

Council Regular Agenda

Council Chambers, 3rd Floor City Hall, 2580 Shaughnessy Street, Port Coquitlam, BC **Tuesday**, **November 27**, 2018

Time: 6:00 p.m. (following Public Hearing)

1. CALL TO ORDER

2. ADOPTION OF THE AGENDA

2.1 Adoption of the Agenda

Recommendation:

That the November 27, 2018, Regular Council Meeting Agenda be adopted as circulated.

3. PRESENTATIONS

3.1 PoCo EFC U17 Girls Soccer

4. BYLAWS

4.1 Bylaw Notice Enforcement Amendment Bylaw No. 4096 - First Three Readings Recommendation:

That Council give Bylaw Notice Enforcement Amendment Bylaw No. 4096 first three readings.

4.2 Zoning Amendment Bylaw No. 4093 for #3190-2850 Shaughnessy Street (Shaughnessy Station Childcare) - Third Reading

Recommendation:

That Council give Zoning Amendment Bylaw No. 4093 for #3190-2850 Shaughnessy Street (Shaughnessy Station Childcare) third reading.

4.3 Delegation of Authority Amendment Bylaw No. 4094 & Council and Committee Procedures Amendment Bylaw No. 4095 - Final Reading

Recommendation:

That Council give Delegation of Authority Amendment Bylaw No. 4094 & Council and Committee Procedures Amendment Bylaw No. 4095 final reading.

5. REPORTS

5.1 Development Variance Permit DVP00055 for 3590 Inverness Street

Recommendation:

That Council approve Development Variance Permit DVP00055 for 3590 Inverness Street.

6. NEW BUSINESS

7. OPEN QUESTION PERIOD

8. CLOSED ITEMS RELEASED TO PUBLIC

The following resolutions from closed meetings have been released to the public:

October 2, 2018, Closed Council

That the City of Port Coquitlam enter into a renewal contract to continue to provide recycling collection services for Recycle BC.

9. ADJOURNMENT

9.1 Adjournment of the Meeting

Recommendation:

That the November 27, 2018, Regular Council Meeting be adjourned.

Bylaw Notice Enforcement Amendment Bylaw

RECOMMENDATION:

That Council give first three readings to Bylaw Notice of Enforcement Amendment Bylaw, 2018, No. 4096.

PREVIOUS COUNCIL/COMMITTEE ACTION

None

REPORT SUMMARY

This report proposes that a housekeeping bylaw be approved to correct Schedule "A" of Bylaw Notice Enforcement Bylaw #3814 so that references the correct section of Building and Plumbing Bylaw #3710.

DISCUSSION

Staff have identified an error in the Bylaw Notice Enforcement Bylaw's reference to the stop work order regulation of the Building and Plumbing Bylaw. The current reference is "s.253" whereas it should be "s.26.3". The Bylaw Notice Enforcement Bylaw needs to be corrected in order to allow for staff to enforce stop work orders through the ticketing process.

FINANCIAL IMPLICATIONS

Minimal revenue has been lost to date.

OPTIONS

(Check = Staff Recommendation)

#	Description
1	Give the amending bylaw first three readings as distributed.
2	Amend the bylaw prior to giving it first three readings.
3	Take no action (do not give the bylaw readings).

ATTACHMENTS

Attachment #1: Bylaw Notice Enforcement Amendment Bylaw No. 4096

Attachment #2: The bylaw amendment shown in track changes



Report To: Department: Approved by: Date: Council Corporate Office G. Joseph November 27, 2018

CITY OF PORT COQUITLAM

BYLAW NOTICE ENFORCEMENT AMENDMENT BYLAW, 2018

Bylaw No. 4096

The Council of the Corporation of the City of Port Coquitlam enacts as follows:

1. CITATION

This Bylaw is cited as "Bylaw Notice Enforcement Bylaw, 2013, No. 3814, Amendment Bylaw, 2018, No. 4096".

2. **ADMINISTRATION**

That the Bylaw Notice Enforcement Bylaw, 2013, No. 3814, Schedule "A" (Building and Plumbing Bylaw No. 3710) be amended by changing the Bylaw Section number indicated in Column 2 for the section "Fail to Comply Stop Work Order, from "253" to "26.3".

Mayor Corporate Officer		er
READ A THIRD TIME this	day of	2018
READ A SECOND TIME this	day of	2018
READ A FIRST TIME this	day of	2018

2018

Building and Plumbing Bylaw No. 3710

Column 1	Column 2	Column 3	Column 4	Column 5
DESCRIPTION	SECTION	DISCOUNTED	FULL	COMPLIANCE
	NO. IN	PENALTY IN \$	PENALTY IN \$	AGREEMENT
	BYLAW	(within 14 days)	(after 14 days)	DISCOUNT ⁽¹⁾
Construction without building permit	6.1	100.00	150.00	50%
Occupancy contrary to notice or permit	6.2	100.00	150.00	50%
Construction contrary to plans	6.5	100.00	150.00	n/a
Failure to obtain inspection	17.2	100.00	150.00	n/a
Unlawful disposal of pool water	21.2	100.00	150.00	n/a
Improper Maintenance of pool fence	21.5	100.00	150.00	50%
Moving Building without permit	23.1	100.00	150.00	n/a
Fail to Comply Stop Work order	26.3	200.00	300.00	n/a

⁽¹⁾ Where compliance agreement entered in accordance with section 8 (a)(v) of this bylaw.

SCHEDULE "A" Designated Bylaw Contraventions and Penalties

Building and Plumbing Bylaw No. 3710

Column 1	Column 2	Column 3	Column 4	Column 5
DESCRIPTION	SECTION	DISCOUNTED	FULL	COMPLIANCE
	NO. IN	PENALTY IN \$	PENALTY IN \$	AGREEMENT
	BYLAW	(within 14 days)	(after 14 days)	DISCOUNT ⁽¹⁾
Construction without building permit	6.1	100.00	150.00	50%
Occupancy contrary to notice or permit	6.2	100.00	150.00	50%
Construction contrary to plans	6.5	100.00	150.00	n/a
Failure to obtain inspection	17.2	100.00	150.00	n/a
Unlawful disposal of pool water	21.2	100.00	150.00	n/a
Improper Maintenance of pool fence	21.5	100.00	150.00	50%
Moving Building without permit	23.1	100.00	150.00	n/a
Fail to Comply Stop Work order	253 <u>26.3</u>	200.00	300.00	n/a

⁽¹⁾ Where compliance agreement entered in accordance with section 8 (a)(v) of this bylaw.

Zoning Amendment Bylaw No. 4093 for #3190-2850 Shaughnessy Street (Shaughnessy Station Childcare) – Available for Third Reading

RECOMMENDATION:

That Council give Zoning Amendment Bylaw No. 4093 for #3190-2850 Shaughnessy Street (Shaughnessy Station Childcare) third reading.

PREVIOUS COUNCIL/COMMITTEE ACTION

At the November 13, 2018, Council Meeting, the following motion was passed:

October 9, 2018 - Smart Growth Committee recommended to Council:

- 1. That Council give 1st & 2nd Readings to Zoning Bylaw Amendment Bylaw 4093 to permit a child care facility having a capacity of 136 children at #3190 2850 Shaughnessy Street and allow a 2.4m fence height surrounding the outdoor play space.
- 2. That the following conditions be met prior to adoption of the bylaw amendments:
 - a. Receipt of information from Fraser Health as to its licence requirements for a large child care facility at this location;
 - b. Receipt of information regarding fencing impacts, including the Shaughnessy Street streetscape and sunlight within the outdoor play space;
 - c. Receipt of a building code analysis and identification of building design changes as may be required to comply with daycare guidelines.

November 13, 2018 - Staff recommend to Council the following additional conditions:

- a. Renewal of an encroachment agreement for the encroachments within the Shaughnessy Street right of way; and,
- b. Completion of design and submission of fees and securities for required off-site works and services to the satisfaction of the Director of Development Services.

REPORT SUMMARY

Zoning Amendment Bylaw No. 4093 will be considered at a Public Hearing on November 27, 2018, after which Council may decide whether it wishes to proceed with third reading.

FINANCIAL IMPLICATIONS

None.

OPTIONS

(Check = Staff Recommendation)

#	Description
1 🗸	Give third reading to the Bylaw.
2	Request that additional information be received and determine next steps after receipt of that information.
3	Fail third reading.

ATTACHMENTS

Attachment #1: Draft Bylaw No. 4093

Attachment #2: 2018-11-13 – Report to Council



Report To: Council
Department: Corporate Office
Approved by: C. Deakin

Meeting Date: November 27, 2018

CITY OF PORT COQUITLAM

ZONING AMENDMENT BYLAW, 2018

Bylaw No. 4093

The Council of the Corporation of the City of Port Coquitlam enacts as follows:

1. CITATION

This Bylaw is cited as "Zoning Bylaw, 2008, No. 3630, Amendment Bylaw, 2018 No. 4093".

2. ADMINISTRATION

Comprehensive Development Zone CD10 is amended as follows:

- 2.1 In Table 6.10.2, by adding the following Note 5 to each of the columns within the row, 'Uses permitted in the Community Commercial (CC) zone:
 - "Note 5. One child care facility is permitted within this zone at Unit 3190-2850 Shaughnessy Street and it may accommodate up to 136 children. The facility must comply with the requirements of the B.C. Building Code for assembly uses."
- 2.2 In section 6.10.3 Regulations, by adding the following subsection 5:
 - "5. A sound attenuating fence with a maximum height of 2.4 m is permitted to surround an outdoor recreation space associated with a child care facility. An outdoor recreation space shall not be located at the rear of the building."

Mayor	_	Corporate Office	er
ADOPTED this			
READ A THIRD TIME this			
PUBLIC HEARING HELD this	27 th day of		November, 2018
READ A SECOND TIME this	13 th day of		November, 2018
READ A FIRST TIME this	13 th day of		November, 2018

RECOMMENDATIONS:

October 9, 2018 - Smart Growth Committee recommended to Council:

- 1. That 1st & 2nd Readings to Zoning Bylaw Amendment Bylaw 4093 be given to permit a child care facility having a capacity of 136 children at #3190 2850 Shaughnessy Street and allow a 2.4m fence height surrounding the outdoor play space.
- 2. That the following conditions be met prior to adoption of the bylaw amendments:
 - a. Receipt of information from Fraser Health as to its licence requirements for a large child care facility at this location;
 - b. Receipt of information regarding fencing impacts, including the Shaughnessy Street streetscape and sunlight within the outdoor play space;
 - c. Receipt of a building code analysis and identification of building design changes as may be required to comply with daycare guidelines.

November 13, 2018: Staff recommend to Council the following additional conditions:

- a. Renewal of an encroachment agreement for the encroachments within the Shaughnessy Street right of way; and,
- b. Completion of design and submission of fees and securities for required off-site works and services to the satisfaction of the Director of Development Services.

PREVIOUS COUNCIL/COMMITTEE ACTION

At the October 9, 2018, Smart Growth Committee meeting, the following motion was passed:

That Smart Growth Committee recommend to Council that it approve RZ000148 subject to the following:

- Information from Fraser Health as to its licence requirements for a large child care facility at this location;
- Fencing impacts, including the Shaughnessy Street streetscape and sunlight within the outdoor play space;
- A building code analysis and identification of building design changes as may be required to comply with daycare guidelines.

And that this application be forwarded to the next Council meeting for 1st and 2nd reading.

Please refer to the Attachment 2 for prior resolutions related to this application.

REPORT SUMMARY

In accordance with the direction set by the Smart Growth Committee at its meeting held October 9, 2018, this report brings forward a zoning bylaw amendment that would allow for a child care facility accommodating 136 children in the Shaughnessy Station Shopping Centre. It includes a summary and discussion of the additional information that was submitted at the committee meeting by the applicant as well as information the applicant has subsequently submitted to staff. In addition to conditions identified by the Smart Growth Committee, this report recommends two additional conditions of approval to ensure the applicant provides off-site services are provided in accordance with the City's normal requirements and to obtain an agreement for existing encroachments.



Report To: Department: Approved by: Meeting Date: Council Development Services L.L. Richard November 13, 2018

BACKGROUND

The attached staff report to the Smart Growth Committee dated October 9th, 2018 includes the history of previous Committee and Council review of the initial proposal for a large child care facility at #3190 – 2850 Shaughnessy Street and amendments to that proposal.

At the October 9th Smart Growth Committee meeting, the applicant submitted the following additional information:

- (1) Interim ambient air quality study
- (2) An outdoor schedule for infant toddler and 3-5 years children suggesting rotating access to the outdoor play areas.

The applicant subsequently submitted the following additional information:

- (1) Final ambient air quality study
- (2) A Building Code analysis
- (3) A sunlight study
- (4) Clarification related to the proposed fence height and material.

DISCUSSION

The proposed size of the outdoor play space does not meet Fraser Health's minimum requirements based on the total number of children. However, the applicant has proposed that a schedule for class groups rotating through the outdoor play area and advises that the maximum number of children outside at any one time could meet Fraser Health's required minimum space requirements. The schedule further indicates that there would be sufficient access to space for children to have the opportunity for a minimum of 60 minutes of outdoor play per day.

The air quality study analyses five potential contaminants. While there are no specific standards for children's outdoor play areas, the report concludes that the levels of nitrogen dioxide, particulate matter, carbon monoxide, ozone and sulphur dioxide would be below the general exposure guidelines set by Metro Vancouver. Staff submitted the report to Metro Vancouver staff who are involved in monitoring regional air quality. They noted concerns about how the study was conducted, its short time frame (since air quality varies substantially over time) and the unique locational aspects of the proposed play area. They advised that the information on carbon monoxide and nitrogen dioxide levels could not be substantiated as meeting a level of acceptability. Metro staff's opinion was that the proposed play area is likely to be subject to very site specific air quality impacts due to its proximity to emissions associated with train traffic in the CP Rail yard and vehicle traffic emerging from the Shaughnessy Street tunnel and that the study was insufficient to make a conclusion regarding air quality in the vicinity of the playground. While they also noted that children are known to be more susceptible to the impacts of poor air quality, there are no standards which have been developed that would determine a level of acceptability.

With respect to the fence surrounding the outdoor play space, the applicant has proposed a minimum fence height of 2.4m in height and materials comprising a combination of noise barrier panels and semitransparent panels. As the Zoning Bylaw does not permit a fence of this height abutting a street, the proposed bylaw amendment includes a site-specific regulation that would allow for the height of a fence enclosing a children's play area to be 2.4m in height. Future review of a development permit could evaluate how the impacts of this fence on the pedestrian realm and streetscape may be mitigated by landscaping.

The sunlight study shows when the outdoor play areas would have access to sunlight. While the area is predominantly shaded, the analysis indicates there would be some light within the play areas during most playtime hours.

The high level building code analysis indicates the building can be adapted for a child care occupancy. Confirmation would be required at the time of building permit approval for tenant improvements, but compliance is not expected to be a significant issue.

The Development Engineering Division has identified the following off-site improvements which would be needed to bring the property and adjacent works into compliance with City standards:

- a. Shaughnessy Street to be constructed as required including a multi-purpose trail (widened sidewalk);
- b. Street lighting on Shaughnessy Street must be upgraded to meet City standards;
- c. Existing encroachments (retaining wall, lighting and landscaping) along Shaughnessy Street must be removed or a new encroachment agreement approved; and
- d. Servicing must be in compliance with the Subdivision Servicing Bylaw.

Staff recommend these offsite improvements be required in accordance with the City's normal requirements for a rezoning application in addition to those conditions recommended by the Smart Growth Committee.

FINANCIAL IMPLICATIONS

None.

PUBLIC CONSULTATION

An updated sign is in place on the site. To date, no additional comments have been provided to staff.

OPTIONS

(Check = Staff Recommendation)

#	Description
1	Council may set the conditions to be met prior to bylaw adoption as recommended by the Smart Growth Committee and staff and proceed with giving the bylaw amendment 1 st and 2 nd reading.
2	Council may determine that it wishes to receive additional information and defer giving 1 st and 2 nd reading to the amending bylaw. If this option is selected, the additional information to be provided should be specified.
3	Council may determine that does not wish to give 1 st and 2 nd readings to the application at this time and either reject the application or request additional information.

ATTACHMENTS

Attachment #1: Zoning Bylaw Amendment Bylaw 4093

Attachment #2: Staff report to Smart Growth Committee October 9, 2018

Attachment #3: Ambient Air Quality Study (Final)
Attachment #4: Classroom Outdoor Schedule

Attachment #5: Fencing Sunlight Study

Meeting Date: November 13, 2018

CITY OF PORT COQUITLAM

ZONING AMENDMENT BYLAW, 2018

Bylaw No. 4093

The Council of the Corporation of the City of Port Coquitlam enacts as follows:

1. <u>CITATION</u>

This Bylaw is cited as "Zoning Bylaw, 2008, No. 3630, Amendment Bylaw, 2018 No. 4093".

2. ADMINISTRATION

Comprehensive Development Zone CD10 is amended as follows:

- 2.1 In Table 6.10.2, by adding the following Note 5 to each of the columns within the row, 'Uses permitted in the Community Commercial (CC) zone:
 - "Note 5. One child care facility is permitted within this zone at Unit 3190-2850 Shaughnessy Street and it may accommodate up to 136 children. The facility must comply with the requirements of the B.C. Building Code for assembly uses."
- 2.2 In section 6.10.3 Regulations, by adding the following subsection 5:
 - "5. A sound attenuating fence with a maximum height of 2.4 m is permitted to surround an outdoor recreation space associated with a child care facility. An outdoor recreation space shall not be located at the rear of the building."

READ A FIRST TIME this	13" day of	November, 2018
READ A SECOND TIME this	13 th day of	November, 2018
PUBLIC HEARING HELD this		
READ A THIRD TIME this		
ADOPTED this		
Mover	Compa	rata Officer
Mayor	Corpor	rate Officer

RECOMMENDATION:

That the Smart Growth Committee recommend to Council that the application to amend the Zoning Bylaw to allow for a child care facility accommodating up to 136 children at #3190 – 2850 Shaughnessy Street, as amended, be refused.

PREVIOUS COUNCIL/COMMITTEE ACTION

Smart Growth Committee resolution July 27, 2016:

That the application to amend the Zoning Bylaw to allow for a child care facility accommodating up to 136 children at 3190 – 2850 Shaughnessy Street be refused.

Council resolution November 14, 2016:

That the application to amend the Zoning Bylaw to allow for a child care facility accommodating up to 136 children at #3190 – 2850 Shaughnessy Street be refused.

Smart Growth Committee resolution July 3, 2018:

That the Smart Growth Committee recommend to Council that the application to amend the Zoning Bylaw to allow for a child care facility accommodating 136 children at #3190 – 2850 Shaughnessy Street be refused.

REPORT SUMMARY

Terracap, owner of the Shaughnessy Station Shopping Centre at the corner of Lougheed Highway and Shaughnessy Street, has submitted an amendment to its rezoning application for a child care facility within a commercial zone to accommodate 136 children. The location of the outdoor play space has been amended to replace the previously-proposed space next to the railway tracks with the narrow side yard space between Shaughnessy Street and the building wall, similar to the 2016 proposal. The amended application includes an acoustic study which concludes noise levels within the proposed play area would exceed recommended thresholds for children, and does not include information that would address concerns related to air quality or impacts of the proposed acoustic fence. This report recommends the amended proposal also be refused.

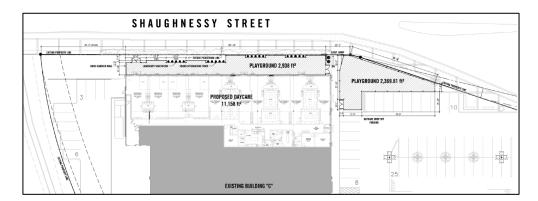
BACKGROUND

This application is described in the attached July 3, 2018 staff report. Following Committee's recommendation to refuse this application, the applicant requested it not proceed to Council and subsequently submitted a revised application.

The revised application includes the following:

Relocation of the outdoor play space to the side and front of the building with a location and
configuration that is similar to that refused by Council in 2016. It has split the play area to retain
the pedestrian walkway between the sidewalk along Shaughnessy Street and the retail
frontage. However, the new proposed area is smaller and would not meet the minimum area as
set by provincial regulations. To address this shortfall, the applicant proposes to rotate times

when children would have access to the outdoors. Fraser Health would determine if this solution would be permitted upon receipt of a licence application.



- An acoustic study. The study recommends a 1.8m high noise barrier around the play space in
 front of the building and a 2.4m noise barrier separating the linear play space along the side of
 the building from Shaughnessy Street. It concludes noise levels would exceed the maximum
 55dBA threshold recommended by the World Health Organization as well as the City of
 Vancouver's technical guidelines even with a barrier of this height.
- A rendering for a fence with acoustic properties:



A report by the Canadian Centre for Policy Alternatives titled "Child Care Deserts in Canada".
 The report does not identify any areas within Port Coquitlam where the number of child care spaces is low enough to qualify as a desert.

DISCUSSION

Staff continue to recommend refusal of the application. While the revised outdoor play area location addresses safety concerns associated with the former siting next to the CP Rail tracks, it does not resolve the concerns identified previously with respect to noise, air quality, and impact of the fence. The resubmission includes an acoustic report which indicates the noise levels would be unacceptable within this space, even with a fence designed to absorb noise and constructed to a height of 2.4m (8'). No information on air quality has been submitted, but staff previously identified this to be a potential concern due to the close proximity of outdoor play spaces to traffic on Shaughnessy Street and the CP Rail line.

The proposed location for the required outdoor play area could be impacted by Council's direction to enhance pedestrian and cyclist connectivity between the south and north sides of the Downtown. Any use which requires the space between the building and Shaughnessy Street should not be permitted until detailed information on the potential impacts of an underpass or overpass are known.

For Committee's further information, staff will be reviewing how the City can support new child care facilities in accordance with the Planning Division's 2018 work program. Staff continue to encourage potential day care operators to seek suitable space with Port Coquitlam and work closely with proponents to support them in the application review and approval processes. Additional child care spaces are currently under consideration for the site at Flint Street and Prairie Avenue (45 spaces) and expansion of a facility in the downtown (approximately 45 spaces).

FINANCIAL IMPLICATIONS

None.

PUBLIC CONSULTATION

A sign remains in place on the site. A public hearing would be required if the rezoning application were to proceed to a public hearing.

OPTIONS

(Check = staff recommendation)

#	Description
1	Recommend to Council that the application be refused.
2	Advise the applicant that the following information would be required prior to making a determination including: (1) An air quality assessment for the proposed outdoor play areas; (2) A concise written submission describing the proposal and identifying any requested variances (compliance with municipal regulations); (3) Information from Fraser Health as to its licence requirements for a large child care facility at this location including the deficienct play space area; (4) Comment from CP Rail; (5) Fencing impacts, including the Shaughnessy Street streetscape and sunlight within the outdoor play space; (6) A building code analysis and identification of building design changes as may be required to comply with daycare guidelines.



Determine that it wishes to proceed directly with consideration of the application at a Public Hearing and specify the conditions it would require be met prior to bylaw adoption.

ATTACHMENTS

3

Attachment #1: Amended application including drawings and acoustic study

Attachment #2: Staff report to Smart Growth Committee July 3, 2018 Attachment #3: Staff report to Smart Growth Committee July 27, 2016



Suite 500, One Bentall Centre 505 Burrard Street, Box 79 Vancouver, BC V7X 1M4 604.669.4041 **T**

August 28, 2018

INTRODUCTION

Members of

The Architectural Institute of British Columbia
The Alberta Association of Architects
The Saskatchewan Association of Architects
The Manitoba Association of Architects
The Ontario Association of Architects
The Nova Scotia Association of Architects
The Newfoundland and Labrador
Association of Architects

Since making the previous submission, circumstances have changed through a number of events occurring in Court Decisions and Policy.

The recent Supreme Court decision on Daycare within schools has resulted in a well-publicised "daycare crisis" with governments at all levels recognizing that more daycare facilities are required to fill the void created.

We believe that the Shaughnessy Station / Willowbrae Proposal will respond to this need very well. We have made a significant change to the arrangement and location of the outdoor play area in response to the concerns which were issued by staff and Council and it is now along the Shaughnessy Street frontage and the front of the building away from the railway tracks at the rear. The play areas are required to be as follows:

- There are 6 infant toddler groups of 12 that will need to rotate out of min. of 2500 sq. ft.
- There are 4 preschool 3-5 years group in a separate area that will need to rotate of an area minimum 2200 sq. ft. These sq. ft. calculations are usable space.

It features a bold and colourful screen fence with some acoustic properties.

The retail landscape is changing with the growth of "on-line" sales and the impact of this on well-established retailers are on shopping centres.

Many shopping centres are now seen as ideal locations for Daycare centres with parking available and vacant retail spaces which can be re-purposed as Daycares, with the activity bringing customers and vitality back, assisting such existing tenants as Bosley's and Doctor's etc.

Willowbrae Academy will greatly assist the local community in creating local jobs for early childhood professionals and in having a fully inclusive quality childcare programs that supports all families and children.

We have obtained an acoustic consultant study to supplement our earlier submissions, and provided more support documentation from the operator – "Willowbrae".

We hope that these changes and the supporting documentation will enable staff and Council to support our application.

,,,2



"Mission Statement"

"Willowbrae Academy provides programs of excellence in Early Childhood Education. We recognize that not every family has access to quality childcare programs and providing these services to families within their community is important to us in meeting their needs. Fully inclusive quality childcare programs support all families and children. Our programs are delivered by a team of trained professionals who are passionate about their role as Early Childhood Educators and respectful of the diversity and uniqueness of the facilities, children and communities that they serve. Every program and practice within Willowbrae Academy is based on our values of honesty, integrity and respect. Our commitment to quality early childhood education programs for the families and children that we serve is truly rooted in excellence!"

Yours truly,

ABBARCH Architecture Inc.

Michael Burton-Brown, Principal
Architect AIBC AAA SAA MAA OAA NSA

MBB/cl.



AC2579 - MLG July 31st, 2018 By email: CNguyen@abbarch.com

Cu Nguyen Abbarch Suite 500, One Bentall Centre 505 Burrard St., Vancouver, BC V7X 1M4

Dear Cu,

RE: 2594 180703 Shaughnessy Station Daycare - Acoustical Study

Following your instruction, BAP Acoustics has undertaken an acoustic survey at the proposed daycare playground for Terracap Ventures at Shaughnessy Station.

1. DESIGN GUIDELINES

There are no City of Port Coquitlam requirements for the control of transportation related noise in daycare playgrounds or outdoor amenity spaces in general.

1.1 CoV Childcare Technical Guidelines

However, the City of Vancouver (CoV) has produced a document for Daycare Technical Guidelines (Facility Planning and Development, 2016), that includes a requirement to control exterior noise levels in outdoor play areas to a maximum sound level of 55dBA from road traffic noise when measured over a 24-hour period. It suggests that if a noise assessment shows that this level is likely to be exceeded, then noise mitigation measures should be considered.

1.2 WHO Guidelines for Community Noise

The Guidelines for Community Noise (World Health Organisation, 1999), proposes 55dBA as a value for daytime noise exposure of between 12 (07:00 to 19:00) hours and 16 (07:00 to 23:00) hours in school outdoor playgrounds.

2. NOISE MEASUREMENT

A noise monitor was set-up to measure and record noise data over a 24-hour period at a selected location on the proposed playground area between July 10th and July 11th, 2018. Figure 1 shows the measurement position on an aerial view of the proposed playground.

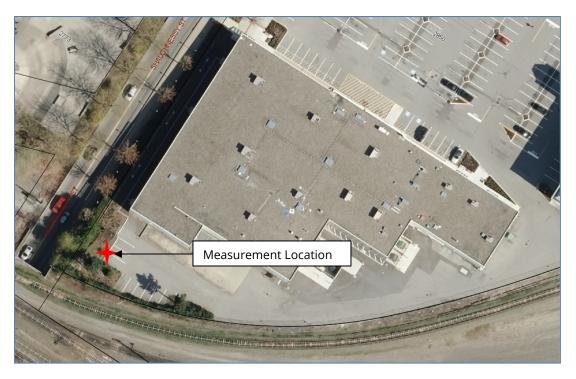


Figure 1: 24-hour Noise Measurement Location

The measurements were made using a Larson Davis LxT sound level meter, which has been laboratory calibrated within the last year. The LxT was field calibrated using a Larson Davis CAL200 calibrator before, and checked after, measurement.

The recorded noise data is presented in graphical form in Figure 2. The equivalent continuous sound pressure level (LAeq) over the time periods referenced in 1.2 is 69dBA in all cases.

3. NOISE MITIGATION

Clearly, the measured noise level exceeds the maximum recommended by both the City of Vancouver and WHO. Therefore, we have explored the benefit of a perimeter noise wall by simulating noise propagation from the rail lines to the surrounding environment using DataKustik CadnaA noise prediction software.

The simulation takes into account geometric divergences, atmospheric absorption, refraction, ground effects and screening effects (i.e. obstacles to sound such as barrier and buildings) in accordance with ISO 9613-2.

3

We reviewed the benefits of a 1.8m and a 2.4m high noise barrier around the playground areas proposed. Noise maps showing the impact of the rail noise on the two playground areas are shown in Figure 3 and 4. Figure 3 illustrates the effect of a 1.8m high barrier. Figure 4 shows the benefit of a 2.4m high barrier. The barrier around the playground area to the top of the images (irregular shaped playground) is 1.8m high in both cases.

A 1.8m high noise barrier around the irregular shaped playground will result in noise levels below 55dBA.

A 1.8m high noise barrier around the long thin shaped playground area will result in a significant portion of the playground subject to noise levels in the range 55dBA to 60dBA. The area subject to higher noise levels can be reduced by increasing the barrier height to 2.4m - compare Figures 3 and 4.

4. RECOMMENDATIONS

We recommend the installation of a 2.4m high noise barrier around the long thin playground area and a 1.8m high noise barrier around the irregular shaped playground area.

Noise barrier materials must have a surface mass density of at least 10kg/m^2 . Materials meeting this requirement include 18-gauge corrugated steel sheets and 3/4" thick plywood or OSB.

However, heavier materials, such as concrete may also be used, and can be beneficial to overcome wind loads and/or minimize repair and maintenance. It is important to ensure that there are no airgaps between adjoining barrier panels, between panels and posts, and between the bottom edge of barrier with the ground or roof.

There are number of proprietary noise barrier products available. Several example are listed below:

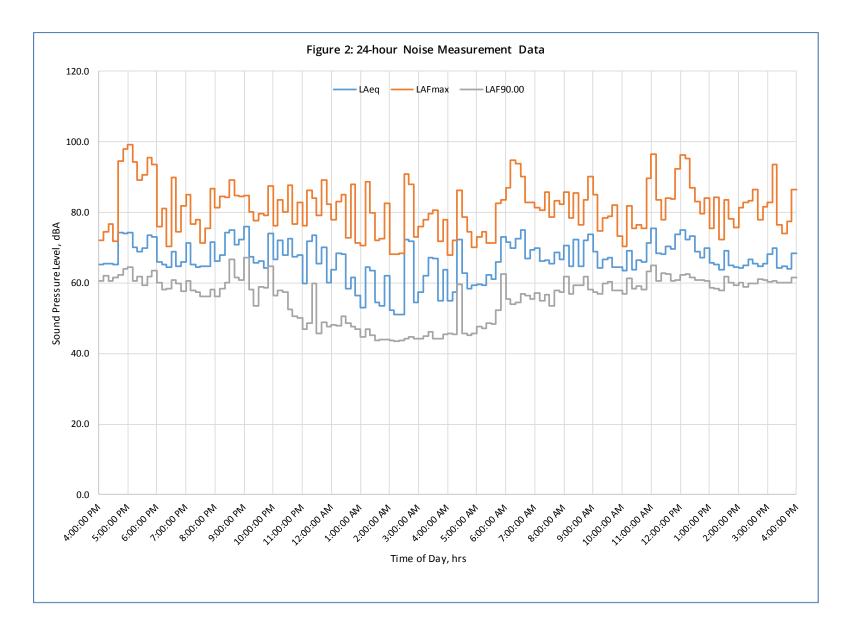
- 1. <u>Armtec</u> Durisol Sound Walls (sound absorptive faces on either side of a concrete core). Supplied locally by Armtec.
- 2. <u>AlL Sound Walls</u> (PVC absorptive or reflective barriers). Supplied direct by AlL Soundwalls.

If you have any questions, please let me know.

Sincerely,

Mark Gaudet, P. Eng.

Principal



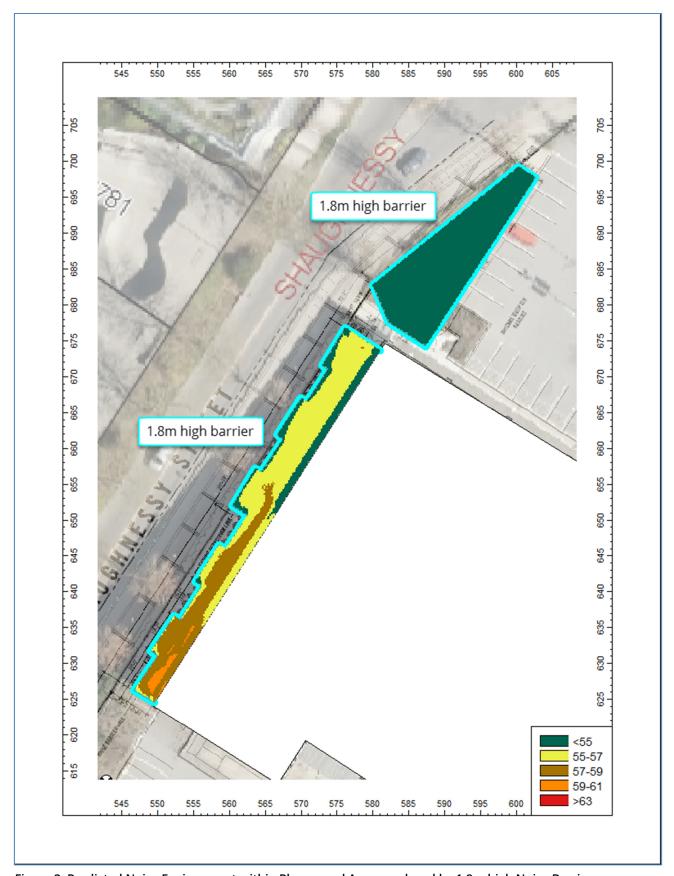


Figure 3: Predicted Noise Environment within Playground Areas enclosed by 1.8m high Noise Barriers

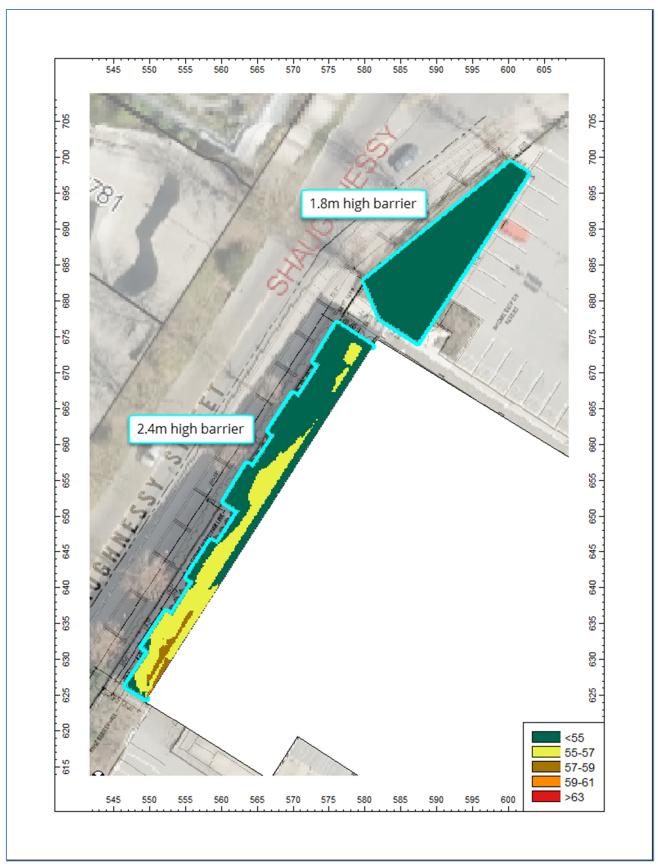


Figure 4: Predicted Noise Environment within Playground Areas enclosed by 1.8m & 2.4m high Noise Barriers



2594 SHAUGHNESSY DAYCARE

PORT COQUITLAM, BRITISH COLUMBIA

ISSUED FOR RE-ZONING AUGUST 13, 2018



ABBARCH

Engaging Design™

VANCOUVER, BC TORONTO, ON

604.669.4041 416.340.8441

PROJECT INFORMATION

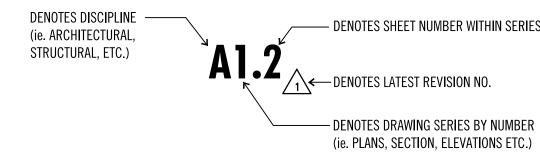
CIVIC ADDRESS:

2850 SHAUGHNESSY ST., SUITE 3190 PORT COQUITLAM, BC V3C 6K5

LEGAL DESCRIPTION: LOT 1, NEW WEST DISTRICT, PLAN LMP21954 DISTRICT LOT 379 & 464, GROUP 1

APPLICABLE CODE: BRITISH COLUMBIA BUILDING CODE (2012)

DRAWING SHEET STANDARDS:



DIRECTORY:

CLIENT/OWNER: TERRACAP MANAGEMENT INC.
100 SHEPPARD AVENUE EAST, SUITE 502

TEL: (416) 222-9345 FAX: -E-MAIL: JMcCauley@terracap.ca

ARCHITECT: ABBARCH ARCHITECTURE INC Suite 500, One Bentall Centre, 505 Burrard ST. Box 79

VANCOUVER, B.C. VANCOUVER, B.C.
V7X 1M4
CONTACT: MICHAEL BURTON-BROWN - PRINCIPAL
DAVID TOO - PROJECT MANAGER
TEL: (604) 669-4041
FAX: (604) 683-5338
E-MAIL: mbb@abbarch.com
E-MAIL: dtoo@abbarch.com

LANDSCAPE

PMG LANDSCAPE ARCHITECTS
Suite C100-4185, STILL CREEK DRIVE BURNABY, B.C. V5C 6G9 CONTACT: MARY CHAN-YIP, PRINCIPAL

TEL: (604) 294-0011 TEL: (604) 294-0022 E-MAIL: mary@pmglandscape.com

DRAWING LIST:

SITE PLAN - PROPOSED

SURVEY PLAN (FOR REF.)

LANSCAPE: ARCHITECTURAL: A0.0 COVER SHEET

A1.0 SITE PLAN - CONTEXT A1.1 SITE PLAN - EXISTING L3 - LANDSCAPE DETAILS SITE PLAN - DEMOLITION

ABBREVIATIONS:

ARCHITECT:

ALUM.	ALUMINUM	F.D.	FLOOR DRAIN	MAX.	MAXIMUM	REV.	REVISION
ANOD.	ANODIZED	FTG.	FOOTING	MET.	METAL	R.D.	ROOF DRAIN
A.F.F.	ABOVE FINISHED FLOOR	FDTN.	FOUNDATION	MIN.	MINIMUM	R.O.	ROUGH OPENING
BLKG.	BLOCKING	F.S.	FULL SIZE	MISC.	MISCELLANEOUS	STRUCT.	STRUCTURAL
B.G.	BUILDING GRADE	FIN.	FINISH	N.I.C.	NOT IN CONTRACT	SPEC.	SPECIFICATION
BLDG.	BUILDING	F.O.	FINISHED OPENING	N.T.S.	NOT TO SCALE	S.S.	STAINLESS STEEL
BOL.	BOLLARD	GALV.	GALVANIZED	NO.	NUMBER	ST.	STAIR
CLG.	CEILING	GA.	GAUGE	O.C.	ON CENTRE	S.F., SQ. FT.	SQUARE FEET
C/W	COMPLETE WITH	GL.	GLASS	0.D.	OUTSIDE DIAMETER	STL.	STEEL
CONC.	CONCRETE	G.1.S.	GOOD ONE SIDE	0/0	OUT TO OUT	TR.	TREAD
C.M.U.	CONCRETE MASONRY UNITS	G.W.B.	GYPSUM WALL BOARD	O/A	OVERALL	TYP.	TYPICAL
CORR.	CORRUGATED	H.C.	HANDICAP	P.C.	PRECAST	T/O	TOP OF
CG	CORNER GUARD	HR.	HOUR	P.C. CONC.	PRECAST CONCRETE	T.O.W.	TOP OF WALL
C.J.	CONTROL JOINT	HDW.	HARDWARE	PREFAB.	PREFABRICATED	U/G	UNDERGROUND
DIA.	DIAMETER	H.C.W.	HOLLOW CORE WOOD	PREFIN.	PREFINISHED	U/S	UNDER SIDE
DCJ	DRYWALL CONTROL JOINT	HDWD.	HARDWOOD	PL, PROP.	PROPERTY LINE	UNFIN.	UNFINISHED
DWG	DRAWING	HT.	HEIGHT	PTD.	PAINTED	V.B.	VAPOUR BARRIER
ELEV.	ELEVATION	HORIZ.	HORIZONTAL	P. LAM.	PLASTIC LAMINATE	V.C.T.	VINYL COMPOSITE TILE
EQ.	EQUAL	H.M.	HOLLOW METAL	PLY.	PLYWOOD	V.I.F.	VERIFY IN FIELD
EXT.	EXTERIOR	H.B.	HOSE BIB	P.T.	PRESSURE TREATED	V. WC.	VINYL WALL COVERING
ELEC.	ELECTRICAL	I.D.	INSIDE DIAMETER	R/W	RIGHT OF WAY	VERT.	VERTICAL
EXIST.	EXISTING	JT.	JOINT	RWL.	RAIN WATER LEADER	W.C.	WATER CLOSET
F.R.P.	FIBERGLASS REINFORCED PANEL	L.	LENGTH	R, RAD.	RADIUS	W.P.	WATERPROOFING
FHC	FIRE HOSE CABINET	L.S.	LANDSCAPE	R.T.	RESILIENT TILE	WD.	WOOD
E EVT	EIDE EVTINCHICHED	MECH	MECHANICAL	DEOID	DECHIDED		

THE DESIGN OF ALL SUSPENDED ARCHITECTURAL COMPONENTS INCLUDING BULKHEADS, CEILINGS, EQUIPMENT, PIPING AND OTHER SUSPENDED ITEMS MUST BE CARRIED OUT BY PROFESSIONAL STRUCTURAL ENGINEERS, REGISTERED TO PRACTICE IN THE PROVINCE OF BRITISH COLUMBIA AND EMPLOYED DIRECTLY BY THE RESPECTIVE CONTRACTOR AND SUB-CONTRACTOR.

DESIGNS SHALL TAKE INTO ACCOUNT ALL SEISMIC AND DESIGN LOAD REQUIREMENTS, AS SET OUT IN THE BRITISH COLUMBIA BUILDING CODE, LATEST EDITION. THE PROFESSIONAL STRUCTURAL ENGINEER SHALL PREPARE SIGNED AND SEALED DRAWINGS AND CERTIFY THE COMPLETED INSTALLATION, UTILISING SCHEDULES S-B AND S-C OF THE BRITISH COLUMBIA BUILDING CODE. THE DESIGNS ARE ALSO SUBJECT TO THE APPROVAL OF THE OWNER AND ARCHITECT WITH REGARD TO SUITABILITY OF APPEARANCE AND COMPATIBILITY WITH ADJACENT WORK.

SHEET NOTES

02 2018/08/13 ISSUED FOR RE-ZONING
01 2018/03/13 ISSUED FOR RE-ZONING
NO DATE ISSUE / ADDENDUM / REVISION



SHAUGHNESSY STATION -DAYCARE DEVELOPMENT

Shaughnessy Station, Port Coquitlam, BC

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VANCOUVER, BC 604.669.4041

SEVI :

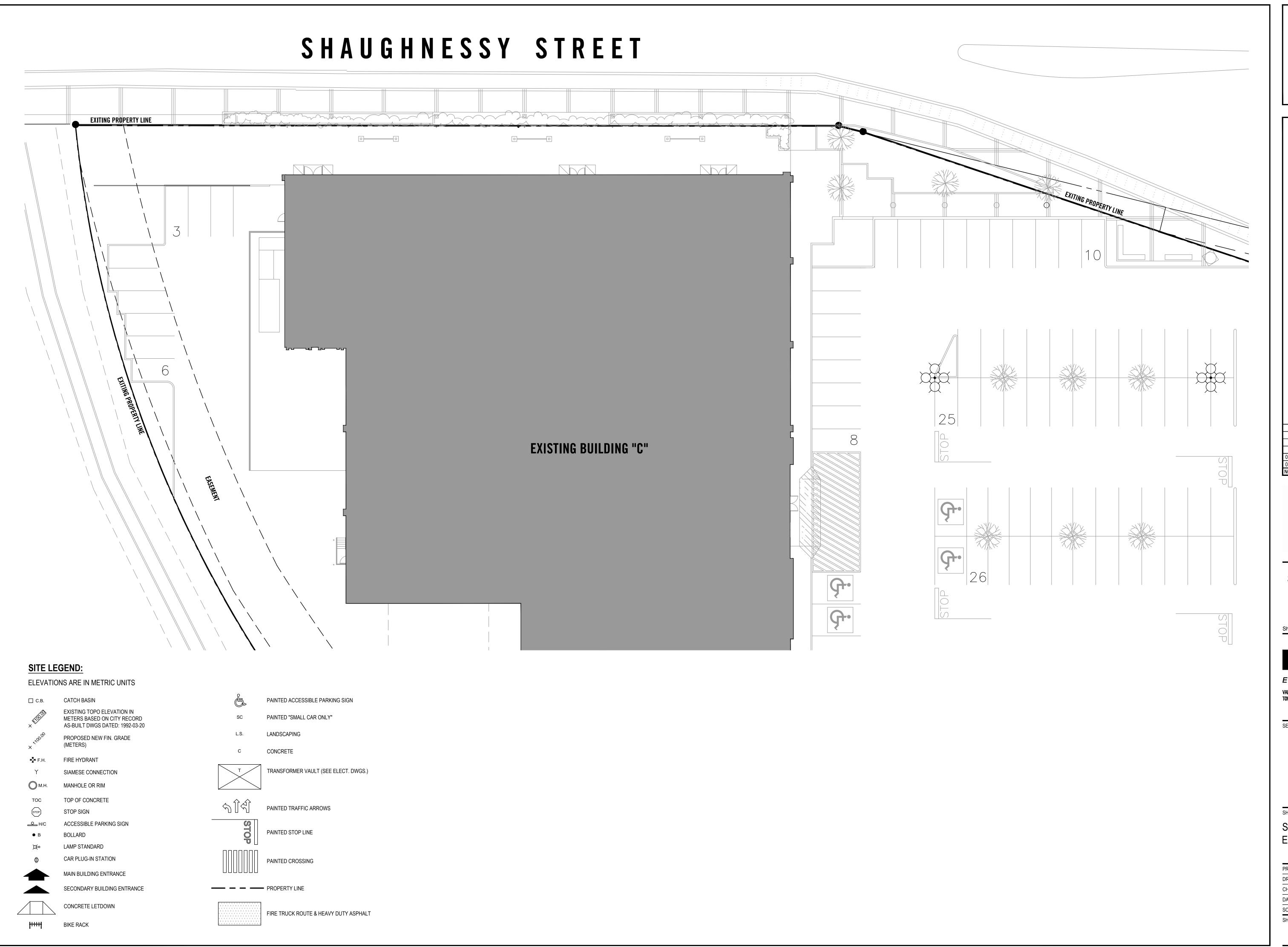
SHEET TITLE:

SITE PLAN -CONTEXT

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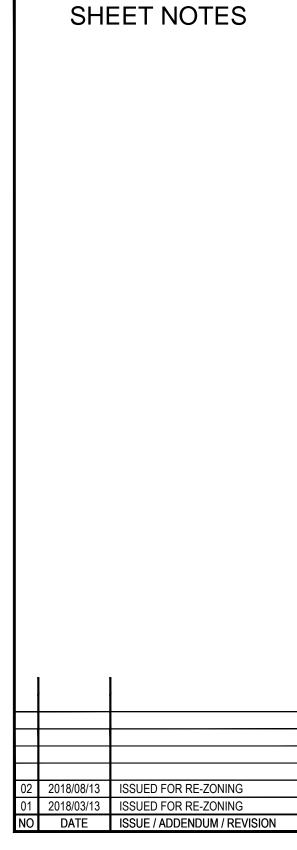
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SHAUGHNESSY STATION -DAYCARE DEVELOPMENT

Shaughnessy Station, Port Coquitlam, BC

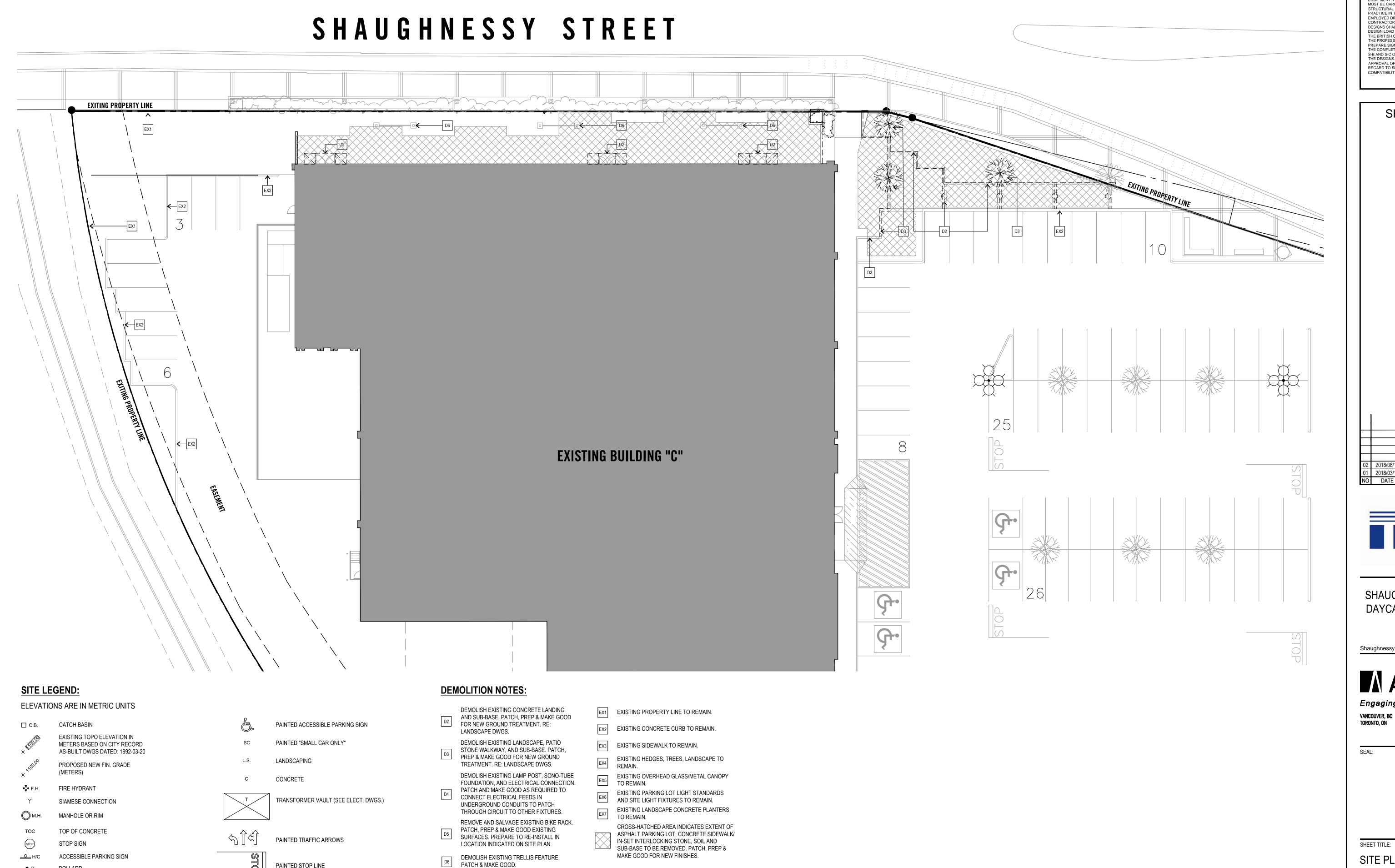
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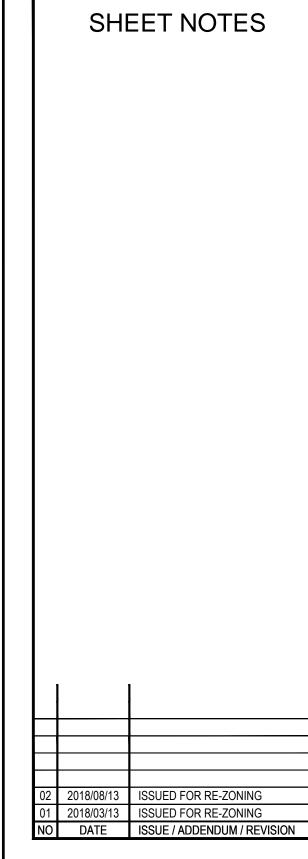
SITE PLAN -**EXISTING**

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SHAUGHNESSY STATION -DAYCARE DEVELOPMENT

Shaughnessy Station, Port Coquitlam, BC

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SITE PLAN -DEMOLITION

PROJECT NO:	2594	
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DATE:	-	
SCALE:	1/16" = 1'-0"	

SHEET:

LAMP STANDARD

CAR PLUG-IN STATION

CONCRETE LETDOWN

BIKE RACK

MAIN BUILDING ENTRANCE

SECONDARY BUILDING ENTRANCE

PAINTED STOP LINE

PAINTED CROSSING

FIRE TRUCK ROUTE & HEAVY DUTY ASPHALT

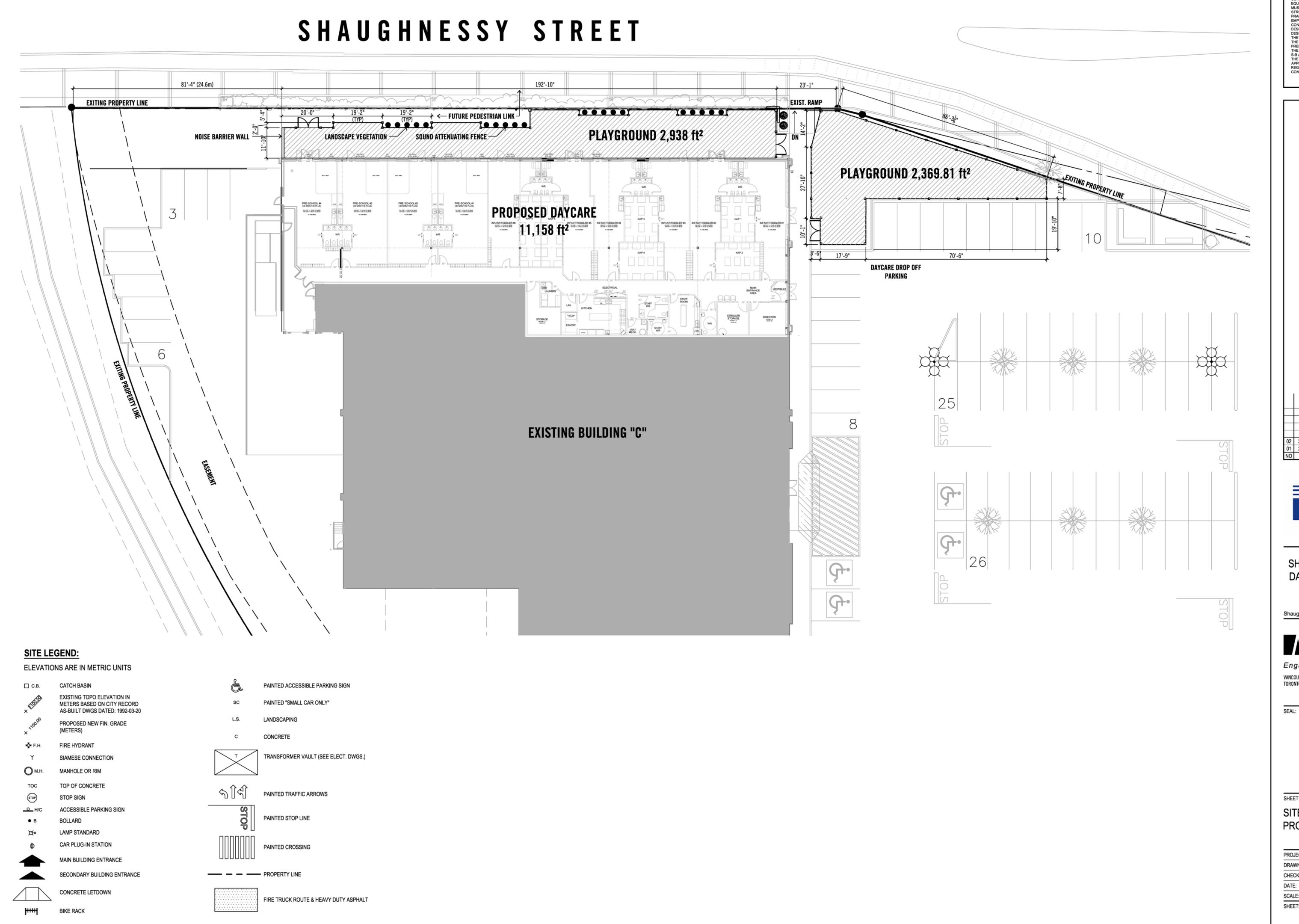
— — — PROPERTY LINE

DEMOLISH EXISTING HANDRAILS. PATCH, PREP & MAKE GOOD EXISTING SURFACES.

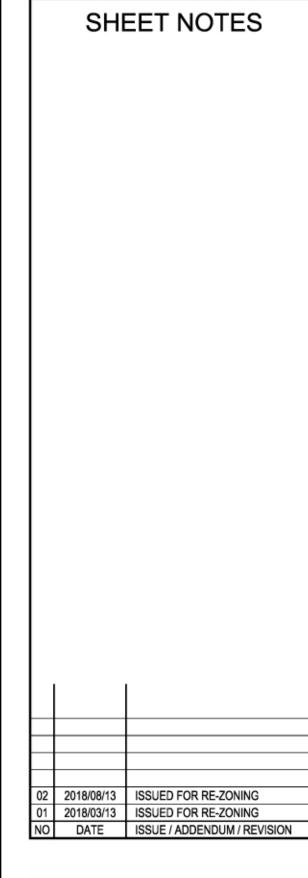
REMOVE EXISTING PLANTER CONCRETE WALLS, LANDCAPE, VEGETATION, SOIL, AND

REMOVE EXISTING CONCRETE CURB/ PARKING ISLAND. PATCH & MAKE GOOD.

SUB-BASE. PATCH, PREP & MAKE GOOD FOR NEW GROUND TREATMENT. RE: LANDSCAPE



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SHAUGHNESSY STATION -DAYCARE DEVELOPMENT

Shaughnessy Station, Port Coquitlam, BC

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SITE PLAN -PROPOSED

PROJECT NO:	2594
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SEAL









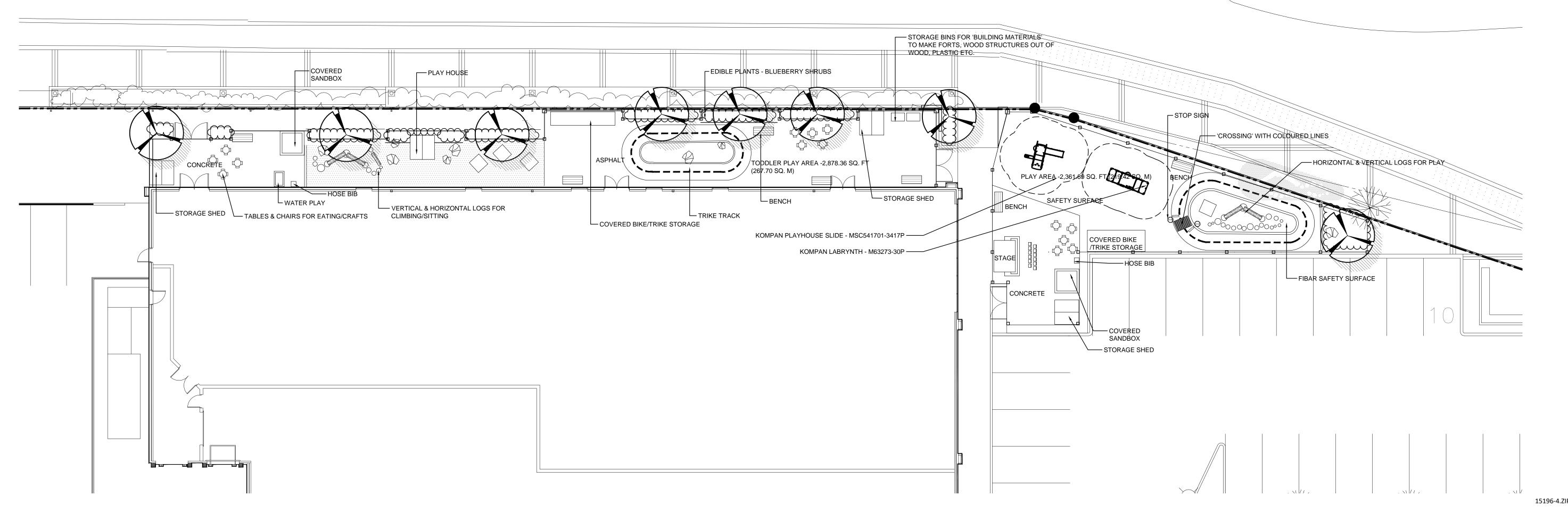












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2	18.AUG.28	NEW SITE PLAN	MM
1	17.JULY.05	NEW SITE PLAN & LAYOUT	MM
NO.	DATE	REVISION DESCRIPTION	DR

CLIENT:

PROJECT:

SHAUGHNESSY DAYCARE

2850 SHAUGHNESSY PORT COQUITLAM, B.C.

DRAWING TITLE:

OVERALL LANDSCAPE PLAN

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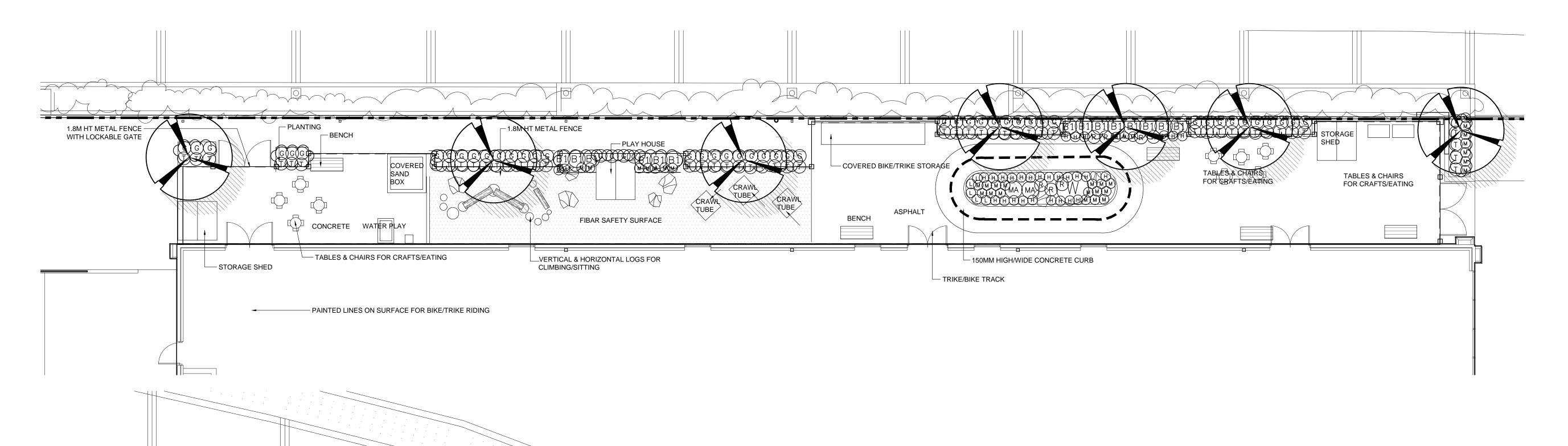
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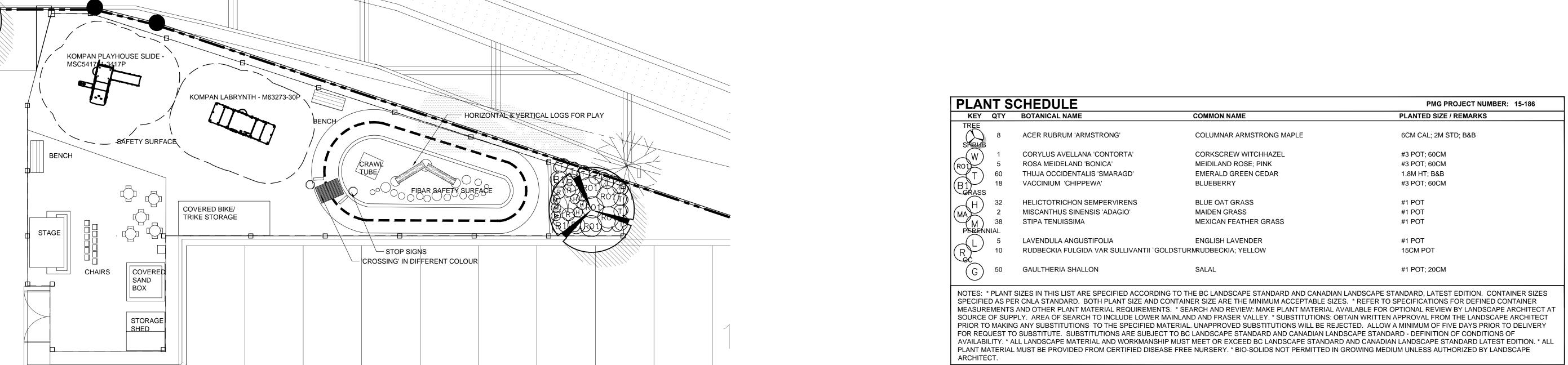




KOMPAN LABRYNTH - M63273-30P

KOMPAN PLAYHOUSE SLIDE - MSC541701-3417P





PROJECT:

CLIENT:

SHAUGHNESSY DAYCARE

NEW SITE PLAN & LAYOUT
REVISION DESCRIPTION

2850 SHAUGHNESSY PORT COQUITLAM, B.C.

DRAWING TITLE:

LANDSCAPE PLAN

DRAWING NUMBER:	15.DEC.15	DATE:	
	1:100	SCALE:	
	MM	DRAWN:	
	MM	DESIGN:	
OF 3	MCY	CHK'D:	

RECOMMENDATION:

That the Smart Growth Committee recommend to Council that the application to amend the Zoning Bylaw to allow for a child care facility accommodating 136 children at #3190 – 2850 Shaughnessy Street be refused.

PREVIOUS COUNCIL/COMMITTEE ACTION

Smart Growth Committee resolution July 27, 2016:

That the application to amend the Zoning Bylaw to allow for a child care facility accommodating up to 136 children at 3190 – 2850 Shaughnessy Street be refused.

Smart Growth Committee resolution October 27, 2016:

That Council be advised that the additional information [provided by the applicant to Council] be received for information.

Council resolution November 14, 2016:

That the application to amend the Zoning Bylaw to allow for a child care facility accommodating up to 136 children at #3190 – 2850 Shaughnessy Street be refused.

REPORT SUMMARY

Terracap Corp., owner of the Shaughnessy Station Shopping Centre at the corner of Lougheed Highway and Shaughnessy Street, resubmitted its application to rezone a vacant commercial unit within the centre to allow a child care facility accommodating 136 children. The application is similar to that refused by Council in late 2016 with the exception of the two outdoor play space locations. The July 2017 submission relocated the one of the required outdoor play spaces from the north side of the building to the south side; a revised March 2018 submission removed the outdoor play space from the west side of the building and proposed it be located on its north side along with an expansion to the space on the south. The locations of these play areas is a significant concern due to their exposure to fumes and noise associated the CP Rail operations and Shaughnessy Street traffic and the report recommends the rezoning application be refused.

The applicant has not presented information that could address staff's concerns. Information to assist in a determination of whether or not the proposal would be acceptable would be expected include provision of a site-specific air quality analysis, an assessment of the visual impact of the noise-attenuating fence, comment from CP Rail on the application, and input from Fraser Health. If Committee wishes to further consider the application, the report presents an option that the applicant be requested to provide specified information prior to Committee making a decision on the application.

BACKGROUND

The following events and actions are relevant in consideration of the proposed child care facility and child care within the City:



- February 16, 2016. An initial rezoning application to allow for a child care facility accommodating 107 children (later increased to 136 children) to occupy a vacant commercial space in the former Canadian Tire building was received.
- July 27, 2016: Smart Growth Committee considered the attached staff report on the proposed large child care facility and recommended Council refuse the application.
- September 19, 2016: The Smart Growth Committee's report to Council recommending refusal
 was scheduled for Council's consideration. However, the applicant provided Council members
 with a large package of information immediately prior to its consideration of Committee's report
 and Council referred this material to Committee for review.
- October 27, 2016: Smart Growth Committee assessed the additional information and determined it would uphold its original recommendation to refuse the application.
- November 14, 2016: Council considered the initial and further information reports from the Smart Growth Committee. Prior to its decision, Council also heard from two delegates who raised concern about the appropriateness of the location as well as heard from the potential operator of the facility and the architect in support of the application. Council determined it would refuse the application.
- May 11, 2017: Smart Growth Committee heard from child care operators as part of its consideration of amending the City's child care regulations. Amended regulations were subsequently adopted by Council. In addition, the Sustainability and Environment Committee charged was with considering ways to enhance and assist the development of child care facilities in the City.
- July 18, 2017: The architect, Michael Burton Brown, submitted a new rezoning application for the large child care facility (similar to the one previously proposed) on behalf of the owner, Terracap. Following an initial review, the applicant was advised that staff would be seeking the following information:
 - A response from Fraser Health to determine if it would be prepared to issue a licence for a child care facility at this location or if it would have any specific requests that could be met through the rezoning process that would support a licence;
 - An assessment of anticipated information from an in-process study on child care needs within the Tri-Cities being undertaken on behalf of the United Way, in order to determine if the information would inform the rezoning process.

In the fall, the applicant was informed that the City was considering a pedestrian/cycle connection between Shaughnessy Station and the Downtown and it would be necessary to determine if the desired connection would impact the application.

 February 13, 2018: The Finance and Intergovernmental Committee approved a recommendation from the Downtown Oversight Committee to include funding in the 2018 Financial Plan to provide for an assessment of options for a pedestrian connection (overpass or

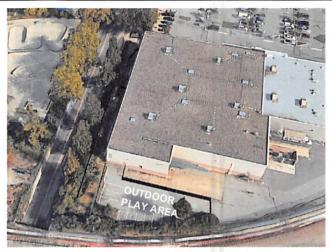


underpass) and its impacts. Proceeding with this work is pending direction from the Downtown Oversight Committee.

March 13, 2018: Abbarch Architects submitted a revised submission package which relocated
the outdoor play space from the west side yard to occupy a larger portion of the parking area at
the back of the property on the south and added back a play area adjoining Shaughnessy
Street in the front of the building. The narrow west side yard was shown as "pedestrian link".



Shaughnessy Station context



March 2018 Submission (play area on the north not identified)

DISCUSSION

- A. 2016 Application: In reporting on the original application, staff raised a number of significant concerns about the appropriateness of the proposed location for a daycare as well as demand for a facility of this size at this location. Identified concerns included:
 - proximity of the proposed outdoor play area along the west side of the building to Shaughnessy Street and the CP Rail tracks, including the visual impact of a soundattenuating fence adjacent to the sidewalk and shading of the play area by this fence
 - traffic impacts from vehicles at peak pick-up and drop-off times (the requested capacity of 136 children is similar to a small school)
 - traffic impacts as well as safety issues related to small children regularly crossing Shaughnessy Street to get to Lions Park
 - if commercial site remediation standards would be sufficient for a day care use, and
 - compliance with Official Community Plan policies and land use designation.

Council was advised that the type of facility being proposed by the potential operator, Willowbrae, would be supported in locations elsewhere within the community, such as at Fremont Village. Staff further indicated their expectation that in the future, a larger child care

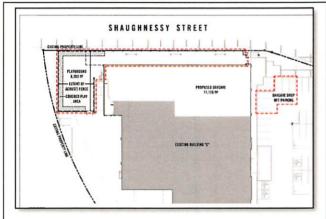


July 3, 2018

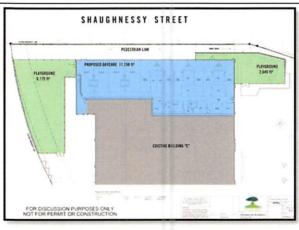
facility at Shaughnessy Station could be supported if integrated within a comprehensive redevelopment as a transit-oriented, mixed use development including residential uses.

A variety of reasons explaining the vote to either refuse or support the application were cited by members of Council, prior to the 5-2 vote. The development procedures bylaw allows for a refused application to be resubmitted six months after the date of Council's refusal.

B. July 2017/March 2018 Application: The application resubmitted in July maintained the original proposal to locate an outdoor play space in the west side yard and added a play area to the south, removing the play area formerly proposed in front of the building. The proposal was changed in March 2108 to remove the proposed play area along the west side of the building and put it back on the north side.



Proposed child care facility, including outdoor play space proposed in July 2017



Proposed child care facility, including outdoor play space proposed in March 2018

Issues associated with the current application include the following:

Application: The applicant's 2017 submission, as amended in 2018, comprises a mix of 2015/2016 information, excerpts from various staff and consultant reports through out that period and various responses to these reports, along with submissions from the potential daycare operator and parents seeking daycare (Council has received most of this material from the applicant and it was reviewed by Committee prior to a decision on the former application). Consequently, a number of aspects of the current proposal are unclear and, if the application is to be given further consideration, the staff file manager requests the applicant be required to provide an updated, comprehensive and concise application.

<u>Site remediation</u>: Additional information was provided confirming the applicant's position that remediation has been completed to a commercial standard. While staff continue to question if that standard would be appropriate for a child care facility, this report does not identify a need for further information.

<u>Fraser Health Licence</u>: A child care facility requires a licence from Fraser Health to ensure facilities are designed and operated in accordance with its requirements. Prior to issuing a



business licence for a daycare, the Bylaw Services Division will contact Fraser Health to determine if the business has obtained the necessary licence; Fire Protective Services also provides comment as part of this process. Following receipt of the current application, in late 2017 staff contacted Fraser Health by letter to ask if it had any specific concerns with the application or conditions it would wish to see met through the City's rezoning process. Fraser Health responded it would only provide comments following review of a complete application.

<u>Proximity to CP Rail</u>: The Federation of Canadian Municipalities and Railway Association of Canada's *Guidelines for New Development in Proximity to Railway Operations* (2013) outlines standard mitigation measures for new development. The guidelines emphasize the importance of early consultation with the railway but to date, the applicant has not provided the City with any comments.

The buildings within the Shaughnessy Station shopping centre pre-date the guidelines and the buildings along the south property line are closer than the recommended minimum setbacks. For example, the recommended residential building setback from a principle rail line with more than 5 trains per day is 30m and the minimum noise barrier height to a residential use is 5.5m (18'); there are no guidelines contemplating outdoor play space within this area. One of the multiple rail lines with the CP Rail property is only 6m from the play area on the south.

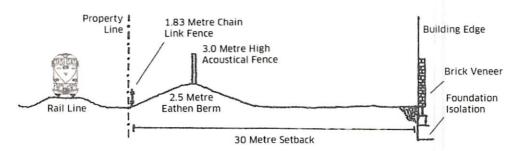


Figure 1: Example of Standard Mitigation Measures (Image Source: Figure 2: Standard mitigation for new residential development in proximity to a main line railway, pg. 19).

In an attempt to better understand potential safety concerns, staff viewed information posted by the Transportation Safety Board of Canada, which is an independent agency that advances transportation safety by investigating occurrences in the marine, pipeline, rail and air modes of transportation. Its website includes data such as the number of derailments by month and province, identifies concerns with respect to issues such as the risk posed by the transportation of large quantities of dangerous goods, and makes recommendations on safety issues.

The Fire and Emergency Services Department has expressed its concern about locating a playground in the proposed location, including the potential for safety issues associated with a playground so close to not only the rail yard but also the loading dock at the rear of the building. It recommends that infants and children not be put at risk and requests that the applicant be advised to seek a safer site for this type of assembly occupancy.

Noise Attenuation & Fencing: The location of the outdoor play areas immediately adjoining CP Rail's property and Shaughnessy Street means they would be noisy locations. To address this, the applicant proposes to surround the south play area with a specialized acoustic fence. A portion of the fence would be alongside an existing loading bay, similar to the image on the supplier's website below. The website for the proposed fencing also shows how a visual impact can be mitigated by planting hedges or climbing plant material. The current application does not include sufficient information on the design, height, location, or landscaping of the fence or the loss of existing vegetation to determine its impacts or compliance with Zoning Bylaw siting and height regulations.



Example of the proposed acoustic fence

Air Quality: The air quality where the outdoor play areas are proposed is a major concern. Staff research indicates there is increasing public health concern where small children are being exposed to poor quality air due to inappropriate play area locations. Health Canada's publication, Human Health Risk Assessment for Diesel Exhaust, notes diesel emissions are estimated to contribute significantly to ambient concentrations of NO₂, PM_{2.5} and ground level ozone (O₃) particularly where close to major transportation routes. Children can be at greater risk for adverse effects as they inhale proportionally more air than adults. A University of Washington study found residents living near rail lines faced increased exposure to harmful microscopic particles from diesel emissions. As staff observed a detectable diesel smell from train activity at the proposed playground site, it would be critical to obtain information on the specific air quality (if this application is to be further considered) as the potential operator proposes to restrict children the on-site outdoor play areas rather than allowing for them to walk across Shaughnessy Street to get to Lion's Park.

<u>Traffic Impacts</u>: The applicant's submission had included the following information from Bunt & Associates:

"From traffic and parking standpoints, the synergies realized in locating child care within a shopping centre precinct are compelling, and include:

Shopping centres are typically located on well-travelled, commuter traffic routes. With much of the morning drop-off and afternoon pick-up activity for child care centres tied in with the morning and afternoon commute, the linkage couldn't be more direct. Moreover, the proximity of other stores, shops and services within the shopping centre enables a linking of trip purposes, i.e., picking up children and grocery shopping after work, i.e., two trip purposes, one trip.



- The peak traffic and parking period for shopping centres, with the most significant impact on the area transportation system, is typically the Saturday afternoon period. Child care facilities are typically not in operation at this time; conversion of retail space to child care therefore serves to reduce the overall shopping centre traffic and parking activity during the Saturday afternoon period.
- The morning peak traffic and parking period for child care centres is typically early in the morning before many of the stores open. The shopping centre parking lots and driveways are typically only lightly used at these times.
- The weekday afternoon period for pick-up from child care is generally not as peaked as the morning period. While shopping centre traffic and parking can be considerable in the weekday afternoon period, the difference between the traffic and parking activity of retail space versus child care space during the weekday afternoon period is not significant."

This assessment indicates that shopping centres can be suitable locations for child care facilities from the perspective of vehicular access and on-site traffic management.

<u>Pedestrian and Visual Impacts</u>: The proposed play area on the north side of the building would eliminate a popular pedestrian short-cut connecting between the Shaughnessy Street sidewalk and the shopping centre. Acoustic fencing around the play area, if required, could also reduce the amenity of this pedestrian realm. A previous design scheme had also showed that a play space in this location could reduce the visibility of an adjoining commercial business.

<u>Interior renovations</u>: The Building Division advises that a change of use to an assembly A2 occupancy is not as per the original building design and it requires a building code analysis from an architectural registered professional to show changes required to comply with the BC Building Code. Staff would also wish to ensure that there would be sufficient windows added to the building to meet guidelines for a child care facility. While this information can be provided in consideration of future development permit and building permit applications, it is important to bring it to the applicant's attention in the rezoning process.

<u>United Way Child Care Needs Assessment:</u> The assessment, completed in fall 2017, identified concerns of parents in the Tri-Cities with respect to their child care arrangements. The applicant has not identified a response to key findings of this study, which include:

- · insufficient time scheduled for children to play outdoors
- high cost
- hours of operation, with an identified need for extended hours due to time to commute to work and a preference for child care to be close to homes and local schools
- lack of access to parks and the outdoors for children in care
- need for more before and after school care close to school, especially in Port Coquitlam
- more licensed child care spaces in the Tri-Cities (39%) compared to province (22%).

Off-Sites and Encroachments: This report has not identified the potential off-site improvements that may be required of the development and would need to be determined if this application proceeds to further consideration. Staff previously noted that there is an existing encroachment agreement related to lighting along the Shaughnessy Street sidewalk would need to be assessed if this application is to be further considered.



FINANCIAL IMPLICATIONS

None associated with consideration of a change in use as proposed.

PUBLIC CONSULTATION

A sign has been posted on the site and several enquiries have been received by staff regarding the status of the application.

OPTIONS

(Check = staff recommendation) Smart Growth Committee may:

#	Description
1	Recommend to Council that the application be refused.
2	Request the applicant provide information prior to making a determination such as: (1) A concise written submission describing the proposal and identification of any requested variances (compliance with municipal regulations); (2) Information from Fraser Health as to its licence requirements for a large child care facility at this location; (3) Comment from CP Rail; (4) An air quality assessment for the proposed outdoor play areas in sufficient detail to assess if proximity to rail yard and tracks (for the south play area) and Shaughnessy Street (north play area) would be a concern; (5) Design and siting information regarding the fencing, including impacts on Shaughnessy Street and landscaping; (6) A building code analysis and identification of design changes to comply with daycare guidelines; and, (7) Off site requirements.
3	Determine the conditions it wishes to have the applicant meet prior to bylaw adoption and recommend to Council taht the identified conditions be set and the application proceed to a Public Hearing.

ATTACHMENTS

Attachment #1: Drawings submitted March 13, 2018

Attachment #2: Staff report to Smart Growth Committee July 27, 2016





2594 SHAUGHNESSY DAYCARE PORT COQUITLAM, BRITISH COLUMBIA

ISSUED FOR RE-ZONING MARCH 13, 2018



ABBARCH

Engaging Design™

VANCOUVER, BC TORONTO, ON

604.669.4041 416.340.8441



CIVIC ADDRESS: 2850 SHAUGHNESSY ST., SUITE 3190 PORT COQUITLAM, BC V3C 6K5

LEGAL DESCRIPTION: LOT 1, NEW WEST DISTRICT, PLAN LMP21954 DISTRICT LOT 379 & 464, GROUP 1 APPLICABLE CODE: BRITISH COLUMBIA BUILDING CODE (2012)

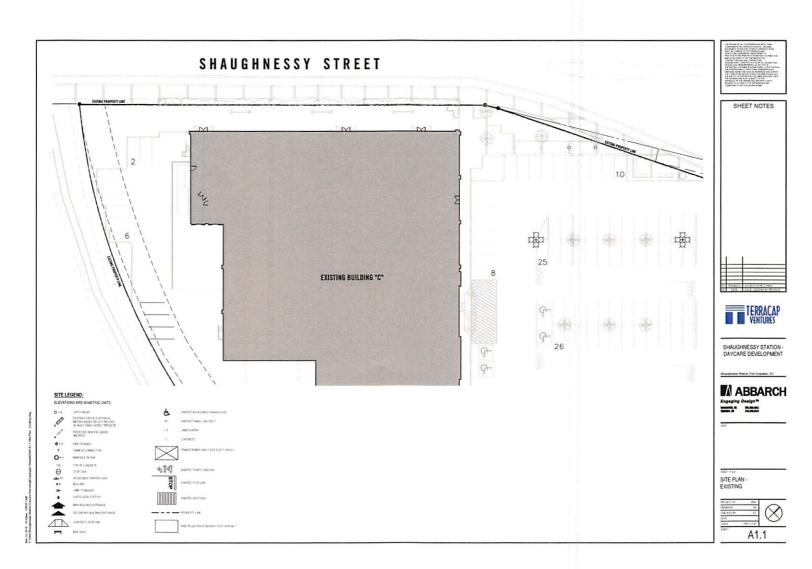
DRAWING SHEET STANDARDS:

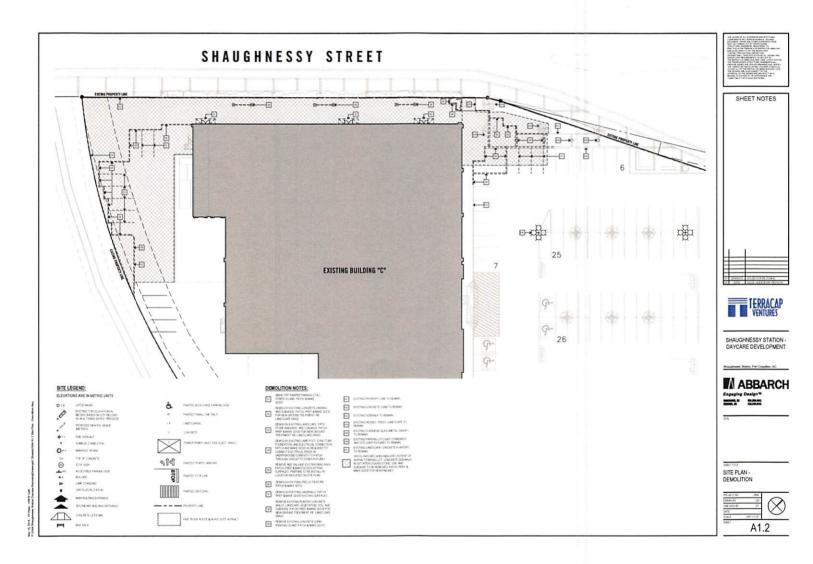


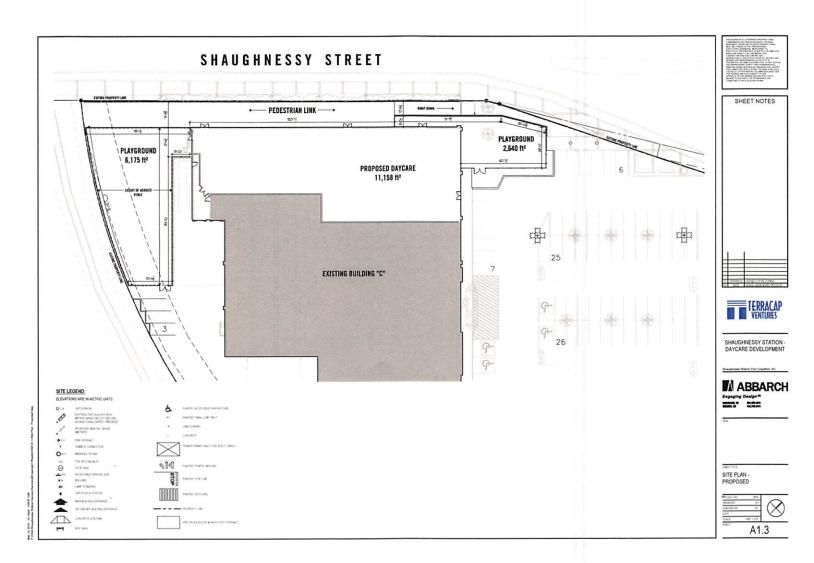
DIRECTORY:		DRAWING LIST:		
CLIENT/OWNER:	TERRACAP MANAGEMENT INC.	ARCHITECTURAL:		
	100 SOUTHAND SAFERIN AND 1 SOUTH SOU	A0.0 A1.1 A1.2 A1.3	COVER SHEET SHE PLAN - EXISTING SITE PLAN - DEMOLITION SITE PLAN - PROPOSED	
ARCHITECT:	ABBARCH ARCHITECTURE INC late 50% One Barroll Caster, 505 Bernard LS, Ber 74 UNICCOUNT, CL. FY 1004. C. L. COSTACK, INCLAME, BURTON-BROWN - PERCOPAL			

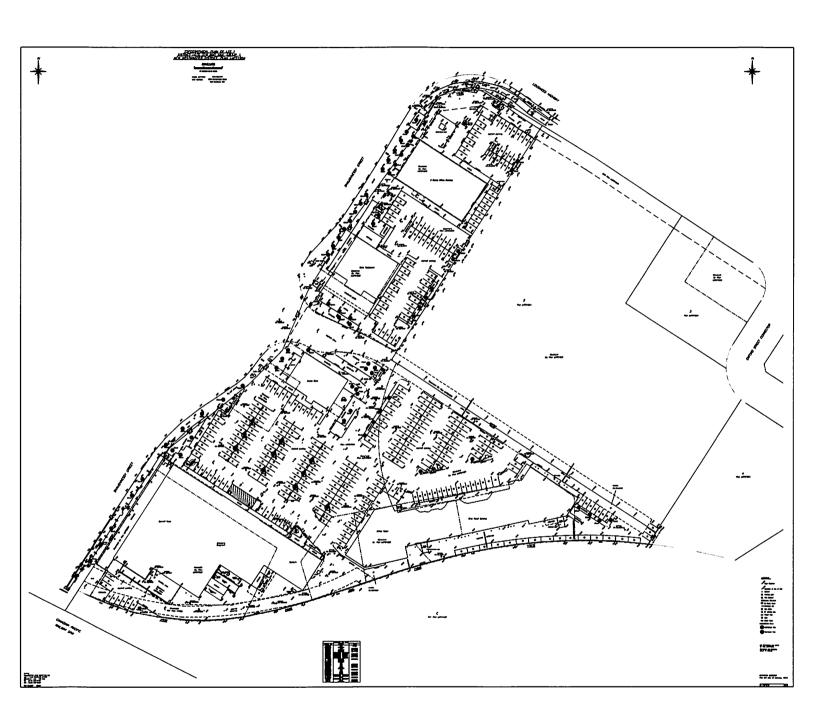
ABBREVIATIONS:

AUT.	AURIEUR	GL.	GLASS	PD.	PARTID
ARCS.	AACOCZID	6.7.5.	BOOD DNE SIDE	P. LAM.	PLASTIC LAMINATE
IJJ.	ABOVE FINISHED FLOOR	GHA.	CITTUR WALL BOARD	PEL	PCTWOOD
R.HG.	BLOCKING	N.C.	RANDICAP	*1.	PRISONE MIAND
14.	BUILDING GEIDS	92.	HOUR	E.W	DENT OF WAT
E34.	BULDING	NOW.	REPUBLI	ENG.	RAIS WATER CLASES
BOL.	BOLLARD	M.C.W.	MOLIOW COSE WOOD	E. 840.	LADRIE
04.	CELING	8049.	KARDWOOD .	1.1	RESULENT THE
CW	COMPLETS WITH	81.	REGRT	8197	EDGUMED.
COMIC	CONCRETE	HOUZ.	MOREOW TAL	MIN.	REVESION
CA.L	CONCESTS BUSINESS UNITS	8.8.	NOLDW METAL	12.	BOOF DEATH
CORR	COMMUGATED	8.8.	HOLE BIR	8.0.	RODGE OPERING
CG.	CORNER GUARD	1.3.	INDION DIAMETER	STRUCT.	STRUCTURAL
C.L.	CONTROL SORT	т.	20167	SPIC.	SPECIFICATION .
DIA.	DIAMETER	L	precise	LL.	STAMUSES STORE
DCI DCI	DETWALL CONTROL JOINT	LL	LARDSCAPE	11.	STAR
DWG.	DEANING	BUCK.	ROCHARCA	1,5,14,11	SQUARE FORT
BUTY.	BENEDON	MAL.	NATRUM.	18.	STREET
19.	1004	mit.	METAL		TELED
DET.	printed	MIR.	ROBERT .	te.	TIPICAL
BJC.	BACTRON	MISC.	MISCRIANIONS.	10	10# OF
DEST.	DISTING	RIC	NOT IN CONTRACT	TOM:	TOP OF WALL
127	FIRESCALL RESPONDED PARTY	8.7.5	BOT TO SCALE	84	UNDERGROUND
FRC	PRE HOSE CARRET	80.	NUMBER	81	UNDER SIDE
.00	FIRE DETINIQUENCE	3.0	DI CLASS	GROUN.	OMPORTAGE .
14.	FLOOR DEALE	0.0.	DUTURE DIAMETER	VA.	VAPOUR BARRIER
P16.	FOOTING	6.0	001 10 001	V.C.T.	WHIS COMPOSITE THE
FOTH.	FOUNDATION	0.8	OVERALL	WAS.	WEST IN FIGUR
11.	FULL SIZE	7.5	PRICEIT	x.wc	MING MAIL COVERING
FR.	PRODE	P.C. COW.C.	PRICALT CONCRETS	WIRT.	METICAL
1.0.	PERSONAL OPERING	PRIVAT.	PRITABRICATIO	W.C.	WATER GLOSET
GEV.	GA VANIZO	PRINK.	PERMIND	**	WATERPROOFING
64.	GAUGE	PL PROF.	PROPRETY LINE	W9.	WOOD











Report to Committee

DATE:

July 19, 2016

To:

Smart Growth Committee

FROM:

Laura Lee Richard, Director of Development Services

SUBJECT:

#3190 - 2850 SHAUGHNESSY ST

REZONING APPLICATION RZ000126 (PROPOSED CHILD CARE

FACILITY)

EXECUTIVE SUMMARY

The owner of the vacant store front located in the Shaughnessy Station commercial development (the former Canadian Tire building) has submitted a rezoning application to allow for a child care facility that would accommodate up to 136 children.

This application raises a number of significant concerns about the appropriateness of the proposed location for a daycare and the demand for a facility of this size at this location. In particular, staff's concerns include the proximity of an outdoor play area located along the west side of the building to Shaughnessy Street and the CP Rail tracks, traffic impacts from vehicles at peak pick-up and drop-off times and traffic impacts as well as safety issues related to children regularly crossing Shaughnessy Street to get to Lions Park, site contamination, institutional use of an area designated to promote retail commercial development, and the existing supply of child care spaces in the area.

Based on information provided by the applicant to date and staff's analysis of the site's constraints for a child care use, it is recommended that SGC resolve to not support the application. If this recommendation is approved by the Committee, then the applicant may appeal the rejection and the application must be considered at a Council meeting.

Should Committee determine that it wishes to further consider the application, then staff would work with the applicant to obtain additional information during the summer recess with the intent that a report would be brought forward to SGC that identifies recommended conditions of the rezoning.

RECOMMENDATION

That SGC recommend to Council that the application to amend the Zoning Bylaw to allow for a child care facility accommodating up to 136 children at #3190 - 2850 Shaughnessy Street be refused.

1. BACKGROUND

- **1.1. Application:** This application originated as a proposal to rezone a vacant commercial unit to allow a child care facility that would accommodate 107 children. The application was subsequently amended to replace the original applicant (a planning firm) with an architectural firm, Abbarch Architecture, and to increase the number of children to be accommodated at the facility to 136.
- 1.2. History: The site was originally part of CP Rail lands. In 1996, it was rezoned and subdivided for the development of the Shaughnessy Station as a highway-oriented shopping centre. There have been a number of changes to this centre over the years with the most recent being in 2012, when SGC issued a DP amendment to allow for alteration of the former Canadian Tire building into smaller units with work including façade improvements and landscape enhancements in the parking lot.
- 1.3. The Proposal: The applicant wishes to redevelop the vacant commercial unit for a child care facility with an outdoor play area along the west side of the building. The facility would be leased to an independent operator and building alterations would be made to accommodate the change in use. There would be six groups of infants and toddlers, with 12 children in each of these groups, and four groups of preschoolers, with 16 children in each of these groups; care would be offered between the hours of 7 am and 6 pm Monday through Friday.

2. POLICY & REGULATIONS

- **2.1. OCP Policies:** The OCP's policies promote having a sufficient number of child care spaces located throughout the community, including in residential areas, close to educational facilities (schools) and at business centres. OCP policies also promote commercial and mixed-use development of sites in the downtown and, where appropriate, of sites with a highway orientation. The land use designation is Downtown Commercial.
- **2.2. Zoning Bylaw:** The property is zoned Comprehensive Development Zone 10 (CD10), which allows for the uses permitted in the Community Commercial (CC) zone well as automobile sales and rentals, accessory automobile servicing and auditoriums. The CC zone allows for child care facilities with a maximum of 25 children in a facility at any one time. A child care facility in a CD zone is further subject to a regulation that it is to serve residents or persons residing in adjacent apartments or apartment residential zones.
- **2.3. Child Care Licenses:** Child care facilities are regulated under the Child Care Licensing Regulation and Standards of Practice of the *Community Care and Assisted Living Act* and require a child care license from Fraser Health. Licenses are not required for facilities with 1 or 2 children.

2.4. Development Procedures Bylaw: All applications to amend the Zoning Bylaw are considered by Council and only Council has the authority to refuse an application for a bylaw amendment.

3. COMMENTS AND ANALYSIS

3.1. Site Characteristics and Context: Shaughnessy Station is located on the eastern side of Shaughnessy Street just north of the underpass and contains multi-tenant buildings, a large grocery store, restaurants, banks, offices and other commercial uses. The property backs onto the CP Rail railway.



The proposed site for the daycare is located adjacent to Shaughnessy Street in a multi-tenant building that was formerly occupied by the Canadian Tire business. A landscape strip located along the side of the building encroaches into the City road right-of-way and a retaining wall supports the back part of this area.



3.2. Project Description: The proposal is to renovate the vacant 1036.6 m² (11,158 ft²) commercial unit to create a facility with 10 classrooms, 6 napping rooms, and supporting office and kitchen rooms. The landscaping along the western side and 9 parking spaces in front of the building would be replaced with a fenced outdoor play area for the children that would be accessed from a new entry along the façade. The operator also intends to take advantage of the close proximity of this site to Lions Park.

The applicant has provided the following to date:

- a transportation letter by Bunt & Associates providing an analysis of the potential impacts of a child care facility with 107 children: the study determined that there would be sufficient parking to accommodate the proposed use. The study also identified that the frequency of arrivals and departures would be appreciably higher compared to the previous commercial use but did not comment on the potential impact on existing transportation network.
- an air quality and noise study that recommended use of acoustic materials in the building's renovation, but did not address the impact of noise on the outdoor play area. It also used office building standards for assessing air quality.
- an incomplete site profile that would need to be completed to meet the requirements of the Ministry of Environment.

Significant offsite improvements would be recommended as conditions of the rezoning in accordance with normal practice and could include reconstruction of the adjacent portions of Shaughnessy Street and Lougheed Highway, upgrading services and street lighting, and construction of a portion of a multi-purpose pathway. Another recommended condition of a rezoning would be renewal of an expired encroachment agreement for the retaining wall within the City right-of-way.

3.3. Existing Supply of Child Care Spaces: There are 176 licenced child care spaces located within approximately 400m of the proposed site (a 5-minute walk). 36 of these spaces are for infants and toddlers and 140 for children aged 3 to 5. There is also an active licence application for an additional 8 infant and toddler spaces and 16 spaces for children aged 3 to 5 within the same radius.

3.4. Discussion & Analysis

A number of issues have been identified as follows:

- The site was formerly used by CP Rail and was remediated to meet standards required for office and commercial uses. Further remediation of the site may be necessary for this proposed change of use to meet the standards required for a child care facility.
- The on-site outdoor play area meets the minimum size required for a large child care facility, but its location is immediately adjacent to heavy traffic on Shaughnessy Street as it emerges from the underpass and an active railway line.

- The potential use of the popular children's play area in Lions Park leads to two issues: one, that a large number of children would be crossing the busy intersection at Lions Way and Shaughnessy Street to get to the play area and secondly, that the public park could become a substitute for the facility's required on-site play area if it is determined to be too noisy or its air quality is too poor for frequent use.
- An increase in both pedestrian and vehicle traffic may adversely impact the signal operation and traffic flow at Shaughnessy Street and Lions Way.
- High community need for additional child care spaces serving this neighbourhood and, in particular, residents of adjoining residential developments, has not been demonstrated.
- 3.5. Consultation: The original applicant contacted 29 of the 32 Shaughnessy Station businesses and advised that most did not have any concerns. Questions related to pick-up and drop-off activities were raised, and one business was concerned about the use in close proximity of the railway with respect to noise, pollutants, and hazardous materials.

A sign providing information on the rezoning application is posted on the site. Two nearby child care facilities have each provided comment that they struggle to fill spaces in their facilities and question allowing for additional spaces at this time.

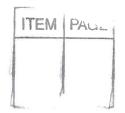
4. OPTIONS

The Smart Growth Committee may:

- (1) Recommend to Council that Council refuse the application; or,
- (2) Determine that it wishes to further consider the application before making a decision on a recommendation. If this option is selected, staff would work with the applicant to bring forward additional information addressing site contamination, further traffic information, and clarify air quality and noise concerns. In accordance with our normal practice for a rezoning application that is expected to proceed to a Public Hearing, staff would also put forward recommended conditions of approval.

Laura Lee Richard, MCIP

Director of Development Services



AMBIENT AIR QUALITY STUDY 3190 SHAUGHNESSY STREET PORT COQUITLAM

for

ABBARCH Architecture Inc

Suite 500, One Bentall Centre 505 Burrard Street Vancouver, BC V7X 1M4

Project No. 2018.038

October 11th, 2018

REPORT PREPARED BY:



October 11th, 2018 Project #: 2018.038

ABBARCH Architecture Inc.

Suite 500, One Bentall Centre 505 Burrard Street Vancouver, BC V7X 1M4

Attn: Michael Burton-Brown, Principal

To Whom It May Concern,

Re: Ambient Air Quality Study Report for 3190 Shaughnessy Street, Port Coquitlam, BC.

We are pleased to submit the results of our ambient air quality study report for 3190 Shaughnessy Street, Port Coquitlam, BC.

The information compiled represents the most accurate information available at the time of our investigation.

Thank you for the opportunity to be of service, and should you have any questions, please contact us through any of the avenues noted below.

Respectfully submitted, ENTECH ENVIRONMENTAL CONSULTANTS LTD.

S.F. Sverre, M.Sc., R.P. Bio.

President

Encl.

Entech Environmental Consultants Ltd.



AMBIENT AIR QUALITY STUDY 3190 SHAUGHNESSY STREET PORT COQUITLAM

for

ABBARCH Architecture Inc

Suite 500, One Bentall Centre 505 Burrard Street Vancouver, BC V7X 1M4

Project No. 2018.038

October 11th, 2018

REPORT PREPARED BY:



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2.0 EXECUTIVE SUMMARY

Entech Environmental Consultants Ltd. (ENTECH) was retained by Michael Burton-Brown of ABBARCH Architecture Inc. to conduct an ambient air quality study (AAQS) and consequent report for a property located at Shaughnessy Station Mall, Port Coquitlam, BC (the Property). It is proposed that part of 3190 Shaughnessy Street building will be used for a daycare facility and a narrow strip of land directly to the north east of the building will be used as a children's playground area. Entech was retained to provide an Air Quality assessment of the outdoor facility.

The applicable Air Quality Objectives set out by Metro Vancouver were used as a basis for determining the potential contaminants of concern. This assessment focuses on 5 potential air contaminants; Nitrogen Dioxide (NO₂), Carbon Monoxide (CO), Particulate Matter ($PM_{2.5}$ and PM_{10}), Ozone (O₃) and Sulphur Dioxide (SO₂).

To assess these potential contaminants of concern Entech used three data collection techniques over a sampling period of one week. A passive collection system was used to measure NO_2 , O_3 and SO_2 . The Particulate Matter was measured using a TSI DustTrak Drx (DustTrak). A MultiRAE Model 6228 was used to analyse CO and additional gases.

Data from the Active monitoring instruments (DustTrak and MultiRAE) was recorded throughout the duration of the week-long program and downloaded at the conclusion. Maxxam's passive samplers were shipped to Maxxam's Laboratory to be analyzed at the conclusion of the program.

In order to comply with Metro Vancouver's and Fraser Health Authority objectives and requirements for Air Quality, a number of guidelines and regulations were consulted. These include Community Care and Assisted Living Act, Environmental Assessment Act, Environmental Management Act, and Waste Discharge Regulation. Furthermore, the Canadian Council of Ministers of the Environment Ambient Air Monitoring Protocol was consulted for best practices and guidelines.

The information gathered from the MultiRAE instrument included data for CO and NO₂. Both parameters are known to cause respiratory issues in humans if exposed to prolonged periods along with NO₂'s ability to react with sunlight and produce ground-level ozone. With respect to the Property, analytical results for the above parameters met applicable Metro Vancouver Air Quality Objectives.

PM_{2.5} is known informally as respirable particulate matter and therefore has the ability to penetrate deep into the lungs once inhaled. PM₁₀ is known as



inhalable particulate matter and while it can be inhaled its diameter is slightly too large to penetrate the lung cavity. Together these two particulate matters can have a negative impact with respect to air quality. If exposed for a long period of time they can lead to asthmatic conditions, lung cancer, and other various respiratory issues. Both potential contaminants of concern ($PM_{2.5}$ and PM_{10}) met Metro Vancouver's Air Quality Objectives. The data obtained during this monitoring event met compliance for the 3 days each the DustTrak instrument was operating and logging data.

Data from the closest Metro Vancouver Air Quality monitoring station was also reviewed during the monitoring period. The station was located in Pitt Meadows approximately 9.5 km to the east southeast of the Property. The data for, NO_2 O_3 and SO_2 was reviewed and indicated that each analyte was less than their respective guideline objective. This was used as a general review of the local air quality. The PASS samplers analyzed by the laboratory for NO_2 , O_3 and SO_2 also contained concentrations that met the Metro Vancouver Air Quality Objectives.

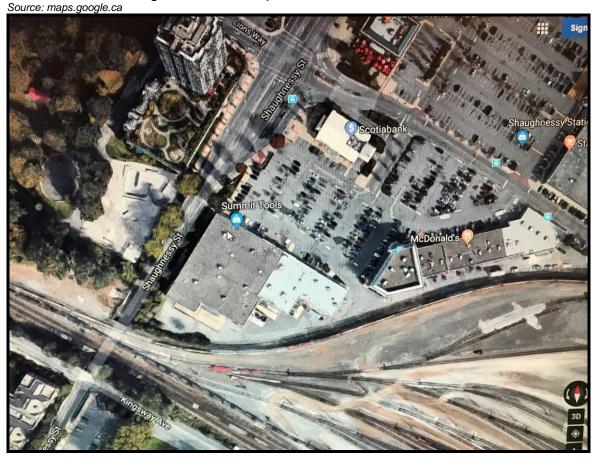
The information compiled represents the most accurate information available at the time of our investigation.



3.0 INTRODUCTION AND BACKGROUND INFORMATION

Entech Environmental Consultants Ltd. (ENTECH) was retained by Michael Burton-Brown ABBARCH Architecture Inc., to provide an air quality assessment. The assessment was required for an outside playground area for a proposed child care facility at Shaughnessy Station Mall in Port Coquitlam, BC. The proposed facility is located at 3190 Shaughnessy Street in Port Coquiltam (also referred to as Building 'C' in Figure 2). The location of the Property is illustrated in Figure 1.

Figure 1: Location Map Proposed Childcare Facility Building and Summit Tools, Shaughnessy Station Mall and Surrounding Area, Port Coquitlam, BC.



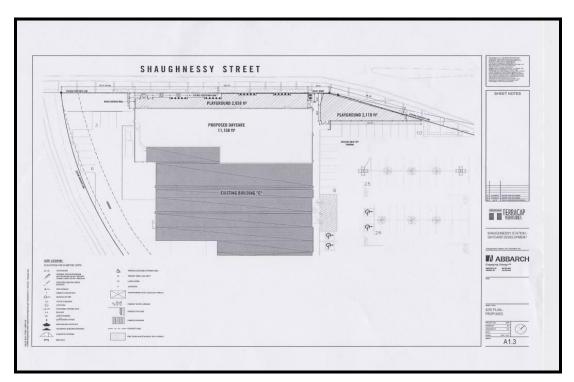
The Property is bounded to the northwest by Shaughnessy Street and across the street is a mixture of residential use which includes a Park, Railside Skate Park and a residential condominium tower. To the northeast and east of the Property is the Shaughnessy Station Mall which comprises of a variety of commercial units. These include Summit Tools, Shoppers Drug Mart and Bosley's Pet Supplies. The unit next to the proposed childcare facility is



Summit Tools. To the southeast, south and southwest of the Property is a large Canadian Pacific rail switching yard.

The outdoor play area consists of a strip of land between the existing building and Shaughnessy Street. The playground area is approximately 10 m wide and runs along the length of the existing building. It also includes a narrow triangular shaped section of vegetation covered space to the northwest of the existing parking spaces

Figure 2
The Proposed Play Ground Facility
Situated next to 3190 Shaughnessy Street Building 'C' as illustrated below.



The City of Port Coquitlam is located near the geographical centre of Metro Vancouver. It is on the north bank of the Pitt River, which flows from Pitt Lake into the Fraser River to the southwest. The City of Port Coquiltam is located to the south of Eagle Mountain which makes up part of the north shore mountain range. To the south is the estuary of the Fraser River. Metro Vancouver is located in a temperate coastal climate and on average has a temperate range between 7°C in winter and 22°C in the summer months. Metro Vancouver on average receives 1,150 mm per year of precipitation, with the majority in the winter months. The prevailing wind direction is typically from the east-southeast however, seasonal fluctuations can frequently occur.



4.0 POTENTIAL CONTAMINANTS OF CONCERN

When assessing air quality and its effects on human health, it is important to note which components have a more detrimental effects. Below is a figure of the structure Metro Vancouver uses to determine the air quality health index (AQHI).

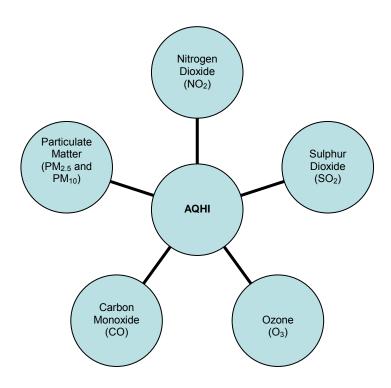


Figure 3: Air Quality Health Index Components Source: Metrovancouver.org/services/air-quality

In order to determine the above AQHI, Metro Vancouver measures each of these components at 27 stations around the lower mainland and determines a regional number to represent the current air quality.

Entech has designated a potential contaminant of concern (PCOC) number for each of the below contaminants.

Below are explanations of each contaminant of concern, their respective sources, and their importance with respect to measuring ambient air quality.



4.01. NITROGEN OXIDES

Nitrogen oxides can be divided into two separate compounds, nitric oxide (NO) and nitrogen dioxide (NO₂). Nitric oxide converts rapidly in the air into nitrogen dioxide after it has been emitted. Nitrogen dioxide is a highly-reactive, coloured gas with a potential pungent and irritating odour. On hot and sunny days, nitrogen dioxide readily reacts with the sunlight to produce ground level ozone. Below is a chart of sources of nitrogen oxides as produced by Metro Vancouver's public fact sheets.

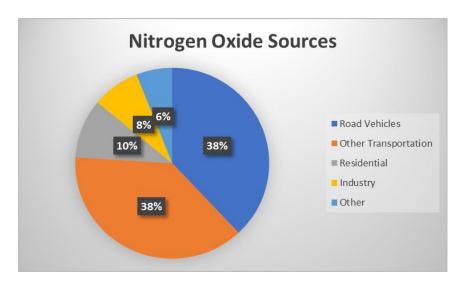


Figure 4: Nitrogen oxide Sources Source: metrovancouver.org/services/air-quality

4.02. PARTICULATE MATTER

Particulate matter with respect to air quality can be sub-divided into two separate categories, $PM_{2.5}$ or respirable particulate matter which is 2.5 microns or smaller and PM_{10} or inhalable particulate matter measuring 10 microns or smaller. Due to their extremely small size, especially $PM_{2.5}$, their ability to penetrate deep into our lungs makes them a significant potential air contaminant. Below is a chart of sources of particulate matter as produced by Metro Vancouver's public fact sheets.



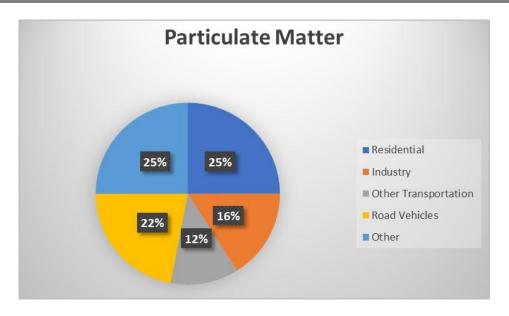


Figure 5: Particulate Matter Sources
Source: metrovancouver.org/services/air-quality

4.03. CARBON MONOXIDE (CO)

Carbon monoxide is a colourless and odourless gas produced primarily by incomplete burning of fossil fuels. Ontario's Ministry of the Environment estimates that approximately 87% of all CO emitted comes from transportation sources. Below is a chart of sources of CO from Ontario's Ministry of the Environment and Climate Change.

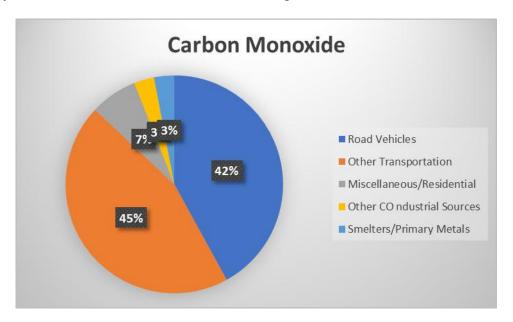


Figure 6: Carbon Monoxide Sources
Source: airqualityontario.com/science/pollutants/carbon.php



4.04. OZONE

Ozone is a gas made up of three oxygen atoms, when assessing ozone; it can be divided into either atmospheric or ground-level ozone. The ozone for our purposes is ground-level ozone which is formed when nitrogen oxides and volatile organic compounds react with sunlight. Below is a chart of sources of volatile organic compounds as produced by Metro Vancouver's public fact sheets. In order to ascertain sources of ozone directly, it is necessary to take into account both sources of volatile organic compounds and nitrogen oxides and amount of sunlight present.

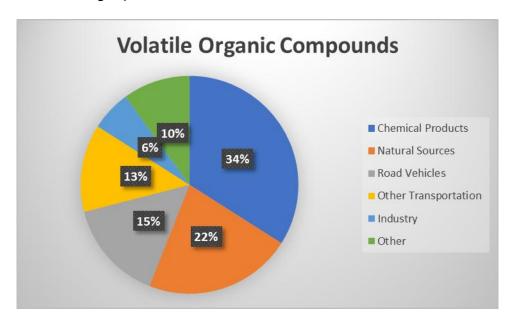


Figure 7: Volatile Organic Compound Sources Source: metrovancouver.org/services/air-quality

4.05. SULPHUR DIOXIDE (SO₂)

Sulphur dioxide is a gas produced when fossil fuels containing Sulphur are burned. Sulphur dioxides can react with other substances in air to form particulate matter. Below is a chart of sources of Sulphur dioxide as produced by Metro Vancouver's public fact sheets.



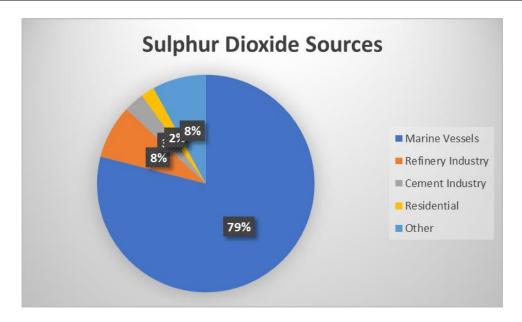


Figure 8: Sulphur Dioxide Sources
Source: metrovancouver.org/services/air-quality

5.0 REGULATORY FRAMEWORK

The Environmental Management Act (EMA) and the Waste Discharge Regulation are the fundamental pieces of legislation for air quality in British Columbia. The EMA was enacted in July 2004; it replaced the Waste Management Act and the EMA and brings provisions from both of those acts into one statute.

The EMA provides a more flexible authorization framework, increases enforcement options and uses modern environmental-management tools. It also enables the use of administrative penalties, informational orders and economic instruments to assist in achieving compliance. Along with the enactment of the EMA, several new regulations and regulatory amendments have been made.

Furthermore, air quality management involves other processes and legislation. This includes the environmental assessment process under EMA. Proposed projects may need to undergo a formal environmental assessment, if required by criteria in federal or provincial legislation. This process identifies and assesses the potential impacts of a proposed project and develops measures to eliminate, minimize or manage those impacts.

Pertaining specifically to childcare facilities and the regulations that govern them, the *Community Care and Assisted Living Act* defines a set of terms and definitions under which conditions a facility may be operated.



The Canadian Council of Ministers of the Environment (CCME) guidelines for ambient air quality monitoring was consulted in order to ensure best practices were used for the measuring of the potential contaminants of concern.

The Shaughnessy Station Mall, City of Port Coquitlam is situated within the Fraser Health Authority Region that is overseeing the approval of the child care facility and playground area.

6.0 AIR PROFILE AND BACKGROUND INFORMATION

The potential issues that surround the Property with respect to ambient air quality are two-fold. Primarily, there is Shaughnessy Street which runs parallel to the proposed outdoor play area. The second potential concern is the CP Rail yard located to the south of the Property.

The building located at 3190 Shaughnessy Street, is situated adjacent and to the north of CP rail yard. It is within the 'Shaughnessy Station Mall' that has the civic address of 2850 Shaughnessy Street, City of Port Coquitlam .This civic address encompasses all the Mall buildings. The proposed plan is to create a childcare facility for 156 children in the west part of the 3190 Shaughnessy Street unit with an exterior toddler play area between Shaughnessy St. and the building. There were concerns associated with the ambient air quality (A.Q.) in this commercial / industrial area of the City that required assessment.

The proposed childcare facility and the adjacent Submit Tools retail outlet occupy approximately 1115 m^2 ($12,000 \text{ ft}^2$) each and are separated by a wall. The interior height of the building is approximately 6 m (20 ft), and can facilitate a mezzanine floor. The Property is situated within the Fraser Health Authority region.

The outdoor playground area is an approximately 10 m (30 ft) wide, and is landscaped with rose bushes and contains a concrete pathway, situated between the building and Shaughnessy St. The proposed play area extends from the southwest corner along the length of the building, and a triangular shaped area to the north of the building currently occupied by approximately 10 parking spaces. The site specifics are detailed on the Overall Landscape Plan by PMG and dated December 15th, 2015 and illustrated in Figure 2.



7.0 METHODOLOGY

The proposed playground area along the building is unfenced at this time. The security of the monitoring equipment that would be on site 24 hrs a day for 5 days of the week was a concern. Suggestions were made that the Mall security would monitor the equipment during the day, and during night time the mobile security detail might periodically look in on the equipment.

Typically a 3 m high pedestal tower normally houses the monitoring equipment and is connected to an electrical outlet to provide power to the equipment. However, due to the lack of perimeter fencing alternatives locations to position the equipment were discussed. Jason Thievin, Site Supervisor, with Terracap Management Inc. suggested that we could leverage or suspend the monitoring equipment from the roof, where an electrical cord could be utilised. A site visit was made up to the roof via an interior restricted access ladder by representatives from Terracap, Entech and ABBARCH, and it appeared to represent an accessible, secure solution for the location of the monitoring equipment.

This required the construction of an extension platform from the roof extending two meters from the building wall where the equipment box would be suspended to comply with the normal monitoring recommendations of the CCME (the Canadian Council of Ministers of the Environment). ABBARCH prepared a structural sketch/drawing to accommodate this temporary installation of the monitoring equipment.

An additional option could be considered by relocating the play area to the roof of the building should the air quality data at ground level not meet compliance. If the play area would be relocated to the roof space a separate monitoring event would be required.

The CP Rail yard is situated south of the Property, and the rail overpass across Shaughnessy St. is located near the southwest corner of the Property. The trains using this overpass slow down in the line switch area when going into or coming out of the Port Coquitlam rail yard and when crossing the overpass. It is therefore expected that the fully loaded or empty coal train cars that pass through the rail yard may not create much particulate dust that exceed the CCME standards. The two (2) lane underpass of the Shaughnessy St. situated approximately 10 m (30 ft) west of the warehouse building may not appear to represent a major truck transportation corridor. However, smaller delivery truck/vans and busses use this corridor.

A 3 m (10 ft) high fence may be considered along the western edge of the



property, along Shaughnessy St. to improve the air quality in the exterior play area. This may be constructed with concave shaped panels to allow the sound to be reflected back into the traffic. Therefore, reducing the noise concentration entering the playground area from Shaughnessy St., if it should considered to be of concern. We understand that there has already been a noise assessment conducted of the underpass area that was not reviewed by the authors.

Two (2) Instruments were rented from Pine Environmental for the purpose of conducting the study, a DustTraK Drx and a MultiRAE Model 6228. Both instruments were placed within an environmental enclosure box and connected to a power cable to provide an adequate run time. The equipment was recording data on a 24 hour basis for six days. Due to unrestricted access to the potential outdoor play area, the enclosure box was suspended from the roof of the neighbouring building. This was to prevent any potential external interference during the investigation. The enclosure was suspended approximately 3 m from ground level in accordance with the CCME's guidelines for ambient air monitoring.

The Dustrak DRX was used to monitoring for particulate matter and the sampling period was divided equally to record data for $PM_{2.5}$ and PM_{10} . The $PM_{2.5}$ data was collected from September 25th till September 28th. The PM_{10} data was recorded from September 28th till October 2nd 2018.

The MultiRAE 6228 was calibrated by Pine Environmental prior to being transported to the Property. The MultiRAE was programmed to record NO, NO₂, CO, CO₂ and H₂S. The data was collected from September 25th till October 2nd 2018. However, the data collected after 08:00 AM on October 1st has been excluded due to potentially excessive moisture causing a data recording failure alarm. The main purpose of the MultiRAE was to collect data on CO as this is part of Metro Vancouver's air quality guidelines. The additional gasses provided further information on the general air quality of the Property.

A Passive Air Sampling System (PASS) was supplied by Maxxam laboratories to analyse the NO_2 , O_3 and SO_2 . The PASS system consists of a sampler for each analyte which is attached to a rain guard and left on the Property for the duration of the monitoring event. The samplers are then shipped to the laboratory and analysed for their exposure content. A total of three samplers were used during this investigation.



8.0 FIELD OBSERVATIONS

On September 17 2018, Entech attended the Property in order to gauge a suitable location for the placement of the environmental enclosure containing the recording instruments and the PASS.

Due to the unrestricted access to the proposed play area it was concluded that the enclosed should be suspended from the roof of the neighbouring building to prevent any external interruption of the data recording. In discussion with Entech, Terracap Management and ABBARCH a design was formulated to allow the enclosure to be suspended from the roof. On September 24th Entech fabricated a structure and installed it in place. On September 25th the instruments and the PASS system were positioned in place.

The play area consists of a narrow strip of land between the existing building and Shaughnessy Street. The playground area is approximately 10 m wide and runs along the length of the existing building. It also includes a narrow triangular shaped section of vegetation covered space to the north of the existing parking spaces.

During the site visit Entech did observe the traffic volumes on Shaughnessy Street and from the roof of the building the operation of the CP Rail yard. The Rail yard is located directly to the south of the mall and extends approximately 3 km to the southeast where it is terminated by the Pitt River Bridge. The facility appears to be switching yard.

9.0 RESULTS

This section of the report documents the results of the analysis and a review of Environment Canada's weather data. The results are segregated into each PCOC with respect to BC's Ambient Air Quality Objectives. The data from the MultiRAE and DustTraK have been included within this report. The laboratory data for NO₂, Ozone and SO₂ have also been reviewed and the calculated exposure per hour has been compared to their respective guidelines. Regional data for NO₂, Ozone and SO₂ has been review from the closest Metro Vancouver Air Quality monitoring station in Pitt Meadows. This data is used as an indication of the regional air quality. The monitoring station is located approximately 9.5 km to the East Southeast of the Property.



9.01. WEATHER DATA ENVIRONMENT CANADA

Historical weather data was collected reviewed from Environments Canada's Pitt Meadows facility located at Latitude 49°12'29.964" N Longitude 122 41'24.076" W. The data indicated that average daily temperature was between 10.8 °C and 18.2 °C. The total precipitation was 51.3 mm with approximately 5 of the eight days having no precipitation. Wind gusts were only recorded on two of the days with a maximum gust speeds of 39 kph and 36 kph, both were recorded from the North.

Table 1
Meteorological Data from Environment Canada's Pitt Meadows Weather
Station

Date (DD/MM/YY)	Max Temp (°C)	Min Temp (°C)	Mean Temp (°C)	Total Precip (mm)	Direction max gust (degs)	Speed of max gust (Kph)
25/09/18	20.3	6.7	13.5	0.0		
26/09/18	20.6	7.0	13.8	0.0		
27/09/18	22.9	9.1	16.0	0.0		
28/09/18	25.9	10.4	18.2	0.0		
29/09/18	20.2	9.2	14.7	0.2	8	39
30/09/18	16.6	11.4	14.0	30.2		
01/10/18	17.0	12.2	14.6	14.6		
02/10/18	15.1	6.5	10.8	6.3	25	36

9.02. NITROGEN DIOXIDE (NO₂)

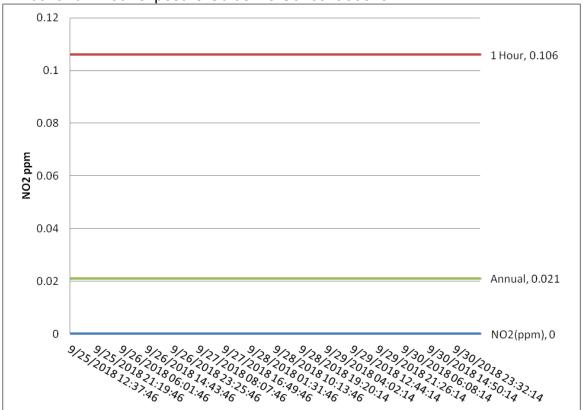
Results for nitrogen dioxide, designated by Entech as a potential contaminant of concern due to its high emissions from transportation sources and the potential of reacting with sunlight to produce ground-level ozone are detailed below.

Active data was compiled using the raw data logged over the course of the monitoring event using the MulitRAE 6228 on a 1 minute intervals. This was conducted to identify any significant peaks or spikes in concentrations. The PASS system was utilized to provide data on the typical exposure over the total monitoring period. The PASS samplers submitted to the laboratory for chemical analysis and have a significantly increased minimum detection limit.

The active system conducted a total of 8,338 readings on a 1 minute interval over the monitoring period the results did not detect any spikes in the data or elevated readings.





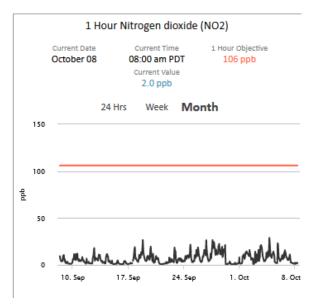


The data analyzed from the PASS sampler contained a NO_2 concentration of 9.4 ppb. The sampler was exposed to ambient air for a total of 141.5 hours over the monitoring period. Therefore, the sampler was exposed to a NO_2 concentration of 0.066 ppb/hour, which is significantly less than the Guideline Objective of 0.106 per hour.

The data reviewed from the Pitt Meadows Air Quality Monitoring Station indicated that the majority of the readings over the investigation period were less than 25 ppb (<0.025 ppm). The hourly 1 hour objective for NO_2 is 106 ppb (<0.106 ppm).



Figure 10 NO₂ Data from the Pitt Meadows Air Quality Monitoring Station

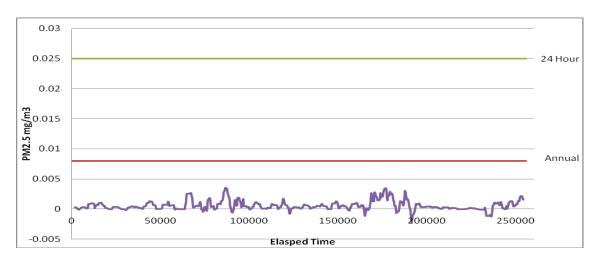


9.03. PARTICULATE MATTER (PM_{2.5} & PM₁₀)

The data for the $PM_{2.5}$ was collected between September 25^{th} and September 28^{th} 2018. The DustTraK was initiated at 12:24:10 with analysis at 2 minute intervals. A total of 2,130 readings were collected and have been displayed in Figure 11. The average reading over the monitoring period was 0.001 mg/m³. The raw data has been plotted on an hourly average to allow for comparison to the air quality objectives. The exposure objectives for a 24 hour period (0.025 mg/m³) and annual period (0.008 m/m³) have been include on the chart. The data indicates that during the monitoring event the mass per cubic meter of $PM_{2.5}$ were always less than both Guidelines.

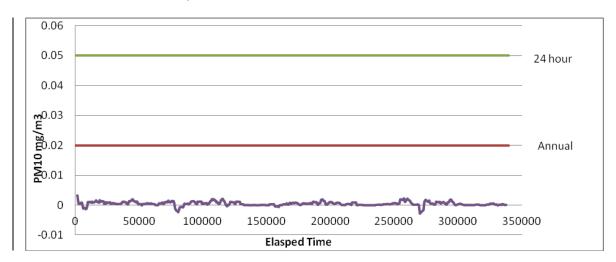


Figure 11 PM_{2.5} Data collected from September 25th to September 28th 2018 with Annual and 24 hour Exposure Guidelines



The data for the PM_{10} was collected between September 28^{th} and October 2^{nd} 2018. The DustTraK was initiated at 12:19:07 with analysis at 2 minute interals. A total of 2,130 readings were collected and have been displayed in Figure 12. The average reading over the monitoring period was 0.001 mg/m³. The raw data has been plotted on an hourly average to allow for comparison to the air quality objectives. The exposure objectives for a 24 hour period (0.05 mg/m³) and annual period (0.02 mg/m³) have been include on the chart. The data indicates that during the monitoring event the mass per cubic meter of $PM_{2.5}$ were always less than both guidelines.

Figure 12 PM₁₀ concentrations (mg/m³) from September 28th to October 2nd 2018 with Annual and 24 hour exposure Guideline Concentrations.

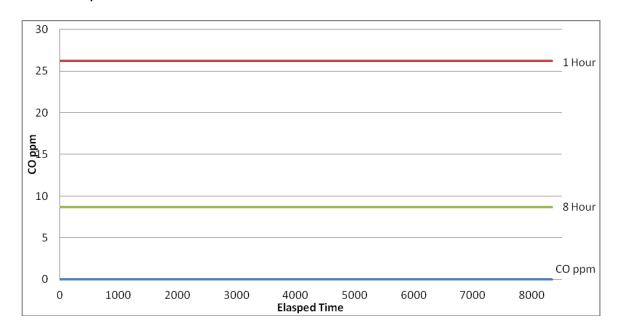




9.04. CARBON MONOXIDE (CO)

Active data was compiled using the raw data logged over the course of the monitoring event using the MulitRAE 6228 on a 1 minute interval. This was conducted to identify any significant peaks or spikes in concentrations. The active system conducted a total of 8,338 readings. The results did not detect any spikes in the data or elevated readings. All of the readings were 0 ppm. The air quality Objective Guidelines for 1 hour exposure is 26.2 ppm and for an 8 hour exposure is 8.7 ppm. The data indicates that during the monitoring event the CO concentrations were less than both Objectives.

Figure 13 CO (ppm) concentrations from September 25th to October 1st 2018 with 1 and 8 hour Exposure Guideline Concentrations



9.05. OZONE (O₃)

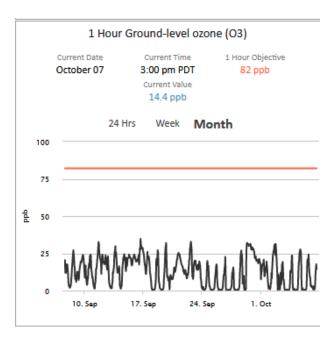
The PASS data collection method was used to measure the O_3 concentration during the monitoring event. The sampler was exposed during the entire monitoring event and the data provides information on the potential cumulative exposure at the Property. The data from the laboratory indicated that the sampler contained an Ozone concentration of 4.2 ppb. The sampler was exposed for a total of 141.5 hours, therefore the concentration per hour was 0.03 ppb/hour. This is significantly less than the 82 ppb hourly Guideline Objective.

The data from the Pitt Meadows Air Quality Monitoring Station was also



reviewed. The data indicates that the majority of the readings during the investigative period were less than 30 ppb. The 1 hour Objective for ozone exposure is 82 ppb.

Figure 14
Ozone Data from the Pitt Meadows Air Quality Monitoring Station



9.06. SULPHUR DIOXIDE (SO₂)

The PASS data collection method was used to measure the SO_2 concentration during the monitoring event. The relative detection limit for the analysis is 0.4 ppb. The laboratory data indicated a concentration of <0.4 ppb. Therefore, if the sampler did absorb any SO_2 during the monitoring event it was at concentrations less than the relative detection limit of the analysis. This indicates that any SO_2 on the Property during the monitoring event was less than 0.4 ppb and therefore less than the hourly objective guideline of 82 ppb.

The data from the nearest Metro Vancouver Air Quality Sampling Station was used as a guide to assess the regional air quality near the Property.



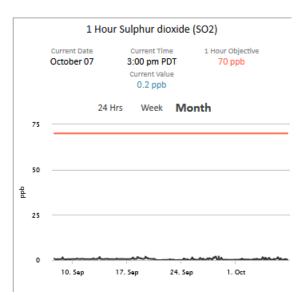


Figure 15 Sulphur Dioxide Data from the Pitt Meadows Air Quality Monitoring Station

The data reviewed from the Monitoring Station indicated that the majority of the readings during the investigation period were less than 1 ppb (<0.001ppm). The 1 hour exposure objective for SO_2 is 70 ppb (<0.07 ppm).

10.0 SUMMARY AND CONCLUSION

Entech was retained by ABBARCH to conduct an ambient air quality study (AAQS) and prepare a report for a proposed outdoor playground facility at Shaughnessy Station Mall, Port Coquitlam, BC. The Property is currently a vacant area with landscaped vegetation and an access pathway from the mall parking lot to the rear of the facility. The baseline study was conducted to verify that the proposed play area will comply with the applicable Air Quality Objectives as established by Metro Vancouver.

The applicable Air Quality Objectives set out by Metro Vancouver were used as a basis for determining the potential contaminants of concern. As such this report focuses on 5 potential air contaminants; Nitrogen Dioxide (NO₂), Carbon Monoxide (CO), Particulate Matter (Fine $PM_{2.5}$ and Inhalable PM_{10}) Ozone (O₃) and Sulphur Dioxide (SO₂)

Entech personnel attended the Property between September 17th and October 2nd 2018. A DustTrak and MultiRAE Model 6228 (MultiRAE) instruments (Active) were used to quantify the potential air contaminants continuously while a passive air system (Passive) was utilized to measure



 $NO_2\ O_3$ and SO_2 . The DustTRak collected data for $PM_{2.5}$ from September 25^{th} to September 28^{th} . Data for PM_{10} was collected from September 28^{th} to October 2^{nd} 2018. The data was collected on 2 minute intervals. The MultiRAE was run continuously from September 25^{th} to October 1^{st} and collected data on 1 minute intervals. The Passive system was used to collected NO_2 , O_3 and SO_2 average exposure concentrations from September 25^{th} to October 2^{nd} .

Data from Active monitoring instruments (DustTrak and MultiRAE) was recorded throughout the duration of the week-long program and downloaded at the conclusion. Maxxam's passive samplers were shipped to Maxxam's Laboratory to be analyzed at the conclusion of the program.

In order to comply with Metro Vancouver's and Fraser Health Authority objectives and requirements for Air Quality, a number of guidelines and regulations were consulted. These include Community Care and Assisted Living Act, Environmental Assessment Act, Environmental Management Act, and Waste Discharge Regulation. Furthermore, the Canadian Council of Ministers of the Environment Ambient Air Monitoring Protocol was consulted for best practices and guidelines.

The information gathered from the MultiRAE instrument included data for CO and NO₂. Both parameters are known to cause respiratory issues in humans if exposed to prolonged periods along with NO₂'s ability to react with sunlight and produce ground-level ozone. With respect to the Property, analytical results for the above parameters met applicable Metro Vancouver Air Quality Objectives.

 $PM_{2.5}$ is known informally as respirable particulate matter and therefore has the ability to penetrate deep into the lungs once inhaled. PM_{10} is known as inhalable particulate matter and while it can be inhaled its diameter is slightly larger and unable to penetrate the lung cavity. Together these two particulate matters can be a concern with respect to air quality. If exposed to them for long periods of time, they can lead to asthmatic conditions, lung cancer, and other various respiratory issues. Both potential contaminants of concern ($PM_{2.5}$ and PM_{10}) met Metro Vancouver's Air Quality Objectives. The data obtained during this monitoring event met compliance for the 3 days each the DustTrak instrument was operating and logging data.

Data from the closest Metro Vancouver Air Quality monitoring station was also reviewed during the monitoring period. The station was located in Pitt Meadows approximately 9.5 km to the east southeast of the Property. The data for, NO_2 O_3 and SO_2 was reviewed and indicated that each analyte was less than their respective guideline objective. This was used as a general review of the local air. The PASS samplers analyzed by the laboratory for NO_2 , O_3 and SO_2 also contained concentrations that met the Metro



Vancouver Air Quality Objectives.

The information compiled represents the most accurate information available at the time of our investigation.

11.0 DISCLAIMER

This project report was prepared for the exclusive use of ABBARCH for the subject property at 3190 Shaughnessy Street, within Shaughnessy Station Mall, Port Coquitlam, BC, and was conducted and reported on in accordance with BC Ministry of Environment regulations using generally accepted Air Quality Monitoring and environmental consulting practices. In completing this study Entech Environmental Consultants Ltd. has related in good faith on information provided by sources noted in the report. All reasonable attempts were made to complete this project in a professional manner, but Entech cannot be held responsible for errors and omissions resulting from unknown field conditions or unavailable data.

Should new information be discovered in the future, Entech Environmental Consultants Ltd. should be requested to re-evaluate the conclusions of this report and to provide amendments as required prior to any reliance upon the information presented.

This report is subject to copyright law and is the sole property of ABBARCH any third party use of this report is at the sole risk of that party or person as Entech Environmental Consultants Ltd. and the authors of this report assume no liability whatsoever. The Ministry of Environment, the City of Port Coquitlam, and Fraser Health Authority may rely on this report.

12.0 QUALIFICATIONS OF ASSESSOR

Entech Environmental Consultants Ltd. has been conducting environmental investigations since 1973, and is one of the oldest companies in the business in BC. The investigator for this project was S. Fredrik Sverre, M.Sc., R.P.Bio., who has more than 30 years of environmental investigative experience.

13.0 INSURANCE COVERAGE

Entech carries Professional Liability Insurance for Consultants from ENCON. The coverage is for annual claim aggregates up to \$5,000,000. The insurance agent is HUB International Insurance Brokers of Burnaby.



Commercial General Liability Insurance in the amount of \$3,000,000 is also provided through our insurance agent HUB.

Thank you for allowing Entech to be of service. **Entech Environmental Consultants Limited.**

S. Fredrik Sverre, M.Sc. R.P. Bio President



APPENDIX A SITE PHOTOS





Photo 1: View of the Proposal Child Care Facility

Photo 2: View of Proposed Outdoor Play Area.





Photo 3: Environmental Enclosure Box with Air Monitoring Equipment Exposed at 3190 Shaughnessy Street, Port Coquitlam, BC. Photo was taken on September 25, 2018.



Photo 4: Environmental Enclosure Box with Air Monitoring Equipment Exposed at 3190 Shaughnessy Street, Port Coquitlam, BC. Photo taken on September 28, 2018.





APPENDIX B LABORATORY DATA





Your Project #: 2018/09/25 - 2018/10/02

Site Location: BURNABY BC

Attention: Paul Scott

Entech Environmental Consultants Ltd. 3187 Thompson Place West Vancouver, BC Canada V7V 3E3

Report Date: 2018/10/11

Report #: R2632930 Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B888071 Received: 2018/10/10, 09:18

Sample Matrix: Air # Samples Received: 1

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
NO2 Passive Analysis	1	2018/10/10	2018/10/11	PTC SOP-00148	Passive NO2 in ATM
O3 Passive Analysis	1	2018/10/10	2018/10/11	PTC SOP-00197	EPA 300 R2.1
SO2 Passive Analysis	1	2018/10/10	2018/10/11	PTC SOP-00149	Passive SO2 in ATM

This report shall not be reproduced except in full, without the written approval of the laboratory. Results relate only to the items tested.

Encryption Key

 $\label{lem:please direct all questions regarding this Certificate of Analysis to your Project Manager.$

Levi Manchak, Project Manager SR Email: LManchak@maxxam.ca

Phone# (780)468-3536

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

^{*} RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Entech Environmental Consultants Ltd. Client Project #: 2018/09/25 - 2018/10/02

Site Location: BURNABY BC

Sampler Initials: PS

RESULTS OF CHEMICAL ANALYSES OF AIR

Maxxam ID		UM9560		
Sampling Date		2018/09/25 13:00		
	UNITS	1	RDL	QC Batch
Passive Monitoring				
Calculated NO2	ppb	9.4	0.4	9178401
Calculated O3	ppb	4.2	0.4	9178403
Calculated SO2	ppb	<0.4	0.4	9178423
RDL = Reportable Detection Limit				



Entech Environmental Consultants Ltd. Client Project #: 2018/09/25 - 2018/10/02

Site Location: BURNABY BC

Sampler Initials: PS

GENERAL COMMENTS

Travel blank result for SO2 exceeded acceptance criteria of >RDL. Possible contamination may have occurred. Sample results have been blank subtracted.

Results relate only to the items tested.



Entech Environmental Consultants Ltd.
Client Project #: 2018/09/25 - 2018/10/02

Site Location: BURNABY BC

Sampler Initials: PS

QUALITY ASSURANCE REPORT

QA/QC								
Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9178401	YL6	Spiked Blank	Calculated NO2			100	%	90 - 110
9178401	YL6	Method Blank	Calculated NO2		<0.1		ppb	
9178403	YL6	Spiked Blank	Calculated O3			99	%	90 - 110
9178403	YL6	Method Blank	Calculated O3		<0.1		ppb	
9178423	OZ	Spiked Blank	Calculated SO2			102	%	90 - 110
9178423	OZ	Method Blank	Calculated SO2		<0.1		ppb	

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.



Entech Environmental Consultants Ltd.
Client Project #: 2018/09/25 - 2018/10/02

Site Location: BURNABY BC

Sampler Initials: PS

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Linda Lin, Supervisor, Centre for Passive Sampling Technology

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Outdoor schedule infant toddler classes.

A total play area of 2900 useable sq ft divided into 3 separate developmental area of 966 sq ft. Each area will allow for a rotational schedule of 2 groups of 12 children per below. This will allow for 80 sq ft per child and follows the guidelines

Of the Director of Licensing Standard of Practice - Active Play ensuring a minimum of 60 minutes per day of outdoor active play.

1/T room 3&4 (share)	I/T Room 1&2 (share)
8:30-10am / 10am-11:30am	8:30-10am / 10am-11:30am
1:30pm - 3:00pm / 3pm - 6pm season	1:30pm - 3:00pm / 3pm - 6pm season
dependent	dependent

I/T Room 5&6 (share)	
8:30-10am / 10am-11:30am	
1:30pm - 3:00pm / 3pm – 6pm season	
dependent	

This schedule is only a guideline; the setup of the playground areas is extremely flexible to allow the children to access a different area morning and afternoon depending on the needs, program and nap times of the group.

Outdoor schedule infant toddler classes A total play area of 2100 useable sq ft divided into 2 separate developmental area of 1050 sq ft. Each area will allow for a rotational schedule of 2 groups of 16 children per below. This will allow for 66 sq ft per child and follows the guidelines Of the Director of Licensing Standard of Practice - Active Play ensuring a minimum of 60 minutes per day of outdoor active play.

Outdoor schedule 3-5 vrs 16 children

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Room 1 & 2 (share)	Room 3 &4 (share)	
8:00-10am / 10am-	8:00-10am / 10am-	
12pm	12pm	
1-3pm / 3-6pm	1-3pm / 3-6pm	
season dependent	season dependent	

This schedule is only a guideline; the setup of the playground areas is extremely flexible to allow the children to access a different area morning and afternoon depending on the needs, program and quiet times of the group. The children will rotate through the different sections of the playground during the day.

Sunlight Study – Submitted by Abbarch Architecture Oct 31 2018





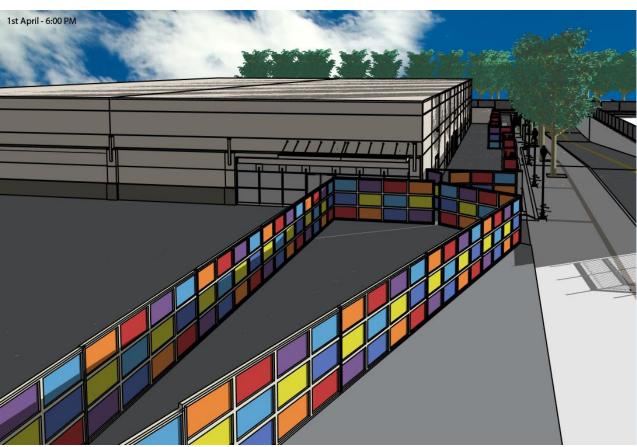






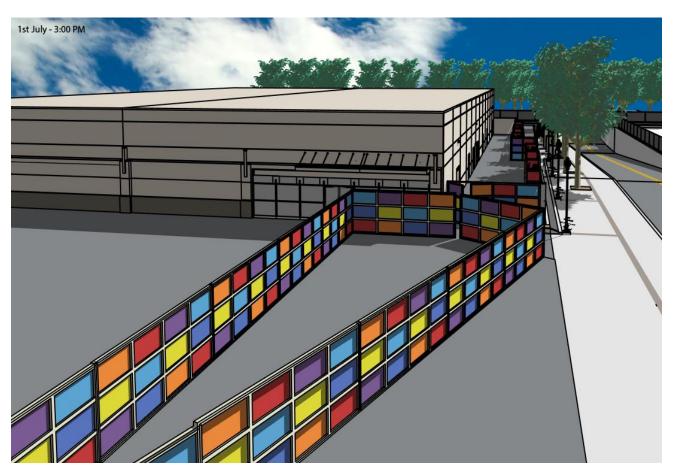


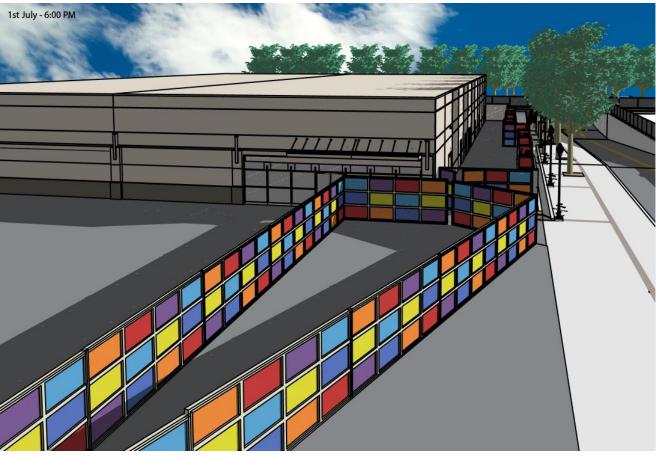




















From: Derek Jennejohn [mailto:Derek.Jennejohn@metrovancouver.org]

Sent: Thursday, November 08, 2018 12:17 PM

To: Meredith Seeton

Cc: Geoff Doerksen; Conor Reynolds

Subject: RE: Air quality report for a child care outdoor play space

Hi Meredith,

As per our discussion yesterday morning, please see below for comments on the report. Hopefully these are helpful. Let us know if you have questions or would like to discuss further.

Monitoring Equipment and Data

The consultant used two portable handheld monitors, DustTrak and MiniRAE, designed for industrial settings and/or emergency response. The MiniRAE instrument is designed for measuring unsafe air quality concentrations and alerting an individual when life threating levels are present. This instrument is not appropriate for measuring ambient air quality at the levels typically experienced in an outdoor environment and is not comparable to our standard air quality monitoring equipment. It is suggested that NO2 (nitrogen dioxide), O3 (ozone) and CO (carbon monoxide) measurements presented in this study be disregarded.

The consultant used the DustTrak monitor for measuring both fine particulate matter (PM2.5) and inhalable particulate matter (PM10). This instrument can be used as a screening level tool, but the duration of measurement used is not long enough to support any conclusions about air quality at this site. Typically, up to one year of air quality data is needed to be able to comment on air quality at any particular site. PM levels vary throughout the year; less than four days of sampling is not even enough to be able to comment on one season of the year. In our view, the data collected during this study does not provide sufficient meaningful insight into air quality at this location.

Air Emissions and Other Issues

Air emissions of concern at this location include diesel particulate matter emissions from trucks and locomotives, dust emissions from the rail yard, as well as possible heavy metals and PM emissions from passing and shunting trains. This location will also be particularly sensitive to micro-meteorology, which should be factored into any analysis. There will be a unique wind flow around the large building and potential channeling of winds through the traffic tunnel. Given the rail yard is adjacent to this large building and the rail overpass, there could be a mechanism that increases dust and rail emissions at the play area, which is within 100 metres of these emission sources.

Unless there are known local emission sources, it is unlikely there will be concern with CO, SO2 (sulphur dioxide) and/or O3 at this location. Given the size of the adjacent roadway, NO2 likely would not be any higher at this location compared with other roadways and is it not expected that NO2 at this location would be below air quality objectives.

Recommendations

Use of this location for an outdoor play area for a sensitive population such as young children is not recommended, without further study. Alternatively, a location away from the railway, parking lot and traffic would be ideal and would not need such a detailed air quality study. If this location is still desired, it is recommended that it not move forward without a more suitable air quality monitoring study that includes continuous measurement of PM2.5, PM10 and black carbon (with standard equipment) for a minimum of 6 months, ensuring that each season is captured including extended periods of dry conditions and heavy train activity. Sampling of heavy metals and coal dust at this site is also recommended. Wind speed and direction should also be measured at the sampling location and the study should include an analysis demonstrating the air quality impact that winds blowing from the railyard have on the play area.

Regards, Derek

Derek Jennejohn, P.Eng.

Lead Senior Engineer, Air Quality and Climate Change Parks, Planning and Environment t. 604.436.6744



CITY OF PORT COQUITLAM

Delegation of Authority Amendment Bylaw, 2018

Bylaw No. 4094

The Council of the Corporation of the City of Port Coquitlam enacts as follows:

1. <u>CITATION</u>

This Bylaw is cited as "Delegation of Authority Bylaw, 2014, No. 3876, Amendment Bylaw, 2018, No. 4094".

2. <u>ADMINISTRATION</u>

2.1 That all occurrences of the words, "Finance and Intergovernmental Committee", "Community Safety Committee", "Smart Growth Committee" and "Healthy Community Committee", be replaced with the words, "Committee of Council".

Mayor	C	orporate Officer
ADOPTED this		
READ A THIRD TIME this	13 th day of	November, 2018
READ A SECOND TIME this	13 th day of	November, 2018
READ A FIRST TIME this	13 th day of	November, 2018

CITY OF PORT COQUITLAM

Council and Committee Procedures Amendment Bylaw, 2018

Bylaw No. 4095

The Council of the Corporation of the City of Port Coquitlam enacts as follows:

1. <u>CITATION</u>

This Bylaw is cited as "Council and Committee Procedures Bylaw, 2015, No. 3898, Amendment Bylaw, 2018, No. 4095".

2. <u>ADMINISTRATION</u>

- 2.1 That in Section 4.1 b), the words, "7:00 pm" be changed to "6:00 p.m.";
- 2.2 That Section 4.3 be deleted; and
- 2.3 That in Section 7.3, the words, "Council members present must choose by way of resolution a member to fulfill the duties of Acting Mayor", be replaced with the words, "the Acting Mayor duties will fall to the Acting Mayor of each preceding month until a replacement is identified".

READ A FIRST TIME this	13" day of	November, 2018
READ A SECOND TIME this	13 th day of	November, 2018
READ A THIRD TIME this	13 th day of	November, 2018
ADOPTED this		
Mayor	Corporate	Officer

3590 Inverness Street - Issuance of DVP

RECOMMENDATION:

That Development Variance Permit DVP00055 for 3590 Inverness Street be approved for issuance.

PREVIOUS COUNCIL/COMMITTEE ACTION

At the November 13, 2018, Committee of Council Meeting, the following motion was passed:

That Committee of Council:

- Pursuant to s. 498 of the Local Government Act, authorize staff to provide notice of an application to vary the regulations of the Zoning Bylaw to facilitate subdivision and road dedication at 3590 Inverness Street, and
- 2) Advise Council it supports approval of Development Variance Permit DVP00055.

REPORT SUMMARY

As public input has now been considered at the November 27, 2018, Public Input Opportunity, the Development Variance Permit for 3590 Inverness Street is now available for issuance.

BACKGROUND

Pursuant to instructions issued, the owners and residents of property surrounding the subject properties have been notified and the Public Input Opportunity has been held. Council may consider issuance of the Development Variance Permit.

OPTIONS

(Check = Staff Recommendation)

#	Description
1	That Development Variance Permit DVP00055 for 3590 Inverness Street be approved for issuance.
2	Request that additional information be received prior to the issuance of the Development Variance Permit.
3	Deny the approval of the Development Variance Permit.

ATTACHMENTS

Attachment #1: 2018-11-13 – Staff Report to Committee with Draft DVP00055



Report To: Council
Department: Corporate Office
Approved by: C. Deakin
Meeting Date: November 27, 2018

Development Variance Permit DVP00055 for 3590 Inverness Street

RECOMMENDATIONS:

That Committee of Council:

- Pursuant to s. 498 of the Local Government Act, authorize staff to provide notice of an application to vary the regulations of the Zoning Bylaw to facilitate subdivision and road dedication at 3590 Inverness Street, and
- 2) Advise Council it supports approval of Development Variance Permit DVP00055.

PREVIOUS COUNCIL/COMMITTEE ACTION

None.

REPORT SUMMARY

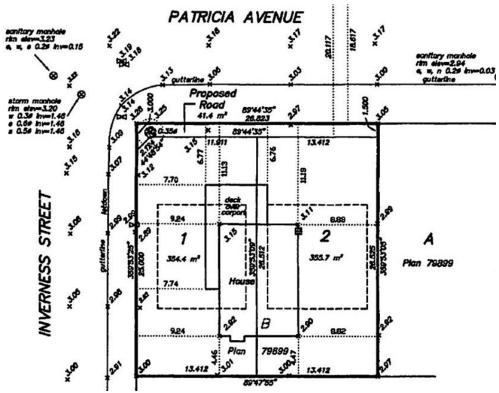
This report provides for Committee's consideration of a development variance permit application which would facilitate a two-lot subdivision including dedication of lands for widening of Patricia Avenue and a corner cut-off at the intersection. The proposal conforms to City policies that support varying regulations where a public benefit results from the variance and is recommended for approval.

BACKGROUND

The large lot located at the corner of Inverness Street and Patricia Avenue is designated R Residential in the OCP, zoned RS2 (Residential Single Dwelling 2) and currently accommodates an older single-family house. It is large enough to allow for a 2-lot subdivision conforming to Zoning Bylaw lot area and depth regulations. However, the Subdivision Servicing Bylaw requires dedication of a strip of land along the frontage to widen Patricia Avenue and provision of a corner cut-off at the time of subdivision, resulting in the lot having insufficient area and depth for conforming lots following this dedication.



Existing zoning surrounding 3590 Inverness Road



Proposed subdivision layout including road dedication

	RS2 Bylaw Regulations ¹	Existing	After Subdivision & Road Dedication ²	Variance
Lot Area	375 m² (4036 sq.ft.)	710.1 m²	Lot 1: 354.4 m ² Lot 2: 355.7 m ²	App. 20m² per lot (215 sq.ft.)
Lot Width	12 m	26.8 m	13.4 m	n/a
Lot Depth	28 m	28 m	26.5 m	1.5m

DISCUSSION

The housing policies and objectives in the Official Community Plan support facilitating subdivisions in cases where an associated public benefit can be provided which, for this application, is obtaining the road dedication and corner cut-off. As the lots would be in keeping with the neighbourhood and adequately sized to accommodate new dwellings conforming to Zoning Bylaw regulations, the application is recommended for approval. In keeping with the City's practice to promote additional trees, the proposed variance permit also requires the owner to plant one tree on each of the lots.

² Information provided by applicant



¹ Refer to Zoning Bylaw No. 3630 and Parking and Development Management Bylaw No. 3525

Development Variance Permit DVP00055 for 3590 Inverness Street

FINANCIAL IMPLICATIONS

None.

PUBLIC CONSULTATION

One letter was received from a neighbouring property owner supporting the proposed subdivision. If authorised, an opportunity for public input will be provided during Council's consideration of the application.

OPTIONS

(Check = Staff Recommendation)

#	Description
1	Authorize notification of the application and advise Council that Committee supports the application
2	Request additional information or amendments to the application to address specified issues prior to making a determination on the application; or
3	Determine that it does not wish to authorize the application. The applicant may then request the application be forwarded to Council for its consideration.

ATTACHMENTS

Attachment #1: Location Map

Attachment #2: Draft Development Variance Permit

CITY OF PORT COQUITLAM DEVELOPMENT APPLICATION LOCATION

PROJECT ADDRESS: <u>3590 INVERNESS STREET</u> FILE NO: <u>DVP00055</u>



THE CORPORATION OF THE CITY OF PORT COQUITLAM

"DEVELOPMENT PROCEDURES BYLAW, 2013, NO. 3849"

DEVELOPMENT VARIANCE PERMIT

NO. DVP00055

Issued to: Shaun Dhakar & Amardeep Singh

Address: 8393 148B Street

Surrey, BC V3S 7S1

- This Development Variance Permit is issued subject to compliance with all of the Bylaws of the Municipality applicable thereto, except as specifically varied by this permit.
- 2. This Development Variance Permit applies to and only to those lands within the Municipality described below, and any and all buildings, structure and other development thereon:

Address: 3590 Inverness Street

Legal Description: LOT B, SECTION 6, TOWNSHIP 40, NEW WEST

DISTRICT, PLAN NWP79899

P.I.D.: 012-505-854

3. Zoning Bylaw, 2008, No. 3630 is varied to relax the lot depth and area requirements of the RS2 zone to permit a minimum lot area of 354m² and minimum lot depth of 26.5 metres.

For clarity, this variance applies to and only to the lot depth and area requirements associated with a subsequent subdivision application.

- 4. As a condition of approval, the following must be provided to the satisfaction of the Director of Development Services:
 - Submission of a cash security payment to plant a minimum of one on-site tree per lot. The cash security required is \$500 per tree.
- 5. The land described herein shall be developed strictly in accordance with the terms and conditions and provisions of this permit.
- 6. This permit shall lapse if the Permittee does not apply for and complete subdivision within two (2) years of the date of this permit.
- 7. This permit is not a building permit.

APPROVED BY COUNCIL THE	DAY OF	_,2018.
SIGNED THIS DAY OF	<u>,2018.</u> .	
	Mayor	
	Corporate Officer	
I ACKNOWLEDGE THAT I HAVE READ AN CONDITIONS UPON WHICH THIS PERMI		AND
	Applicant (or Authorized Agent of Applicant)	r Representative