissions, wasting fuel, increasing engine wear, and to comply with municipal bylaws regarding anti-idling. This policy applies to all CMBC operated vehicles and all vehicles operating on CMBC properties.

2. POLICY

Employees operating CMBC vehicles and all vehicles operating on CMBC property will:

- minimize idling of buses and non-revenue vehicles.
- comply with applicable municipal anti-idling bylaws.

3. APPLICATION

When an operator expects to idle at a bus stop or in a loop for more than three (3) minutes, the operator will turn off the bus.

Circumstances that reasonably require idling of the engine include periods when it is necessary to operate defrosting, heating, or cooling equipment to ensure the health or safety of the operator or passengers. When the circumstances have been corrected, the engine will be turned off until they exist again or the bus/vessel is ready to move.

Buses in service should not be left idling unattended under any circumstances.

Idling within CMBC's garages and yards is to be limited to idling that is required as part of a repair, pre-trip inspection or for training purposes.

Operators to only start buses they are pre tripping or otherwise required to start.



SeaBus vessels will use shore power at all times while docked at the maintenance and fueling bays with the exception of periods where maintenance, diagnostic or pre voyage checks are required.

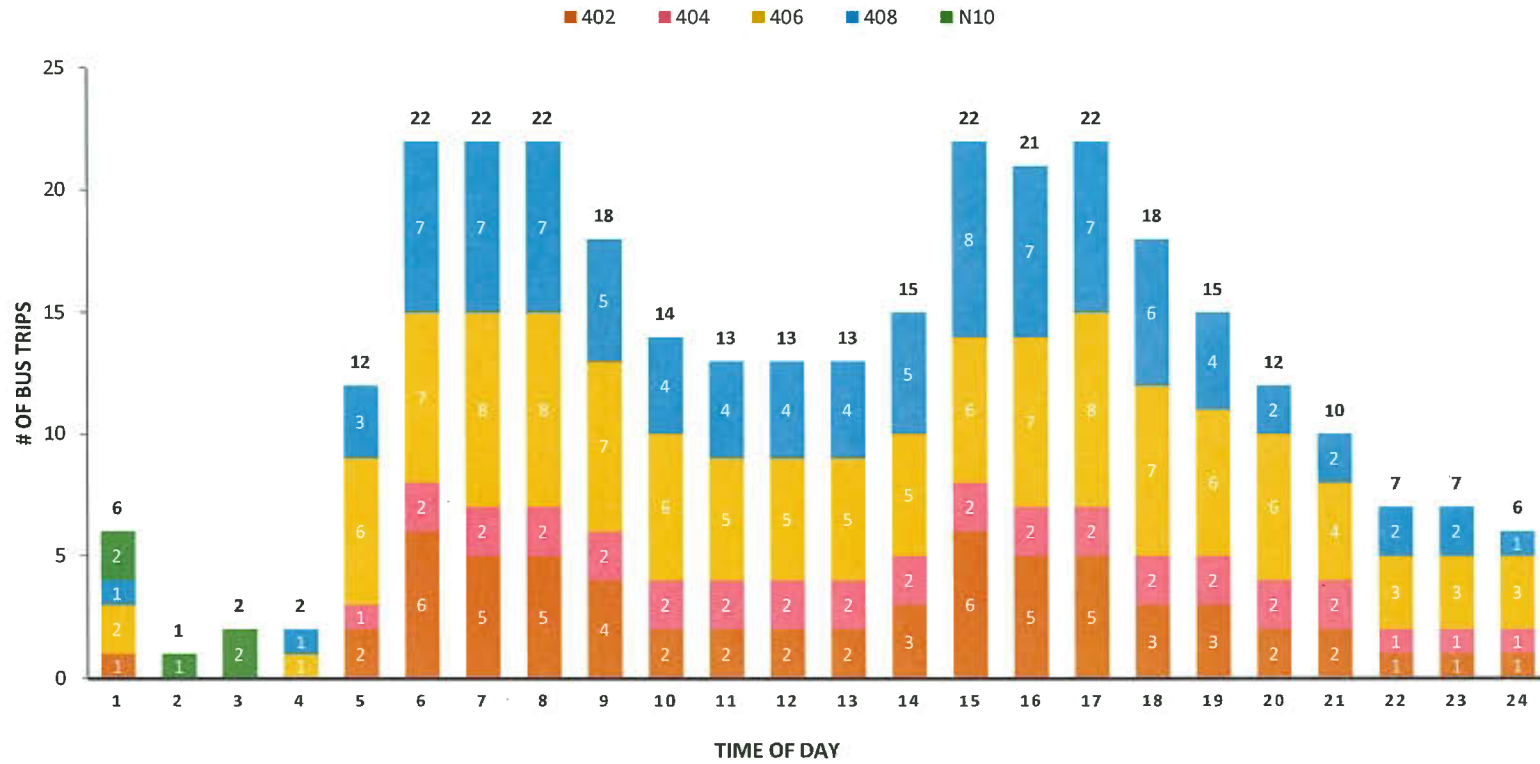
4. DEFINITIONS

"(term)"

5. REFERENCES



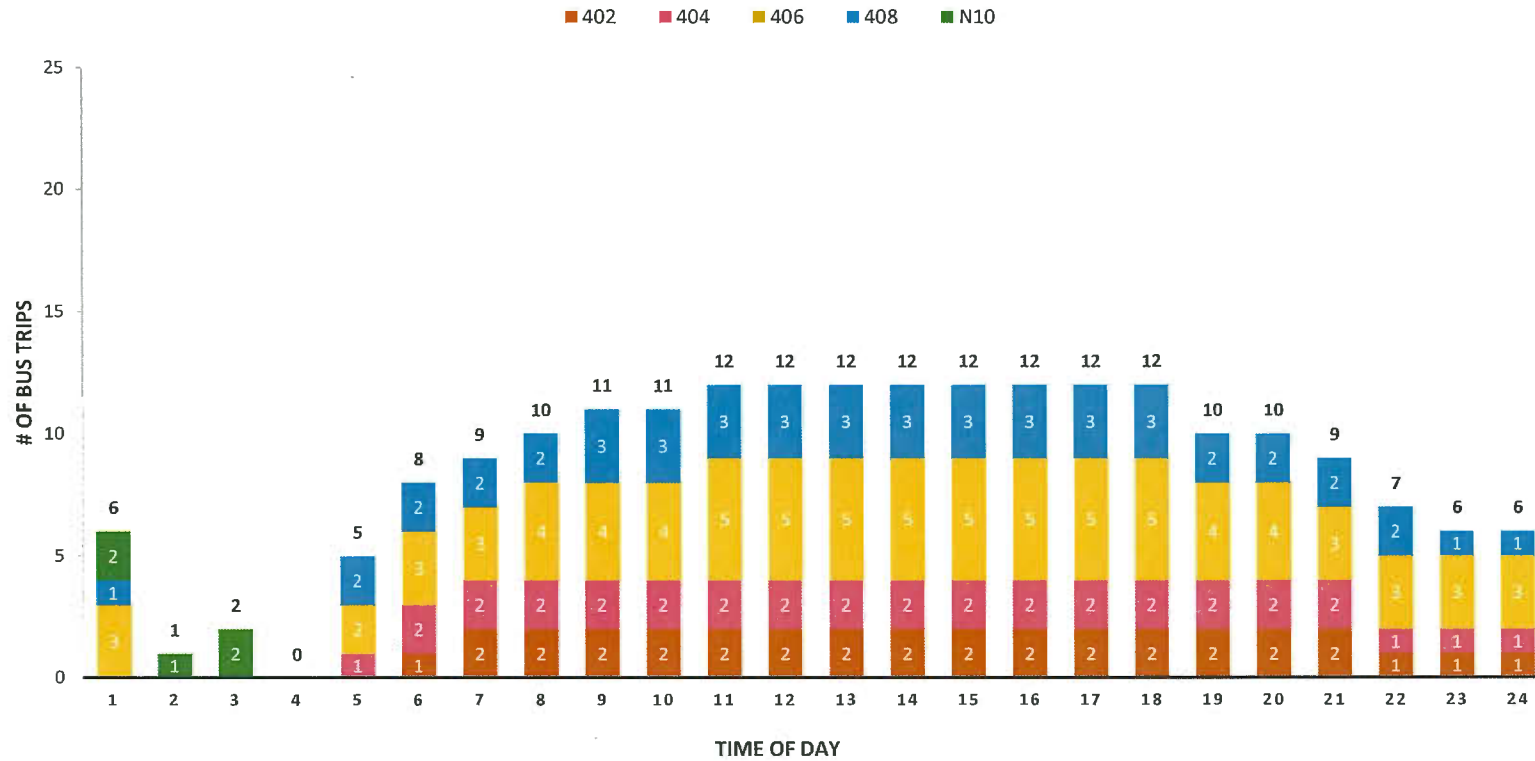
WEEKDAY HOURLY BUS TRIPS



Trips per Hour - Future Brighthouse Bus Mall Routes - April 2019

Weekdays	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	TOTAL
402	1				2	6	5	5	4	2	2	2	2	3	6	5	5	3	3	2	2	1	1	1	63
404					1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	36
406	2			1	6	7	8	8	7	6	5	5	5	5	6	7	8	7	6	6	4	3	3	3	118
408	1			1	3	7	7	7	5	4	4	4	4	5	8	7	7	6	4	2	2	2	2	1	93
N10	2	1	2																						5
Total	6	1	2	2	12	22	22	22	18	14	13	13	13	15	22	21	22	18	15	12	10	7	7	6	315

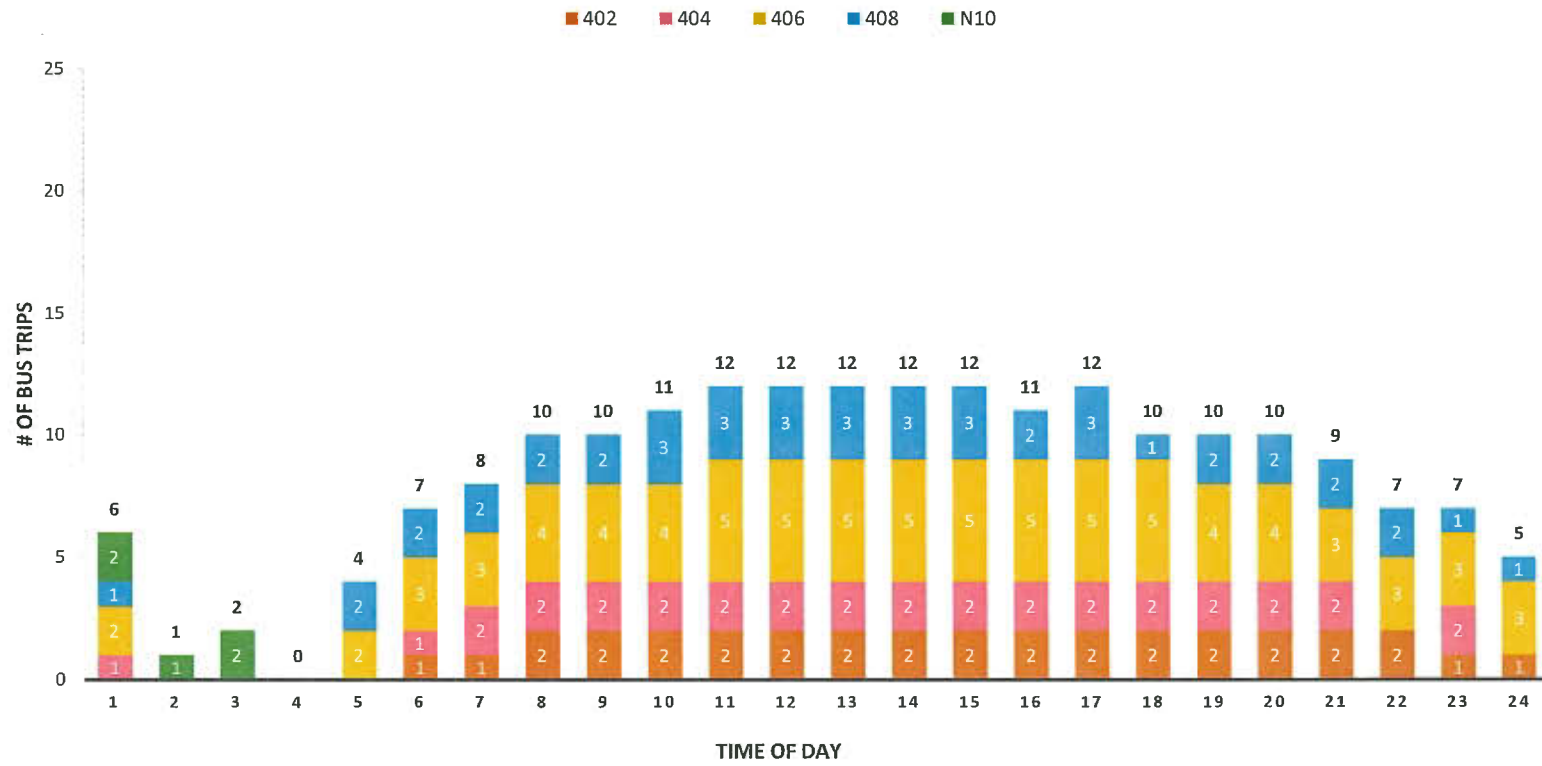
SATURDAY HOURLY BUS TRIPS



Trips per Hour - Future Brighthouse Bus Mall Routes - April 2019

Saturday	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	TOTAL
402						1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	34
404					1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	36
406	3				2	3	3	4	4	4	5	5	5	5	5	5	5	5	4	4	3	3	3	3	83
408	1				2	2	2	2	3	3	3	3	3	3	3	3	3	3	2	2	2	2	1	1	49
N10	2	1	2																						5
Total	6	1	2	0	5	8	9	10	11	11	12	12	12	12	12	12	12	12	10	10	9	7	6	6	207

SUNDAY HOURLY BUS TRIPS



Trips per Hour - Future Brighthouse Bus Mall Routes - April 2019

Sunday	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	TOTAL
402						1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	34
404	1					1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		2		34
406	2				2	3	3	4	4	4	5	5	5	5	5	5	5	5	4	4	3	3	3	3	82
408	1				2	2	2	2	2	3	3	3	3	3	3	2	3	1	2	2	2	2	1	1	45
N10	2	1	2																						5
Total	6	1	2	0	4	7	8	10	10	11	12	12	12	12	12	11	12	10	10	10	9	7	7	5	200



City of Richmond

Report to Development Permit Panel

To: Development Permit Panel

Date: June 5, 2019

From: Wayne Craig
Director, Development

File: DP 11-593871

Re: **Application by IBI Architects (Canada) Inc. on behalf of South Coast British Columbia Transportation Authority (TransLink) for a Development Permit at 6302 No. 3 Road and 6411 Buswell Street**

Staff Recommendation

That a Development Permit be issued which would:

1. Permit the construction of a Bus Mall at 6302 No. 3 Road and 6411 Buswell Street on a site zoned "Downtown Commercial (CDT1)"; and
2. Vary the provisions of Richmond Zoning Bylaw 8500 to reduce the number of parking spaces for the existing office building on 6411 Buswell Street from 44 to 25 spaces.

Wayne Craig
Director, Development
(604-247-4625)

WC:mm

Att. 5

Staff Report

Origin

IBI Architects (Canada) Inc., on behalf of South Coast British Columbia Transportation Authority (TransLink), has applied to the City of Richmond for permission to construct a Bus Mall at 6302 No. 3 Road and a portion of 6411 Buswell Street. The Bus Mall comprises an area of approximately 7,150 m² (76,962.0 ft²) zoned "Downtown Commercial (CDT1)" (Attachment 1).

The actual Bus Mall loop is located on 6302 No. 3 Road and functions as an enhanced City street for transit vehicles and public pedestrian access. The Bus Mall loop includes a roadway with four bus loading and unloading bays, five bus layover bays and a HandyDart bay, and is bordered by wide sidewalks to provide access and waiting areas for transit riders.

The northern portion of the 6411 Buswell Street site includes proposed public pedestrian and emergency vehicle access routes from the Bus Mall to Buswell Street. The remainder of this lot includes an existing three-storey office building owned by TransLink, which is not part of the plans for the Bus Mall, but requires a parking variance from 44 to 25 spaces as discussed later in this report.

A small portion of the north side of the proposed Bus Mall sidewalk has already been constructed as part of the Mandarin development next to the Brighthouse Canada Line station (DP 11-584010). Public access to this area has been secured with a Statutory Right of Way (SRW) registered on title of the site.

The City will be granting TransLink a SRW over City-owned lot at 6302 No. 3 Road and licence over part of the lane at the southeast corner of the site to allow for Translink to operate the Bus Mall. TransLink will be granting an 18.0 (59.0 ft.) wide SRW to the City over the northern portion of 6411 Buswell Street to provide for the above-noted pedestrian/emergency access route to Buswell Street.

A specific Bus Mall Servicing Agreement (SA18-842676) is required for the on-site servicing associated with the Bus Mall Development Permit and off-site frontage improvements. Off-site improvements include adjustments to the southbound left-turn lane and the median on No. 3 Road, widened sidewalks on No. 3 Road, additional wide pedestrian crosswalks on No. 3 Road, and installation of new traffic signals at the intersection of No. 3 Road and the Bus Mall.

Development Information

Please refer to the attached Development Application Data Sheet (Attachment 2) for a comparison of the proposed development data with the relevant Bylaw requirements.

Background

Development surrounding the subject site is as follows:

- To the north: There is the recently completed "Mandarin" building with two residential towers at 6188 and 6288 No. 3 Road with the Scotiabank at grade, approved under

Development Permit (DP 11-584010); and a tower on 6351 Buswell Street with a parkade and townhouses at grade, are zoned “Downtown Commercial (CDT1)”.

- To the east: There is an existing four-storey retail/office building located on the southern part of the lot at 6411 Buswell Street on a site zoned “Downtown Commercial (CDT1)”. The northern part of this site forms part of the proposed Bus Mall.
- To the south: A vacant site at 6340 No 3 Road was recently rezoned to “High Density Mixed Use and Early Childhood Development Hub (ZMU37)” (RZ17-773703) and issued a Development Permit (DP18-822743) to permit the mixed-use “Keltic” development with four Mixed-Use towers with commercial retail units at grade.
- To the west, across No. 3 Road: There is the northern portion of Richmond Centre Mall, a large regional shopping centre on a site zoned “Downtown Commercial (CDT1)”.

Rezoning and Public Hearing Results

There is no rezoning involved with the development of the subject properties which are zoned “Downtown Commercial (CDT1)”.

TransLink organized a meeting with the Strata Council of the Emporio building at 6351 Buswell Street which was built and occupied prior to the Bus Mall being proposed. The meeting included a presentation of the proposed Bus Mall plans and receipt of comments on the design, including the proposed acoustic screen adjacent to the building. The Strata Council asked questions and made comments about possible noise from some members of the public late at night. In response, TransLink staff explained their approach to security at bus exchanges and the limited late night bus schedule. The Strata Council members also expressed concern about the current parking enforcement situation on the existing lane north of the Bus Mall. City Community Bylaws staff have followed up with increased parking enforcement on the lane.

Staff Comments

The proposed scheme attached to this report has satisfactorily addressed the significant urban design issues and other staff comments identified as part of the review of the subject Development Permit application. In addition, it complies with the intent of the applicable sections of the Official Community Plan (OCP) and that designates the site “DTMU – Downtown Mixed Use” and the City Centre Area Plan (CCAP) that designates the site as “Urban Centre T6 (45m)” and “Bus Exchange” (Attachment 3).

The proposal is generally in compliance with Zoning Bylaw 8500 with the exception of the parking variance noted below.

Zoning Compliance/Variations (staff comments in bold)

The applicant requests to vary the provisions of Richmond Zoning Bylaw 8500 to reduce the number of parking spaces for the existing office building on 6411 Buswell Street from 44 to 25 spaces.

(Staff supports the proposed variance from 44 to 25 parking spaces given that the existing office building on 6411 Buswell Street has operated with partial closure of the parking lot for

a staging area for the construction of the Mandarin building in 2015-2017 and previously for construction of the adjacent building at 6351 Buswell in 2007. Since 2015, the subject office building has functioned with 30 parking spaces. TransLink has also advised the current building tenants of the proposed reduction in parking. Furthermore, the parking reduction is supported in consideration of the proximity of the site to the Brighthouse Canada Line station and adjacent Bus Mall. Lastly, it should be noted that the subject site will ultimately be redeveloped by TransLink or sold to another developer, at which time, the parking requirement would be re-assessed as part of any redevelopment of the site.)

Advisory Design Panel Comments

The Advisory Design Panel was in favour of the proposed Bus Mall. A copy of the relevant excerpt from the Advisory Design Panel Minutes from held on April 3, 2019 is attached for reference (Attachment 4). The design response from the applicant has been included immediately following the specific Design Panel comments and is identified in '*bold italics*'. It should also be noted that previously, on September 8, 2011, the Design Panel recommended in favour of the adjacent Mandarin development which included preliminary Bus Mall plans.

Analysis

Conditions of Adjacency

The proposed development has addressed the interface with the adjacent properties surrounding the development site, as indicated below:

- To the north: The proposed Bus Mall presents a coordinated design with the Mandarin development, especially at the interface along the south frontage of the new retail unit with Scotiabank.
- To the east: The loop turnaround at the eastern end of the proposed Bus Mall will be adjacent to the existing south-facing, ground-oriented townhouses at 6351 Buswell Street. The Bus Mall design includes an acoustic screen for noise attenuation in front of these units as discussed below.
- To the south: The proposed Bus Mall development abuts the proposed Keltic retail/commercial development to the south as noted above. There will be ground-oriented retail units within the Keltic building that front a sidewalk located within an SRW providing public access. The development also includes a "Kiss and Ride" drop off for pedestrians adjacent to the southeast corner of the Bus Mall. The Bus Mall and Keltic sidewalk design are being constructed with the same landscaping and pavement standards.
- To the west: The proposed development is separated from the existing retail/commercial and residential developments across No. 3 Road by the elevated Canada Line guideway.

Site Planning and Urban Design

Site Planning

- The Bus Mall is basically an enhanced street with transit vehicle access from No. 3 Road with passenger drop-off provided on the south side and passenger pick-up on the north side of the Bus Mall.

- The main pedestrian access is provided by broad sidewalks on the north and south sides of the Bus Mall leading from No. 3 Road.
- The sidewalk on the north side of the Bus Mall will lead to the existing pedestrian plaza on No. 3 Road adjacent to the Brighthouse Canada Line station and Mandarin building to the north.
- The proposed pedestrian plaza on No. 3 Road on the south side of the Bus Mall will extend onto the northwest corner of the proposed Keltic development site.
- There is a secondary public pedestrian route and emergency vehicle exit lane from the eastern end of the Bus Mall to Buswell Street located on the north portion of 6411 Buswell Street. This access has been reviewed and supported by the Fire and Rescue Department. It should be noted that this lane is not intended or designed to allow bus traffic to access Buswell Street.

Urban Design

- The principal design feature of the proposed Bus Mall landscape is the creation of identifiable pedestrian public realm in the area that results from the continuous stone pavement on the north and south urban plazas discussed above and the Bus Mall sidewalks.
- Decorative pedestrian paving for the sidewalk on both sides of the Bus Mall will match the pavement around and on the Brighthouse station plaza on No. 3 Road (granite field and basalt tile bands), in combination with high-quality street/site furnishings (decorative tree grates, lighting and decorative metal fencing).
- The wide sidewalk on the north side of the Bus Mall provides ample area for passengers waiting to board buses and provides access from No. 3 Road to the Mandarin south tower's residential lobby, fronting the plaza at the south end of the lane leading to Saba Street one block to the north.
- A continuous planter, seating, a bus shelter and extensive glass canopies along the south frontage of the new Scotiabank have been constructed with the Mandarin building, along the north side sidewalk of the Bus Mall, and will provide weather protection and a friendlier pedestrian environment along the passenger pickup area.
- Although narrower than the north side sidewalk, the same pavement treatment, materials, tree planting and lighting is also proposed along the south side sidewalk of the Bus Mall, where the unloading of passengers take place. Increasing the width of the Bus Mall south sidewalk to match the width of the north sidewalk is included in the Development Permit plans for Keltic development on the south side of the Bus Mall site.
- Along the perimeter of the eastern end of the Bus Mall loop, a 1.0 m (3.5 ft.) high fence, consisting of a galvanized finish wire and wall panels attached to "silver" powder coated metal frames. This fence is designed as a safety measure to protect pedestrians from buses turning at the loop at the end of the Bus Mall.
- There is a mid-block crosswalk that will allow pedestrians to cross from the above-noted existing lane on the north side of the Bus Mall to the south side of the Mall and to the proposed Keltic development to the south.

- A 1.0 m (3.5 ft.) high fence is provided on the median between the passenger loading and unloading operation sides of the Bus Mall. This fence will consist of a grid of (1.5 in. x 1/8 in.) aluminum grating with solid wave-shaped panels painted “Translink” blue. The median fence will prevent pedestrians crossing from the passenger unloading area on the south side to the passenger loading areas on the north side, and funnel them to the designated mid-block crosswalk or at the signalized crosswalk at No. 3 Road.
- A mounded landscaped area is included at the centre of the turnaround at the east end of the Bus Mall loop to provide a visual buffer to the three TransLink service vehicle parking spaces located at the centre of the loop.
- There is a 3.66 m (12.0 ft.) high acoustic screen wall at the eastern end of the Bus Mall loop turnaround adjacent to the townhouse units within the adjacent building at 6351 Buswell Street. The screen consists of laminated frit-patterned glazing with a translucent Evergreen tree graphic pattern, mounted to a galvanized steel frame. The screen includes a 0.85 m (2.75 ft.) high concrete base to provide a foundation and visual screening from bus headlights. In response to noise concerns from the residents of 6351 Buswell Street, the screen height was increased further to a report from TransLink’s acoustical engineers.
- The use of decorative paving treatment that enhance the Bus Mall public realm consists of two coordinated basic treatments:
 - The granite field and basalt tile bands, which are proposed for all the highest volume pedestrian areas of the public realm, including the plazas and the Bus Mall passenger areas. These materials are also used on the plaza in front of the lobby of the south residential tower of Mandarin building and along the eastern portion of the east-west pedestrian route to Buswell Street.
 - Cast-in-place light broom concrete of a natural light grey colour will be used as a base on the bus lane operations area and will include regularly spaced north-south charcoal integral colour bands of approximately 1.2 m (4 ft.) wide.
- There will be planting of 21 Pin Oaks and three Japanese Maples in tree grates along both sides of the Bus Mall adjacent to the sidewalks, establishing an urban street character. Trees will have a minimum 10 cm (4 in.) caliper. Trees will be planted in structural soil under the sidewalk to promote tree root and canopy development, and have automatic irrigation.
- Hedge shrubs are proposed to be planted adjacent to the parkade wall of the building at 6351 Buswell Street near the eastern end of the Bus Mall.

Tree Retention and Removal

- *Existing On-Site Tree:* There is one tree on 6411 Buswell Street in good condition that will need to be removed to allow for construction of the Bus Mall loop driving surface. TransLink has confirmed that the driving surface cannot be revised due to the geometry of the bus turning movements and safety requirements (Attachment 5).
- *On-Site Replacement Trees:* The proposed landscape plan accommodates 24 on-site replacement trees as described above under the Urban Design section of the report.
- *Trees and Adjacent Sites:* There are six Pin Oak trees on the SRW on the adjacent Mandarin building site at 6288 No. 3 Road that have been planted to form part of the public realm for the Bus Mall and will be protected. There are also six trees on the adjacent site at 6351

Buswell Street that will be retained, of which four will need to be trimmed to allow for construction of the acoustic screen. TransLink has been advised to consult with the owners of this building prior to trimming of these trees.

- *Off-Site Trees on No 3 Road:* There are seven trees that will need to be moved or removed for the improvements to No. 3 Road under the Servicing Agreement for the Bus Mall. Three trees (nos. 106-108) will be moved to another location on City property as determined by City Parks. The four trees to be removed (nos. 102-105) will either need to be replaced at a 2:1 ratio with eight street trees or require payment of \$5,100 to the City Tree Compensation Fund prior to issuance of the Servicing Agreement.

Crime Prevention Through Environmental Design

- There will be daytime casual surveillance of the Canada Line Station plaza and the Bus Mall from the Scotiabank and ground-oriented commercial units with the proposed Keltic development to the south.
- In the evenings, casual surveillance over the Bus Mall will be provided from the residential units within Mandarin and Keltic buildings.
- At night, pedestrian and street lighting will keep the whole extent of the Bus Mall, and other ancillary spaces, including the pedestrian linkage to Buswell Street, well lit. Decorative lane lighting on the lane that leads from Saba Road to the Bus Mall also will contribute to the overall safety of pedestrian routes to and from the Bus Mall.

Conclusions

As the proposed development would meet applicable policies and Development Permit Guidelines, staff recommend that the Development Permit be endorsed, and issuance by Council be recommended.



Mark McMullen
Senior Coordinator - Major Projects
(604-276-4173)

MM:blg

Attachments:

- Attachment 1: Location Map
- Attachment 2: Development Application Data Sheet
- Attachment 3: CCAP Bridgeport Village Land Use Map
- Attachment 4: Excerpt from the Advisory Design Panel Minutes
- Attachment 5: Existing Tree Management Plan

The following are to be met prior to forwarding this application to Council for approval:

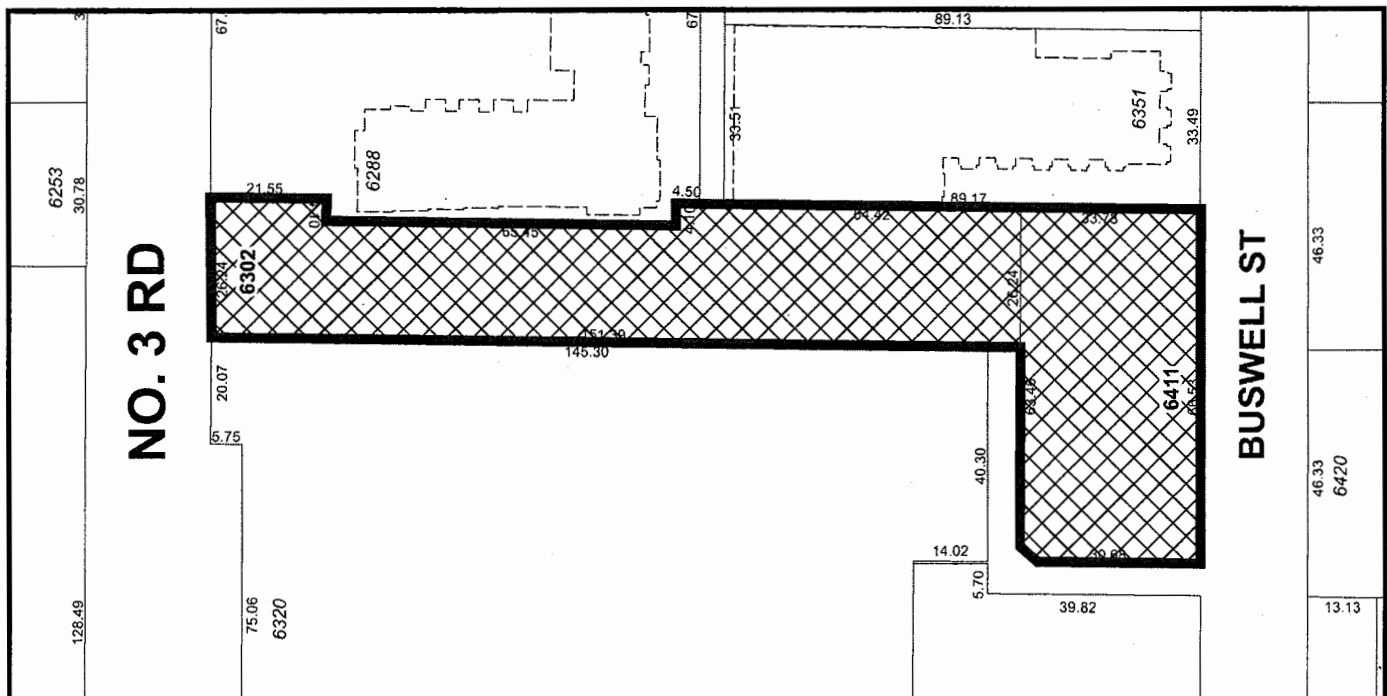
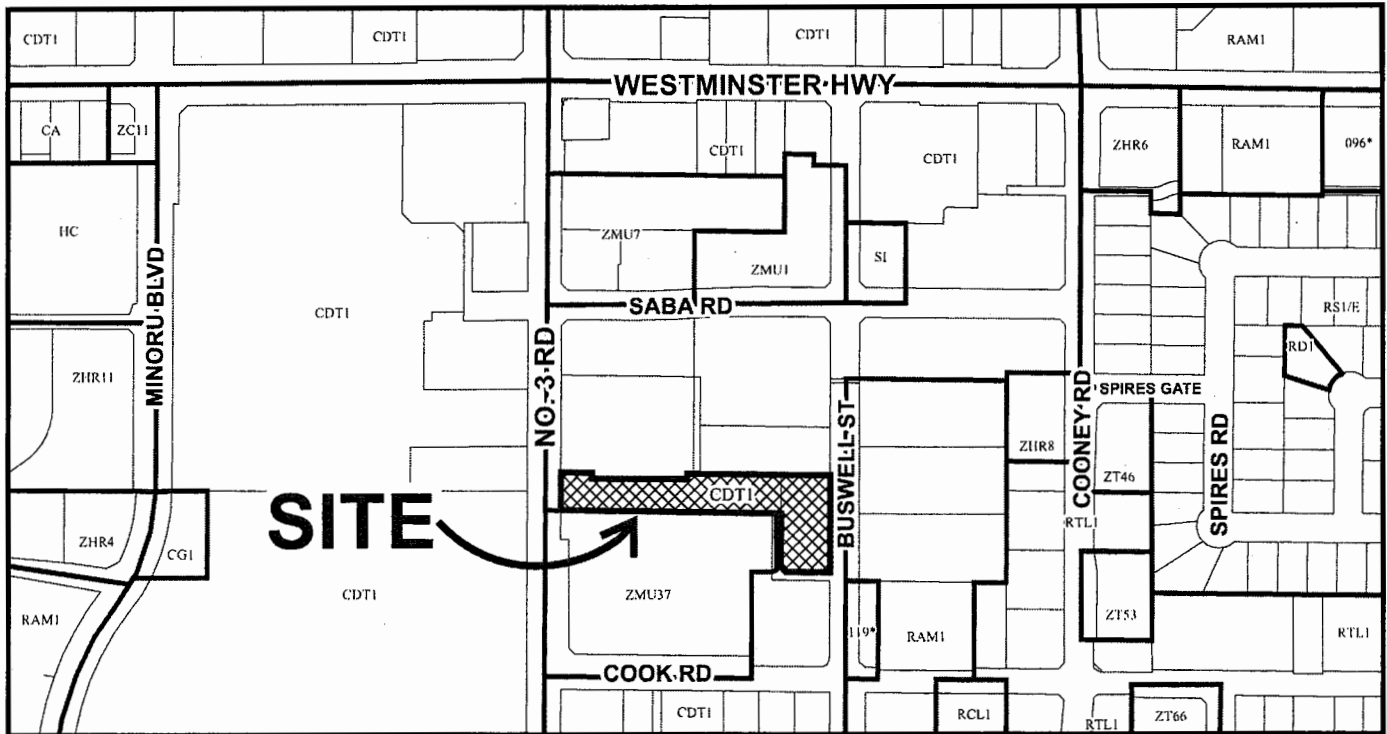
- Receipt of a security for landscaping in the amount of \$715,254.10.

Prior to commencement of construction, the developer is required to complete the following:

- Registration of Statutory Right-of-Ways (SRW) over City-owned lot at 6302 No. 3 Road and licence over part of the lane at the southeast corner of the site to allow for Translink to operate the Bus Mall. TransLink will be granting an 18.0 (59.0 ft.) wide SRW to the City over the northern portion of 6411 Buswell Street to provide for the above-noted pedestrian/emergency access route to Buswell Street.
- Issuance of a Servicing Agreement from the City for the on-site servicing works within the Bus Mall and for the off-site works.
- The four off-site trees to removed (nos. 102-105) will either need to be replaced at a 2:1 ratio with eight street trees within the Servicing Agreement plans or TransLink is required to make payment of \$5,100 to the City Tree Compensation Fund.
- Issuance of a Building Permit for the acoustic screen/wall after consultation with the owners of 6351 Buswell Street regarding the trimming of the four adjacent has been completed by TransLink.
- The applicant is required to obtain a Building Permit for any construction hoarding associated with the proposed development. If construction hoarding is required to temporarily occupy a street, or any part thereof, or occupy the air space above a street or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. *For further information on the Building Permit, please contact Building Approvals Department at 604-276-4285.*
- Submission of a construction traffic and parking management plan to the satisfaction of the City's Transportation Department (<http://www.richmond.ca/services/ttp/special.htm>).



City of
Richmond



DP 11-593871

Original Date: 06/04/19

Revision Date:

Note: Dimensions are in METRES



DP 11-593871

Attachment 2

Address: 6302 No. 3 Road and 6411 Buswell Street

Applicant: IBI Architects (Canada) Inc.

Owner: City of Richmond (6302 No. 3 Road)
TransLink (6411 Buswell Street)

Planning Area(s): City Centre

Floor Area Gross: 1,767m² Building on 6411 Buswell Floor Area Net: 1,767m² Building on 6411 Buswell

	Existing	Proposed
Site Area:	7,150 m ²	7,150 m ²
Land Uses:	Vacant Lot and Office Building	Vacant Lot and Office Building
OCP Designation:	DTMU – Downtown Mixed Use	DTMU – Downtown Mixed Use
CCAP Designation:	Urban Centre T6 (45 m) & Bus Exchange	Urban Centre T6 (45 m) & Bus Exchange
Zoning:	Downtown Commercial (CDT1)	Downtown Commercial (CDT1)

	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	3.0	0.0	none permitted
Lot Coverage:	Max. 90%	0 %	none
Setback – Front Yard:	Min. 6.0 m	> 6.0 m	none
Setback – North Side Yard:	Min. 0.0 m	0.0 m	none
Setback – South Side Yard:	Min. 3.0 m	> 6.0 m	none
Setback – Rear Yard:	Min. 3.0 m	> 3.0 m	none
Height (m):	Building - Max.47 m Structure - Max.12 m	Building – 0.0 m Structure – 3.66 m	none
Lot Size:	N/A	N/A	none
Total off-street Spaces:	N/A for Bus Mall 44 for Existing Building at 6411 Buswell	3 for Bus Mall 25 for Existing Building at 6411 Buswell	25 for Existing Building at 6411 Buswell

Map Legend:

- General Urban T4 (15m)** (Yellow)
- Urban Centre T5 (25m)** (Orange)
- Urban Core T6 (45m)** (Red)
- Park** (Green)
- Park-Configuration & location to be determined** (Green diamond)
- Village Centre: No. 3 Road & Cook Road Intersection** (Circle)
- School** (Blue rectangle)
- Village Centre Bonus** (Hatched rectangle)
- Institution** (Black diamond)
- Pedestrian Linkages** (Dotted line)
- Enhanced Pedestrian & Cyclist Crossing** (Blue star)
- Proposed Streets** (Thick blue line)
- Pedestrian-Oriented Retail Precincts-High Street & Linkages** (Red line)
- Pedestrian-Oriented Retail Precincts-Secondary Retail Streets & Linkages** (Blue line)
- Canada Line Station** (Red circle)
- Transit Plaza** (P)
- Bus Exchange** (B)

Map Labels: WESTMINSTER HWY, GILBERT RD, NO. 3 RD, GRANVILLE AVE, GARDEN CITY RD, Site, P, B.

Scale: 0 50 100 200 300 400 Meters

Excerpt from the Minutes of Advisory Design Panel

Wednesday, April 3, 2019

DP 11-593871– BRIGHOUSE BUS MALL

ARCHITECT: IBI Group Architects

LANDSCAPE ARCHITECT: Durante Kreuk Ltd

PROPERTY LOCATION: 6302 No. 3 Road and 6411 Buswell Street

Applicant's Presentation

Martin Bruckner, IBI Group Architects, and Peter Kreuk, Durante Kreuk Ltd., presented the project, and together with Salim Narayanan, IBI Group Architects, and Chit Vyas, Stantec/Translink answered queries from the Panel on behalf of the applicant.

Panel Discussion

Comments from Panel members were as follows:

- appreciate the proposed Bus Mall which will enhance public transportation in Richmond; adjacent developments could have consolidated open spaces to provide gathering places near the Bus Mall;

The North and South Plaza areas are included on the west side in the current design of Bus Mall. Additional space, if required, should be included in the adjacent development design.

- support the proposed location of the Bus Mall close to the pedestrian crossing on No. 3 Road;

Noted.

- consider installing a canopy/shelter for the HandyDART passenger waiting/pick-up area; also consider designating wheelchair priority areas adjacent to bus loading stops in the Bus Mall;

TransLink has consulted Coast Mountain Bus Company (CMBC) Access Transit staff and have received the following comment for the shelter:

“Existing canopy of Mandarin Residence Building located close to the HandyDART location is enough to provide shelter. A bench must be added underneath.”

CMBC Access Transit has advised that the existing canopy of the Mandarin Residence building would be adequate. The benches under the canopy are in close proximity to the stop where HandyDART customers would likely wait during times of inclement weather. This canopy location provides visibility of the arriving vehicle to the customers.

A bench has been added like the existing benches located next to the planter to maintain consistency.

- fonts on the package provided by the applicant are small and hard to read; plans could have been enlarged to make them more legible;

Noted. Has been incorporated in the full-scale drawings

- appreciate the presentation of the project; however, the applicant could have provided elevation drawings for all sides of the project to enable the Panel to better understand the project;

Noted. Will provide the elevations.

- no concerns on the project; the applicant has done a good job;

Noted with thanks.

- appreciate the proposed surface paving treatment for pedestrian circulation areas and sidewalks in the Bus Mall; however, consider similar treatments for the two pedestrian crosswalks to tie them together and to be more consistent with the sidewalk surface paving treatment;

The sidewalks include granite pavers which are not suitable for the cross walk with heavy bus movement. The pavement is made up of concrete. Stamped concrete with zebra pattern has been included for cross walks to address durability, consistency and on-going maintenance.

- consider incorporating more evergreen planting materials throughout the subject site; also consider installing climbing vines in the centre median of the Bus Mall to soften the appearance of the metal fence in the median;

The centre median includes articulated fence. Planting materials have been avoided to address bus movement, safety and long-term maintenance.

- appreciate the amount of work that the applicant has put into the project as shown by the renderings presented to the Panel; however, eye-level views of the project would have been helpful to the Panel's consideration of the project;

Noted. Will include more views.

- applicant has provided good solutions with regard to the openings and connections to the other parts of the adjacent urban environment; however, the back of house view of those connections was presumably not designed with frontages on those connector passageways;

Noted. Improved design of fence close to the turn around has been included.

- support the Panel comment to consider installing a canopy over the HandyDART passenger waiting/loading area;

Please see above canopy response for HandyDART.

- also support the Panel comment to incorporate greenery in the centre median of the Bus Mall;

Please see above greenery response for centre median.

- review the design and material of the acoustic screen adjacent to the residential tower on the north of the Bus Mall to ensure that headlight glares coming from the bus loop will not go through to the western side of the existing building; and

The height of concrete wall has been increased to address the headlight glare. More dense/opaque patterns have been added at the bottom of the glass screen. The evergreen hedge has been removed.

- consider installing low level lighting on the edge of the sidewalks to enhance pedestrian accessibility and safety in the Bus Mall area, particularly on the eastern side.

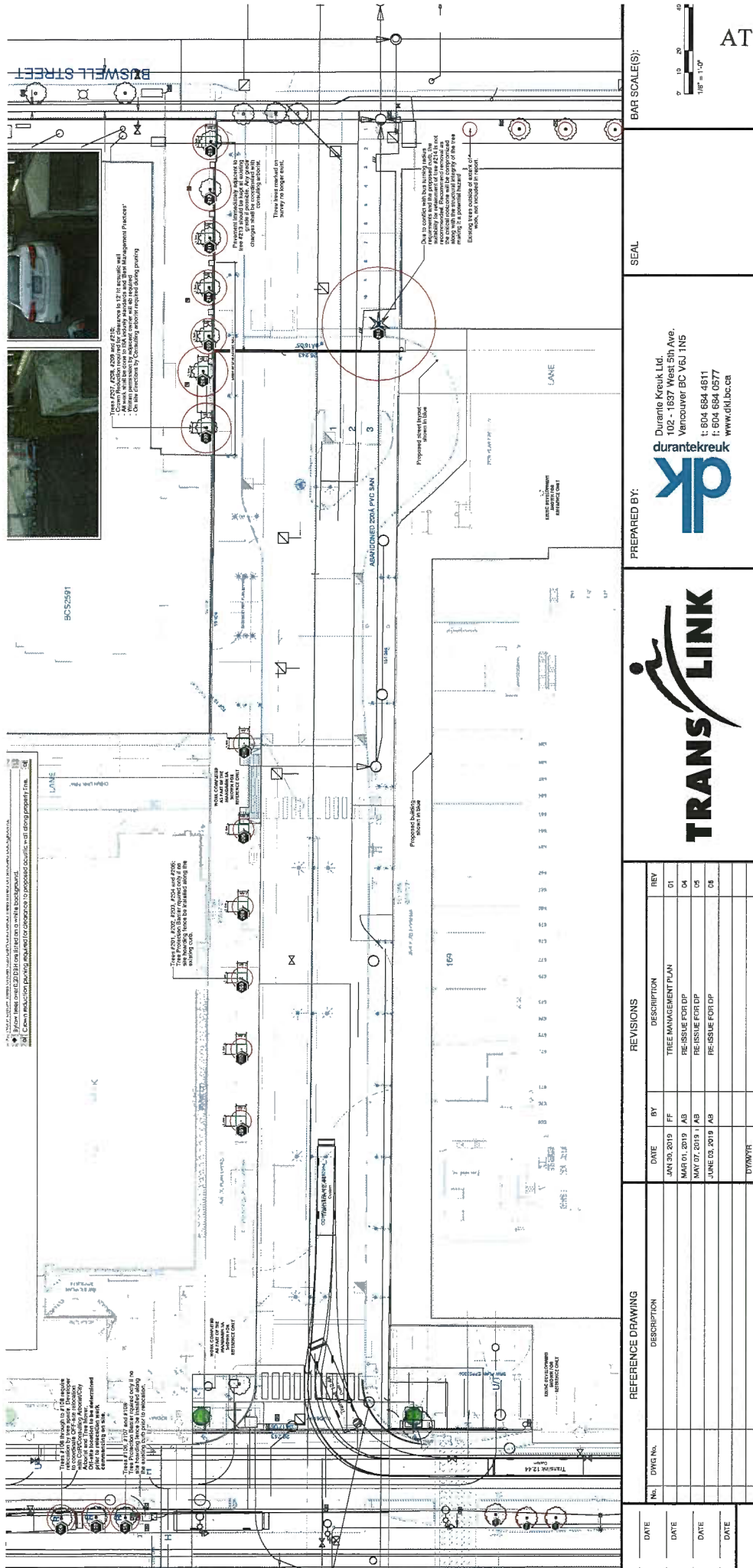
High level lighting is consistently provided which meets the Street lighting levels. Low level lighting has been avoided to maximize space for passenger circulation and safety issues while loading and unloading of passengers.

Panel Decision

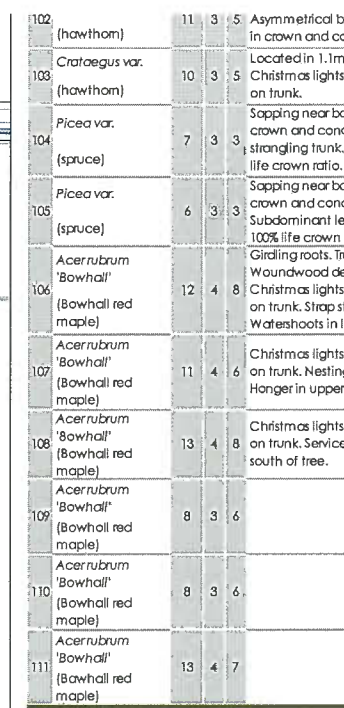
It was moved and seconded

That DP 11-593871 be supported to move forward to the Development Permit Panel subject to the applicant giving consideration to the comments of the Advisory Design Panel.

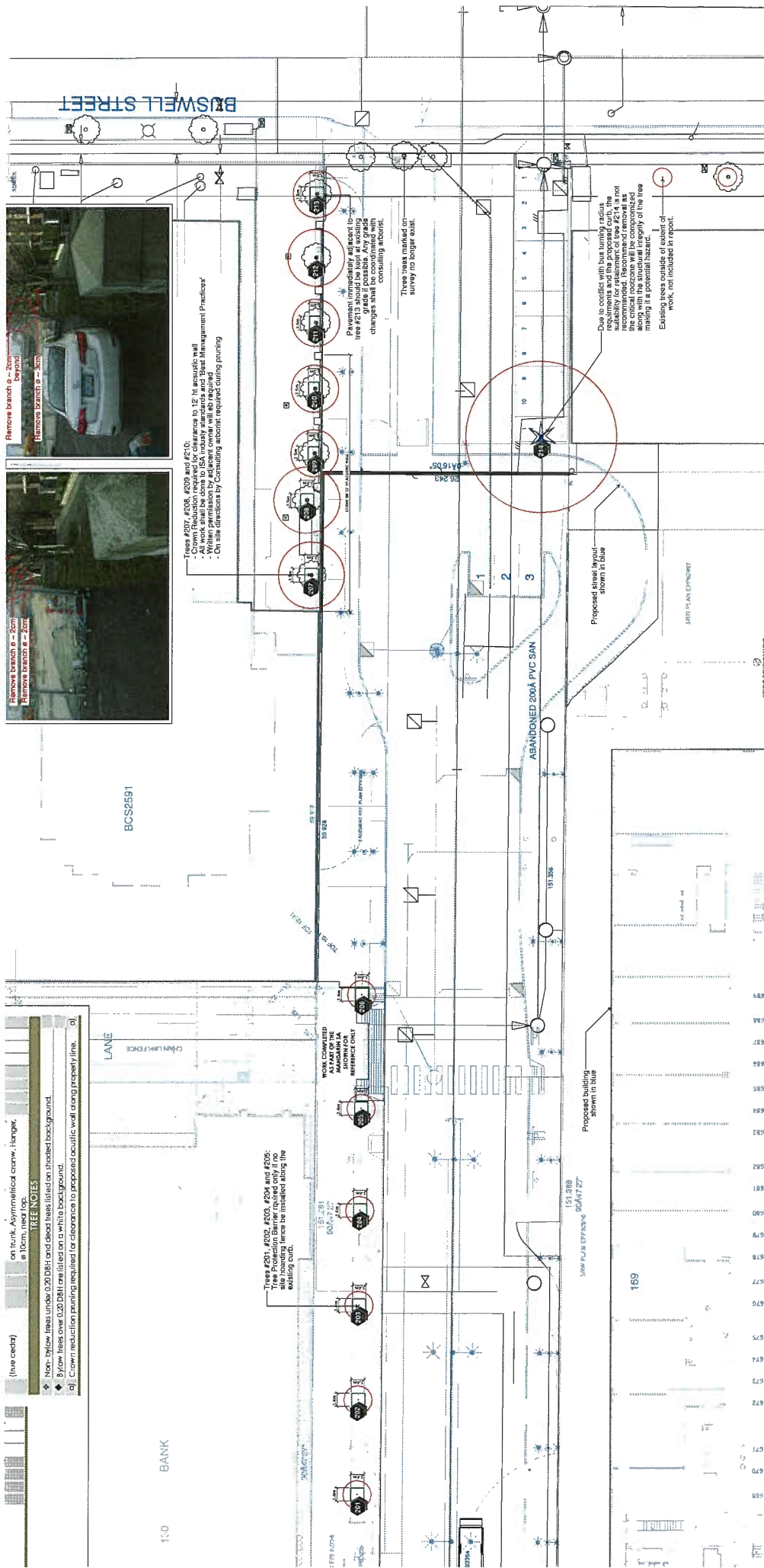
CARRIED



REFERENCE DRAWING		REVISIONS		PREPARED BY:		SEAL		BAR SCALE(S):	
No.	DWG No.	DATE	BY	DESCRIPTION	REV				
		JAN 30, 2019	FF	TREE MANAGEMENT PLAN	01				
		MAR 01, 2019	AS	RE-ISSUE FOR DP	04				
		MAY 07, 2019	AS	RE-ISSUE FOR DP	05				
		JUNE 03, 2019	AS	RE-ISSUE FOR DP	06				
						DURANTE KREUK LTD. 102 - 1837 West 5th Ave. Vancouver BC V6J 1N5 t: 604 684 4611 f: 604 684 0577 www.dkl.bc.ca		1" = 10'	



- (five cacti)
- on bank. Asymmetrical crown. Hanger, ø 10cm, rear top.
- TREE NOTES**
- ◆ Non- bylow trees under 0.20 DBH and dead trees listed on shaded background.
 - ◆ Bylow trees over 0.20 DBH are listed on a white background.
 - a) Crown reduction pruning required for clearance to proposed acoustic wall along property line.





City of Richmond

Development Permit

No. DP 11-593871

To the Holder: IBI ARCHITECTS (CANADA) INC. ON BEHALF OF SOUTH COAST
BRITISH COLUMBIA TRANSPORTATION AUTHORITY (TRANSLINK)

Property Address: 6302 NO. 3 ROAD AND 6411 BUSWELL STREET

Address: C/O SUITE 400 - 287 NELSON'S COURT
NEW WESTMINSTER, BC V3L 0E7

1. This Development Permit is issued subject to compliance with all of the Bylaws of the City applicable thereto, except as specifically varied or supplemented by this Permit.
2. This Development Permit applies to and only to those lands shown cross-hatched on the attached Schedule "A" and any and all buildings, structures and other development thereon.
3. The "Richmond Zoning Bylaw 8500" is hereby varied to reduce the number of parking spaces for the existing office building on 6411 Buswell Street from 44 to 25 spaces.
4. Subject to Section 692 of the Local Government Act, R.S.B.C.: buildings and structures; off-street parking and loading facilities; roads and parking areas; and landscaping and screening shall be constructed generally in accordance with Plans #DP 11-593871-1 to #DP 11-593871-16 attached hereto.
5. Sanitary sewers, water, drainage, highways, street lighting, underground wiring, and sidewalks, shall be provided as required.
6. As a condition of the issuance of this Permit, the City is holding the security in the amount of \$715,254.10 to ensure that development is carried out in accordance with the terms and conditions of this Permit. Should any interest be earned upon the security, it shall accrue to the Holder if the security is returned. The condition of the posting of the security is that should the Holder fail to carry out the development hereby authorized, according to the terms and conditions of this Permit within the time provided, the City may use the security to carry out the work by its servants, agents or contractors, and any surplus shall be paid over to the Holder. Should the Holder carry out the development permitted by this permit within the time set out herein, the security shall be returned to the Holder. The City may retain the security for up to one year after inspection of the completed landscaping in order to ensure that plant material has survived.
7. If the Holder does not commence the construction permitted by this Permit within 24 months of the date of this Permit, this Permit shall lapse and the security shall be returned in full.

Development Permit

No. DP 11-593871

To the Holder: IBI ARCHITECTS (CANADA) INC. ON BEHALF OF SOUTH COAST
BRITISH COLUMBIA TRANSPORTATION AUTHORITY (TRANSLINK)

Property Address: 6302 NO. 3 ROAD AND 6411 BUSWELL ROAD

Address: C/O SUITE 400 – 287 NELSON'S COURT
NEW WESTMINSTER, BC V3L 0E7

8. The land described herein shall be developed generally in accordance with the terms and conditions and provisions of this Permit and any plans and specifications attached to this Permit which shall form a part hereof.

This Permit is not a Building Permit.

AUTHORIZING RESOLUTION NO.
DAY OF , .

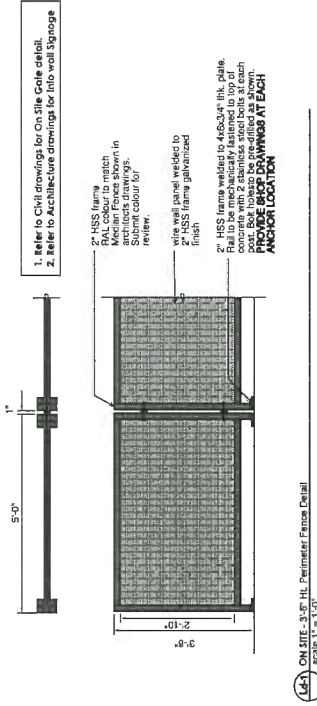
ISSUED BY THE COUNCIL THE

DELIVERED THIS DAY OF , .

MAYOR

Off-Site Landscape on No. 3 Road

On-Site Bus Loop Fence Detail



ON SITE: 3'-0" H; Perimeter Fence Detail
SCALE: 1" = 1'-0"

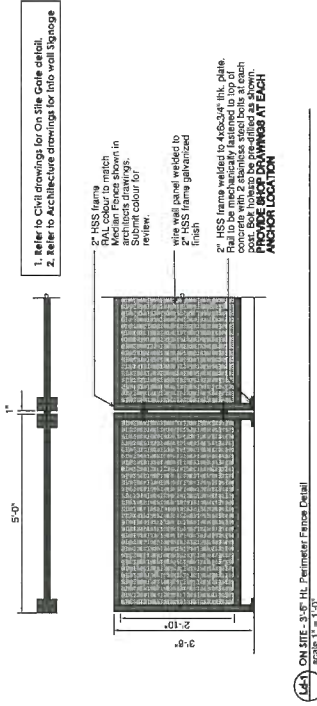
Approximate extent of new planting:
quantities may vary; contractor to confirm on
site, see sheet of for site planting legend
see sheet of for site planting legend

OFFSITE LANDSCAPE WORKS ALONG NO. 3
ROAD

SABA ROAD

Off-Site Landscape on No. 3 Road

On-Site Bus Loop Fence Detail



ON SITE: 3'-0" H; Perimeter Fence Detail
SCALE: 1" = 1'-0"

Approximate extent of new planting:
quantities may vary; contractor to confirm on
site, see sheet of for site planting legend
see sheet of for site planting legend

OFFSITE LANDSCAPE WORKS ALONG NO. 3
ROAD

SABA ROAD

DESIGNED	AL	DATE
DRAWN	MTB	DATE
CHECKED	PK	DATE
APPROVED		DATE

No.	DWG No	DESCRIPTION

DATE	BY	DESCRIPTION
MARCH 2019 AB		RE-USE FOR DP
MAY 02 2019 AB		RE-USE FOR DP
JUNE 03 2019 AB		RE-USE FOR DP

REV	DESCRIPTION
04	
05	
06	



PREPARED BY:
durantekruk
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www.dkl.bc.ca

SEAL

BAR SCALE(S):



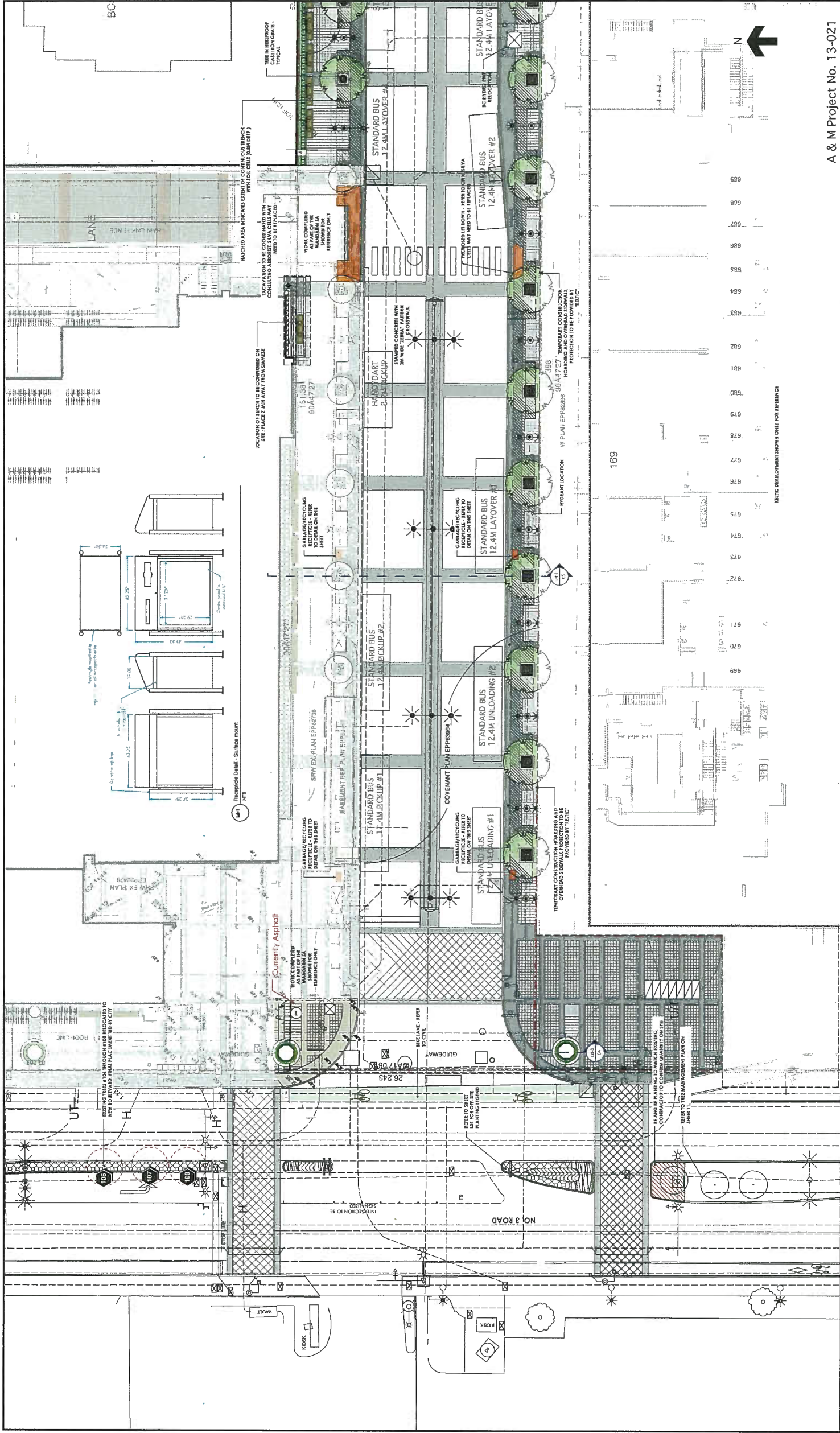
BRIGHOUSE STATION
BUS MALL
LANDSCAPE PLAN

A & M Project No. 13-021

SCALE: 1/8" = 1'-0"	DWG PROJECT #	CITY PROJECT #	LANDSCAPE PROJECT #
DATE: JULY 2013	13042	42425-15-10	06 01 03

SUPERSEDES PRINTS OF THIS NUMBER WITH LETTERS PREVIOUS TO →

DP 11-593871-4



A & M Project No. 13-021

BRIGHOUSE STATION
BUS MALL
LANDSCAPE PLAN

BAR SCALE(S):



SEAL

PREPARED BY:

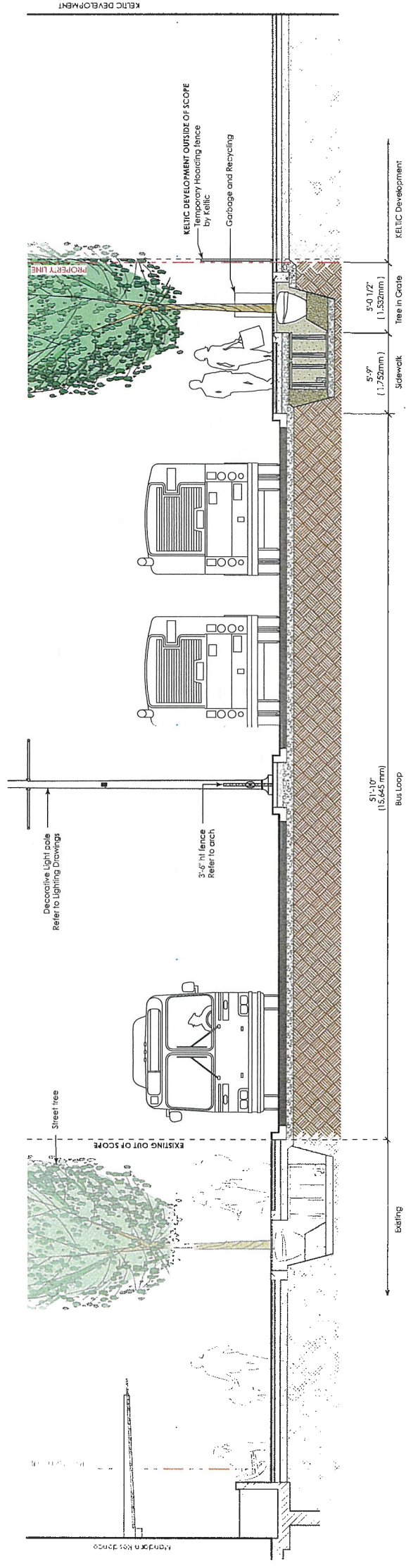
Durante Kreuk Ltd.
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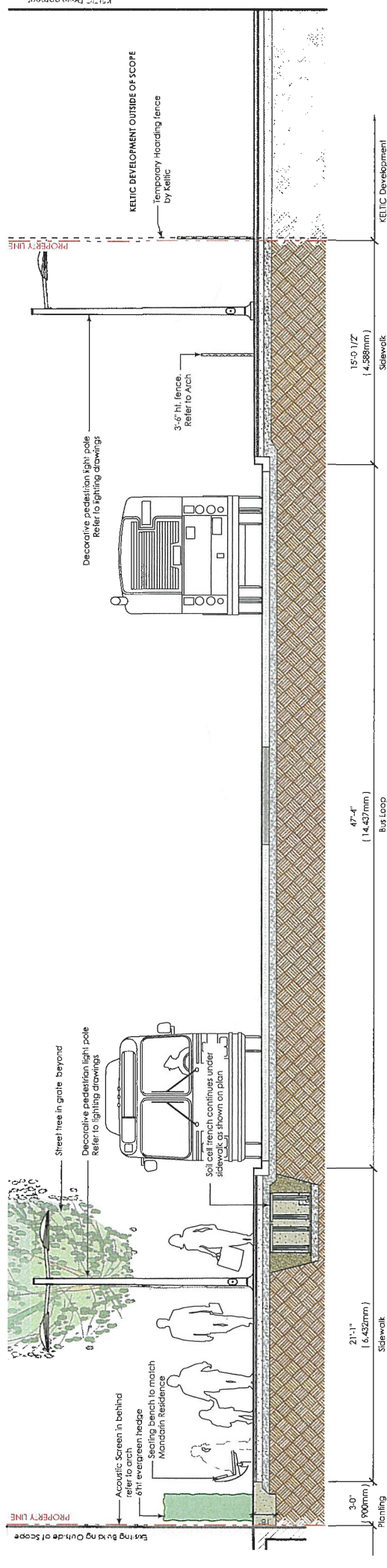
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NO.	DATE	DATE	DESCRIPTION
1	MAY 01, 2014	AS	RE-BUSING FOR DP
2	MAY 07, 2014	AS	RE-BUSING FOR DP
3	JUNE 03, 2014	AS	RE-BUSING FOR DP
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SCALE: 1/8" = 1'-0"	DATE: JUL 1, 2014	PROJECT: 13-021	LANDSCAPE PLAN
DATE: JUL 1, 2014	PROJECT: 13-021	LANDSCAPE PLAN	03.01.09

DP 11-593871-5

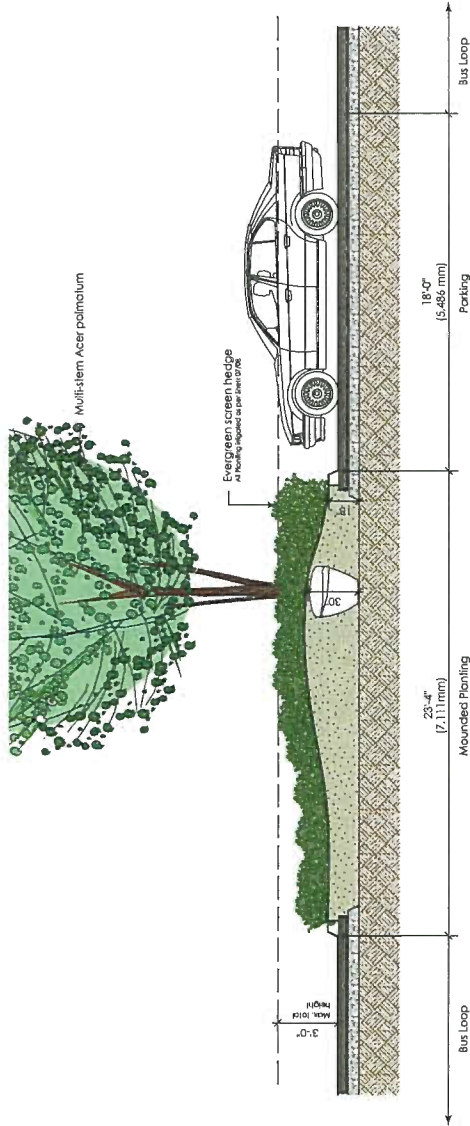
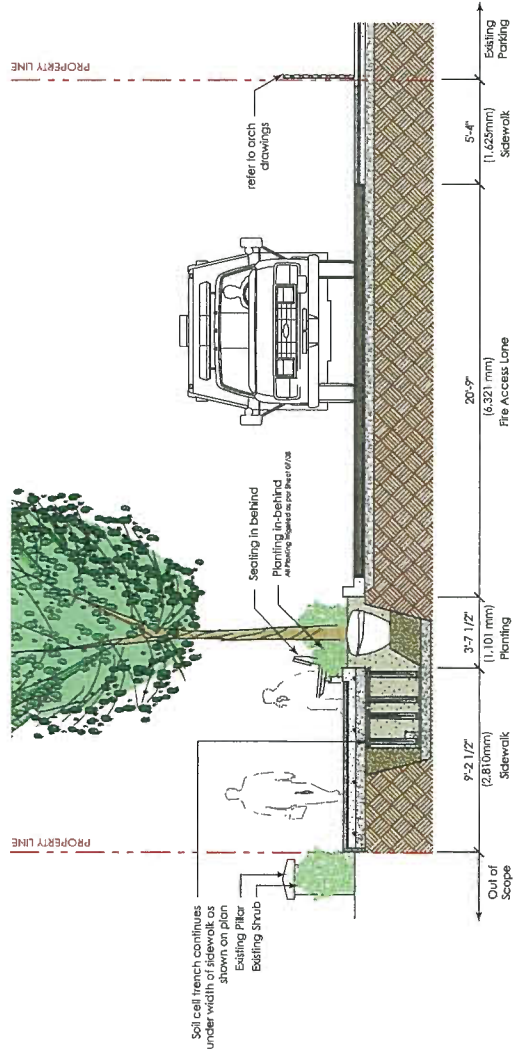
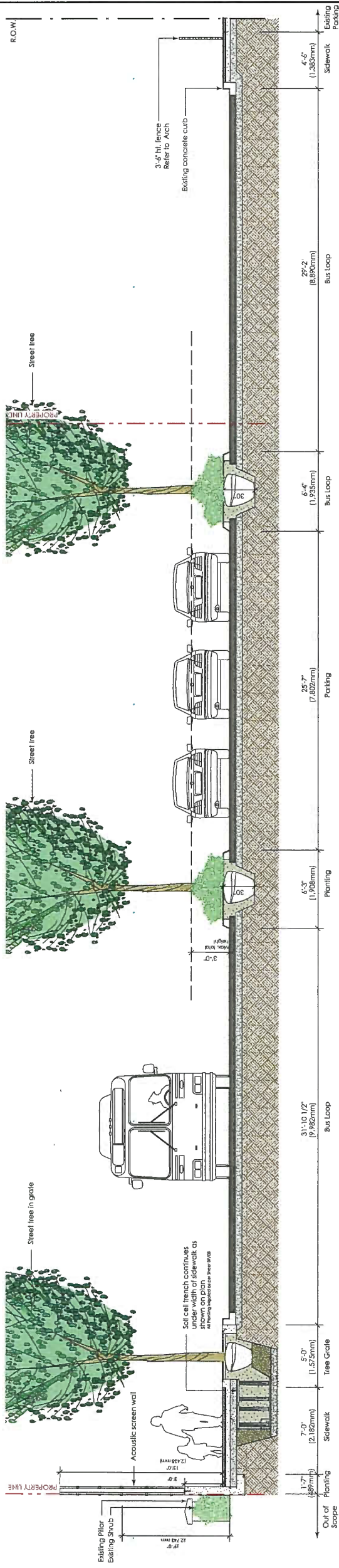


Ld-1 Section through bus loop - A



Ld-2 Section through bus loop - B

[illegible]

[illegible][illegible]

REVISIONS			
DATE	BY	DESCRIPTION	REV
MAY 01, 2018	AB	RE-SUB FOR DP	04
MAY 01, 2018	AB	RE-SUB FOR DP	05
JUNE 03, 2018	AB	RE-SUB FOR DP	06
TYPED BY			

RECEIVED BY:



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dk

BAR SCALE(S):
SCALE AS SHOWN

BRIGHOUSE STATION
BUS MALL
LANDSCAPE SECTIONS

SCALE AS SHOWN	DKL PROJECT #	CITY PROJECT #	LANDSCAPE DRAWING #
DATE JULY - 2013	13032	842676-18-10	06 of 09

SUPERSEDES PRINTS OF THIS NUMBER WITH LETTERS PREVIOUS TO →



Image 1: North Neighbour
FACING EAST ELEVATION

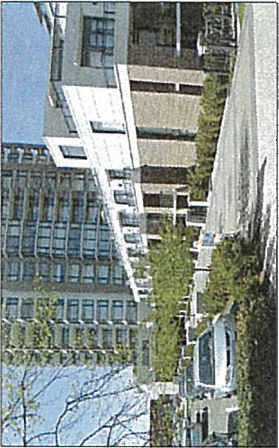
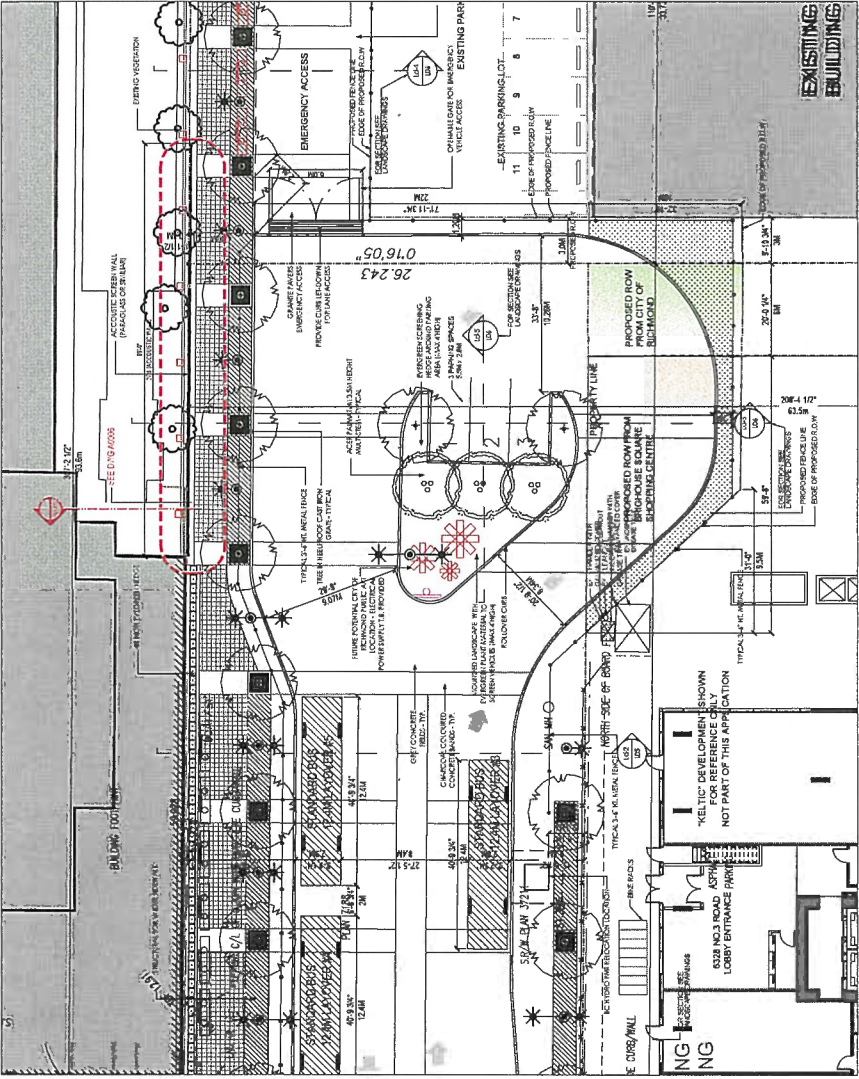
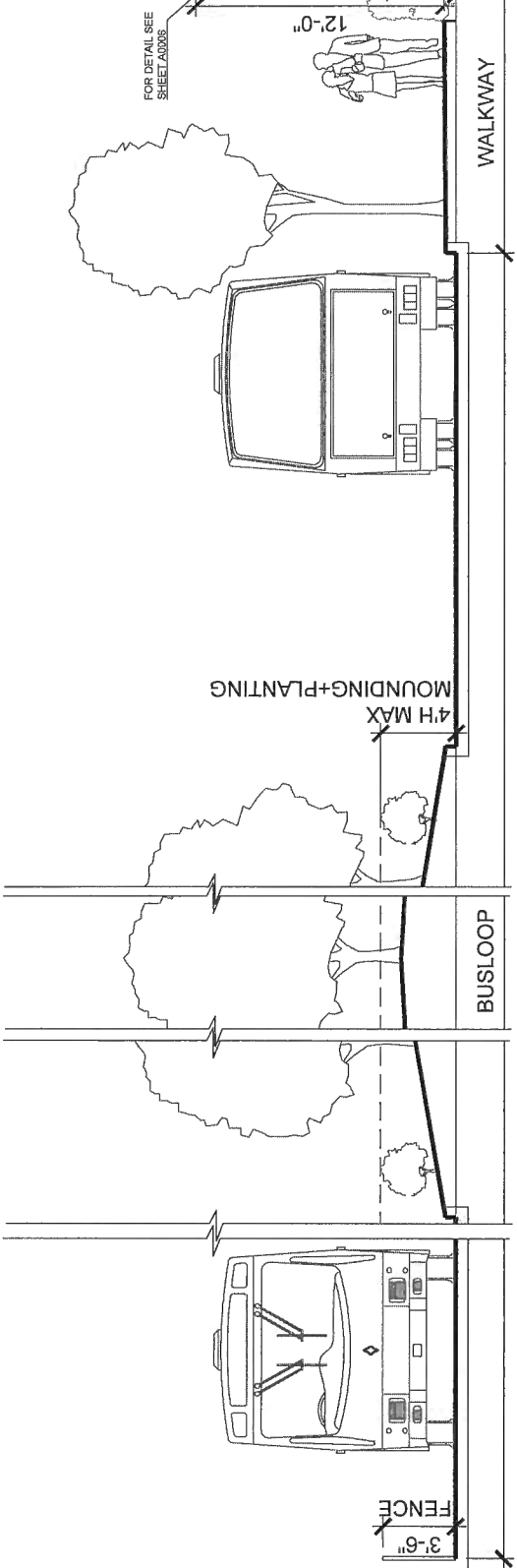


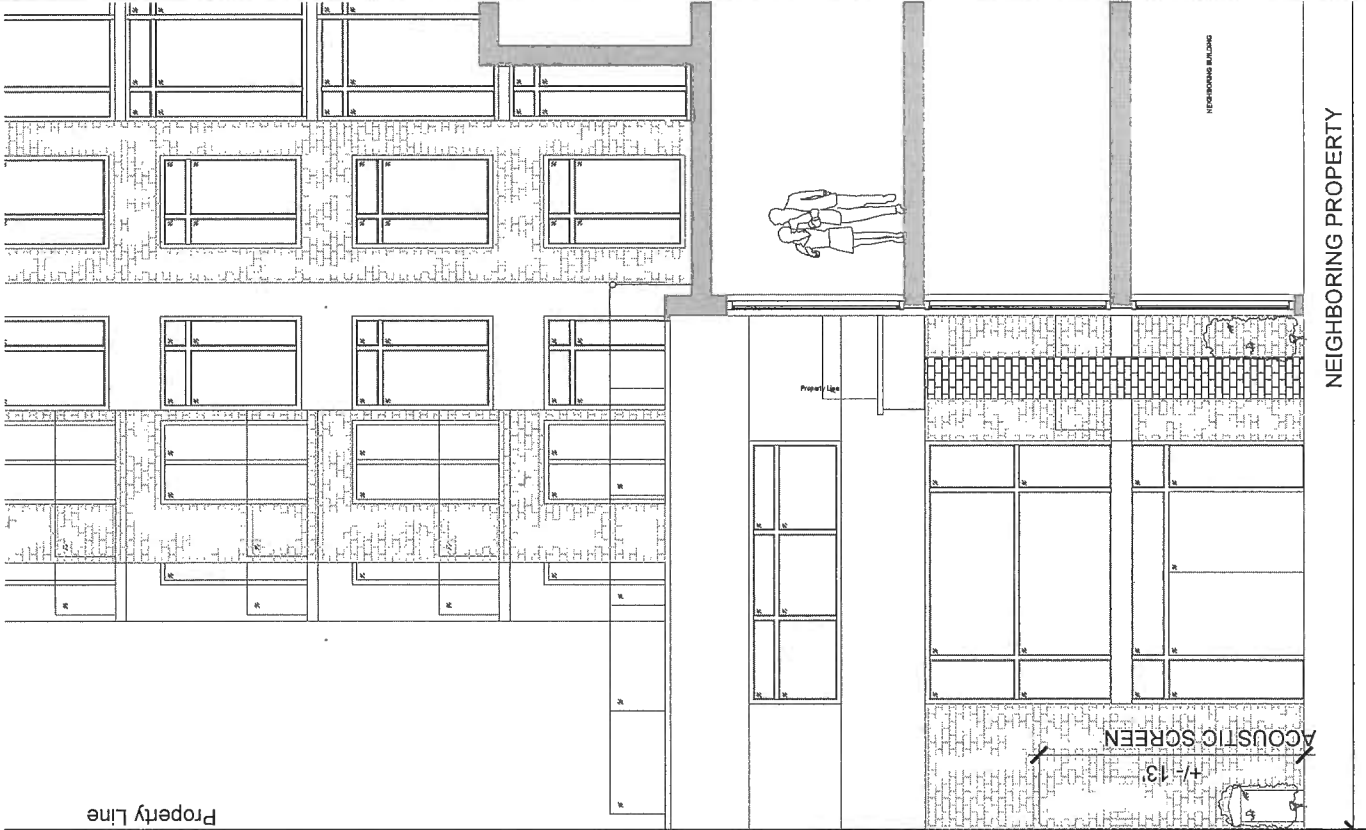
Image 2: North Neighbour
FACING SOUTH-EAST ELEVATION



Key Plan
Scale: 1/16" = 1'-0"



Acoustic Screen
Scale: 1/4" = 1'-0"



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ACOUSTIC SCREEN

SCALE: 1/12"=1'-0"

6302 No 3 Road, Richmond
DEVELOPMENT PERMIT RE-SUBMISSION
June 03, 2019

A0005

DP 11-593871-12

4.5.5.5 Poster Case – Double-Sided Info Wall

Product Codes
PCe.nh, 2PCe.iw

Relevant Sign Types
E3, T7

Lines
All

Description
Free standing twin ANSI E double sided poster case, displaying paper based information (4 posters). Two levels of header panel

Materials and construction
External frame Translink Two Part Extrusion to main body top and bottom with aluminum capping plates on sides.

Proprietary hinged extruded aluminum framing system supporting a glass door panel with SkyTrain cam locks, combined header panels to be fabricated, welded and dressed using low carbon steel for Vitreous Enamel finish.

Main structure supported by 101.6mm (4") aluminum posts with 76.2 (3") tapping rail and spun aluminum feet to finish at grade level.

Colours (See Common Parts and Finishes)

- Colour A
- Colour B
- Colour E
- Colour F
- Colour N

Finishes

All external trim and support structure finished with suitable grade of architectural quality polyester powdercoat or other paint finish appropriate to environment. Powder coat colour Supermal P4100-919G Sparkle Silver.

Shadow gap detailing between main post supports and main structure together with tapping rail connection saddles powdercoated RAL 5003.

Header Panels: Vitreous Enamel on low carbon steel.

Marie-Louise poster border (applied to inside face of glass) 3M Vinyl Pearl Gray Series 7725-11 or Series 7125_11.

5mm thick clear tempered glass.

Installation

Surface fixed at grade with chemical fixings or cast in studs to concrete base or sidewalk.

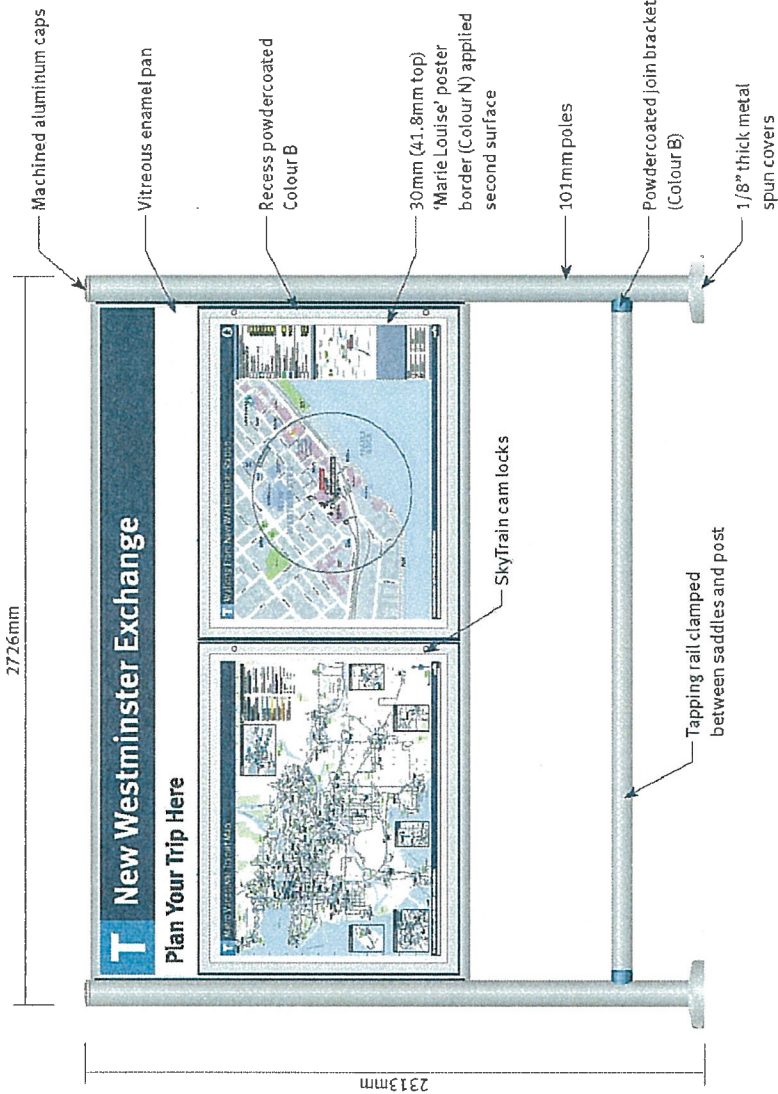
Overall dimensions

These are approximate dimensions. See production drawings for exact sizes.

- 2PCe.iw
Outside dimensions: 2313mm X 2726mm X 249mm

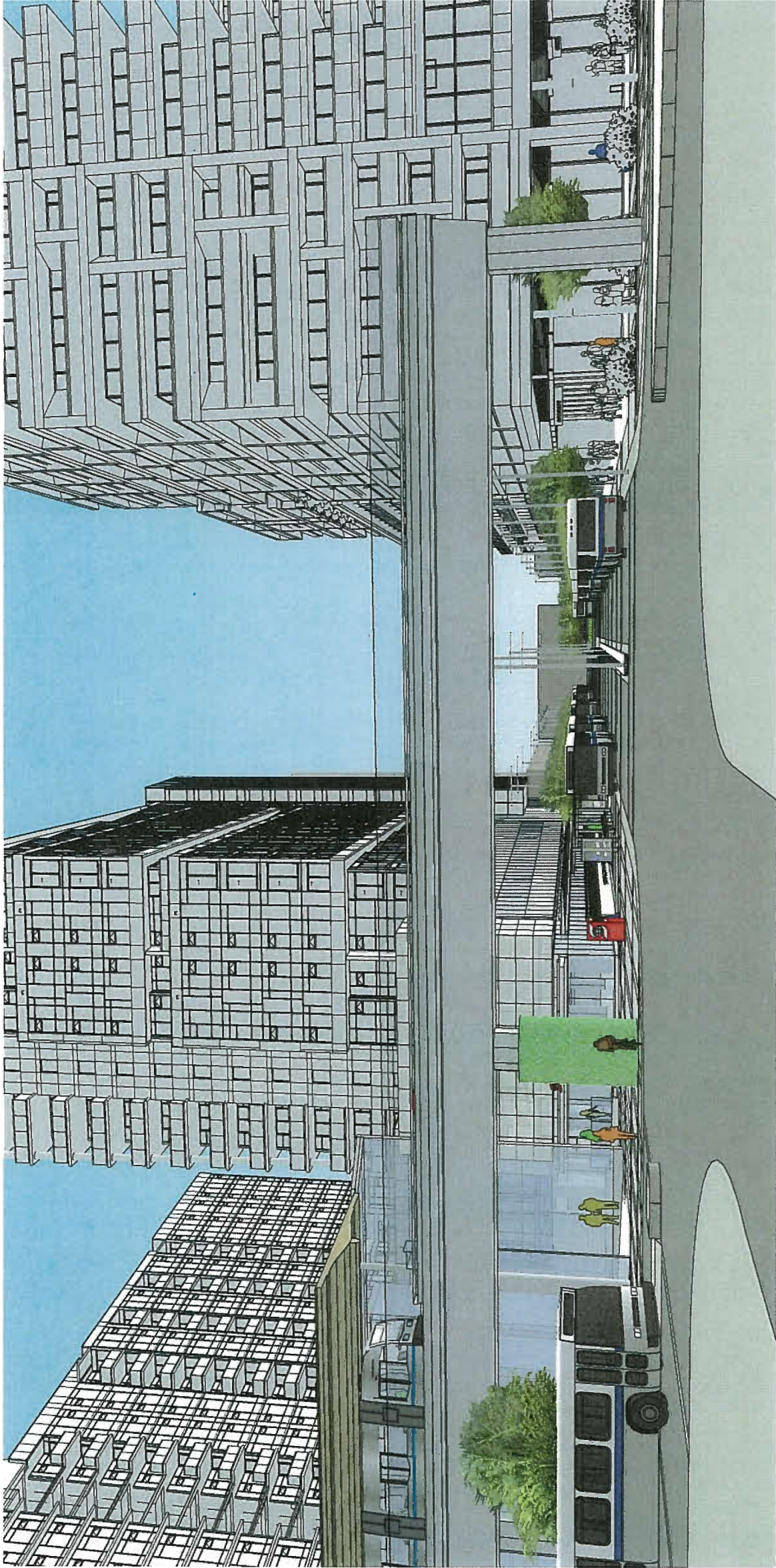
Production drawings reference section

5.2.4.2

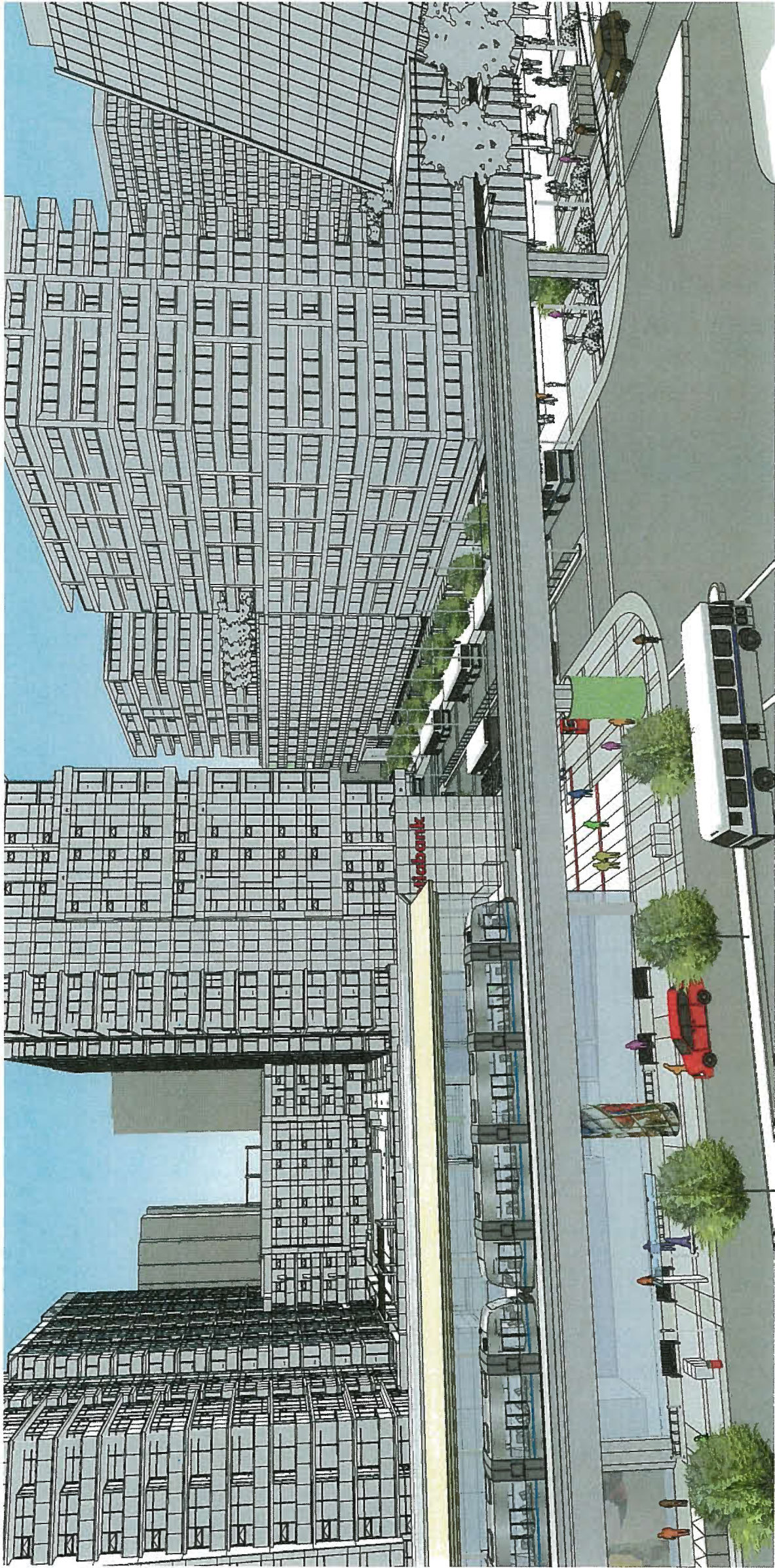


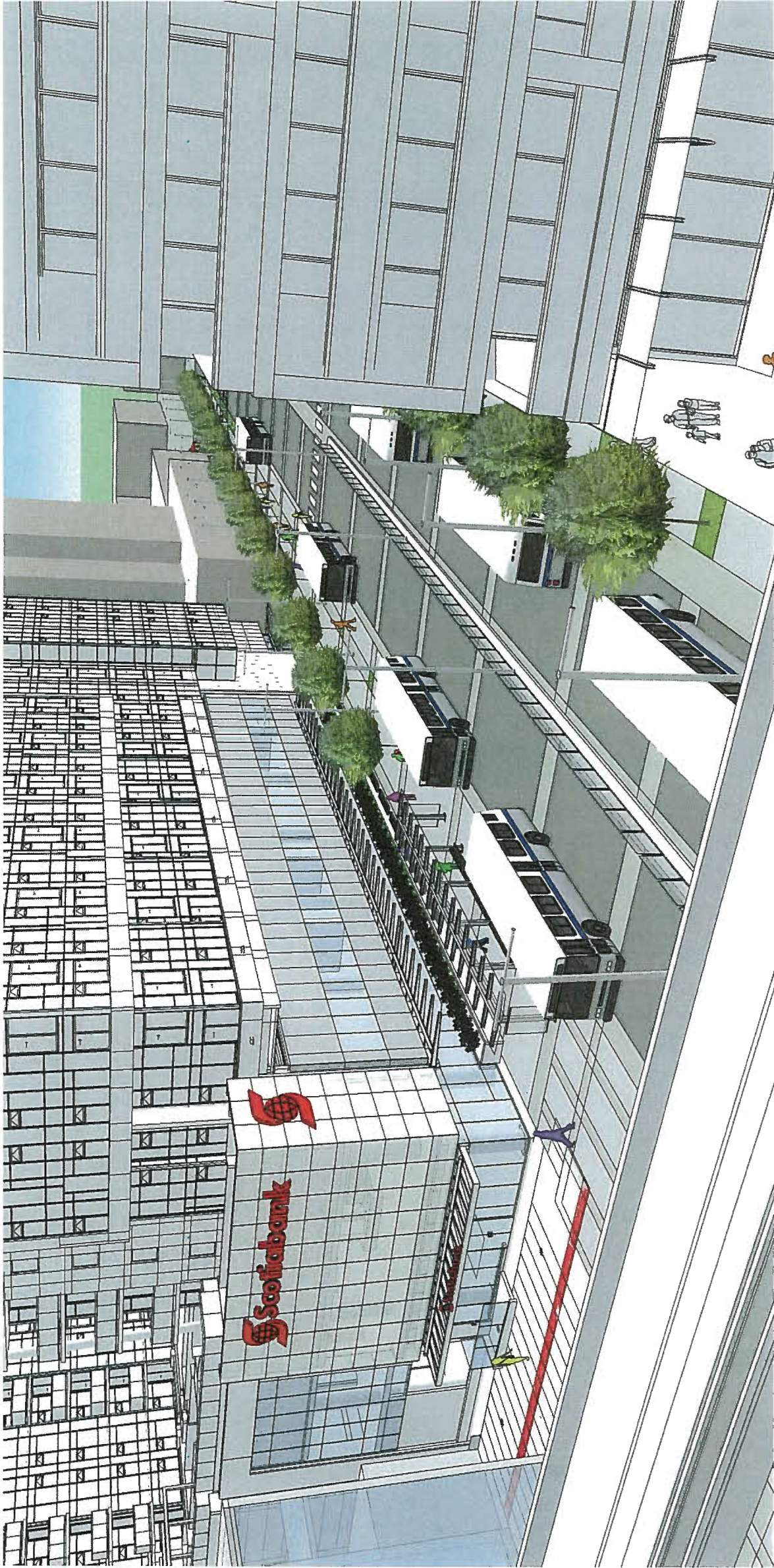
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Product Code: 2PCe.iw

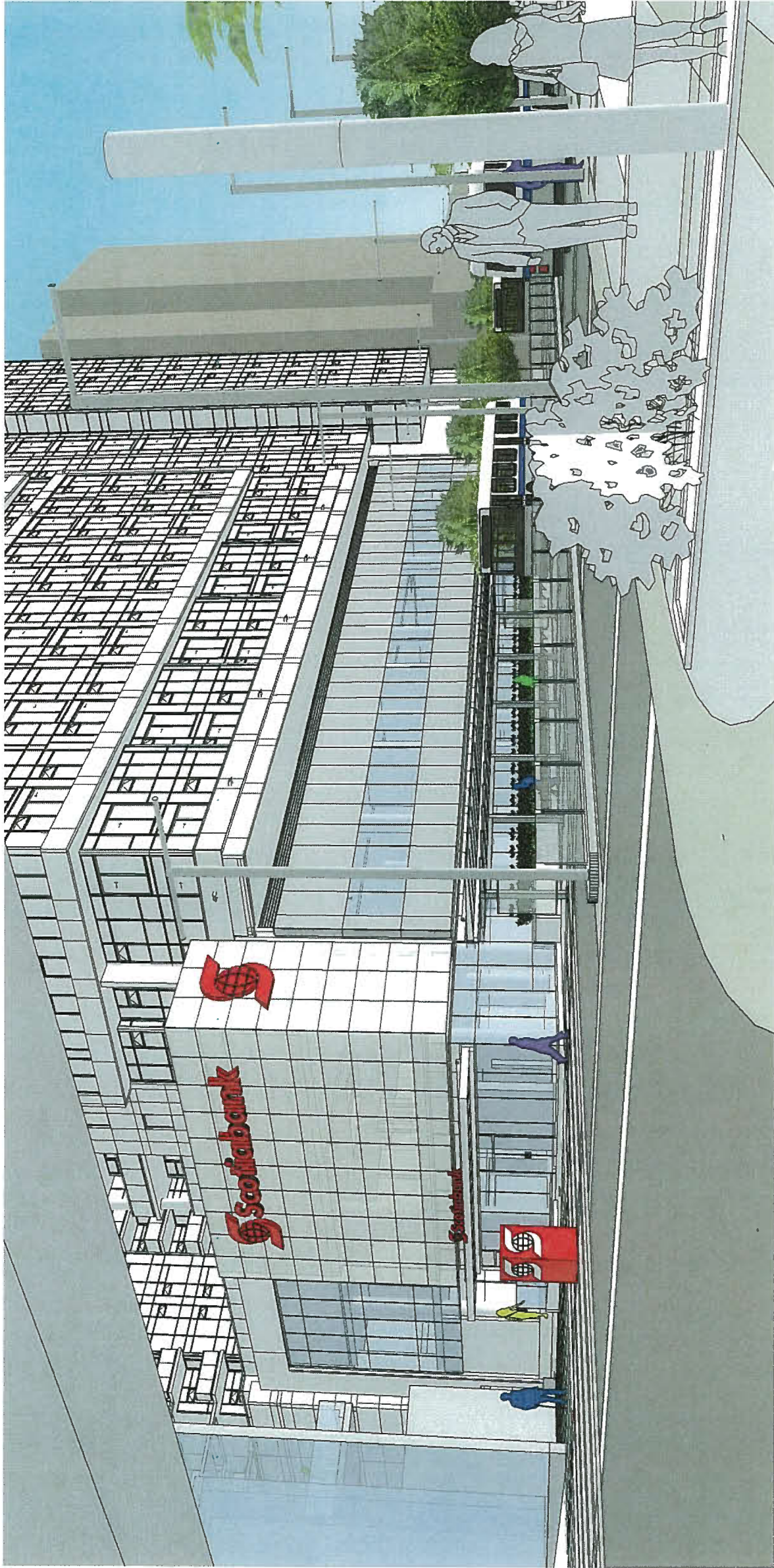




DP 11-593871 - reference





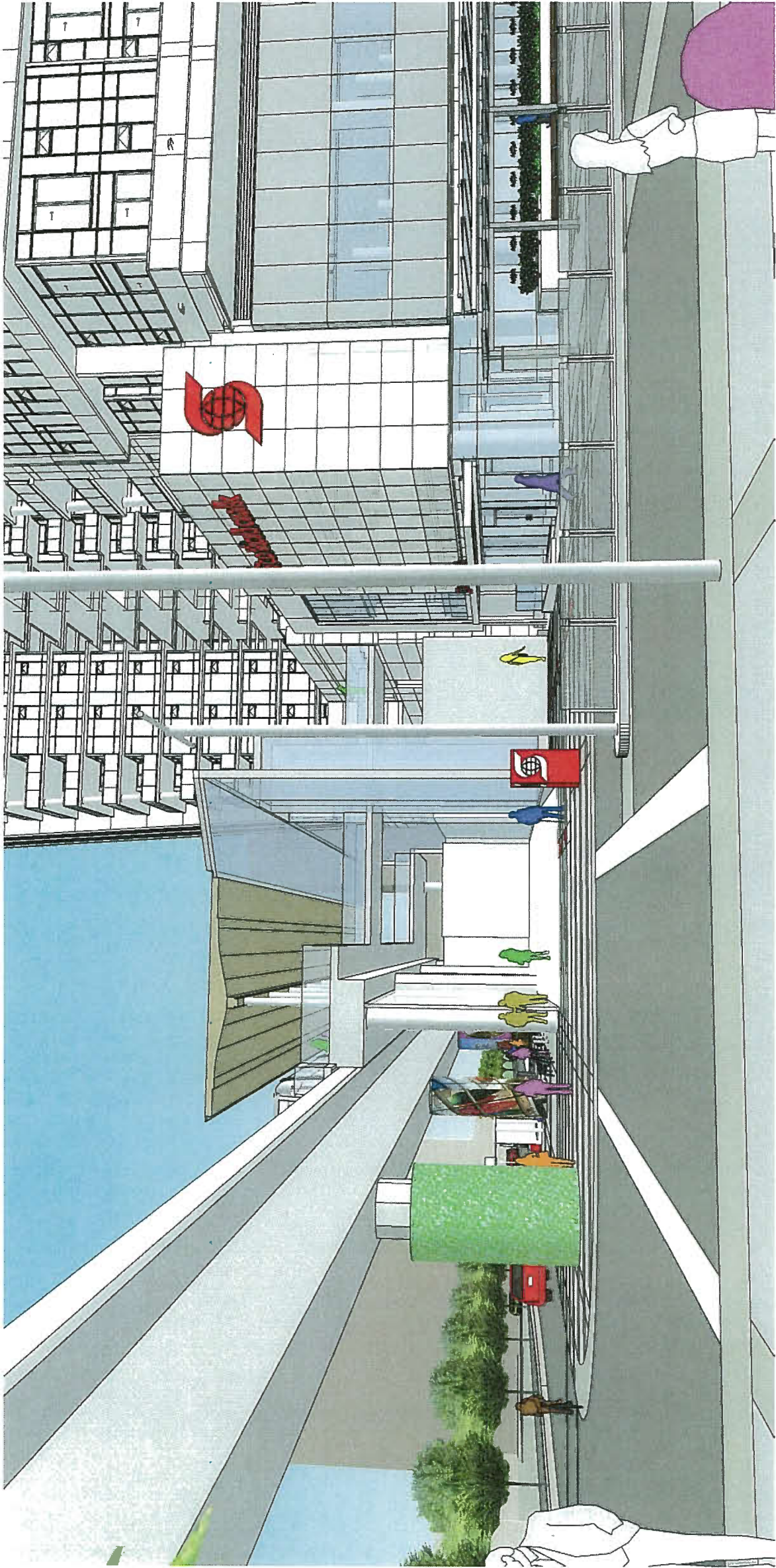


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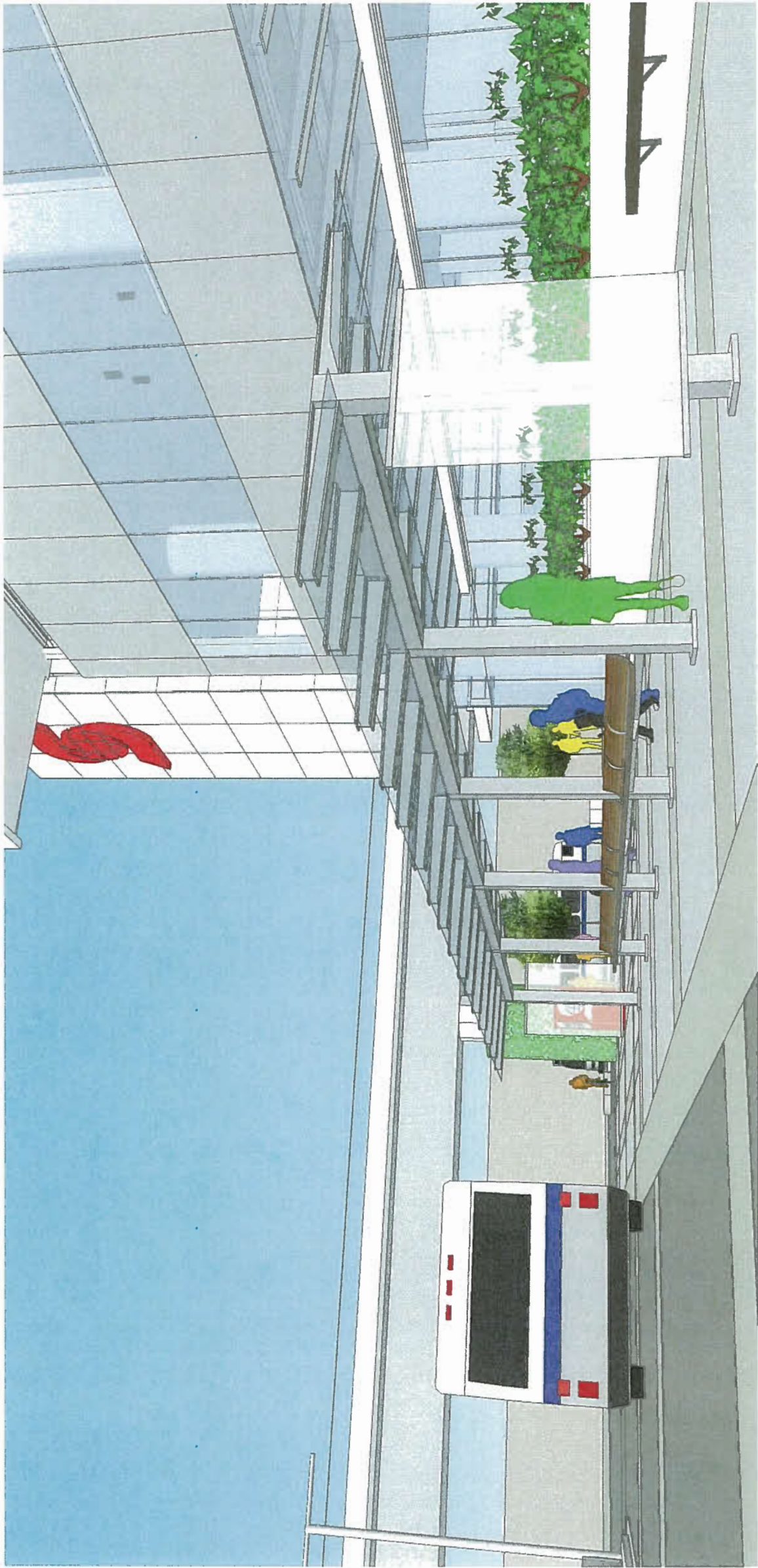
TRANSLINK

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DEVELOPMENT PERMIT RE-SUBMISSION
June 03, 2019

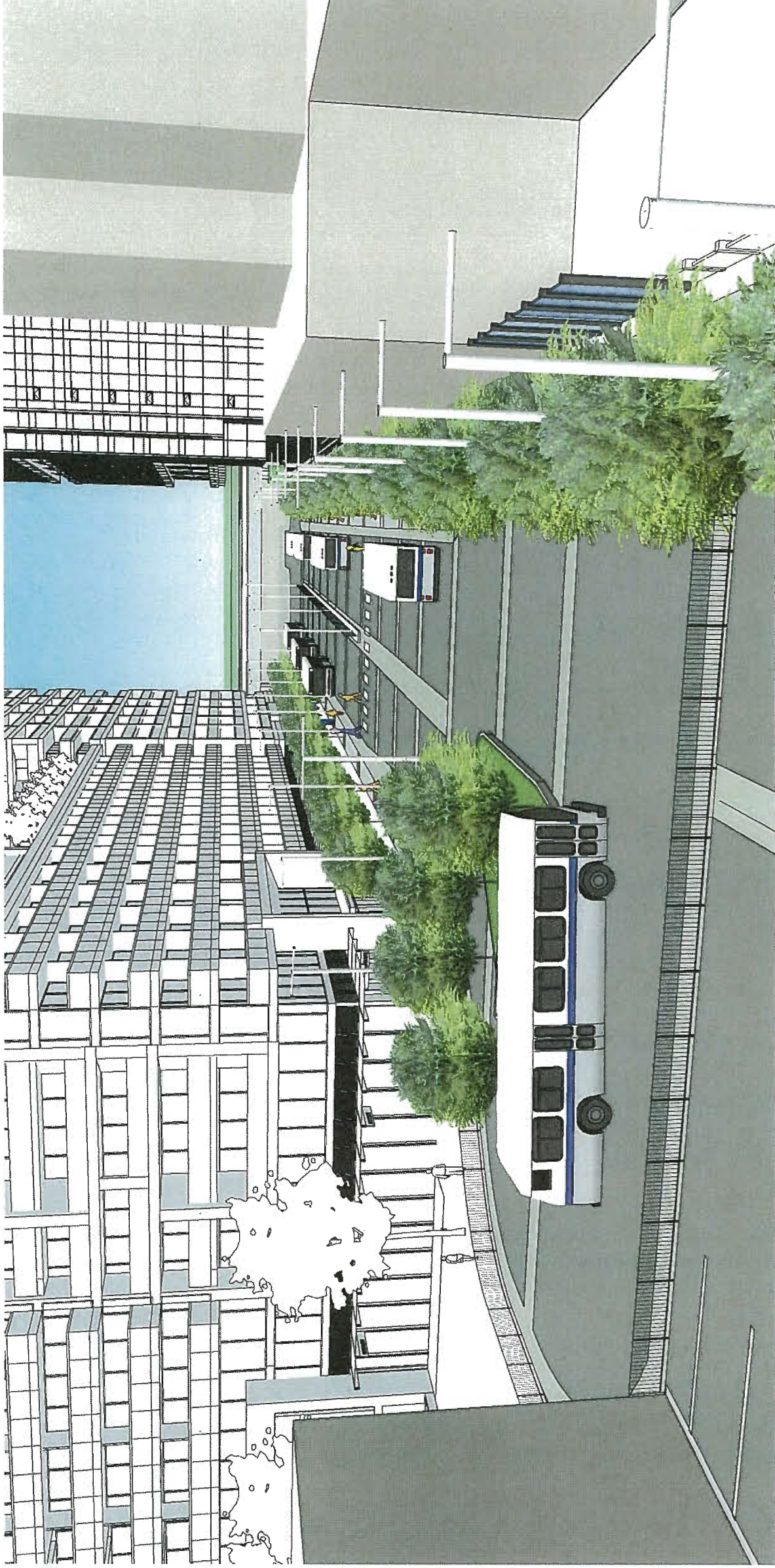
BUS MALL







DP 11-593871 - Reference



TRANSLINK

BUS MALL

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DEVELOPMENT PERMIT RE-SUBMISSION
June 03, 2019

DP 11-593871-Reference

