nhc
northwest hydraulic consultants ltd

NHC Ref. No. 3003511

2018 February 12
Revised 2022 March 29

SPRING CREEK DEVELOPMENT LTD.
#3-1680 Lloyd Ave.
North Vancouver, BC, V7P 2N6

Attn: Ghol Marzara, gmarzara@hotmail.com
Kal Srih, kalsrih@hotmail.com

LO STUDIO architecture Inc.
#205 – 3751 Jacombs Road
Richmond, BC, V6V 2R4

cc: Marco Ciriello, Architect AIBC, AAA, OAA, Principal
marco@lostudioarchitecture.com

Re: 2101 Clarke St., Port Moody, BC.
Flood Hazard Assessment

This letter report summarizes the flood hazard assessment conducted for 2101 Clarke Street in Port Moody, British Columbia. The assessment was conducted in 2018, but the text below has been updated in 2022 to account for the current design drawings.

1 INTRODUCTION

Spring Creek Development Ltd. is in the process of developing a six storey residential property, which includes underground parking, located at 2101 Clarke Street, Port Moody, BC. The property is located within a identified flood hazard zone due to Schoolhouse Creek crossing the property; this is as defined by the City of Port Moody's hazardous lands map (*Official Community Plan, Development Permit Area 5, Hazardous Lands, Map 14*). Therefore a flood hazard assessment is required prior to receipt of a development permit.

The objective of this assessment is to identify and evaluate the flood hazards that may affect the safe development and use of the property with respect to the proposed development. Based on the scale of the proposed development, which consists of a six storey residential building with underground parking, the risk of exposure of vulnerable populations warrants a *Class 2* FHA as categorized by provincial guidelines (APEGBC, 2012). A *Class 2* FHA, as defined by the guidelines, is to include:

- Identification and assessment of site specific flood hazard
- Identification of any potential mitigative measures required for safe use of the property
- Identification of potential effects the development and mitigative measures will have on the flood risk of nearby properties identified
- Identification of upstream and downstream mass movement process
- A completed *Flood Hazard and Risk Assurance Statement* (Appendix J of APEGBC 2012).

Figure 1. Project site overview map

2 BACKGROUND REVIEW

The following information has been reviewed as part of our investigation of the possible hydraulic hazards located near the property site, and information pertinent to this FHA is summarized below:

- Greater Vancouver Sewerage And Drainage District Study of Coquitlam/Port Moody Drainage Area (Dayton & Knight, 1988), with all respective appendices which includes among others the Geotechnical Study of Coquitlam/Port Moody Drainage Area (Thurber Consultants 1988)
- *Chines Integrated Stormwater Management Plan (ISMP)* (Associated Engineering, 2016)
- *ViewPort* (Port Moody's Public GIS/Mapping System), accessed October/November 2017

- *Geotechnical Investigation Report-Commercial/Residential Building, 2101 Clarke Street* (GeoPacific, 2016)
- Site survey: *Topographic and Proposed Consolidation Plan Of Portions of District lot 202, Group 1, New Westminster District, Plan 55,* (W. Papove, BCLS, 2016)

The 1988 Coquitlam/Port Moody Drainage Area study and the 2016 ISMP provide mapping of Schoolhouse Creek's alignment. The 1988 report also includes descriptions of successive reaches along the length of the channel, including culvert diameters and capacities and denotation of open channel sections. The 1988 study also reported on a culvert blockage that occurred on Schoolhouse Creek and stated that the creek is at a medium risk of experiencing a debris flood due to slumping of steeper hills and at a low risk of experiencing a debris flow.

For context, a typical flood is a surge of water with moderate concentration of debris (< 20% by volume). A debris flood is a rapid surge of water with high concentration of debris (20 to 50%), that can occur within small to moderate sized watersheds (<35 km^2) with steep slopes (10-50%). A debris flow is an extremely rapid surge of debris saturated with water that can occur within small watersheds (<5 km^2) with steep slopes (30-50%) (Wilford et. al. 2004).

3 SITE DESCRIPTION

The project site is located in Port Moody between the intersection of Barnett Highway (Hwy 7A) and Saint Johns Street and Clarke Street. Near the project site, Port Moody slopes up from the south side of the east end of Burrard Inlet. The study property is located on a sloping terrace roughly 22 m above Burrard Inlet. The terrace continues to the south roughly 200 m before the grade rises steeply up to roughly 150 m elevation. The steeply sloping break in grade between the lower and upper terrace is a forested area known as the Chines. Residential neighbourhoods surround the Chines both to the south and north.

Schoolhouse Creek (also referred to as School House Brook) originates in a residential area just above the Chines. It flows north, confined within a gully through the Chines, and then along the lower terrace, where it runs along the east side of 2101 Clarke Street before discharging to the south shore of Burrard Inlet. With an upstream network of multiple tributaries, Schoolhouse Creek has a watershed area of 468 ha (Dayton & Knight, 1988) at its outlet to Burrard Inlet. The most substantial tributary to connect into Schoolhouse Creek upstream of the project site is Noble Creek. From the Chines to Burrard Inlet the channel contains five culvert crossings of various size and shape. The channel enters the study site from a pair of culverts from the south under Saint Johns Street, then flows within an 80 m long open channel along the western boundary of the site, after which it returns to culverts as it crosses under Clarke Street.

The upstream culvert under Saint Johns Street is twin 1350 mm diameter concrete culverts about 48 m in length and at a slope of around 7 % (**Photo 1**). At right side culvert (facing downstream) exits about 0.7 m above a concrete apron while the left discharges through a concrete fish ladder. Flow in the creek was low at the time of inspection. The open channel has a 3 % slope and 3.5 m bed width which ranges from 2.5 m to 5 m. The bed consists of predominantly gravel and cobbles with boulders and some sand deposition in sheltered areas (**Photo 2**). Angular rock riprap (i.e. *Class 250 kg* – 750 mm and smaller) placed at the outlet of the culvert appears to have been mobilized and subsequently deposited within 10 m downstream of the upstream culverts.

The channel has a 0.3 m high steep or undercut bank before sloping further upwards. The left bank (looking downstream) rises 3 to 4 m with the lowest 2 m at a slope of 1.5H:1V to 2H:1V, after which the bank slope flattens to less than 4H:1V . The right bank is typically closer to 2 to 3 m high with slope of around 2.5H:1V. The top of the right bank is developed with two sets of townhouses. The riparian habitat consists of mature alder close to the creek, large western cedar and hemlock farther up the banks, as well as ground cover of ferns, various brush, and blackberry bushes.

Approximately 40 m downstream of the Saint Johns St culvert a smooth concrete weir crosses the bed of the creek (**Photo 3**), potentially constructed to limit channel degradation. Downstream of the weir, the toe of the right bank is armoured with concrete slabs that extends 0.3 m up from the bed (**Photo 4**). Near this same area there is a small (approximately 200 mm) pipe that discharges into the creek with a trash rack surrounding the outlet (**Photo 5**). At the time of inspection there was no water flowing from this pipe.

At the inlet of the downstream culvert (under Clarke Street) the creek bends lefts as the culvert is skewed roughly 30^{o} from the upstream channel alignment. The culvert is a 2400 mm by 1500 mm concrete box, about 50 m long at a 2.5 % slope and an additional, parallel, 900 mm diameter overflow culvert (**Photo 6**). Concrete wing walls, 2 m high, project upstream from the culvert to direct flow to its entrance and to hold back adjacent fill (**Photo 7**).

The proposed development is for a six storey residential building with underground parking (Lo Studio Architecture drawings, dated 2015 Dec 08/plotted 2022 Mar 25 – Appendix A). The building is to be located 15 m west from the left side of the channel (top of bank). Primary access to the building is from the north; with the underground parking ramping up from El. 14.59 m at Clarke Street over the Schoolhouse Creek culvert to El. 15.16 m, 25 m north of Clarke Street; and then back down to El. 14.66 m for the top of slab of the lower parking level (level 1). The north side lobby and mechanical room are also at the lower level, but slightly raised to El. 15.33 m. The south side lobby is located on the ground floor (above the level 2 parking) along with the lower level of residences and buildings. The elevation of the ground floor is at El. 21.79 m. Any additional access other than to the parkade and north lobby access (including balcony doors, windows, and south side building access) is at or above El. 21.79 m.

4 FLOOD HAZARD ASSESSMENT

4.1 Hydrology

Schoolhouse Creek is in an un-gauged watershed with no record of water level or discharge. Therefore, the Rational method was applied to determine design flows at the project location.

4.1.1 Watershed

The upstream watershed is predominantly northern facing with steep slopes and gradually sloping terraces. The steeper slopes are mature forest and the terraces urban development with a mix of open channel and piped flow. The elevation of the water shed ranges from El. 15 m at the project site to El. 155 m on the upper terrace. Area of the watershed to the Clarke Street culvert is 209 ha.

4.1.2 Rational Method

The Rational Method uses rainfall data and the physical characteristics of the drainage basin to estimate peak runoff flows at the site. Data collected from an Environment Canada rain gauge stationed approximately 1 km northwest in Port Moody Glenayre, BC, (ID 1106CL2) was utilized for rainfall intensity. The Environment and Climate Change Canada (ECCC) prepared the Intensity-Duration-Frequency (IDF) for this station is based on 29 years of data collected from 1971-2001.

The general form of the Rational Method Formula is as follows:

$$Q = NCiA \qquad (1)$$

where:

Q = flow (m^3/s),
C = runoff coefficient,
A = catchment area (hectares),
i = rainfall intensity value (mm/h), and
N = 0.0028 metric coefficient.

A runoff coefficient of 0.95 was used with a sensitivity analysis from 0.85 to 1.05. The time of concentration (Tc) was calculated to be between 30 minutes and 1 hour. The following table presents the range of calculated peak design flows compared to flows calculated from previous reports. The current flow estimate is slightly higher, but supported by the previous reports.

Table 1. Instantaneous design flows, based on historic precipitation record.

Event	NHC Flow (m^3/s)	Dayton & Knight Ltd., (1988) (m^3/s)	Metro Vancouver, (2016) (m^3/s)	Scaled Metro Vancouver, (2016) (m^3/s)
2-Yr	5.5	-	-	-
10-Yr	7.6	-	4.9	7.3
100-Yr	11.1	9.6	6.3	10.3
200-Yr	11.8	-	-	-

Notes:

1. Dayton & Knight Lt.d (1988) flow values are for a similar location in the watershed (reported watershed area of 213 ha).
2. Metro Vancouver (2016) flow estimates are for Schoolhouse Creek immediately upstream of Noble Creek. The scaled values are based on linear scaling by area.

4.1.3 Climate Change

To provide designs with long term resilience, the effects of climate change must be considered. NHC applied a previously developed tool which provides IDF values that account for the projected future changes in climate to the year 2100. This tool modifies the local rain station IDF to account for 9 Global Circulation Models (GCMs) and 3 RCP climate change scenarios. RCP is the representative concentration pathways for greenhouse gas concentration trajectories. Various RCPs are used to assess possible climate futures. RCP 8.5, which utilize radiative forcing peaks of +8.5 Wm^{-2} was used within this study (corresponds to an increased effect of radiation on the earth in the year 2100 relative to pre-industrial values). RCP 8.5 was selected, over lower level scenarios (RCP 2.6 and 4.5) to account for current climate and political projections.

Rainfall intensity is projected to increase by as much as 30% for extreme events by the year 2100. Assuming flood flows are proportional to rainfall intensity, than flood flow would go up by a similar amount. The following table presents the projected design flood flows using the year 2100 IDF values.

Table 2. Instantaneous design flows to the year 2100 (with climate change projections).

Event	NHC Flow (m^3/s)
2-Yr	7.1
10-Yr	9.8
100-Yr	14.4
200-Yr	15.4

4.2 Hydraulic Analysis

The local hydraulics for the design flow was evaluated using a one-dimensional numerical model to determine potential flood level and channel changes. HEC-RAS, a hydraulic model developed by the US Army Corps of Engineers was selected for the model. The model was implemented for the study reach (Saint Johns St. to Clarke St.) based on site survey and observations collected by NHC. The model was used to simulate a range of design flows from bankfull flow to the 200-year flood to calculate the local hydraulics, particularly flow depth and velocity. Simulations were conducted for both free flowing and with partially obstructed culverts. The obstruction scenario simulates the lower 0.4 m of the culvert being blocked. The smooth transition the wingwall provided from the upstream channel to the box culvert reduce the likelihood of the culvert becoming blocked by debris.

From results of the simulations Clarke Street culvert is expected to surcharge (0.6 m) during a 200 year flood. Incorporating projected increase in flow with climate change and partial culvert blockage, flow is expected to begin to overtop Clarke Street. The following table presents results from the model for the design flow (200 year flood with climate change and partial blockage of the culvert).

Table 3. Design water levels.

Location (ref. stationing)	Design Water Level (m)
Clarke Street (0 m)	15.08
20 m upstream	15.08
40 m upstream	15.29
60 m upstream	15.63
80 m upstream	16.40

Changes to Clarke Street, such as raising, lowering, or installing solid barriers, by the City of Port Moody or others, could increase the flood risk at this property.

In addition to inundation hazard is the hazard of channel erosion, migration, aggradation, and degradation. Although local erosion or channel changes may occur, the deep ravine, fixed position of the culverts, established bank vegetation, and upstream culverts (Albert Street and St Johns Street) limits the risk.

4.3 Mitigation Measures

In order to address potential inundation from high water levels during the event of overflow flooding, it is recommended a flood construction level (FCL) be established for the site. The FCL is the designated level for which development above this level is expected to be safe for flood events up to and including the design event. The FCL is based on the water level during the design event plus an allowance or freeboard to account for debris, local turbulence, and uncertainty in the data and analysis. A freeboard of 0.3 m is recommended for this project. The flood level during the most extreme events is primarily controlled by Clarke Street. That is during the design flow, even a nearly complete blockage of the culverts is not expected to increase the flood level greater than the proposed FCL.

The following table presents the recommended FCL for this project:

Table 4. Flood construction level for 2101 Clarke Street, Port Moody.

Location (ref. stationing)	FCL (m)
Clarke Street (0 m)	15.38
20 m upstream	15.38
40 m upstream	15.59
60 m upstream	15.93
80 m upstream	16.70

Flow during the design flood event may also go over St. Johns Street. Therefore, **the FCL should be a minimum of 0.3 m above the surrounding grade at the south end (25 m) of the property** to prevent such overflow from negatively impacting the safe use of the site.

Past reports have suggested a moderate risk of debris floods and low risk for debris flows. Debris floods have been reported to result in flows on the order of twice that of existing clear water design flows. Debris flows, although of low risk based on past reports and watershed metrics, can result in flows on the order of 4 to 40 times larger than the existing clear water design flood (Wilford et. al. 2004). The proposed freeboard and minimum level of openings above the surrounding grade (south end) is to address the potential higher flood levels and overflow from a moderate debris flood.

In addition to an FCL to limit the risk to the inundation hazard a setback and or erosion and scour protection is generally required to limit the risk from channel changes. A setback of 15 m is typically applied for this size of channel. However, due to the limitation on channel migration imposed by the existing culverts and the relative depth of the foundation to the existing channel bed and those culverts (greater than 2 m below the bed and culvert inverts) the minimum setback for hydrotechnical hazards can be set at 10 m from the typical waters edge. This can be further reduced to 5 m where the concrete headwalls confine the channel to its current location. A larger setback may be required to maintain riparian habitat value.

The current project plans (Lo Studio, 2022 March 25) shows a lobby and mechanical room within the north 15 to 20 m of the site (Clarke Street to 20 m upstream) on the *parking level 2* at an elevation of 15.33 m. Use of the rest of this level appear to be limited to parking with no entrances or windows. Residents, commercial use, and other entries are limited to the *ground floor* (El. 21.79 m) and higher. The project footprint is set back 15 m from the top of bank with footings keyed in a couple of meters below the lower parking level.

Provided the mechanical and main electrical switch gear (assuming to be located in the mechanical room) are higher than 0.05 m above the floor, then the proposed development appears to meet the proposed mitigation measures.

5 SUMMARY AND RECOMMENDATIONS

A hydrotechnical hazard assessment was conducted for flood risk for the property at 2101 Clarke St., Port Moody, BC. From the study, it is recommended that a flood construction level of El. 15.38 m at the north end of the site to El. 16.70 m near the south side of the site, in addition the south end of the property should be 0.3 m above surrounding grade to protect from overflow of St. Johns Street. The following recommendations are to be followed for safe use of the property, that is with respect to the flood hazard.

1) An FCL as detailed in previous section be adopted for development of the site (based on survey from W. Papove , BCLS, 2016).
2) Building entrances and windows should be minimum of 0.3 m above surrounding grade along the south side of the property to prevent any flow over Saint Johns Street from entering the buildings.
3) The underside of any wooden floor system, or the top of any concrete floor system used for habitation is above the FCL.
4) The underside of any wooden floor system, or the top of any concrete floor system used for industrial purposes is above the FCL minus freeboard.
5) Any areas below the FCL, such as the underground parkade must provide pedestrian exits that extend to or above the FCL that are adequate for evacuation during a flood and lack of electrical power.
6) Signage must be posted at all points of entry notifying users of the areas below the FCL. Notification of the risk of flooding should be provided to all users of such space (i.e. storage of vehicles or other property).

7) Any structure below the FCL is to be designed to limit seepage and withstand hydrostatic loading up to the FCL (i.e. underground parkade).
8) Any electrical supply below the FCL (i.e. parking lighting and outlets) should be designed as per the 2020 EGBC practice advisory: Electrical Engineering Considerations in Flood-Resilient Design of Buildings.
9) Main electrical switchgear and mechanicals be above the FCL.
10) Structures are set back a minimum of 10 m from the top of bank of the channel.

Other hazards, such as those imposed by local stormwater management, fire, and earthquake have not been assessed and may not be mitigated by the proposed measures.

This flood hazard assessment was conducted following APEGBC 2012 Class 2 flood hazard assessment guidelines. A summary of the APEGBC criteria for such an assessment is presented in **Table 5**.

Table 5. Summary of EGBC typical Class 2 flood hazard assessment methods and deliverables

APEGBC Flood Hazard Assessment Component	Notes
Typical hazard assessment methods and climate/environmental change considerations	
Site visit and qualitative assessment of flood hazard	Completed by NHC 2017
Identify any very low hazard surfaces in the consultation area (i.e., river terraces)	Completed by NHC 2018
Estimate erosion rates along river banks	Addressed NHC 2018
1-D or possibly 2-D modelling, modelling of fluvial regime and future trends in river bed changes, erosion hazard maps, possibly paleoflood analysis	Completed by NHC 2018
Identify upstream or downstream mass movement processes that could change flood levels (e.g., landslides leading to partial channel blockages, diverting water into opposite banks)	Potential blockage of culvert or sediment deposition in the channel considered possible mechanism of the flood scenario.
Conduct simple time series analysis of runoff data, review climate change predictions for study region, include in assessment if considered appropriate	Completed by NHC 2018, including allowance for climate change to year 2100
Quantify erosion rates by comparative air photograph analysis	N/A – erosion risk constrained by site geometry
Typical deliverables	
Letter report or memorandum with at least water levels and consideration of scour and bank erosion	Completed by NHC 2018
Cross-sections with water levels, flow velocity and qualitative description of recorded historic events, estimation of scour and erosion rates where appropriate with maps showing erosion over time	Completed by NHC 2018
Maps with area inundated at different return period, flow velocity, flow depth, delineation of areas prone to erosion and river bed elevation changes, estimates of erosion rates	Not Required

6 CLOSURE

We hope this work and report meets your current needs. If you have any questions or would like to further discuss these findings, please contact Sarah Kuipers or Dale Muir at our North Vancouver office at (604) 980-6011 or by email (skuipers@nhcweb.com | dmuir@nhcweb.com).

Sincerely,

Northwest Hydraulic Consultants Ltd.

Prepared by:

Sarah Kuipers, EIT
Project Engineer

Reviewed by:

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA D.P. MUIR 27657

2022 MARCH 30

Dale Muir, P.Eng
Principal

DISCLAIMER

This document has been prepared by Northwest Hydraulic Consultants Ltd. in accordance with generally accepted engineering practices and is intended for the exclusive use and benefit of Spring Creek Developments Ltd., their architecture firm – Lo Studio Architecture Inc., and their authorized representatives for specific application to the flood hazard assessment at 2101 Clarke St., Port Moody, BC. The contents of this document are not to be relied upon or used, in whole or in part, by or for the benefit of others without specific written authorization from Northwest Hydraulic Consultants Ltd. No other warranty, expressed or implied, is made. Northwest Hydraulic Consultants Ltd. and its officers, directors, employees, and agents assume no responsibility for the reliance upon this document or any of its contents by any parties other than Spring Creek Developments Ltd.

REFERENCES

APEGBC. (2012). *Professional Practice Guidelines for Legislated Flood Assessment in a Changing Climat in BC.*

City of Port Moody. (2014). *Community Plan: Development Permit Area 5, Hazardous Lands, Map 14.*

Dayton & Knight Ltd. (1988). *Coquitlam/Port Moody Drainage Area.*

GeoPacific . (2016). *Geotechnical Investigation Report- Commercial/Residential Building 2101 Clarke Street, Port Moody, BC.*

LO Studio Architecture Inc. (2015). *Proposed Residential Building for Spring Creek Development.*

Metro Vancouver. (2016). *The Chines Integrated Stormwater Management Plan.*

Professional Land Surveying Inc. . (2016). *Topographical and Proposed Consolidation of Portions of Distric Lot 202, Group 1, New Westminster District.*

Whilford, D., Sakals, M., Innes, J., Sidle, R., & Bergerud, W. (2004). *Recognition of Debris Flow, Debris Flood and Flood Hazard Through Watershed Morphometrics.*

APPENDIX A
SITE PHOTO

Photo 1 Saint Johns culvert crossing facing upstream

Photo 2 Schoolhouse Creek bed just downstream of the Saint Johns St. crossing

Photo 3 Concrete weir facing upstream

Photo 4 Concrete curb facing downstream

Photo 5 Small overflow pipe outlet

Photo 6 Clarke St culvert facing downstream

Photo 7 Wing walls at Clarke St culvert facing east

APPENDIX B
FLOOD ASSURANCE STATEMENT

FLOOD ASSURANCE STATEMENT

Note: This statement is to be read and completed in conjunction with the current Engineers and Geoscientists BC *Professional Practice Guidelines – Legislated Flood Assessments in a Changing Climate in BC* ("the guidelines") and is to be provided for flood assessments for the purposes of the *Land Title Act*, Community Charter, or the *Local Government Act*. Defined terms are capitalized; see the Defined Terms section of the guidelines for definitions.

To: The Approving Authority   Date: 2018-02-12

City of Port Moody

100 Newport Drive, Port Moody, BC, V3H 5C3

Jurisdiction and address

With reference to (CHECK ONE):

- ☐ *Land Title Act* (Section 86) – Subdivision Approval
- ☑ *Local Government Act* (Division 7) – Development Permit
- ☐ Community Charter (Section 56) – Building Permit
- ☐ *Local Government Act* (Section 524) – Flood Plain Bylaw Variance
- ☐ *Local Government Act* (Section 524) – Flood Plain Bylaw Exemption

For the following property ("the Property"):

2101 Clarke Street, Port Moody, BC

Legal description and civic address of the Property

The undersigned hereby gives assurance that he/she is a Qualified Professional and is a Professional Engineer or Professional Geoscientist who fulfils the education, training, and experience requirements as outlined in the guidelines.

I have signed, sealed, and dated, and thereby certified, the attached Flood Assessment Report on the Property in accordance with the guidelines. That report and this statement must be read in conjunction with each other. In preparing that Flood Assessment Report I have:

[CHECK TO THE LEFT OF APPLICABLE ITEMS]

___ 1. Consulted with representatives of the following government organizations:

____

✓ 2. Collected and reviewed appropriate background information

✓ 3. Reviewed the Proposed Development on the Property

___ 4. Investigated the presence of Covenants on the Property, and reported any relevant information

✓ 5. Conducted field work on and, if required, beyond the Property

✓ 6. Reported on the results of the field work on and, if required, beyond the Property

✓ 7. Considered any changed conditions on and, if required, beyond the Property

8. For a Flood Hazard analysis I have:

✓ 8.1 Reviewed and characterized, if appropriate, Flood Hazard that may affect the Property

✓ 8.2 Estimated the Flood Hazard on the Property

✓ 8.3 Considered (if appropriate) the effects of climate change and land use change

___ 8.4 Relied on a previous Flood Hazard Assessment (FHA) by others

✓ 8.5 Identified any potential hazards that are not addressed by the Flood Assessment Report

9. For a Flood Risk analysis I have:

___ 9.1 Estimated the Flood Risk on the Property

___ 9.2 Identified existing and anticipated future Elements at Risk on and, if required, beyond the Property

___ 9.3 Estimated the Consequences to those Elements at Risk

10. In order to mitigate the estimated Flood Hazard for the Property, the following approach is taken:
✓ 10.1 A standard-based approach
___ 10.2 A Risk-based approach
___ 10.3 The approach outlined in the guidelines, Appendix F: Flood Assessment Considerations for Development Approvals
___ 10.4 No mitigation is required because the completed flood assessment determined that the site is not subject to a Flood Hazard

11. Where the Approving Authority has adopted a specific level of Flood Hazard or Flood Risk tolerance, I have:
___ 11.1 Made a finding on the level of Flood Hazard or Flood Risk on the Property
___ 11.2 Compared the level of Flood Hazard or Flood Risk tolerance adopted by the Approving Authority with my findings
___ 11.3 Made recommendations to reduce the Flood Hazard or Flood Risk on the Property

12. Where the Approving Authority has not adopted a level of Flood Hazard or Flood Risk tolerance, I have:
✓ 12.1 Described the method of Flood Hazard analysis or Flood Risk analysis used
✓ 12.2 Referred to an appropriate and identified provincial or national guideline for level of Flood Hazard or Flood Risk
✓ 12.3 Made a finding on the level of Flood Hazard of Flood Risk tolerance on the Property
✓ 12.4 Compared the guidelines with the findings of my flood assessment
✓ 12.5 Made recommendations to reduce the Flood Hazard or Flood Risk

✓ 13. Considered the potential for transfer of Flood Risk and the potential impacts to adjacent properties

___ 14. Reported on the requirements for implementation of the mitigation recommendations, including the need for subsequent professional certifications and future inspections.

Based on my comparison between:

[CHECK ONE]

☐ The findings from the flood assessment and the adopted level of Flood Hazard or Flood Risk tolerance (item 11.2 above)

✓ The findings from the flood assessment and the appropriate and identified provincial or national guideline for level of Flood Hazard or Flood Risk tolerance (item 12.4 above)

I hereby give my assurance that, based on the conditions contained in the attached Flood Assessment Report:

[CHECK ONE]

☐ For subdivision approval, as required by the *Land Title Act* (Section 86), “that the land may be used safely for the use intended”:

[CHECK ONE]

☐ With one or more recommended registered Covenants.

☐ Without any registered Covenant.

✓ For a development permit, as required by the *Local Government Act* (Sections 919.1 and 920), my Flood Assessment Report will “assist the local government in determining what conditions or requirements under [Section 920] subsection (7.1) it will impose in the permit”.

☐ For a building permit, as required by the Community Charter (Section 56), “the land may be used safely for the use intended”: that is, the proposed renovations does not increase flood risk or transfer flood risk for the site.

[CHECK ONE]

☐ With one or more recommended registered Covenants.

☐ Without any registered Covenant.

☐ For flood plain bylaw variance, as required by the *Flood Hazard Area Land Use Management Guidelines* and the *Amendment Section 3.5 and 3.6* associated with the *Local Government Act* (Section 524), “the development may occur safely”.

☐ For flood plain bylaw exemption, as required by the *Local Government Act* (Section 524), “the land may be used safely for the use intended”.

I certify that I am a Qualified Professional as defined below.

Date

2018 February 12

Prepared by

Sarah Kuipers

Name (print)

Previous Version Signed in 2018

Signature

Reviewed by

Dale Muir

Name (print)

Signature

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Email

PROFESSIONAL · PROVINCE OF BRITISH COLUMBIA · D.P. MUIR 27657 · ENGINEER

2022 MAR 30

(Affix PROFESSIONAL SEAL here)

If the Qualified Professional is a member of a firm, complete the following:

I am a member of the firm Northwest Hydraulic Consultants Ltd. (NHC)
and I sign this letter on behalf of the firm. (Name of firm)

APPENDIX C
CURRENT SURVEY AND DRAWINGS

(for reference)

PROPOSED PROJECT:

SIX STOREY RESIDENTIAL BLDG

GROUND LVL RESIDENTIAL
SECOND LVL RESIDENTIAL
THIRD LVL RESIDENTIAL
FOURTH LVL RESIDENTIAL
FIFTH LVL RESIDENTIAL
SIXTH LVL RESIDENTIAL

PROJECT DATA

LEGAL DESCRIPTIONS

LOT 34, BLOCK 3, PLAN NWP55, DISTRICT LOT 202, NEW WEST DISTRICT EXCEPT PLAN LMP14138. Folio: 04311-004

LT 33, BLK 3, PL NWP55, DL 202, NWD &SLINK LOT 33,BLOCK 3,PLAN NWP55DISTRICT LOT 202, NEW WEST DISTRICT Folio:04311-003

LOT 32, BLOCK 3, PLAN NWP55, DISTRICT LOT 202, NEW WEST DISTRICT PART N 1/2 Folio: 04148-010

LOT 14, BLOCK 3, PLAN NWP55, DISTRICT LOT 202, NEW WEST Folio 04311-001

LOT 20, BLOCK 3, PLAN NWP55, DISTRICT LOT 202, NEW WEST DISTRICT EXCEPT PLAN LMP14138 Folio 04311-02

CIVIC ADDRESS

2101 CLARKE ST, PORT MOODY, B.C.

ZONING

PROPOSED : CD79

SITE AREA

GROSS SITE AREA : +/_ 36, 994 S. F. +/_ (3,436.7 S.M.)
DEDICATION AREA : +/_ 15,649 S. F. +/_ (1,453.8 S.M.)
NET SITE AREA : +/_ 21, 345 S. F. +/_ (1,982.9 S.M.) (INCLUDING 2,750 S.F. OF PLAYGROUND AREA)

BUILDING AREA

+/_ 16, 720 S. F. +/_ (1,553.3 S.M.)

SITE COVERAGE

GROSS SITE COVERAGE 16, 720 S. F. / 36,994 S.F. = 0.4 = 45 %
NET SITE COVERAGE 16, 720 S. F. / 21, 345 S.F. = 0.75 = 78.9 %

GROSS FLOOR AREA BUILDING "A"

	RESIDENTIAL GROSS AREA	OFFICE NET AREA	CHILDCARE NET AREA	TOTAL	PARKING GROSS AREA	TOTAL	OUTDOOR AREA PLAY GROUND	OUTDOOR AREA RESIDENTIAL AMENITY
PARKING LEVEL 2	0 S.F.±	0 S.F.±	0 S.F.±	0 S.F.±	5,825 S.F.±	5,825 S.F.±		
PARKING LEVEL 1	0 S.F.±	0 S.F.±	0 S.F.±	0 S.F.±	5,825 S.F.±	5,825 S.F.±		
GROUND LEVEL	4,222 S.F.±	0 S.F.±	0 S.F.±	4,220 S.F.±		4,222 S.F.±	1,625 S.F.±	
SECOND FLOOR	4,980 S.F.±	0 S.F.±	0 S.F.±	4,980 S.F.±		4,980 S.F.±		
THIRD FLOOR	5,352 S.F.±	0 S.F.±	0 S.F.±	5,352 S.F.±		5,352 S.F.±		
FOURTH FLOOR	5,352 S.F.±	0 S.F.±	0 S.F.±	5,352 S.F.±		5,352 S.F.±		
FIFTH FLOOR	5,370 S.F.±	0 S.F.±	0 S.F.±	5,370 S.F.±		5,370 S.F.±		
SIXTH FLOOR	5,370 S.F.±	0 S.F.±	0 S.F.±	5,370 S.F.±		5,370 S.F.±		0 S.F.±
ROOF	0 S.F.±	0 S.F.±	0 S.F.±	0 S.F.±		0 S.F.±		5,370 S.F.±
TOTAL OUTDOOR AREA							1,625 S.F.±	5,370 S.F.±
TOTAL INDOOR AREA	30,646 S.F.±	0 S.F.±	0 S.F.±	30,646 S.F.±	11,650 S.F.±	42,246 S.F.±		

GROSS FLOOR AREA BUILDING "B"

	RESIDENTIAL GROSS AREA	OFFICE NET AREA	CHILDCARE NET AREA	TOTAL	PARKING GROSS AREA	TOTAL	OUTDOOR AREA PLAY GROUND	OUTDOOR AREA RESIDENTIAL AMENITY
PARKING LEVEL 2	1,105 S.F.±	0 S.F.±	0 S.F.±	1,105 S.F.±	9,425 S.F.±	10,530 S.F.±	1,125 S.F.±	
PARKING LEVEL 1	420 S.F.±	0 S.F.±	0 S.F.±	420 S.F.±	9,545 S.F.±	9,965 S.F.±		
GROUND LEVEL	4,848 S.F.±	0 S.F.±	5,150 S.F.±	4,998 S.F.±		4,998 S.F.±		
SECOND FLOOR	4,745 S.F.±	4,360 S.F.±	0 S.F.±	9,155 S.F.±		9,155 S.F.±		
THIRD FLOOR	7,756 S.F.±	0 S.F.±	0 S.F.±	7,756 S.F.±		7,756 S.F.±		
FOURTH FLOOR	7,778 S.F.±	0 S.F.±	0 S.F.±	7,778 S.F.±		7,778 S.F.±		7,715 S.F.±
FIFTH FLOOR	0 S.F.±	0 S.F.±	0 S.F.±	0 S.F.±		0 S.F.±		
SIXTH FLOOR	0 S.F.±	0 S.F.±	0 S.F.±	0 S.F.±		0 S.F.±		
ROOF	0 S.F.±	0 S.F.±	0 S.F.±	0 S.F.±		0 S.F.±		
TOTAL OUTDOOR AREA							1,125 S.F.±	7,715 S.F.±
TOTAL INDOOR AREA	27,204 S.F.±	4,360 S.F.±	5,150 S.F.±	36,114 S.F.±	19,020 S.F.±	55,134 S.F.±		

TOTAL NUMBER OF UNITS 45 OF WHICH 4 ARE ADAPTABLE & 2 ACCESSIBLE / TOTAL 6 UNITS

APARTMENTS 34
TOWN-HOUSES & LOFT 11

DEDUCTION FOR ADAPTABLE UNITS (2 m / UNIT) 6* 21.53 S.F. = 129.2 S.F.

NET FLOOR AREA (BLDG."A" +BLDG. "B") : 67,230.8 S.F.

FLOOR AREA RATIO

MAX. ALLOWABLE = 2.5
MAXIMUM ALLOWABLE GROSS FLOOR AREA : 2.5 X 36, 994 S.F. = 92,485 S.F.
MAXIMUM ALLOWABLE NET FLOOR AREA : 2.5 X 18, 345 S.F. = 46,487.5 S.F.
GROSS FLOOR AREA (BLDG."A" +BLDG. "B") 67,230.8 S.F. (6,246.7 S.M.) / 36,994 S.F. = 1.82
NET FLOOR AREA (BLDG."A" +BLDG. "B") 67,230.8 S.F. (6,246.7 S.M.) / 21, 345 S.F. = 3.15

BUILDING SETBACKS

	REQUIRED	PROVIDED
FRONT YARD (NORTH)	N/A	6" [0.15 m]
REAR YARD (SOUTH)	0'-0"	1.15' [0.35 m]
SIDE YARD (EAST)	AT THE 15 M FROM TOP OF BANK	0.0'
	FROM PROPERTY LINE 4.84' [3.0 m]	54.17' [16.51 m]
SIDE YARD (WEST)	4.84' [3.0 m]	MIN 11" - AVERAGE 2' VARIANCE

BUILDING "A"

MAXIMUM ALLOWABLE 75.46' ft (23 m) — PROPOSED 54.9" ft (16.69 m)

BUILDING "B"

MAXIMUM ALLOWABLE 75.46' ft (23 m) — PROPOSED 53.5' ft (16.3 m)

AREAS 3									
TYPE	NAME	SQ FT	SQ.M	BEDROOM	BATHROOM	DEN	# UNITS	TOTAL SQ FT	TOTAL SQ.M
CHILDCARE	CHILDCARE	5150	478.40					5150	478.40
OFFICE	OFFICE	4360	405.00					4360	405.00
STUDIO	STU	360	33.4		1	0	4	1440	133.6
	A1	480	44.6		1	0	2	960	89.2
ONE BED	B	650	60.4	1	1	0	2	1300	120.8
	B-1	635	59.0	1	1	1	2	1270	118.0
	C1	925	86.0	1	2	1	2	1850	172.0
	C5-a	790	73.4	1	1	1	4	3160	293.6
TWO BEDS & MORE	B3-1	1133	105.2	3	2	0	2	2266	210.4
	C4	935	86.9	2	1	1	4	3740	347.6
	C4-a	981	91.1	3	2	1	4	3924	364.4
	C5	1007	93.5	3	2	1	4	4028	374.0
	C2	1288	119.6	3	2	1	2	2576	239.2
	C3	1481	137.6	3	2	1	2	2962	275.2
TOWN HOUSES	TH	1280	118.9	2	3	0	3	3840	356.7
	TH-1	1291	120.0	2	3	0	4	5164	480.0
	TH-F	1303	121.0	2	3	0	1	1303	121.0
	TH-C	1653	153.6	2	2	1	1	1653	153.6
	TH-1C	1665	154.7	2	2	0	1	1665	154.7
LOFT	TH-E	924	85.8	1	1	0	1	924	85.8
	TOTAL STUDIO						6		
	TOTAL ONE BED ROOM & ONE BED +DEN						10		
	TOTAL TWO BED ROOMS						18		
	TOTAL LOFT						1		
	TOTAL TOWN-HOUSES						10		
	TOTAL						45	53535	4973.2

PARKING ANALYSIS					
UNIT TYPE	# OF UNITS	ZONING BYLAW REQUIREMENT	REQUIREDD SPACES	PROVIDED SPACES	RELAXATION
TOWN-HOUSES	10	1.5 SPACES PER UNIT	15	44	
LOFT	1	1 SPACES PER UNIT	1		
STUDIO & ONE BED ROOM	16	1 SPACE PER UNIT	16		
2 AND MORE BEDROOM	18	1.5 SPACES PER UNIT	27		
VISITOR SPACES		0.2 SPACES / UNIT	9	8	
SUBTOTAL			68	52	16
MODO CARSHARING		CARSHARING		2 cars parked on street	
OFFICE		1 SPACE PER 50 SQ.M.	8.1	8	
CHILD CARE		3 SPACE PER 93 SQ.M.	15.4	15	
TOTAL(INCLUDE VISITOR PARKINGS)	45		91.5	75	
RELAXATION					16
ACCESSIBLE SPACES			3	3	

AREAS PER LEVEL					
	GROUND FLOOR				
	TYPE	SQF	SQM	SQM TOTAL	# UNIT
CHILDCARE		5150	478.4	478.4	1
RESIDENTIAL					
1	TH-F	570	52.9	52.9	1
2	TH	555	52	156	3
3	TH-C	565	53	53	1
4	TH-1	585	54.3	217	4
5	TH-1C	690	64.0	64	1
6	TH-E	499	46.3	46.3	1
	TOTAL			589.2	11
	TOTAL			1067.6	11
	SECOND FLOOR				
	TYPE	SQF	SQM	SQM TOTAL	# UNIT
OFFICE		4360	405	405	1
RESIDENTIAL					
1	TH-F	733	68	68.0	1
2	TH	725	67	201	3
3	TH-C	1088	101	101	1
4	TH-1	706	65.5	262.0	4
5	TH-1C	975	90.6	90.6	1
6	TH-E	425	39.5	39.5	1
	TOTAL			762.1	11
	TOTAL			1167.1	11
	THIRD FLOOR				
	TYPE	SQF	SQM	SQM	# UNIT
1	A1	480	44.6	44.6	1
2	B	650	60	60	1
3	B-1	635	59	59	1
4	B3-1	1133	105	105	1
5	C1	925	86.0	86.0	1
6	C2	1288	119.6	119.6	1
7	C3	1481	137.6	137.6	1
8	C4	935	86.9	86.9	1
9	C4-A	981	91.1	91.1	1
10	C5	1007	93.5	93.5	1
11	C5-a	790	73.4	73.4	1
12	STD	360	33.4	33.4	1
	TOTAL	10665	990.10	990.10	12
	FOURTH FLOOR				
	TYPE	SQF	SQM	SQM	# UNIT
1	A1	480	44.6	44.6	1
2	B	650	60	60	1
3	B-1	635	59	59	1
4	B3-1	1133	105	105	1
5	C1	925	86.0	86.0	1
6	C2	1288	119.6	119.6	1
7	C3	1481	137.6	137.6	1
8	C4	935	86.9	86.9	1
9	C4-A	981	91.1	91.1	1
10	C5	1007	93.5	93.5	1
11	C5-a	790	73.4	73.4	1
12	STD	360	33.4	33.4	1
	TOTAL	10665	990.10	990.10	12
	FIFTH FLOOR				
	TYPE	SQF	SQM	SQM	# UNIT
1	C4	935	86.9	86.9	1
2	C4-A	981	91.1	91.1	1
3	C5	1007	93.5	93.5	1
4	C5-a	790	73.4	73.4	1
5	STD	360	33.4	33.4	1
	TOTAL	4073	378.30	378.30	5
	SIXTH FLOOR				
1	C4	935	86.9	86.9	1
2	C4-A	981	91.1	91.1	1
3	C5	1007	93.5	93.5	1
4	C5-a	790	73.4	73.4	1
5	STD	360	33.4	33.4	1
	TOTAL	4073	378.30	378.30	5

PARKING

REGULAR STALL 8.53' X 18.37' [2.6m X 5.6m]
SMALL CAR (30% MAX.) 7.54' X 16.73' [2.3m X 5.1m]
HANDICAPPED STALLS 16.07' X 18.37' [4.9m X 5.6m]
MANEUVERING AISLES 21.98' [6.7m]

REQUIRED:

LOFT UNIT : 1 STALLS
STUDIO AND 1-BEDROOM UNIT: 1 SPACE PER UNIT 1x16=16 STALLS
2 OR MORE BEDROOMS UNIT: 1.5 SPACES PER UNIT 1.5x18=27 STALLS
TOWN-HOUSES (2 BED ROOMS): 10X1.5= 15 STALLS
VISITOR PARKING 0.2 SPACES PER UNIT 0.2x45=9 STALLS
OFFICE PARKING 1 STALLS PER 50 SQ.M. 4360/ 538 =8.1 STALLS
CHILDCARE PARKING 3 STALLS PER 93 SQ.M. TOTAL :15.4 STALLS

TOTAL REQUIRED 91 STALLS

PROVIDED:

REGULAR STALLS 38 STALLS
SMALL CAR STALLS (39%) 24 STALLS
HANDICAPPED STALLS 3 STALLS
VISITOR STALLS 8 STALLS (INCLUDE 6 SMALL&3 REGULAR STALLS)

TOTAL PROVIDED 73 STALLS

MODO SHARING CAR 2 STALLS

TOTAL PROVIDED 75 STALLS

BICYCLE PARKING

HORIZONTALL STALL 3.28' X 1.97' [1.0 m X 0.6m]
MINIMUM ACCESS AISLE 3.94' [1.2m]

REQUIRED:

1.5 SPACES PER UNIT 1.5x35=52.5=53 STALLS
2 SPACES PER TOWN HOUSE STALLS 2x10=20 STALLS
VISITOR BIKE STALLS 6 SPACES PER BUILDING 6X1=6 STALLS

TOTAL REQUIRED 79 STALLS

PROVIDED:

BICYCLE STORAGE STALLS 74 STALLS
VISITOR STALLS 6 STALLS

LOADING BAYS

[NOT REQUIRED]

REVISIONS		
No.	DATE	DESCRIPTION
A	APRIL 22/17	ISSUED FOR COORDINATION
B	OCT 16/17	ISSUED FOR COORDINATION
C	NOV 15/17	ISSUED FOR DEVELOPMENT PERMIT
D	APRIL 23/18	RE-ISSUED FOR D.P.
E	JULY 31/18	RE-ISSUED FOR D.P.
F	SEPT. 14/18	RE-ISSUED FOR D.P.
G	SEP. 28/20	ISSUED FOR CLIENT REVIEW
H	SEP. 29/20	REVISED AS PER CLIENT REQUEST
J	SEP. 30/20	ISSUED FOR COORDINATION
K	OCT. 19/20	ISSUED FOR ENERGY COORDINATION
L	OCT. 15/20	ISSUED FOR CLIENT REVIEW
M	OCT. 16/20	REISSUED FOR DP.
N	OCT. 28/20	REISSUED FOR DP.
O	DEC. 09/20	REISSUED FOR CITY REVIEW
P	DEC. 22/20	REISSUED FOR DP.
Q	MARCH 24/21	ISSUED FOR CLIENT APPROVAL
R	MARCH 31/21	RE-ISSUED FOR DP.
S	APRIL 16/21	RE-ISSUED FOR DP.
T	APRIL 30/21	ISSUED FOR COORDINATION
U	MAY 20/21	ISSUED FOR COORDINATION WITH CITY
V	MAY 21/21	RE-ISSUED FOR DP.
W	JULY 30/21	ISSUED FOR COORDINATION
X	NOV 10/21	ISSUED FOR COORDINATION

DRAWING LIST

ARCHITECTURAL

LEGEND

— GROUND FLOOD LIGHTS
— LAMP STANDARD
— MANHOLE
— CATCH BASIN
— WATER VALVE
— LANDSCAPE BOLLARD
— FIRE HYDRANT
— SIAMESE CONNECTION
— HANDICAPPED PARKING
— HOSE BIBB
— UTILITIES BOX
— SWALE-ASPHALT PAVING
ASPHALT
CONCRETE
EXISTING VEGETATION
LANDSCAPED AREAS

ABBREVIATIONS

B.E.R.— BASEMENT ELEVATION RESTRICTION
C.B. — CATCH BASIN
D.D. — DECK DRAIN
EX. — EXISTING
F.C.B.— FUTURE CATCH BASIN
F.H. — FIRE HYDRANT
I.C. — IN-CONTRACT
L.B. — LAWN BASIN
L.B.L.— LANDSCAPE BOLLARD LIGHT
L.S. — LIGHT STANDARD
M.H. — MANHOLE
M.B.E.— MIN. BASEMENT ELEVATION
N.F.H.B. — HOSE BIB (NON-FREEZE TYPE)
N.I.C. — NOT IN CONTRACT
O.I. — OIL INTERCEPTOR
P.P. — POWER POLE
R.D. — ROOF DRAIN
R.S. — ROOF SCUPPER
S.C. — SMALL CAR PARKING
S/W — SIDE WALK

CONSULTANTS LIST

STRUCTURAL: WEILER SMITH BOWERS
ADDRESS: 118 - 3855 HENNING DR., BURNABY

GEOTECHNICAL: GEOPACIFIC CONSULTANTS LTD
ADDRESS: 215-1200 WEST 73RD AVENUE, VANCOUVER

LANDSCAPE : VAN DER ZALM & ASSOCIATES
ADDRESS:1-20177 97TH AVENUE, LANGLEY

ARBORIST: URBAN GROVE TREE CARE & CONSULTING
ADDRESS:15720 RUSSELL AVENUE, VANCOUVER

ENVIRONMENTAL: PGL ENVIRONMENTAL CONSULTANTS
ADDRESS:1200-1185 WEST GEORGIA STREET, VANCOUVER

CIVIL: CORE CONCEPT CONSULTING
ADDRESS: 220-2639 VIKING WAY, RICHMOND

SURVEY INFORMATION PER SURVEY PLAN BY:
PAPOVE PROFESSIONAL LAND SURVEYING INC.
202-1120 WESTWOOD STREET COQUITLAM, B.C. V3B 7K8 TEL:604.464.5199
FAX : 604.464.6509 FILE NUMBER : 7104
IT IS THE OWNERS / DEVELOPERS RESPONSIBILITY TO NOTIFY THE DESIGNER OF ALL RIGHT OF WAYS, EASEMENTS, AND COVENENTS PRIOR TO CONSTRUCTION.

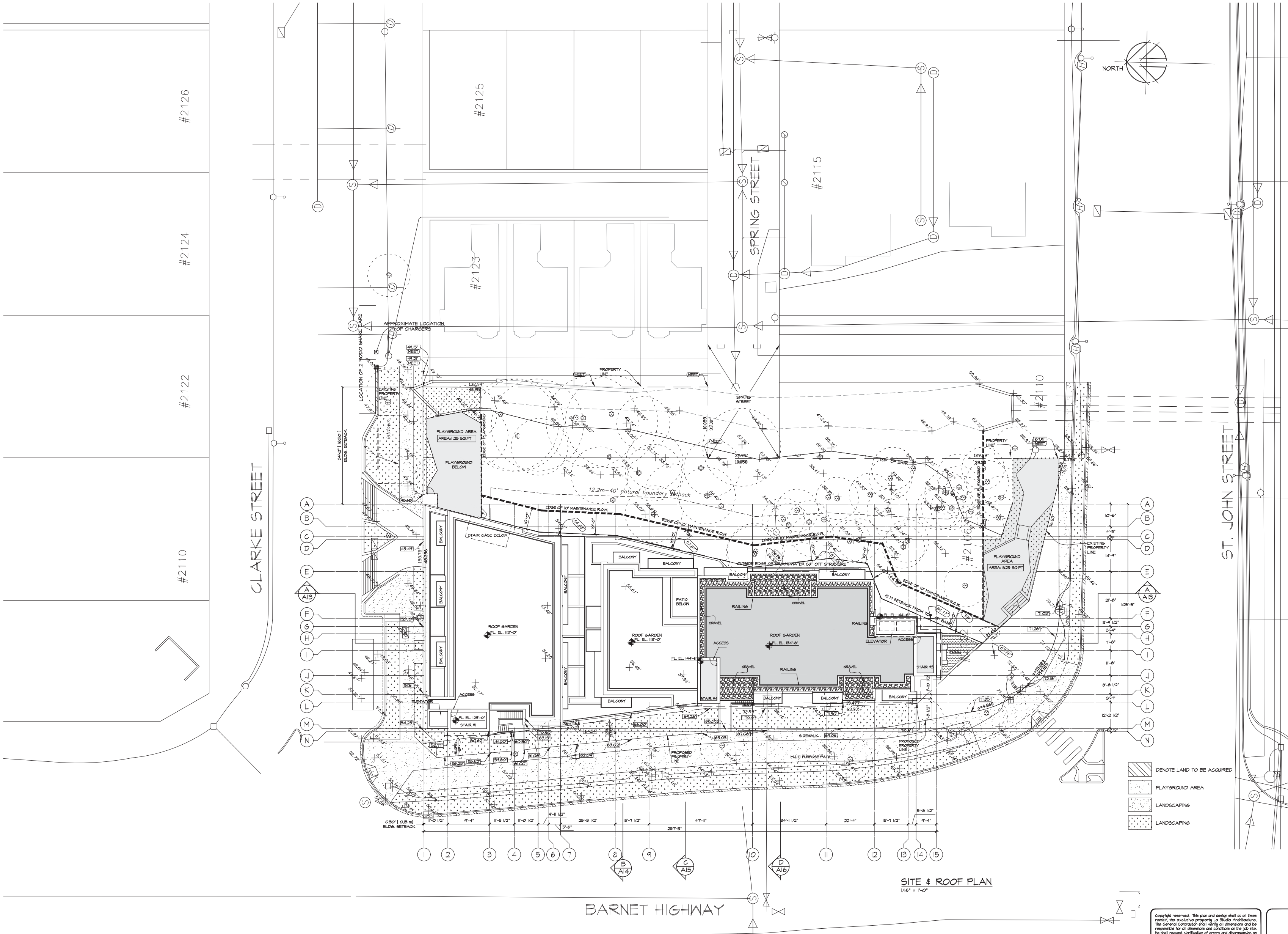
LO STUDIO
architecture Inc.
#205 - 3751 JACOMBS ROAD - RICHMOND, B.C. V6V 2R4 - TEL. 604-276-0114 - CELL 778-886-0264

PROJECT
PROPOSED RESIDENTIAL BUILDING FOR:
SPRING CREEK DEVELOPMENT

SHEET TITLE
COVER SHEET

Plot date: Mar 25, 2022 - 5:23pm

SCALE:	N.T.S.	DRAWN BY:	HM -MA	2101 CLARKE STREET	DWG. No.	15-050-A0	REV.
DATE:	NOV. 5, 2015	CHECKED BY:	MC	PORT MOODY, BC			X



REVISIONS		
No.	DATE	DESCRIPTION
A	APRIL 22/17	ISSUED FOR COORDINATION
B	OCT 16/17	ISSUED FOR COORDINATION
C	NOV 15/17	ISSUED FOR DEVELOPMENT PERMIT
D	APRIL 23/18	RE-ISSUED FOR D.P.
E	JULY 31/18	RE-ISSUED FOR D.P.
F	SEP. 23/20	RE-ISSUED FOR COORDINATION
G	SEP. 29/20	ISSUED FOR CLIENT REVIEW
H	SEP. 29/20	ISSUED FOR COORDINATION
J	SEP. 30/20	ISSUED FOR COORDINATION
K	OCT. 06/20	ISSUED FOR ENERGY COORDINATION
L	OCT. 16/20	REISSUED FOR DP.
M	OCT. 28/20	REISSUED FOR DP.
N	DEC. 04/20	REISSUED FOR COORDINATION
O	DEC. 22/20	REISSUED FOR DP.
P	MARCH 31/21	RE-ISSUED FOR DP.
Q	APRIL 16/21	RE-ISSUED FOR DP.
R	MAY 20/21	ISSUED FOR COORDINATION WITH CITY
S	MAY 21/21	RE-ISSUED FOR DP.
T	AUG 06/21	RE-ISSUED FOR APPROVAL
U	NOV 10/21	ISSUED FOR COORDINATION
V	NOV 26/21	ISSUED FOR COORDINATION
W	NOV 29/21	ISSUED FOR COORDINATION
X	DEC 06/21	ISSUED FOR COORDINATION

LO STUDIO
architecture Inc.
#205 – 3751 JACOMBS ROAD – RICHMOND, B.C.
V6V 2R4 – TEL. 604-276-0114 – CELL 778-886-0264

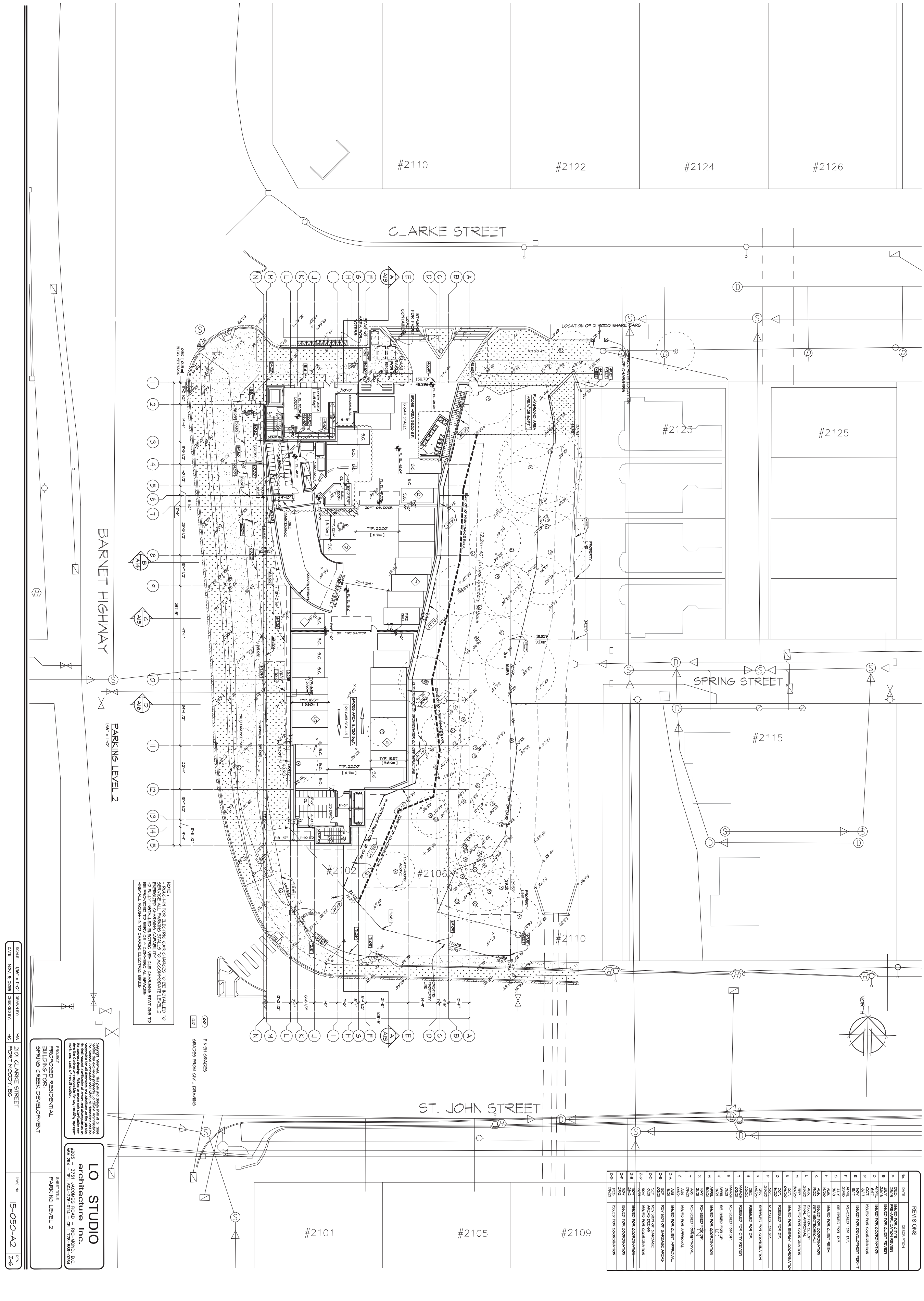
PROJECT
L
BUILDING FOR:
SPRING CREEK DEVELOPMENT

SHEET TITLE
SITE PLAN & ROOF PLAN

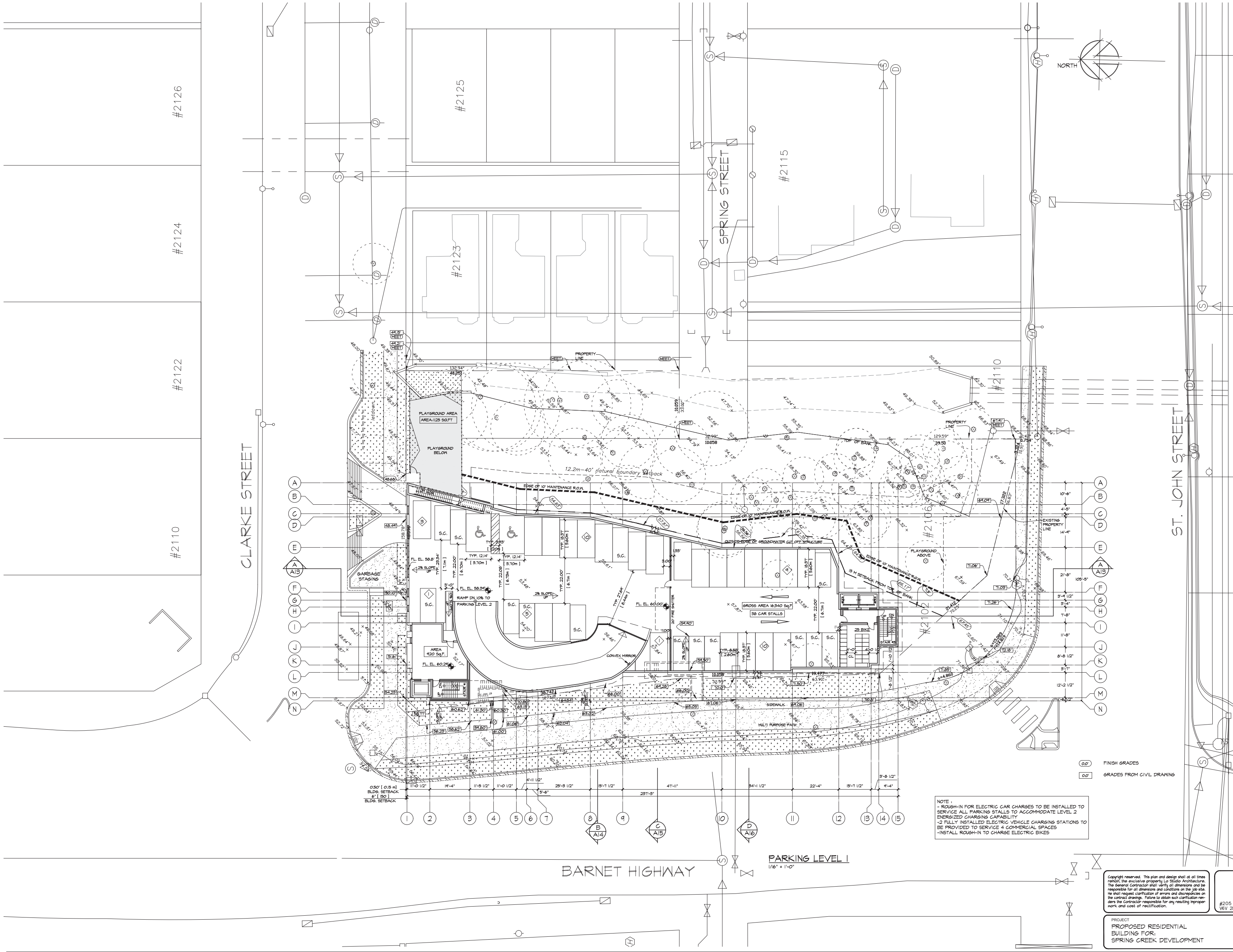
SCALE: 1/16" = 1'-0" | DRAWN BY: MA PFM
DATE: NOV. 5, 2015 | CHECKED BY: MC

2101 CLARKE STREET
PORT MOODY, BC

DWG. No. 15-050-A1 | REV. X



CLARKE STREET
SPRING STREET
ST. JOHN STREET
BARNET HIGHWAY
#2110
#2122
#2124
#2126
#2123
#2125
#2115
#2102
#2106
#2110
#2101
#2105
#2109
LOCATION OF 2 MODO SHARE CARS
PARKING LEVEL 2
NORTH
FINISH GRADES
GRADES FROM CIVIL DRAWING
REVISIONS
LO STUDIO
architecture inc.
PROPOSED RESIDENTIAL BUILDING FOR: SPRING CREEK DEVELOPMENT
2101 CLARKE STREET
PORT MOODY, BC
PARKING LEVEL 2
15-050-A2



FINISH GRADES

GRADES FROM CIVIL DRAWING

NOTE :
- ROUGH-IN FOR ELECTRIC CAR CHARGES TO BE INSTALLED TO SERVICE ALL PARKING STALLS TO ACCOMMODATE LEVEL 2 ENERGIZED CHARGING CAPABILITY
-2 FULLY INSTALLED ELECTRIC VEHICLE CHARGING STATIONS TO BE PROVIDED TO SERVICE 4 COMMERCIAL SPACES
-INSTALL ROUGH-IN TO CHARGE ELECTRIC BIKES

REVISIONS

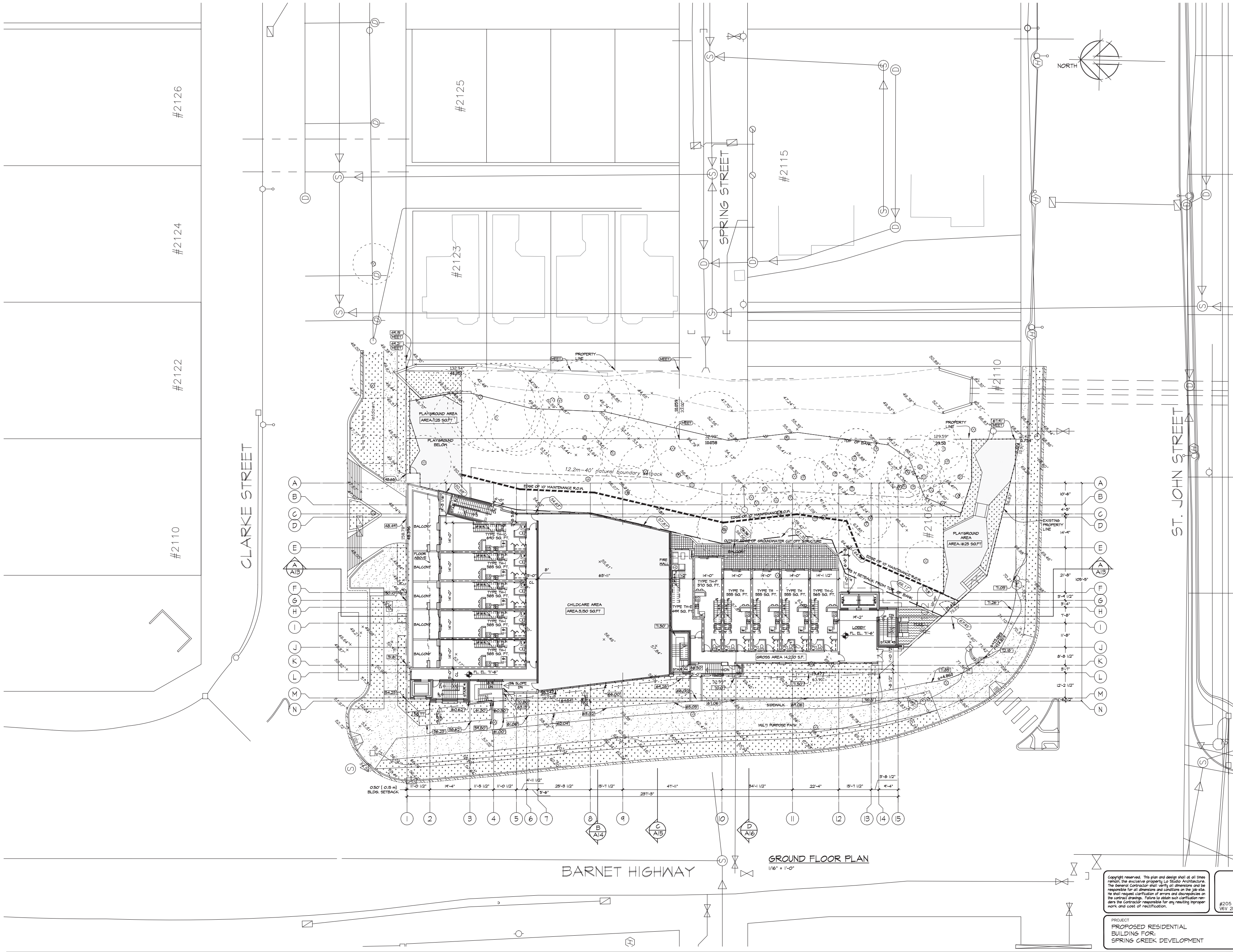
No.	DATE	DESCRIPTION
A	DEC. 23/15	ISSUED FOR CITY'S PRE-APPLICATION REVIEW
B	JULY 28/16	ISSUED FOR CLIENT REVIEW
C	APRIL 6/17	ISSUED FOR COORDINATION
D	OCT. 16/17	ISSUED FOR COORDINATION
E	NOV 15/17	ISSUED FOR DEVELOPMENT PERMIT
F	APRIL 23/18	RE-ISSUED FOR D.P.
G	JULY 31/18	RE-ISSUED FOR D.P.
H	SEPT. 14/18	RE-ISSUED FOR D.P.
J	AUG. 14/20	ISSUED FOR CLIENT REIEW
K	AUG. 19/20	ISSUED FOR COORDINATION WITH GEOTECHNICALl
L	AUG. 28/20	ISSUED FOR CLIENT FINAL APPROVAL
M	SEP. 23/20	RE-ISSUED FOR COORDINATION
N	SEP. 28/20	ISSUED FOR CLIENT REVIEW
O	SEP. 29/20	ISSUED FOR COORDINATION
P	SEP. 30/20	ISSUED FOR COORDINATION
Q	OCT. 06/20	ISSUED FOR ENERGY COORDINATION
R	OCT. 16/20	REISSUED FOR DP.
S	OCT. 28/20	REISSUED FOR DP.
T	DEC. 04/20	REISSUED FOR COORDINATION
U	DEC. 22/20	REISSUED FOR DP.
V	MARCH 31/21	RE-ISSUED FOR DP.
W	APRIL 16/21	RE-ISSUED FOR DP.
X	APRIL 30/21	ISSUED FOR COORDINATION
Y	MAY 21/21	RE-ISSUED FOR DP.
Z	NOV 10/21	ISSUED FOR COORDINATION
Z-A	NOV 26/21	ISSUED FOR COORDINATION
Z-B	NOV 29/21	ISSUED FOR COORDINATION
Z-C	DEC 06/21	ISSUED FOR COORDINATION

LO STUDIO
architecture Inc.
#205 – 3751 JACOMBS ROAD – RICHMOND, B.C.
V6V 2R4 – TEL. 604-276-0114 – CELL 778-886-0264

PROJECT
PROPOSED RESIDENTIAL BUILDING FOR:
SPRING CREEK DEVELOPMENT

SHEET TITLE
PARKING LEVEL 1

SCALE: 1/16" = 1'-0"	DRAWN BY: PFM - MA	2101 CLARKE STREET	DWG. No. 15-050-A3
DATE: NOV. 5, 2015	CHECKED BY: MC	PORT MOODY, BC	REV. Z-C



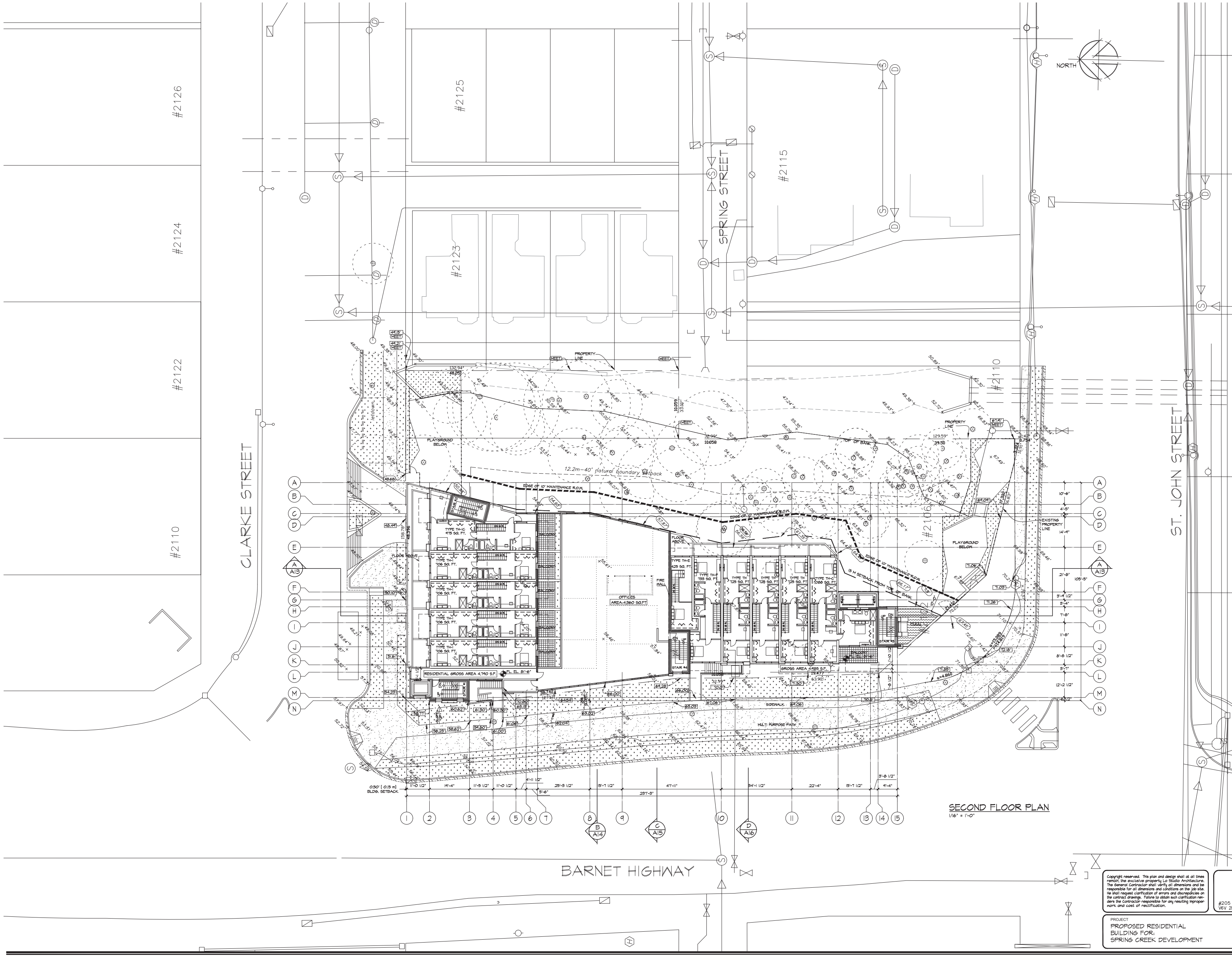
REVISIONS		
No.	DATE	DESCRIPTION
A	DEC. 23/15	ISSUED FOR CITY'S PRE-APPLICATION REVIEW
B	JULY 28/16	ISSUED FOR CLIENT REVIEW
C	APRIL 6/17	ISSUED FOR COORDINATION
D	OCT. 16/17	ISSUED FOR COORDINATION
E	NOV 15/17	ISSUED FOR DEVELOPMENT PERMIT
F	APRIL 23/18	RE-ISSUED FOR D.P.
G	JULY 31/18	RE-ISSUED FOR D.P.
H	SEPT. 14/18	RE-ISSUED FOR D.P.
J	AUG. 14/20	ISSUED FOR CLIENT REIEW
K	AUG. 19/20	ISSUED FOR COORDINATION WITH GEOTECHNICAL
L	AUG. 28/20	ISSUED FOR CLIENT FINAL APPROVAL
M	SEP. 15/20	ISSUED FOR COORDINATION
N	SEP. 23/20	RE-ISSUED FOR COORDINATION
O	SEP. 28/20	ISSUED FOR CLIENT REVIEW
P	SEP. 29/20	ISSUED FOR COORDINATION
Q	SEP. 30/20	ISSUED FOR COORDINATION
R	OCT. 06/20	ISSUED FOR ENERGY COORDINATION
S	OCT. 08/20	ISSUED FOR ENERGY COORDINATION
T	OCT. 16/20	REISSUED FOR DP.
U	OCT. 28/20	REISSUED FOR DP.
V	DEC. 04/20	REISSUED FOR COORDINATION
W	DEC. 22/20	REISSUED FOR DP.
X	MARCH 31/21	RE-ISSUED FOR DP.
Y	APRIL 16/21	RE-ISSUED FOR DP.
Z	MAY 21/21	RE-ISSUED FOR DP.
Z-A	NOV 10/21	ISSUED FOR COORDINATION
Z-B	NOV 26/21	ISSUED FOR COORDINATION
Z-C	NOV 29/21	ISSUED FOR COORDINATION
Z-D	DEC 06/21	ISSUED FOR COORDINATION

LO STUDIO
architecture Inc.
#205 – 3751 JACOMBS ROAD – RICHMOND, B.C.
V6V 2R4 – TEL. 604-276-0114 – CELL 778-886-0264

PROJECT
PROPOSED RESIDENTIAL
BUILDING FOR:
SPRING CREEK DEVELOPMENT

SHEET TITLE
GROUND FLOOR LEVEL

SCALE: 1/16" = 1'-0"	DRAWN BY: PFM - MA	2101 CLARKE STREET	DWG. No. 15-050-A4	REV. Z-D
DATE: NOV. 5, 2015	CHECKED BY: MC	PORT MOODY, BC		



SECOND FLOOR PLAN
1/16" = 1'-0"

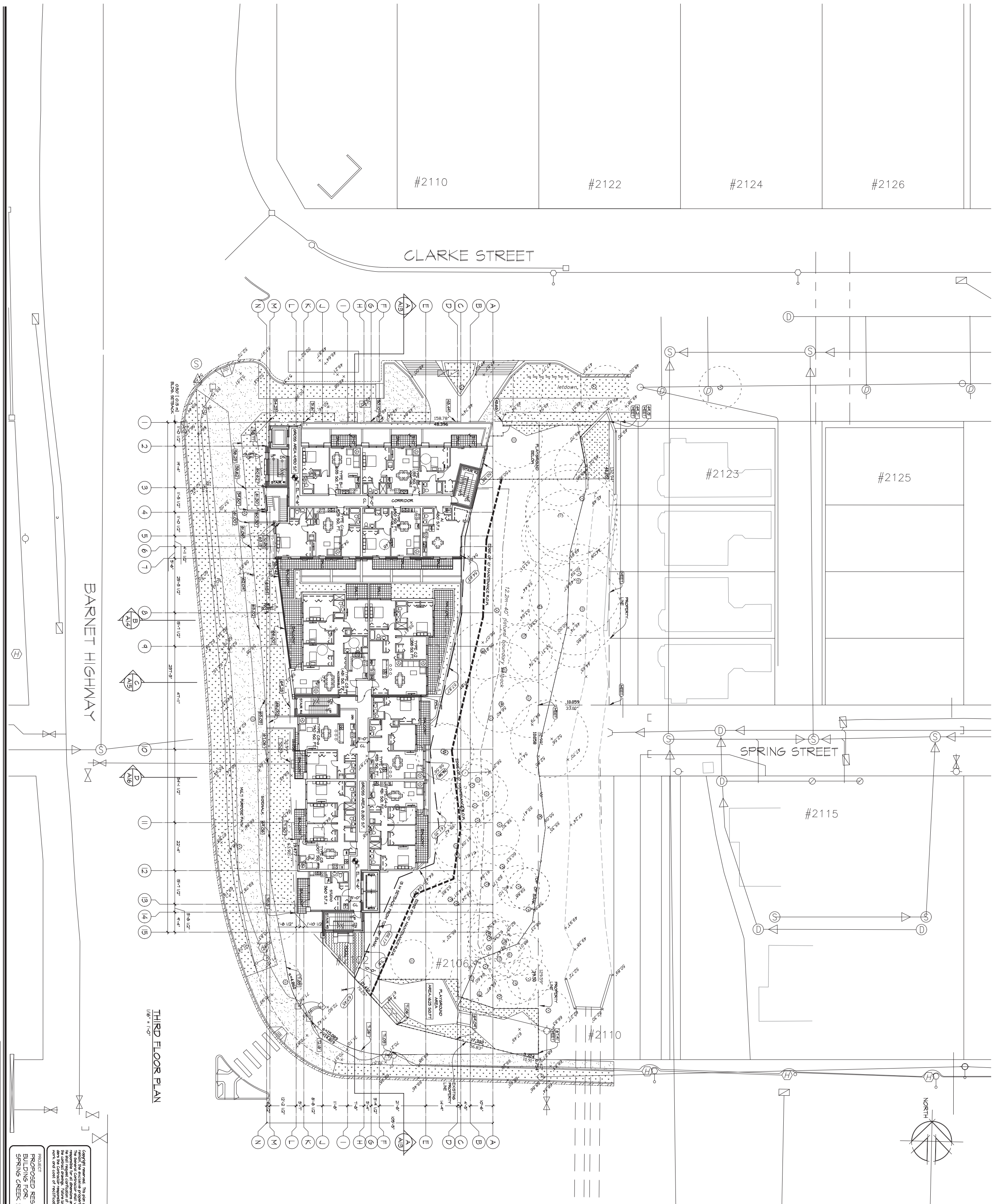
REVISIONS		
No.	DATE	DESCRIPTION
A	DEC. 23/15	ISSUED FOR CITY'S PRE-APPLICATION REVIEW
B	JULY 28/16	ISSUED FOR CLIENT REVIEW
C	APRIL 6/17	ISSUED FOR COORDINATION
D	OCT. 16/17	ISSUED FOR COORDINATION
E	NOV 15/17	ISSUED FOR DEVELOPMENT PERMIT
F	APRIL 23/18	RE-ISSUED FOR D.P.
G	JULY 31/18	RE-ISSUED FOR D.P.
H	SEPT. 14/18	RE-ISSUED FOR D.P.
J	AUG. 14/20	ISSUED FOR CLIENT REIEW
K	AUG. 19/20	ISSUED FOR COORDINATION
L	AUG. 28/20	ISSUED FOR CLIENT FINAL APPROVAL
M	SEP. 30/20	ISSUED FOR COORDINATION
N	OCT. 06/20	ISSUED FOR ENERGY COORDINATION
O	OCT. 16/20	REISSUED FOR DP.
P	OCT. 28/20	REISSUED FOR DP.
Q	DEC. 04/20	REISSUED FOR COORDINATION
R	DEC. 22/20	REISSUED FOR DP.
S	MARCH 31/21	RE-ISSUED FOR DP.
T	APRIL 16/21	RE-ISSUED FOR DP.
U	MAY 21/21	RE-ISSUED FOR DP.
V	NOV 10/21	ISSUED FOR COORDINATION
W	NOV 29/21	ISSUED FOR COORDINATION
X	DEC 06/21	ISSUED FOR COORDINATION

LO STUDIO
architecture Inc.
#205 – 3751 JACOMBS ROAD – RICHMOND, B.C.
V6V 2R4 – TEL. 604-276-0114 – CELL 778-886-0264

PROJECT
PROPOSED RESIDENTIAL BUILDING FOR:
SPRING CREEK DEVELOPMENT

SHEET TITLE
SECOND FLOOR LEVEL

SCALE: 1/16" = 1'-0"	DRAWN BY: PFM - MA	2101 CLARKE STREET	DWG. No. 15-050-A5	REV. X
DATE: NOV. 5, 2015	CHECKED BY: MC	PORT MOODY, BC		



No.	DATE	DESCRIPTION
A	DEC. 23/15	ISSUED FOR CITY'S PRE-APPLICATION REVIEW
B	JULY 28/16	ISSUED FOR CLIENT REVIEW
C	APRIL 6/17	ISSUED FOR COORDINATION
D	OCT. 16/17	ISSUED FOR COORDINATION
E	NOV 15/17	ISSUED FOR DEVELOPMENT PERMIT
F	APRIL 23/18	RE-ISSUED FOR D.P.
G	JULY 31/18	RE-ISSUED FOR D.P.
H	SEPT. 14/18	RE-ISSUED FOR D.P.
J	AUG. 14/20	ISSUED FOR CLIENT REVIEW
K	AUG. 19/20	ISSUED FOR COORDINATION
L	AUG. 28/20	ISSUED FOR CLIENT FINAL APPROVAL
M	SEP. 30/20	ISSUED FOR COORDINATION
N	OCT. 06/20	ISSUED FOR ENERGY COORDINATION
O	OCT. 16/20	REISSUED FOR DP.
P	OCT. 28/20	REISSUED FOR DP.
Q	DEC. 04/20	REISSUED FOR COORDINATION
R	DEC. 22/20	REISSUED FOR DP.
S	MARCH 31/21	RE-ISSUED FOR DP.
T	APRIL 16/21	RE-ISSUED FOR DP.
U	MAY 21/21	RE-ISSUED FOR DP.
V	NOV 10/21	ISSUED FOR COORDINATION
W	NOV 29/21	ISSUED FOR COORDINATION
X	DEC 06/21	ISSUED FOR COORDINATION

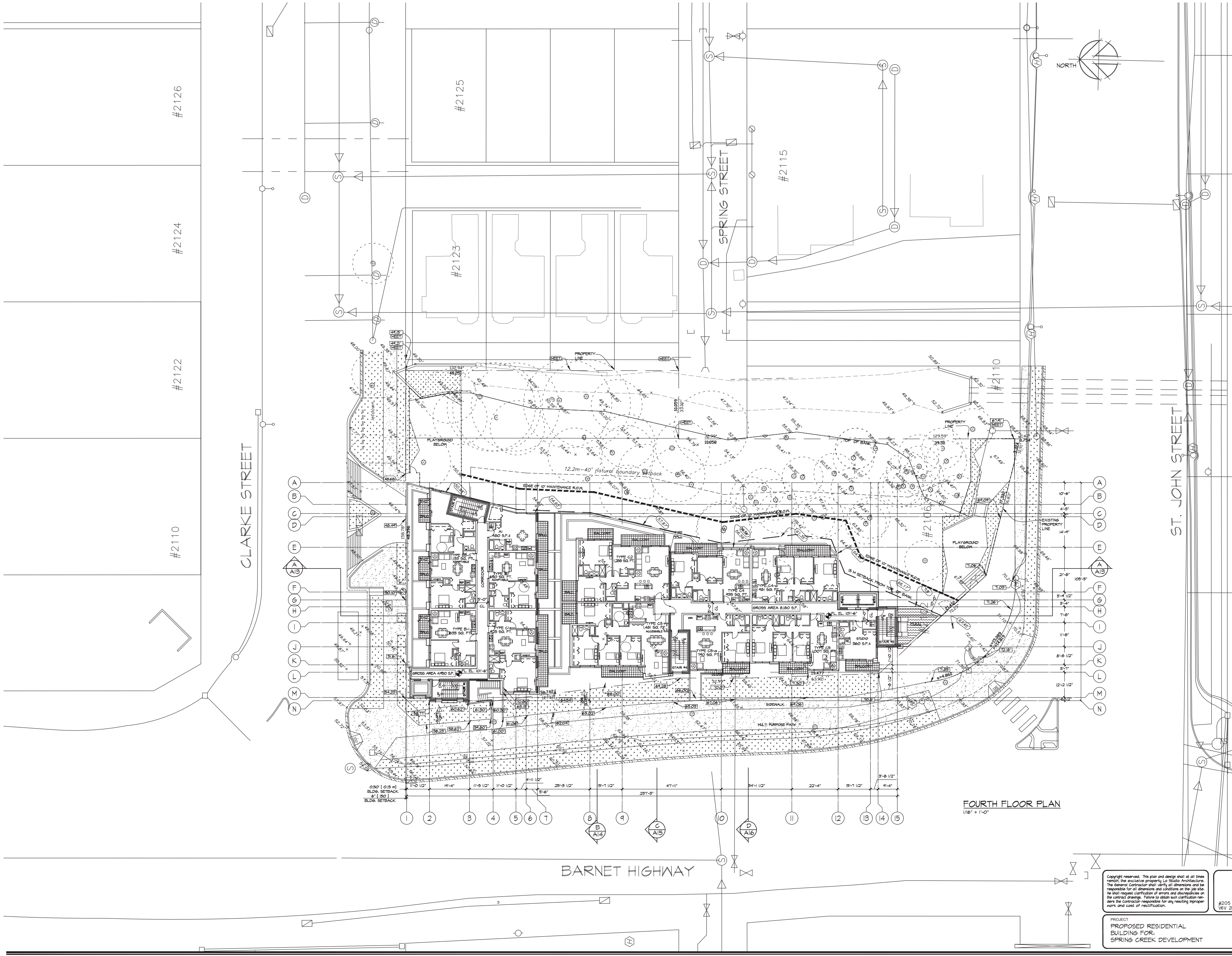
LO STUDIO architecture Inc.

#205 – 3751 JACOMBS ROAD – RICHMOND, B.C. V6V 2R4 – TEL. 604-276-0114 – CELL 778-886-0264

PROJECT
PROPOSED RESIDENTIAL BUILDING FOR:
SPRING CREEK DEVELOPMENT

SHEET TITLE
THIRD FLOOR PLAN

SCALE: 1/16" = 1'-0"
DRAWN BY: PFM - MA
DATE: NOV. 5, 2015
CHECKED BY: MC
2101 CLARKE STREET
PORT MOODY, BC
DWG. No. 15-050-A6
REV. X



FOURTH FLOOR PLAN
1/16" = 1'-0"

REVISIONS

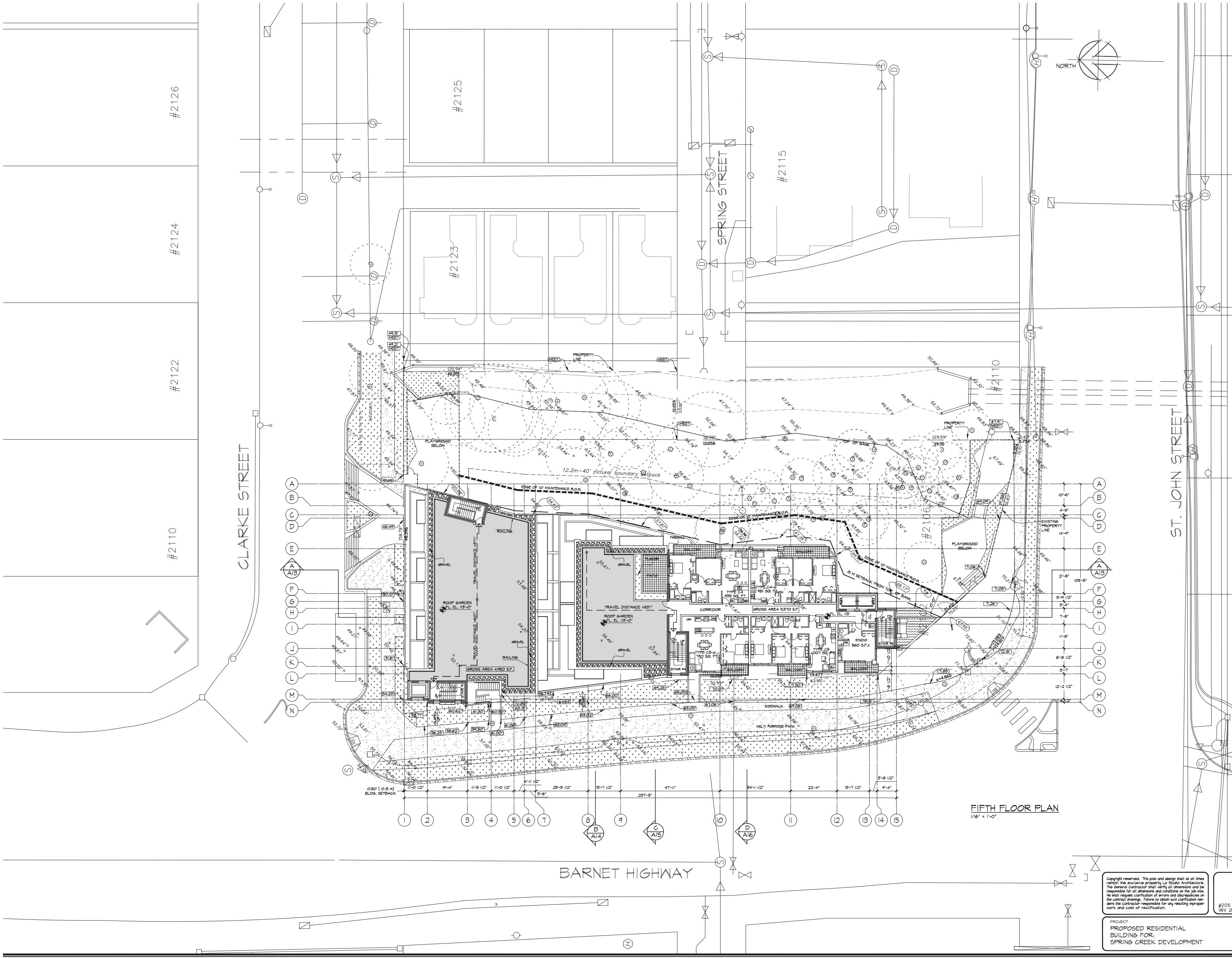
No.	DATE	DESCRIPTION
A	DEC. 23/15	ISSUED FOR CITY'S PRE-APPLICATION REVIEW
B	JULY 28/16	ISSUED FOR CLIENT REVIEW
C	APRIL 6/17	ISSUED FOR COORDINATION
D	OCT. 16/17	ISSUED FOR COORDINATION
E	NOV 15/17	ISSUED FOR DEVELOPMENT PERMIT
F	APRIL 23/18	RE-ISSUED FOR D.P.
G	JULY 31/18	RE-ISSUED FOR D.P.
H	SEPT. 14/18	RE-ISSUED FOR D.P.
J	AUG. 14/20	ISSUED FOR CLIENT REVIEW
K	AUG. 19/20	ISSUED FOR COORDINATION
L	AUG. 28/20	ISSUED FOR CLIENT FINAL APPROVAL
M	SEP. 15/20	ISSUED FOR COORDINATION
N	SEP. 30/20	ISSUED FOR COORDINATION
O	OCT. 06/20	ISSUED FOR ENERGY COORDINATION
P	OCT. 16/20	REISSUED FOR DP.
Q	OCT. 28/20	REISSUED FOR DP.
R	DEC. 04/20	REISSUED FOR COORDINATION
S	DEC. 22/20	REISSUED FOR DP.
T	MARCH 31/21	RE-ISSUED FOR DP.
U	APRIL 16/21	RE-ISSUED FOR DP.
V	MAY 21/21	RE-ISSUED FOR DP.
W	NOV 10/21	ISSUED FOR COORDINATION
X	NOV 29/21	ISSUED FOR COORDINATION
Y	DEC 06/21	ISSUED FOR COORDINATION

LO STUDIO
architecture Inc.
#205 – 3751 JACOMBS ROAD – RICHMOND, B.C.
V6V 2R4 – TEL. 604-276-0114 – CELL 778-886-0264

PROJECT
PROPOSED RESIDENTIAL
BUILDING FOR:
SPRING CREEK DEVELOPMENT

SHEET TITLE
FOURTH FLOOR PLAN

SCALE:	1/16" = 1'-0"	DRAWN BY:	PFM - MA	2101 CLARKE STREET	DWG. No.	15-050-A7	REV. Y
DATE:	NOV. 5, 2015	CHECKED BY:	MC	PORT MOODY, BC			



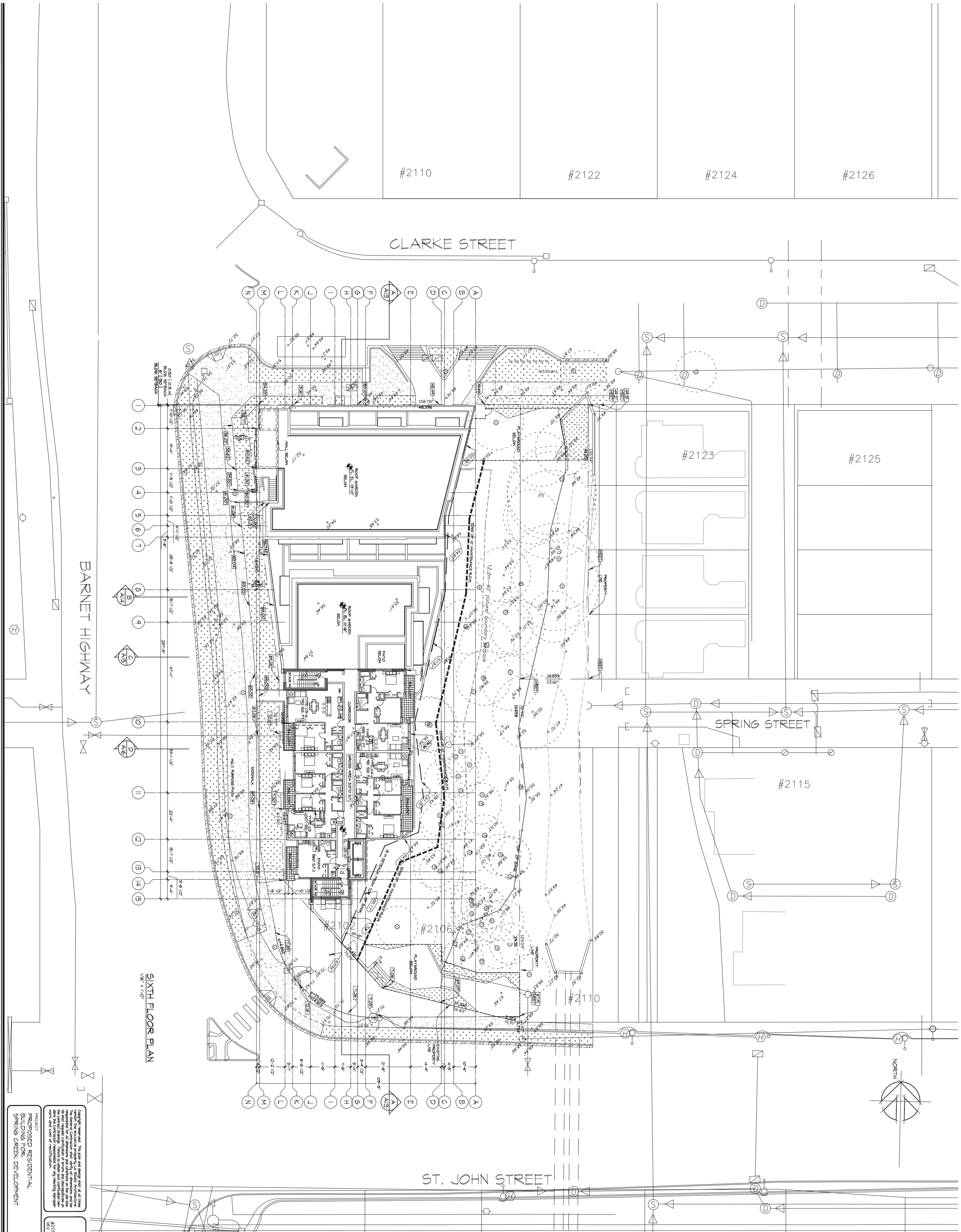
REVISIONS		
No.	DATE	DESCRIPTION
A	DEC. 23/15	ISSUED FOR CITY'S PRE-APPLICATION REVIEW
B	JULY 28/16	ISSUED FOR CLIENT REVIEW
C	APRIL 6/17	ISSUED FOR COORDINATION
D	OCT. 16/17	ISSUED FOR COORDINATION
E	NOV 15/17	ISSUED FOR DEVELOPMENT PERMIT
F	APRIL 23/18	RE-ISSUED FOR D.P.
G	JULY 31/18	RE-ISSUED FOR D.P.
H	SEPT. 14/18	RE-ISSUED FOR D.P.
J	AUG. 14/20	ISSUED FOR CLIENT REVIEW
K	AUG. 19/20	ISSUED FOR COORDINATION
L	AUG. 28/20	ISSUED FOR CLIENT FINAL APPROVAL
M	SEP. 15/20	ISSUED FOR COORDINATION
N	SEP. 28/20	ISSUED FOR CLIENT REVIEW
O	SEP. 29/20	ISSUED FOR COORDINATION
P	SEP. 30/20	ISSUED FOR COORDINATION
Q	OCT. 06/20	ISSUED FOR ENERGY COORDINATION
R	OCT. 16/20	REISSUED FOR DP.
S	OCT. 28/20	REISSUED FOR DP.
T	DEC. 04/20	REISSUED FOR COORDINATION
U	DEC. 22/20	REISSUED FOR DP.
V	MARCH 02/21	REISSUED FOR CITY REVIEW
W	MARCH 31/21	RE-ISSUED FOR DP.
X	APRIL 16/21	RE-ISSUED FOR DP.
Y	MAY 21/21	RE-ISSUED FOR DP.
Z	NOV 10/21	ISSUED FOR COORDINATION
Z-A	NOV 29/21	ISSUED FOR COORDINATION
Z-B	DEC 06/21	ISSUED FOR COORDINATION
Z-C	FEB 25/22	ISSUED FOR COORDINATION

LO STUDIO
architecture Inc.
#205 – 3751 JACOMBS ROAD – RICHMOND, B.C.
V6V 2R4 – TEL. 604-276-0114 – CELL 778-886-0264

PROJECT
PROPOSED RESIDENTIAL BUILDING FOR:
SPRING CREEK DEVELOPMENT

SHEET TITLE
FIFTH FLOOR PLAN

SCALE: 1/16" = 1'-0"	DRAWN BY: PFM - MA	2101 CLARKE STREET	DWG. No. 15-050-A08	REV. Z-C
DATE: FEB.25,2022	CHECKED BY: MC	PORT MOODY, BC		



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architecture Inc.
#205 – 3751 JACOMBS ROAD – RICHMOND, B.C.
V6V 2R4 – TEL. 604-276-0114 – CELL 778-886-0264

PROJECT
PROPOSED RESIDENTIAL BUILDING FOR: SPRING CREEK DEVELOPMENT

SHEET TITLE
SIXTH FLOOR PLAN

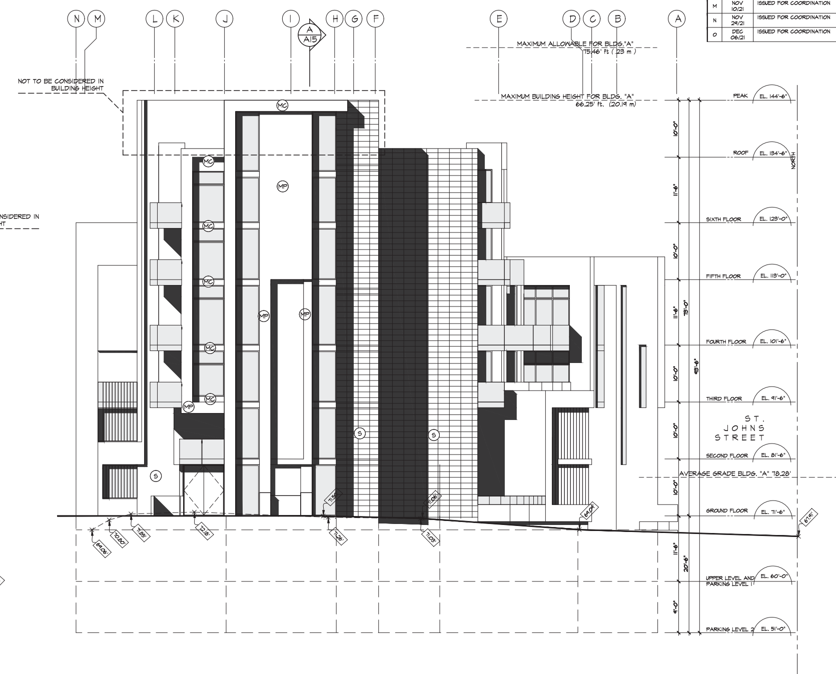
SCALE:	1/16" = 1'-0"
DATE:	NOV. 5, 2015
DRAWN BY:	PFM – MA
CHECKED BY:	MC
	2101 CLARKE STREET PORT MOODY, BC
DWG. No.	15-050-A09
REV.	W

REVISIONS

No.	DATE	DESCRIPTION
A	DEC. 23/15	ISSUED FOR CITY'S PRE-APPLICATION REVIEW
B	JULY 28/16	ISSUED FOR CLIENT REVIEW
C	APRIL 6/17	ISSUED FOR COORDINATION
D	OCT. 16/17	ISSUED FOR COORDINATION
E	NOV 15/17	ISSUED FOR DEVELOPMENT PERMIT
F	APRIL 23/18	RE-ISSUED FOR D.P.
G	JULY 31/18	RE-ISSUED FOR D.P.
H	SEPT. 14/18	RE-ISSUED FOR D.P.
J	AUG. 14/20	ISSUED FOR CLIENT REVIEW
K	AUG. 19/20	ISSUED FOR COORDINATION
L	AUG. 28/20	ISSUED FOR CLIENT FINAL APPROVAL
M	SEP. 15/20	ISSUED FOR COORDINATION
N	SEP. 28/20	ISSUED FOR CLIENT REVIEW
O	SEP. 29/20	ISSUED FOR COORDINATION
P	SEP. 30/20	ISSUED FOR COORDINATION
Q	OCT. 06/20	ISSUED FOR ENERGY COORDINATION
R	OCT. 16/20	REISSUED FOR DP.
S	APRIL 16/21	RE-ISSUED FOR DP.
T	MAY 21/21	RE-ISSUED FOR DP.
U	NOV 10/21	ISSUED FOR COORDINATION
V	NOV 29/21	ISSUED FOR COORDINATION
W	DEC 06/21	ISSUED FOR COORDINATION

NORTH ELEVATION

1/8" = 1'-0"



SOUTH ELEVATION

1/8" = 1'-0"

REVISIONS

No.	DATE	DESCRIPTION
A	NOV. 15/17	ISSUED FOR DEVELOPMENT PERMIT
B	APRIL 23/18	RE-ISSUED FOR D.P.
C	SEP. 30/20	ISSUED FOR COORDINATION
D	OCT. 06/20	ISSUED FOR ENERGY COORDINATION
E	OCT. 16/20	REISSUED FOR DP.
F	OCT. 28/20	REISSUED FOR DP.
G	DEC. 22/20	REISSUED FOR DP.
H	MARCH 26/21	ISSUED FOR CITY'S BUILDING HEIGHT ASSESSMENT
J	MARCH 31/21	RE-ISSUED FOR DP.
K	APRIL 16/21	RE-ISSUED FOR DP.
L	MAY 21/21	RE-ISSUED FOR DP.
M	NOV 10/21	ISSUED FOR COORDINATION
N	NOV 29/21	ISSUED FOR COORDINATION
O	DEC 06/21	ISSUED FOR COORDINATION

LEGEND

- ℄ CENTRELINE OF GLAZING FRAME AND / OR REVEAL
- T GLAZING FRAME OR REVEAL ALIGNED TO TOP OF OPENING *
- B GLAZING FRAME OR REVEAL ALIGNED TO BOTTOM OF OPENING *
- F.C. FIRE COMPARTMENT
- P.J. PANEL JOINT
- R REVEAL
- R.S. ROOF SCUPPER
- EL. ELEVATION
- ℄ BAY LINE
- T.O.C. TO TOP OF CONCRETE
- U.N.O. UNLESS NOTED OTHERWISE
- (R) RATED DOOR
- ◇# PANEL No.

* SEE 5 / A-

NOTE: GLAZING SHOP DWGS. MUST BE REVIEWED BY THE BUILDING ENVELOPE ENGINEER

GLAZING SCHEDULE

(G1) EXTERIOR LITE - 6mm PPG CLEAR, TEMPERED, 1/2" AIRSPACE, INTERIOR LITE - 6mm PPG CLEAR C/W SOLARBAN 60 LOW-E #3 SURFACE, IN 2" X 4 1/2" THERMALLY BROKEN METAL FRAMES.

NOTE: GLAZING SHOP DWGS. MUST BE REVIEWED BY THE BUILDING ENVELOPE ENGINEER

GRADING PROVIDED BY CIVIL ENGINEER (SEE DRAWINGS AND SURVEY)

EXTERIOR FINISH SCHEDULE

- (C) CONCRETE
- (F) PRE-FINISHED METAL FLASHING TO MATCH WALL COLOUR
- (S) 1'X 2' ANCHORED-DIMENSION-STONE
- (Mc) METAL CLADDING
- (Mp) INSUALTED METAL PANEL
  - (G1) SIGNATURE 300 - COLONIAL RED
  - (G2) SIGNATURE 200 - COAL BLACK
  - (G3) SIGNATURE 200 - ASH GREY
  - (G4) SIGNATURE 300 - SLATE GREY
- (Md) PREFINISHED METAL DOORS AND FRAMES PRIMED AND PAINTED TO MATCH COLOUR OF WALL

NOTE: PAINTING
PROVIDE SAMPLES ON WALL AS PER GENERAL NOTES - ELEVATIONS

NOTE
ALL EXPOSED EXT. STEEL SHALL BE PAINTED AS PER GENERAL NOTES

PAINT COLOR TO BE CONFIRMED WITH OWNER PRIOR TO CONSTRUCTION

LO STUDIO
architecture Inc.
#205 – 3751 JACOMBS ROAD – RICHMOND, B.C.
V6V 2R4 – TEL. 604-276-0114 – CELL 778-886-0264

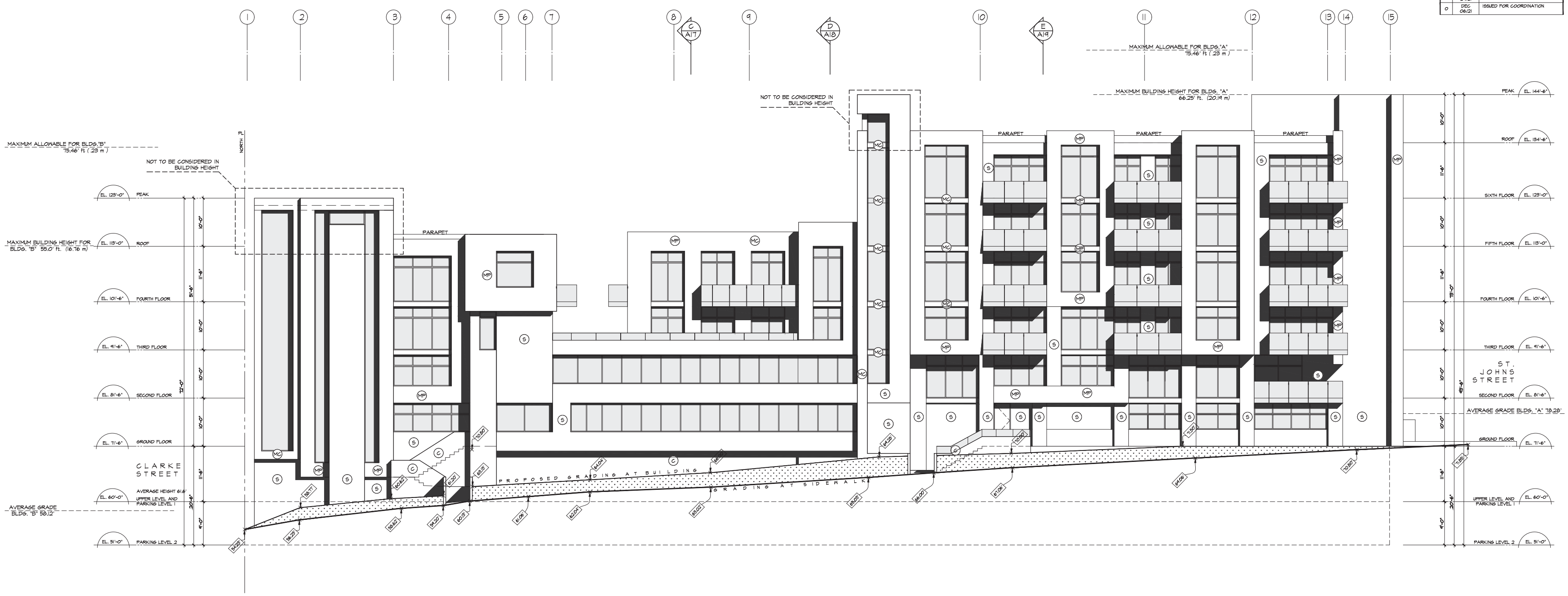
PROJECT
PROPOSED RESIDENTIAL BUILDING FOR:
SPRING CREEK DEVELOPMENT

SHEET TITLE
SOUTH & NORTH ELEVATIONS

SCALE: 1/8" = 1'-0"	DRAWN BY: PFM	2101 CLARKE STREET	DWG. No. 15-050-A10	REV. 0
DATE: OCT. 24, 2017	CHECKED BY: MC	PORT MOODY, BC		

REVISIONS

No.	DATE	DESCRIPTION
A	NOV. 15/17	ISSUED FOR DEVELOPMENT PERMIT
B	APRIL 23/18	RE-ISSUED FOR D.P.
C	SEP. 30/20	ISSUED FOR COORDINATION
D	OCT. 06/20	ISSUED FOR ENERGY COORDINATION
E	OCT. 16/20	REISSUED FOR DP.
F	OCT. 28/20	REISSUED FOR DP.
G	DEC. 22/20	REISSUED FOR DP.
H	MARCH 22/21	ISSUED FOR CITY'S BUILDING HEIGHT ASSESSMENT
J	MARCH 31/21	RE-ISSUED FOR DP.
K	APRIL 16/21	RE-ISSUED FOR DP.
L	MAY 21/21	RE-ISSUED FOR DP.
M	NOV 10/21	ISSUED FOR COORDINATION
N	NOV 29/21	ISSUED FOR COORDINATION
O	DEC 06/21	ISSUED FOR COORDINATION



LEGEND

℄ CENTRELINE OF GLAZING FRAME AND / OR REVEAL
T GLAZING FRAME OR REVEAL ALIGNED TO TOP OF OPENING *
B GLAZING FRAME OR REVEAL ALIGNED TO BOTTOM OF OPENING *
F.C. FIRE COMPARTMENT
P.J. PANEL JOINT
R REVEAL
R.S. ROOF SCUPPER
EL. ELEVATION
BL BAY LINE
T.O.C. TO TOP OF CONCRETE
U.N.O. UNLESS NOTED OTHERWISE
(R) RATED DOOR
(#) PANEL No.

* SEE 5/A-

NOTE: GLAZING SHOP DWGS. MUST BE REVIEWED BY THE BUILDING ENVELOPE ENGINEER

EXTERIOR FINISH SCHEDULE

(C) CONCRETE
(F) PRE-FINISHED METAL FLASHING TO MATCH WALL COLOUR
(S) 1'X 2' ANCHORED-DIMENSION-STONE
(MC) METAL CLADDING
(MP) INSULATED METAL PANEL
- (C1) SIGNATURE 300 - COLONIAL RED
- (C2) SIGNATURE 200 - COAL BLACK
- (C3) SIGNATURE 200 - ASH GREY
- (C4) SIGNATURE 300 - SLATE GREY

(Md) PREFINISHED METAL DOORS AND FRAMES PRIMED AND PAINTED TO MATCH COLOUR OF WALL

GLAZING SCHEDULE

(G1) EXTERIOR LITE - 6mm PPG CLEAR, TEMPERED,
1/2" AIRSPACE,
INTERIOR LITE - 6mm PPG CLEAR C/W SOLARBAN 60 LOW-E #3 SURFACE,
IN 2" X 4 1/2" THERMALLY BROKEN METAL FRAMES.

NOTE: GLAZING SHOP DWGS. MUST BE REVIEWED BY THE BUILDING ENVELOPE ENGINEER

NOTE: PAINTING
PROVIDE SAMPLES ON WALL AS PER GENERAL NOTES - ELEVATIONS

NOTE
ALL EXPOSED EXT. STEEL SHALL BE PAINTED AS PER GENERAL NOTES

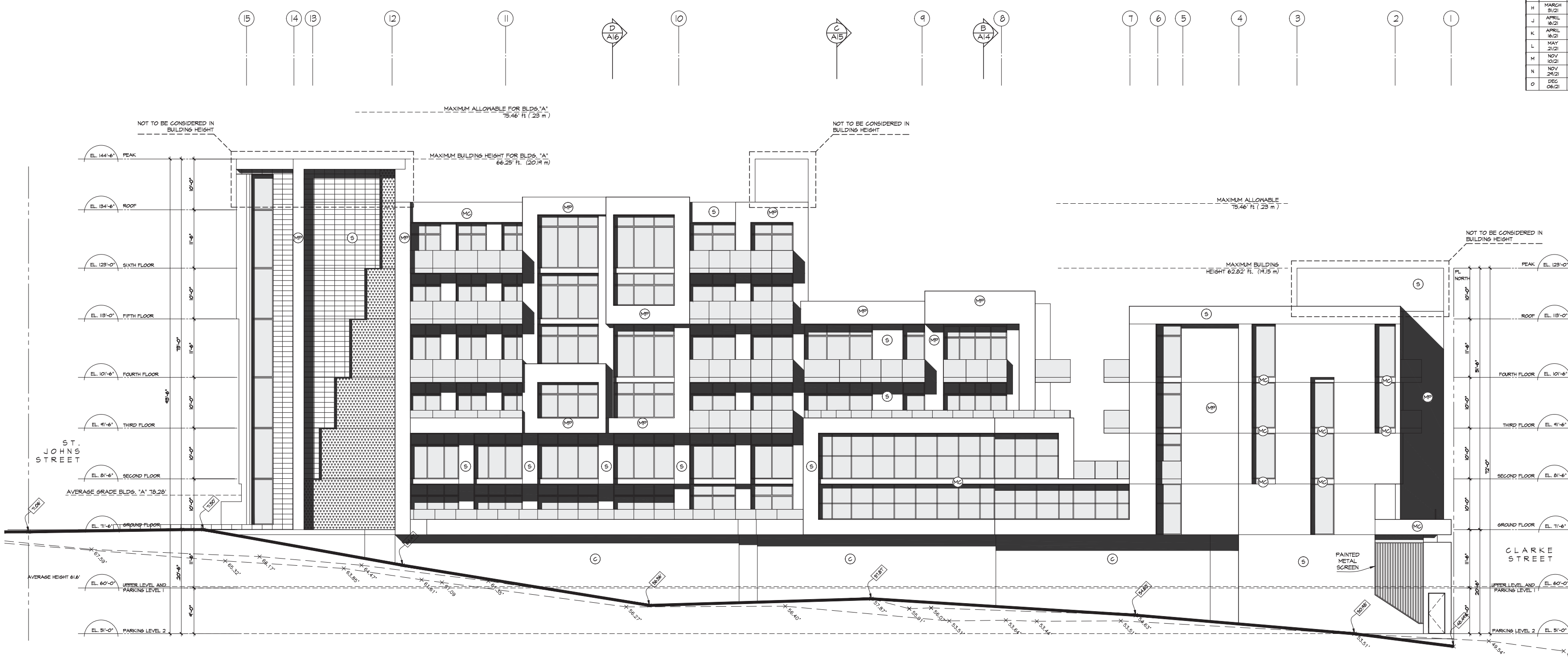
PAINT COLOR TO BE CONFIRMED WITH OWNER PRIOR TO CONSTRUCTION

LO STUDIO
architecture Inc.
#205 – 3751 JACOMBS ROAD – RICHMOND, B.C.
V6V 2R4 – TEL. 604-276-0114 – CELL 778-886-0264

PROJECT
PROPOSED RESIDENTIAL BUILDING FOR:
SPRING CREEK DEVELOPMENT

SHEET TITLE
WEST ELEVATION

SCALE: 1/8" = 1'-0"	DRAWN BY: PFM	2101 CLARKE STREET	DWG. No.	15-050-A11	REV.
DATE: OCT. 24, 2017	CHECKED BY: MC	PORT MOODY, BC			0



EAST ELEVATION

1/8" = 1'-0"

LEGEND

- ℄ CENTRELINE OF GLAZING FRAME AND / OR REVEAL
- T GLAZING FRAME OR REVEAL ALIGNED TO TOP OF OPENING *
- B GLAZING FRAME OR REVEAL ALIGNED TO BOTTOM OF OPENING *
- F.C. FIRE COMPARTMENT
- P.J. PANEL JOINT
- R REVEAL
- R.S. ROOF SCUPPER
- EL. ELEVATION
- BL BAY LINE
- T.O.C. TO TOP OF CONCRETE
- U.N.O. UNLESS NOTED OTHERWISE
- (R) RATED DOOR
- (#) PANEL No.

* SEE 5/A-

NOTE: GLAZING SHOP DWGS. MUST BE REVIEWED BY THE BUILDING ENVELOPE ENGINEER

GLAZING SCHEDULE

G1 EXTERIOR LITE - 6mm PPG CLEAR, TEMPERED, 1/2" AIRSPACE, INTERIOR LITE - 6mm PPG CLEAR C/W SOLARBAN 60 LOW-E #3 SURFACE, IN 2" X 4 1/2" THERMALLY BROKEN METAL FRAMES.

NOTE: GLAZING SHOP DWGS. MUST BE REVIEWED BY THE BUILDING ENVELOPE ENGINEER

GRADING PROVIDED BY CIVIL ENGINEER (SEE DRAWINGS AND SURVEY)

EXTERIOR FINISH SCHEDULE

- C CONCRETE
- F PRE-FINISHED METAL FLASHING TO MATCH WALL COLOUR
- S 1'X 2' ANCHORED-DIMENSION-STONE
- MC METAL CLADDING
- MP INSULATED METAL PANEL
  - C1 SIGNATURE 300 - COLONIAL RED
  - C2 SIGNATURE 200 - COAL BLACK
  - C3 SIGNATURE 200 - ASH GREY
  - C4 SIGNATURE 300 - SLATE GREY
- MD PREFINISHED METAL DOORS AND FRAMES PRIMED AND PAINTED TO MATCH COLOUR OF WALL

NOTE: PAINTING
PROVIDE SAMPLES ON WALL AS PER GENERAL NOTES - ELEVATIONS

NOTE
ALL EXPOSED EXT. STEEL SHALL BE PAINTED AS PER GENERAL NOTES

PAINT COLOR TO BE CONFIRMED WITH OWNER PRIOR TO CONSTRUCTION

REVISIONS

No.	DATE	DESCRIPTION
A	NOV. 15/17	ISSUED FOR DEVELOPMENT PERMIT
B	APRIL 23/18	RE-ISSUED FOR D.P.
C	SEP. 30/20	ISSUED FOR COORDINATION
D	OCT. 06/20	ISSUED FOR ENERGY COORDINATION
E	OCT. 16/20	REISSUED FOR DP.
F	OCT. 28/20	REISSUED FOR DP.
G	DEC. 22/20	REISSUED FOR DP.
H	MARCH 31/21	RE-ISSUED FOR DP.
J	APRIL 16/21	RE-ISSUED FOR DP.
K	APRIL 16/21	RE-ISSUED FOR DP.
L	MAY 21/21	RE-ISSUED FOR DP.
M	NOV 10/21	ISSUED FOR COORDINATION
N	NOV 29/21	ISSUED FOR COORDINATION
O	DEC 06/21	ISSUED FOR COORDINATION

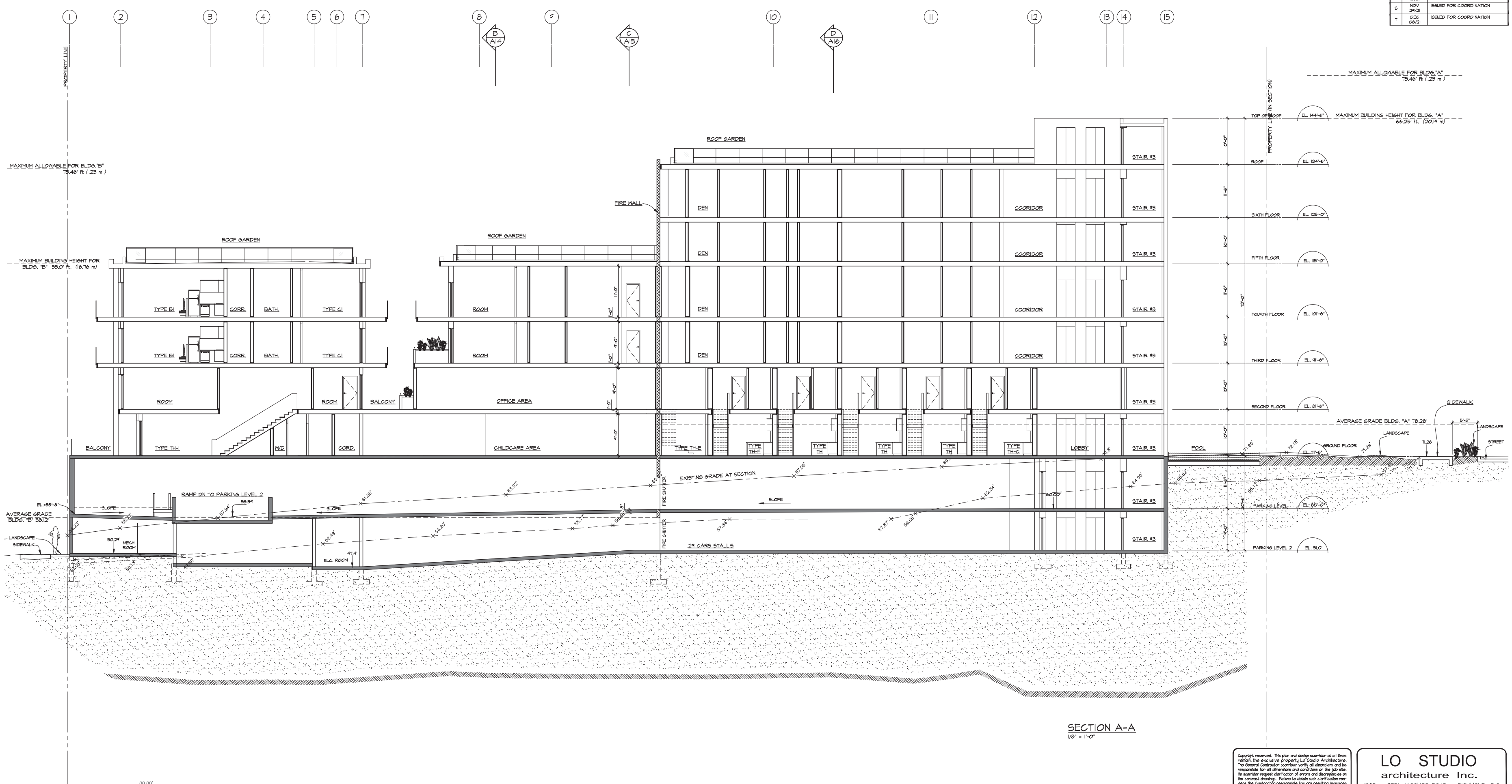
LO STUDIO
architecture Inc.
#205 – 3751 JACOMBS ROAD – RICHMOND, B.C. V6V 2R4 – TEL. 604-276-0114 – CELL 778-886-0264

PROJECT: PROPOSED RESIDENTIAL BUILDING FOR: SPRING CREEK DEVELOPMENT

SHEET TITLE: EAST ELEVATION

SCALE:	1/8" = 1'-0"	DRAWN BY:	PFM	2101 CLARKE STREET	DWG. No.	REV.
DATE:	OCT. 24, 2017	CHECKED BY:	MC	PORT MOODY, BC	15-050-A12	0

REVISIONS		
No.	DATE	DESCRIPTION
A	DEC. 23/15	ISSUED FOR CITY'S PRE-APPLICATION REVIEW
B	JULY 28/16	ISSUED FOR CLIENT' S REVIEW
C	APRIL 06/17	ISSUED FOR COORDINATION
D	NOV 15/17	ISSUED FOR DEVELOPMENT PERMIT
E	APRIL 23/18	RE-ISSUED FOR D.P.
F	JULY 31/18	RE-ISSUED FOR D.P.
G	SEPT. 14/18	RE-ISSUED FOR D.P.
H	SEP. 30/20	ISSUED FOR COORDINATION
J	OCT. 06/20	ISSUED FOR ENERGY COORDINATION
K	OCT. 16/20	REISSUED FOR DP.
L	OCT. 28/20	REISSUED FOR DP.
M	DEC. 04/20	REISSUED FOR COORDINATION
N	DEC. 22/20	REISSUED FOR DP.
O	MARCH 31/21	RE-ISSUED FOR DP.
P	APRIL 16/21	RE-ISSUED FOR DP.
Q	MAY 21/21	RE-ISSUED FOR DP.
R	NOV 10/21	ISSUED FOR COORDINATION
S	NOV 29/21	ISSUED FOR COORDINATION
T	DEC 06/21	ISSUED FOR COORDINATION



SECTION A-A
1/8" = 1'-0"

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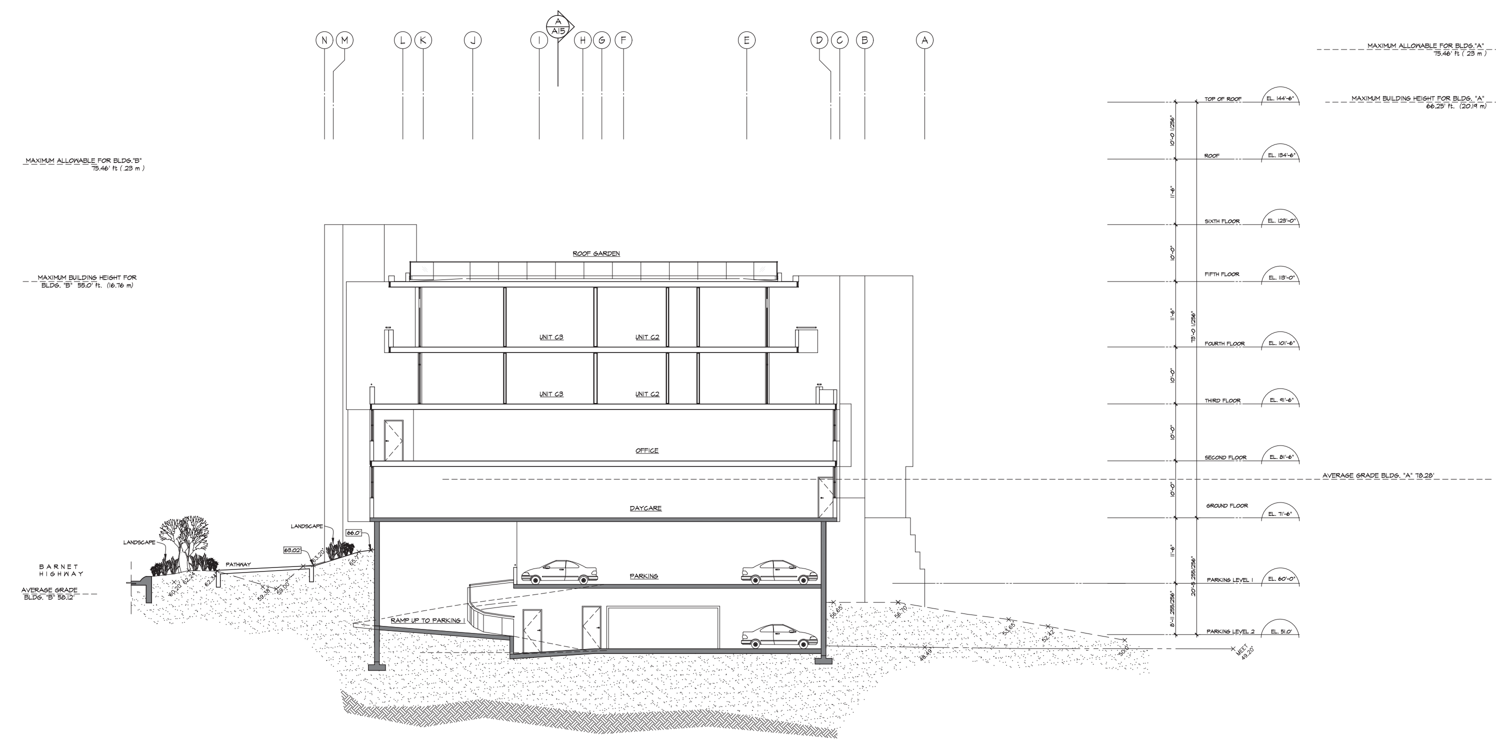
architecture Inc.
#205 – 3751 JACOMBS ROAD – RICHMOND, B.C.
V6V 2R4 – TEL. 604-276-0114 – CELL 778-886-0264

PROJECT
PROPOSED RESTIDENTIAL & RETAIL
BUILDING FOR:
SPRING CREEK DEVELOPMENT

SHEET TITLE
SECTION A-A

Plot date: Mar 25, 2022 – 5:38pm

SCALE: 1/8"=1'-0"	DRAWN BY: PF\LM	2101 CLARKE STREET	DWG. No.	15-050-A13	REV. T
DATE: DEC. 08, 2015	CHECKED BY: MC	PORT MOODY, BC			



SECTION B-B

1/8" = 1'-0"

REVISIONS

No.	DATE	DESCRIPTION
A	DEC. 23/15	ISSUED FOR CITY'S PRE-APPLICATION REVIEW
B	JULY 28/16	ISSUED FOR CLIENT' S REVIEW
C	APRIL 06/17	ISSUED FOR COORDINATION
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E	APRIL 23/18	RE-ISSUED FOR D.P.
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G	SEP. 30/20	ISSUED FOR COORDINATION
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J	OCT. 16/20	REISSUED FOR DP.
L	OCT. 28/20	REISSUED FOR DP.
M	DEC. 04/20	REISSUED FOR COORDINATION
N	DEC. 22/20	REISSUED FOR DP.
O	MARCH 31/21	RE-ISSUED FOR DP.
P	APRIL 16/21	RE-ISSUED FOR DP.
Q	MAY 21/21	RE-ISSUED FOR DP.
R	NOV 10/21	ISSUED FOR COORDINATION
S	NOV 29/21	ISSUED FOR COORDINATION
T	DEC 06/21	ISSUED FOR COORDINATION

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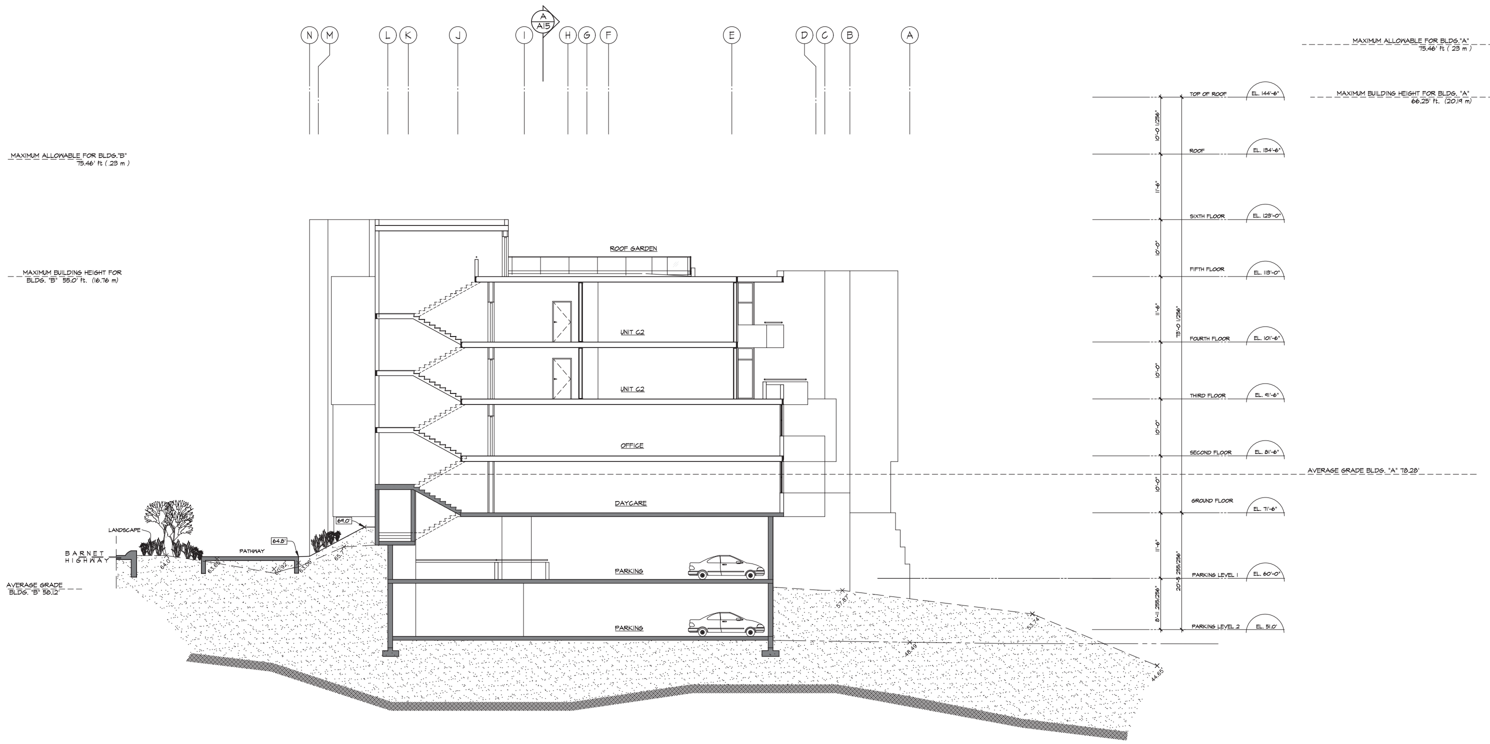
V6V 2R4 – TEL. 604-276-0114 – CELL 778-886-0264

PROJECT
PROPOSED RESTIDENTIAL & RETAIL BUILDING FOR:
SPRING CREEK DEVELOPMENT

SHEET TITLE
SCHEMATIC SECTIONS B-B

Plot date: Mar 25, 2022 – 5:39pm

SCALE: 1/8"=1'-0"	DRAWN BY: PF\LM	2101 CLARKE STREET	DWG. No. 15-050-A14	REV. T
DATE: DEC. 08, 2015	CHECKED BY: MC	PORT MOODY, BC		



SECTION C-C
1/8" = 1'-0"

REVISIONS		
No.	DATE	DESCRIPTION
A	DEC. 23/15	ISSUED FOR CITY'S PRE-APPLICATION REVIEW
B	JULY 28/16	ISSUED FOR CLIENT'S REVIEW
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D	NOV 15/17	ISSUED FOR DEVELOPMENT PERMIT
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L	OCT. 28/20	REISSUED FOR DP.
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Q	MAY 21/21	RE-ISSUED FOR DP.
R	NOV 10/21	ISSUED FOR COORDINATION
S	NOV 29/21	ISSUED FOR COORDINATION
T	DEC 06/21	ISSUED FOR COORDINATION

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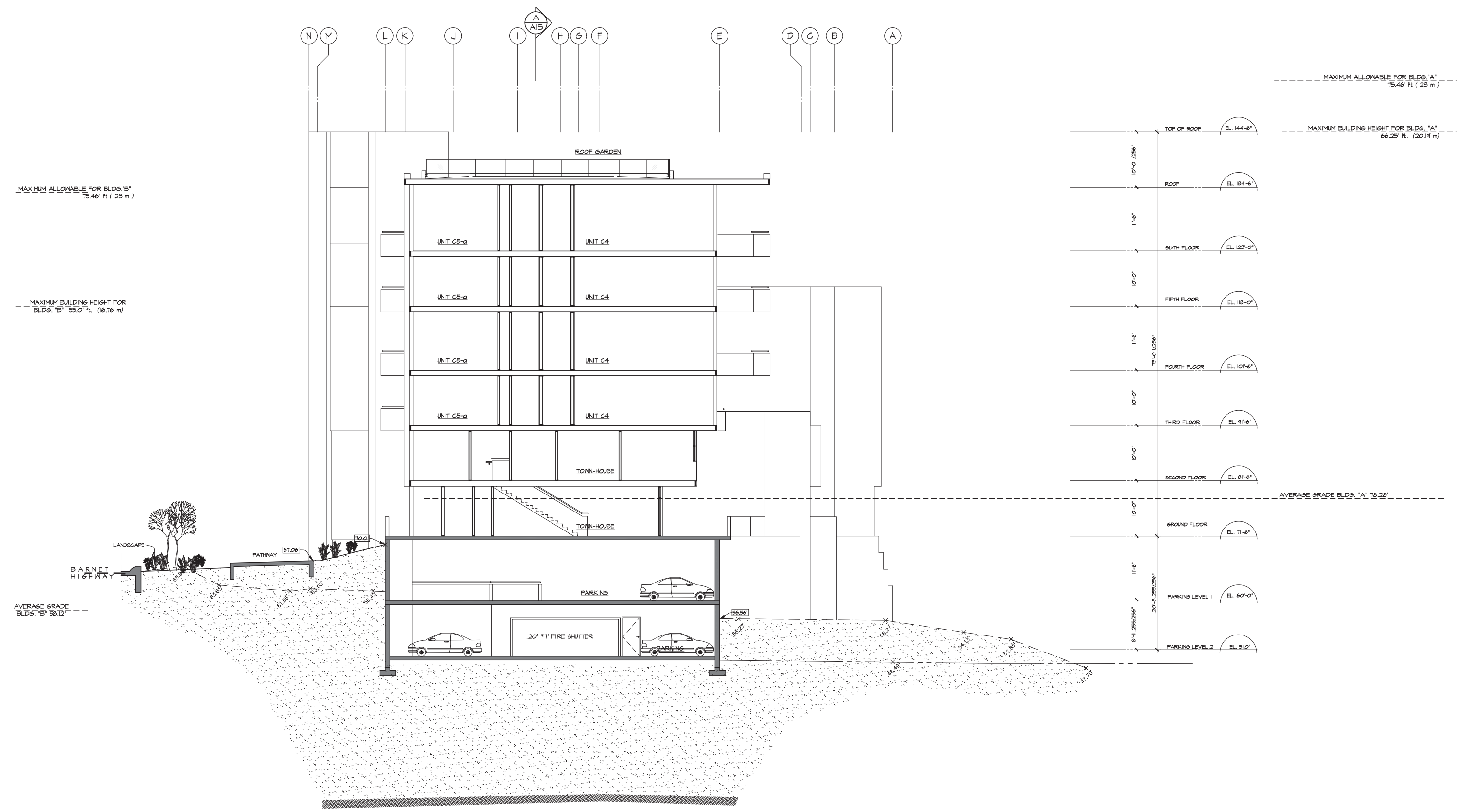
V6V 2R4 – TEL. 604-276-0114 – CELL 778-886-0264

PROJECT
PROPOSED RESTIDENTIAL & RETAIL
BUILDING FOR:
SPRING CREEK DEVELOPMENT

SHEET TITLE
SCHEMATIC SECTIONS C-C

Plot date: Mar 25, 2022 – 5:39pm

SCALE: 1/8"=1'-0"	DRAWN BY: PF\LM	2101 CLARKE STREET	DWG. No. 15-050-A15	REV. T
DATE: DEC. 08, 2015	CHECKED BY: MC	PORT MOODY, BC		



SECTION D-D

1/8" = 1'-0"

REVISIONS

No.	DATE	DESCRIPTION
A	DEC. 23/15	ISSUED FOR CITY'S PRE-APPLICATION REVIEW
B	JULY 28/16	ISSUED FOR CLIENT' S REVIEW
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R	NOV 10/21	ISSUED FOR COORDINATION
S	NOV 29/21	ISSUED FOR COORDINATION
T	DEC 06/21	ISSUED FOR COORDINATION

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V6V 2R4 – TEL. 604-276-0114 – CELL 778-886-0264

PROJECT
PROPOSED RESTIDENTIAL & RETAIL BUILDING FOR:
SPRING CREEK DEVELOPMENT

SHEET TITLE
SCHEMATIC SECTIONS D-D

Plot date: Mar 25, 2022 – 5:39pm

SCALE: 1/8"=1'-0"	DRAWN BY: PF\LM	2101 CLARKE STREET	DWG. No. 15-050-A16	REV. T
DATE: DEC. 08, 2015	CHECKED BY: MC	PORT MOODY, BC		