

PROPOSAL:

- **Development Variance Permit**

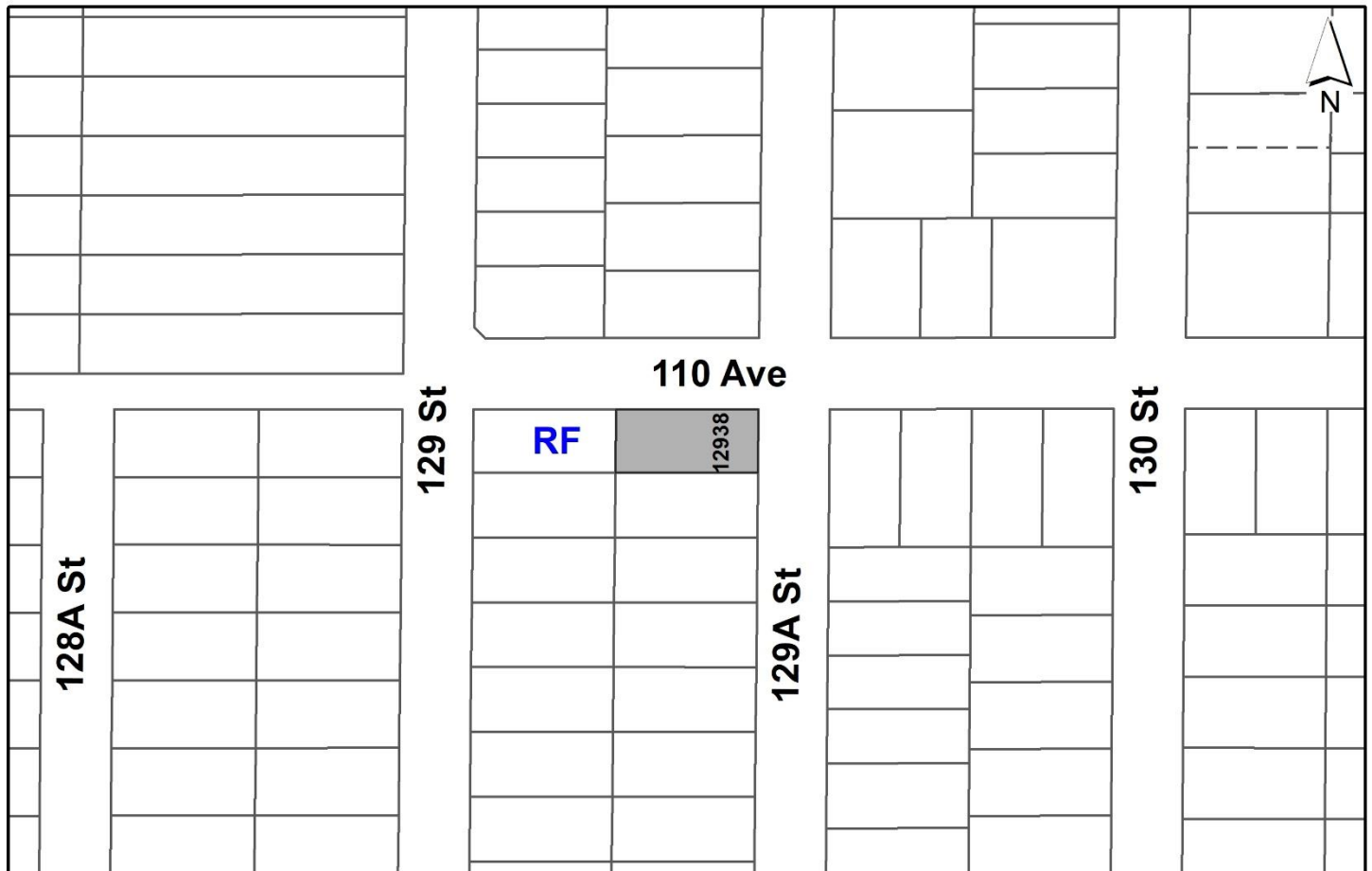
to allow a basement well and basement access between the principal building and side (south) lot line of a proposed single family dwelling.

LOCATION: 12938 - 110 Avenue

ZONING: RF

OCP DESIGNATION: Urban

NCP/TCP/LAP DESIGNATION: N/A



RECOMMENDATION SUMMARY

- Approval for Development Variance Permit to proceed to Public Notification.

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- The applicant is proposing a variance to allow a basement well and basement access between the principal building and side (south) lot line of a proposed single family dwelling in the Single Family Residential (RF) Zone.

RATIONALE OF RECOMMENDATION

- The subject property is a corner lot with frontage along 129A Street (east side) and 110 Avenue (north side) in the Whalley neighbourhood. It is on a gentle slope with views to the North Shore mountains.
- The applicant has a pending building permit application with the Building Division. The applicant is proposing a single family dwelling with a north orientation facing 110 Avenue in order to take advantage of the mountain views. The basement well and access is proposed at the side (south) lot line of the property.
- The RF Zone only allows basement access and basement wells to be situated between the principal building and the rear (west) lot line. The design of the proposed single family dwelling does not comply with the Zoning Bylaw.
- The applicant has indicated that a considerable amount of time was spent designing the proposed single family dwelling. At the time of building design, building permits were being issued with basement access and basement wells between the principal building and the side lot line.
- A subsequent internal policy review has determined that allowing basement access and basement wells between the principal building and the side lot line is contrary to the current Zoning Bylaw. Building permit applications submitted prior to the internal policy review are required to either amend their building design or apply for a Development Variance Permit (DVP) to comply with the current Zoning Bylaw. The basement well is sited in such a manner that it is located outside the side yard setback and provides safe and reasonable access to the rear yard.
- The applicant has indicated that it would cause delay and hardship to alter the design of the proposed single family dwelling at this time. As such, the subject variance has been requested.

RECOMMENDATION

The Planning & Development Department recommends that:

1. Council approve Development Variance Permit No. 7922-0308-00 (Appendix II) varying the following, to proceed to Public Notification:
 - (a) To vary Part 16 – Single Family Residential Zone (RF), Section J. 3. to permit basement access and the basement well to be situated between the principal building and the side (south) lot line.

SITE CONTEXT & BACKGROUND

Direction	Existing Use	OCP Designation	Existing Zone
Subject Site	Single Family Dwelling	Urban	RF Zone
North (Across 110 Avenue):	Single Family Dwelling	Urban	RF Zone
East (Across 129A Street):	Single Family Dwelling	Urban	RF Zone
South:	Single Family Dwelling	Urban	RF Zone
West:	Single Family Dwelling	Urban	RF Zone

Context & Background

- The 722-square metre subject property is located at 12938-110 Avenue in Whalley. It is a corner lot with frontage along 129A Street and 110 Avenue and is approximately 18 metres wide and 40 metres deep.
- The lot is designated “Urban” in the Official Community Plan and is not in a Neighbourhood Concept Plan (NCP) area. The zoning of the property is Single Family Residential (RF) Zone, under Surrey Zoning Bylaw, 1993, No. 12000.
- The applicant has submitted a Building Permit application for a new single family dwelling on the lot. Upon review by the Building Division, it was determined that the proposed basement well and access are not compliant with the RF Zone. A Development Variance Permit (DVP) is therefore required.

DEVELOPMENT PROPOSAL

Planning Considerations

- The applicant is proposing to construct a new single family dwelling on the existing RF-zoned lot.

- The applicant has indicated that they would suffer delay and hardship if they are required to alter the design of the proposed single family dwelling.
- The basement well is sited outside the side yard setback and provides safe and reasonable access to the rear yard.
- Staff support the requested variance to proceed for consideration.

TREES

- An arborist assessment for the subject property is required as part of the Building Permit review. The location of the basement access well is not anticipated to have bearing on tree preservation on the lot.

INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

Appendix I. Site Plan
Appendix II. Development Variance Permit No. 7922-0308-00

approved by Ron Gill

Jeff Arason
Acting General Manager
Planning and Development

DQ/ar

No.	Date	Revision
1	12/27/21	ISSUED FOR BP
1	11/11/22	REVISED FOR BP

LIST OF STANDARD ABBREVIATIONS

A.V.B	Air Vapour Barrier	M	Microwave
Alu	Aluminum	MIN	Minimum
BD	Board	NCS	Necessary
BS	Blind Door	NC	Not in Contact
BP	Building Paper	NTS	Not to Scale
CB	Bottom of	OPY	Opening
CL	Chimney	Plywood	Plywood
CL	Chimney (Beam)	PVC	Polyethylene
CO	Column (Base)	RV	Roof Ventilation Jack
CG	Ceiling	RJ	Root Joints
CLOS	Closet	R.O	Rough Opening
CL	Chlor	RS	Rod and Shelf
CC	Concrete	RWL	Smoke/Water Leader
D	Dryer	S.A.	Smoke Alarm
DN	Down	SFLR	Smoke Alarm
DW	Dishwasher	SGL	Subfloor
EF	Exhaust Fan	SG	Safety Glass
EQ	Equal	STR	Stair
		STM	Stem

GENERAL NOTES:
ALL WORK AND MATERIALS TO COMPLY WITH BC BUILDING CODE 2012 AND WITH MUNICIPAL BYLAWS AND REQUIREMENTS.
CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
ALL STRUCTURAL MEMBERS TO HAVE THE FOLLOWING GRADES UNLESS OTHERWISE NOTED:
BEAMS, JOISTS AND HEADERS: DOUGLAS FIR #2 OR BETTER
STUDS: #2 K.D. S.P.F. OR BETTER

ROOF TRUSSES TO BE DESIGNED BY A PROFESSIONAL ENGINEER. SHOP DRAWINGS TO BE SUBMITTED FOR MUNICIPAL APPROVAL PRIOR TO FABRICATION.

ALL CONSTRUCTION AND DESIGN TO CONFORM TO PART 9 OF THE BCBC 2012.

WATERPROOF WALLBOARD REQUIRED AS TILE BASE AROUND TUBS AND SHOWERS

Date
NOVEMBER 21ST, 2022

Scale
AS SHOWN
Drawing No.

Appendix I

GENERAL CONSTRUCTION NOTES:

EXCAVATION

1. GET TECHNICAL ENGINEER TO CERTIFY A SITE IS SAFE FOR WORKERS WHEN SLABS OF THE EXCAVATION EXCEEDS 4' HORIZONTALLY TO ONE VERTICAL OR EXCAVATION EXCEEDS 48"
2. INSPECTIONS CAN ONLY BE DONE IF SITE IS POSTED AS SAFE BY PROF. ENGINEER.

FOUNDATIONS

1. PAD FOOTINGS ARE REQUIRED TO HAVE A MINIMUM FOOTING AREA OF 4.3SF SUPPORTING 2 FLOORS, 8.107SF SUPPORTING 3 FLOORS.
2. FOOTINGS ARE TO EXTEND 18" BELOW GRADE MINIMUM.
3. FOUNDATION WALLS OF BASEMENT BELOW GRADE AND CRAWL SPACES MUST BE INSTALLED WITH R12 TO 24" BELOW GRADE.
4. PROVIDE 1" BRANCH BOLTS 8" O.C.
5. ANCHOR POSTS TO FOOTINGS TO RESIST UPLIFT.

CRAWL SPACE

1. PROVIDE CRAWL SPACE ACCESS OF 1'4" X 2'-0" MIN. 1" CLEARANCE AND VENTILATE TO 1500TH OF AREA.
2. GROUND COVER REQ. OF 2" CONCRETE OVER 6 MIL U.V.

VENTILATION

1. UNIFORMLY DISTRIBUTE VENTILATION TO FLAT AND VAULTED ROOFS TO 1/50 OF INSULATED CEILING AREA. VENTING IS REQUIRED TO BE TWOWAY.
2. MIN. 2 X 2 CROSS PURLINS TO FLAT, VAULTED CEILINGS, AND DECKS OVER LIVING AREAS TO CONFORM TO R9.13.1.
3. PROVIDE MIN. 2" CLEARANCE BETWEEN ROOF SHEATHING AND INSULATION PER R9.13.
4. PROVIDE MIN. 1" CLEARANCE BETWEEN INSULATION AND TOP OF ROOF JOISTS.
5. VENTILATE ATTICS TO 1500 OF INSULATED CEILING AREA.
6. ROOF VENTS ARE TO BE UNIFORMLY DISTRIBUTED WITH A MINIMUM OF 2% AT BASE AND 25% IN ROOFTOP.
7. PROVIDE ATTIC HATCH OF 3.4SF IN AREA WITH NO DIMENSIONS LESS THAN 1'10"
8. SUBMIT MECHANICAL VENTILATION AIR CONDITIONING DESIGN AND LETTER OF SUBMISSION BY PROF. ENGINEER, CERTIFIED HRA OR HVAC TECHNICIAN AT FRAME AND FINAL INSPECTION.
9. CONTINUOUS OR INTERMITTENT EXHAUST FANS ARE REQUIRED TO ALL BATHROOMS AND KITCHENS AS PER 9.32.3.3.

INSULATION

1. INSULATION WHERE SUBJECT TO MECHANICAL DAMAGE IS TO BE COVERED AS PER 9.32.2.3.1 WITH DRYWALL OR EQUIVALENT (E.G. CRAWL STORAGE AREAS).
2. WALL INSULATION TO BE R20 MINIMUM IF DWELLING IS NOT HEATED BY NATURAL GAS.
3. MINIMUM INSULATION WALLS R20 WALLS, R28 FOR FLAT OR VAULTED CEILINGS, AND R48 FOR ATTIC SPACES.
4. CEILING AND WALLS TO HAVE 6 MIL U.V. POLY FULLY CALKED AS PER 9.2.
5. R10 RIGID INSULATION REQUIRED AROUND UNHEATED SLABS ON GRADE: 2" VERTICAL OR HORIZONTAL FROM BOTTOM EDGE OF SLAB.
6. R12 RIGID INSULATION REQUIRED UNDER ENTIRE SLAB AREA FOR SLABS WITH RADIANT HEATING.

STAIRS

1. STRAIGHT STAIR: RISE MIN. 5" MAX. 7.87"
2. RUN MIN. 8.25" MAX. 14"
3. MINIMUM HEADROOM IS 6'-0" FROM A LINE THROUGH NOSINGS, MEASURED VERTICALLY.
4. HANDRAIL TO BE BETWEEN 32" TO 38" FROM A LINE, MEASURED VERTICALLY, THROUGH NOSING.
5. HANDRAILS TO CONFORM TO 9.8.4.5.
6. PRIMARY STAIR MINIMUM WIDTH 2'-10"
7. CURVED STAIRS AND STAIRS 6" IN WIDTH OR GREATER REQUIRE 2 HANDRAILS.
8. HANDRAIL REQ. ON INTERIOR STAIRS WITH THREE OR MORE RISERS, AND EXTERIOR STAIRS WITH FOUR OR MORE RISERS.
9. HANDRAIL AS A GUARD IS TO BE BETWEEN 38" AND 38"

ENERGY EFFICIENCY REQUIREMENTS:

- CLIMATE ZONE 4 WITH PERFORMANCE 9.36.6.**
ENERGY STEP CODE: STEP 1
APPROXIMATE PER 9.36.2.1 & CONSTRUCTION OF AIR BARRIER DETAILS (9.36.2.1.1):
- SEE SHEETS AL, AT & AS DETAILS
MINIMUM VENTILATION SYSTEM SUPPLY AIR (9.32.3.4.1):
- PROVIDE VENTILATION TO BEDROOMS & HALLWAYS PER 9.32.3.4.1)

HVAC AND SERVICE WATER HEATING REQUIREMENTS (9.32. & 9.33.1)

8. HVAC SYSTEMS AND DUCTS TO BE SIZED & INSTALLED PER 9.36.3.2
 - PROVIDE DAMPERS FOR AIR INTAKE & OUTLET PER 9.36.3.3
 - PER 9.36.3.3, PIPING FOR HEATING AND COOLING SYSTEMS TO BE LOCATED INSIDE THE PLANE OF INSULATION; WHERE PIPING IS LOCATED OUTSIDE THE BUILDING ENCLOSURE OR WITHIN UNCONDITIONED SPACE, THE INSULATION MUST BE INSTALLED TO A THERMAL RESISTANCE NOT LESS THAN THE EFFECTIVE RESISTANCE REQUIREMENTS OF THE EXTERIOR ABOVE GRADE WALL.
 - PROVIDE TEMPERATURE CONTROLS FOR HEATING AND COOLING EQUIPMENT PER 9.36.3.
- THE ACCURACY OF THE CONTROL MUST BE BETTER THAN PLUS OR MINUS 0.5°C.
- HRY TO CONFORM TO 9.36.3.9, INCLUDING HAVING A MINIMUM SENSIBLE HEAT RECOVERY EFFICIENCY OF 60%.

NEW SERVICE CONNECTION INSTALLATION NOTES:

8. PROPERTY CORNERS MUST BE POSTED BY A REGISTERED BC LAND SURVEYOR PRIOR TO ANY CONSTRUCTION BEING INSTALLED.
9. DO NOT INSTALL TEMPORARY POWER POLES WITHIN 3.0M OF ANY EXISTING OR PROPOSED UNDERGROUND UTILITY LOCATION OR IT WILL HAVE TO BE REMOVED AT YOUR EXPENSE. ZONE MUST BE CLEAR PRIOR TO ANY DNV WORK.
10. ANY BUILDING MATERIALS, GARBAGE, CONTAINERS, SPOL, PILES ETC. WITHIN 1.0M OF AN EXISTING OR PROPOSED SANITARY, STORM, OR WATER CONNECTION WILL PREVENT ANY DNV WORK FROM PROCEEDING UNTIL THE AREA HAS BEEN CLEARED.

ZONING REQUIREMENTS

LAND ZONED SITE AREA	25%	RF	7.776 SF	(7.22 M ²)
SITE COVERAGE	(40 - 50) = 38.7.776 SF	2.654 SF	(274.45 M ²)	
-ALLOWABLE		2760 SF	(256.41 M ²)	
-PROPOSED				
FLOOR AREA RATIO	4 X 6000 SF = 3.600 SF	4.221 SF	(392.14 M ²)	
-MAX. ALLOW.	+ 35 X 1.776 SF = 621 SF			
	4.221 SF TOTAL (5,000 SF MAX)			

PARKING - OPEN TO BELOW EXEMPTION	420 SF	(39.02 M ²)
200 SF	200 SF	(18.58 M ²)

-PROPOSED		
-BASEMENT (EXEMPTED)	1787 SF	(166.02 M ²)
-BASEMENT PARKING (EXEMPTED)	442 SF	(41.09 M ²)
-MAIN FLOOR	2352 SF	(218.51 M ²)
-UPPER FLOOR (80% MAX. LOWER FLR - OPEN TO BELOW (EXEMPTED))	1842 SF	(171.14 M ²)
197 SF	197 SF	(18.30 M ²)
TOTAL COUNTED FLOOR AREA	4194 SF	(389.64 M ²)
GROSS FLOOR AREA	6620 SF	(615.02 M ²)

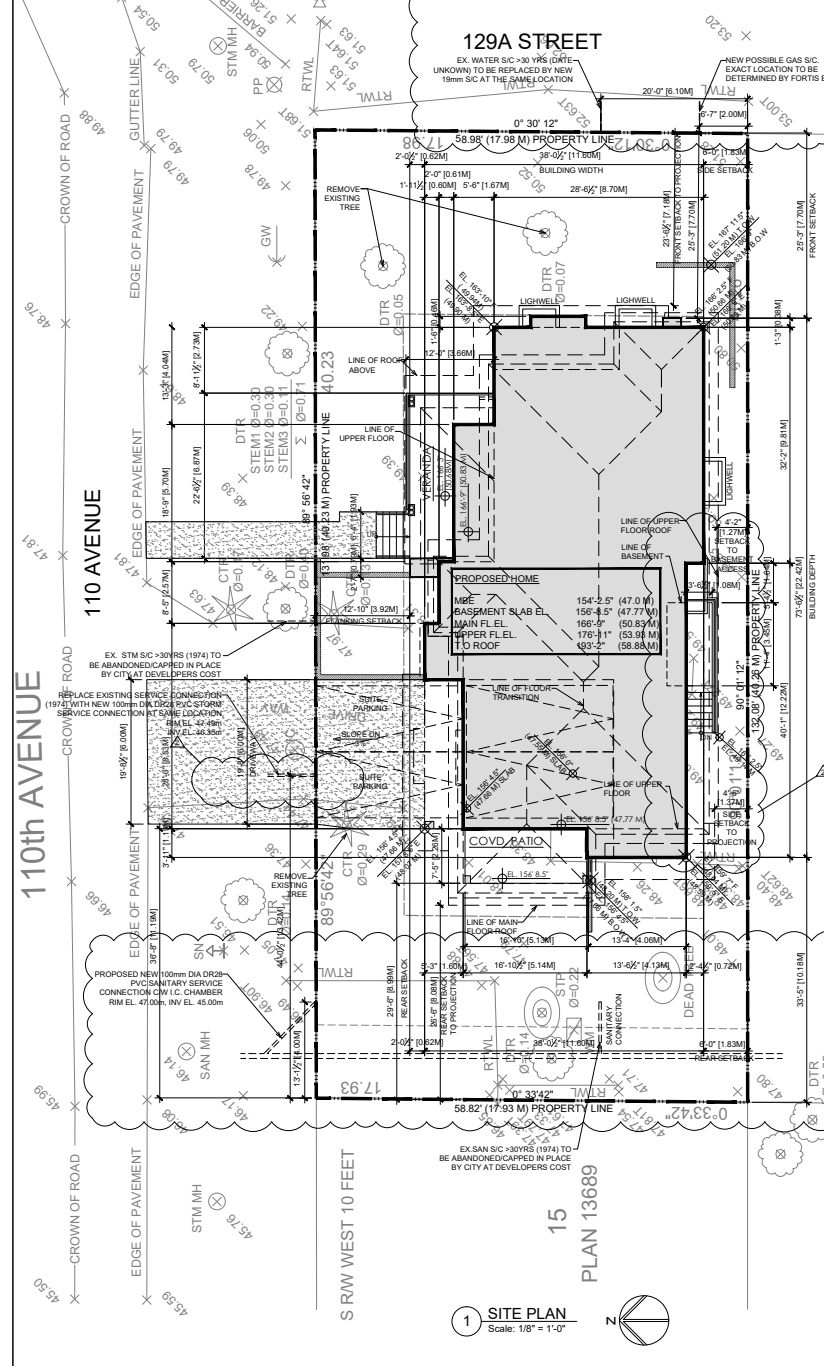
-COVERED DECKS		
-ALLOWABLE: 4221 SF X 1	422 SF	(39.20 M ²)
-VERANDA	153 SF	(14.21 M ²)
-MAIN FLOOR	128 SF	(11.89 M ²)
-UPPER FLOOR (80% MAX. LOWER FLR)	138 SF	(12.10 M ²)
TOTAL COUNTED FLOOR AREA:	411 SF	(38.20 M ²)

AVERAGE GRADE CALC	(159.42 + 156.36 + 166.21 + 163.71) / 4 =	161.43	(49.20 M)
MAX HEIGHT			
-MAXIMUM (161.43 + 29.52): 3:12 SLOPE MIN	190.95	(56.20 M)	
-PROPOSED (161.43 + 29.04): 4:12 SLOPE	190.47	(56.05 M)	

SET BACKS	ALLOWABLE	PROPOSED
-FRONT YARD	7.5 M	25.25' (7.70 M)
-SIDE YARD	1.8 M	6.00' (1.83 M)
-FLANKING SIDE	3.8 M	12.84' (3.92 M)
-REAR YARD	7.5 M	29.52' (9.00 M)

INFERABLE SURFACES		
ALLOWABLE: 7 X 7.776 SF	543.5F	(505.71 M ²)
PROPOSED	3122 SF	(290.06 M ²)

GENERAL SITE PLAN NOTES:	
1. ANY DEVELOPMENT PROPOSED ON DNV BOULEVARDS MUST BE SUBMITTED FOR APPROVAL PRIOR TO COMPLETION. THIS INCLUDES ALL PLANTING, LANDSCAPING, STRUCTURAL AND NON-STRUCTURAL ENTITIES.	
2. NO PERMANENT STRUCTURES PERMITTED ON DNV BOULEVARDS. THIS INCLUDES STAIRS, RETAINING WALLS, RAILINGS, IRRIGATION SYSTEM, ETC. ANY CHANGES TO DNV'S BOULEVARD MUST BE APPROVED.	
3. FIRST 2.0M OF THE BOULEVARD FROM THE ROAD EDGE ARE TO BE FREE OF LANDSCAPING DESIGNS. CLEARANCE REQUIRED FOR PEDESTRIAN ACCESSIBILITY. AT MINIMUM TO BE RESTORED WITH TOPSOIL AND SOD.	
4. ALL CURBING WORK TO BE DONE BY THE DISTRICT CREWS WITH ALL CHARGES PAID BY THE DEVELOPER. MAX DRIVEWAY WIDTH 4.3M FROM ROAD EDGE TO PROPERTY LINE.	
5. ASPHALT DRIVEWAYS MUST BE 65MM MINIMUM ASPHALT PAVEMENT THICKNESS ON A MINIMUM 150MM THICK 19MM MINUS CRUSH GRANULAR BASE MATERIAL. (DISTRICT ROW)	
6. CONCRETE DRIVEWAYS MUST BE AT MINIMUM 120MM THICKNESS ON A 150MM THICK 19MM MINUS CRUSH GRANULAR BASE MATERIAL. (DISTRICT ROW)	
7. SANITARY, WATER AND STORM INSPECTION CHAMBERS MUST BE KEPT VISIBLE AND ACCESSIBLE. DO NOT COVER DURING OR AFTER THE CONSTRUCTION.	



1 SITE PLAN
Scale: 1/8" = 1'-0"



All ideas, designs and plans indicated or represented by this set of drawings are the property of the designer. No part shall be used or disclosed in any form without the written permission of the designer.

(the "City")

DEVELOPMENT VARIANCE PERMIT

NO.: 7922-0308-00

Issued To:

("the Owner")

Address of Owner:

1. This development variance permit is issued subject to compliance by the Owner with all statutes, by-laws, orders, regulations or agreements, except as specifically varied by this development variance permit.

2. This development variance permit applies to that real property including land with or without improvements located within the City of Surrey, with the legal description and civic address as follows:

Parcel Identifier: 009-861-491

Lot 14 Section 16 Block 5 North Range 2 West New Westminster District Plan 13689
12938 110 Ave

(the "Land")

3. Surrey Zoning By-law, 1993, No. 12000, as amended is varied as follows:

(a) In Section J.3. of Part 16 "Single Family Residential Zone (RF)", a basement access and the basement well are permitted to be situated between the principal building and the side (south) lot line.

4. This development variance permit applies to only that portion of the buildings and structures on the Land shown on Schedule A which is attached hereto and forms part of this development variance permit. This development variance permit does not apply to additions to, or replacement of, any of the existing buildings shown on attached Schedule A, which is attached hereto and forms part of this development variance permit.

5. The Land shall be developed strictly in accordance with the terms and conditions and provisions of this development variance permit.

6. This development variance permit shall lapse if the Owner does not substantially start any construction with respect to which this development variance permit is issued, within two (2) years after the date this development variance permit is issued.

7. The terms of this development variance permit or any amendment to it, are binding on all persons who acquire an interest in the Land.

8. This development variance permit is not a building permit.

AUTHORIZING RESOLUTION PASSED BY THE COUNCIL, THE DAY OF , 20 .
ISSUED THIS DAY OF , 20 .

Mayor – Brenda Locke

City Clerk – Jennifer Ficocelli

No.	Date	Revision
1	12/27/21	ISSUED FOR BP
UN	11/12/22	REVISED FOR BP

LIST OF STANDARD ABBREVIATIONS

A.V.B.	Air Vapour Barrier	M	Microwave
Al	Aluminum	Min	Minimum
BD	Board	N	Necessary
BP	Blind Door	NC	Not in Contact
BP	Building Paper	NTS	Not to Scale
CB	Bottom of	OPY	Opening
CL	Chimney	Ply	Plywood
CL	Column (Beam)	PV	Polyethylene
C.O.	Ceiling	P.V.	Plywood Veneer
C.O.	Ceiling	RJ	Root Joints
CLOS	Closet	R.O.	Rough Opening
CL	Chlor	RS	Roof and Shelf
CC	Concrete	RWL	Smoke Alarm
D	Dryer	S.A.	Smoke Alarm
DN	Down	SFLR	Subfloor
DW	Dishwasher	SG	Safety Glass
EF	Exhaust Fan	STR	Stair
EQ	Equal	STM	Stair

GENERAL NOTES:
ALL WORK AND MATERIALS TO COMPLY WITH BC BUILDING CODE 2012 AND WITH MUNICIPAL BYLAWS AND REQUIREMENTS.

CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
ALL STRUCTURAL MEMBERS TO HAVE THE FOLLOWING GRADES UNLESS OTHERWISE NOTED:
BEAMS, JOISTS AND HEADERS: DOUGLAS FIR #2 OR BETTER
STUDS: #2 K.D. S.P.F. OR BETTER.

ROOF TRUSSES TO BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER. SHOP DRAWINGS TO BE SUBMITTED FOR MUNICIPAL APPROVAL PRIOR TO FABRICATION.
ALL CONSTRUCTION AND DESIGN TO CONFORM TO PART 9 OF THE BCBC 2012.

WATERPROOF WALLBOARD AS TILE BASE AROUND TUBS AND SHOWERS

Title
SITE PLAN & CALCS
Date
NOVEMBER 21ST, 2022
Scale
AS SHOWN
Drawing No.

Schedule A

GENERAL CONSTRUCTION NOTES:

EXCAVATION

1. GEOTECHNICAL ENGINEER IS TO CERTIFY A SITE IS SAFE FOR WORKERS WHEN SHEDS OF THE EXCAVATIONS EXCEEDS 11' HORIZONTAL TO THE VERTICAL OR EXCAVATION EXCEEDS 48'.
2. SIGNPOSTS CAN ONLY BE DONE IF SITE IS POSTED AS SAFE BY PROF. ENGINEER.

FOUNDATIONS

1. PAD FOOTINGS ARE REQUIRED TO HAVE A MINIMUM FOOTING AREA OF 4.3SF SUPPORTING 2 FLOORS, 8' 10" SF SUPPORTING 3 FLOORS.
2. FOOTINGS ARE TO EXCEED 18" BELOW GRADE MINIMUM.
3. FOUNDATION WALLS OF BASEMENT BELOW GRADE AND CRAWL SPACES MUST BE INSTALLED WITH R12 TO 24" BELOW GRADE.
4. PROVIDE 1" BRANCON BOLTS 8" O.C.
5. ANCHOR POSTS TO FOOTINGS TO RESIST UPLIFT.

CRAWL SPACE

1. PROVIDE CRAWL SPACE ACCESS OF 1'4" X 2'4" MIN. 1" CLEARANCE AND VENTILATE TO 1500FH OF AREA.
2. GROUND/COVER REQ. OF 2" CONCRETE OVER 6 MIL U.V.

VENTILATION

1. UNIFORMLY DISTRIBUTE VENTILATION TO FLAT AND VAULTED ROOFS TO 1/50 OF INSULATED CEILING AREA. VENTING IS REQUIRED TO BE TOWAY.
2. MIN. 2 X 2 CROSS PURLINS TO FLAT, VAULTED CEILINGS, AND DECKS OVER LIVING AREAS TO CONFIRM TO R9 R19 13.4).
3. PROVIDE MIN. 2" CLEARANCE BETWEEN ROOF SHEATHING AND INSULATION R19.3.
4. PROVIDE MIN. 1" CLEARANCE BETWEEN INSULATION AND TOP OF ROOF JOISTS.
5. VENTILATE ATTICS TO 1500 OF INSULATED CEILING AREA.
6. ROOF VENTS ARE TO BE UNIFORMLY DISTRIBUTED WITH A MINIMUM OF 2% AT BASE AND 2% IN ROOFTOP.
7. PROVIDE ATTIC HATCH OF 3.4SF IN AREA WITH NO DIMENSIONS LESS THAN 1'10".
8. SUBMIT MECHANICAL VENTILATION AIR CONDITIONING DESIGN AND LETTER OF SUPERVISION BY REGISTERED ENGINEER, CERTIFIED HVA OR HVAC TECHNICIAN AT FRAME AND FINAL INSPECTION.
9. CONTINUOUS OR INTERMITTENT EXHAUST FANS ARE REQUIRED TO ALL BATHROOMS AND KITCHENS AS PER 9.32.3.3.

INSULATION

1. INSULATION WHERE SUBJECT TO MECHANICAL DAMAGE IS TO BE COVERED AS PER 9.32.3.3 (1) WITH DRYWALL OR EQUIVALENT (E.G. CRAWL STORAGE AREAS).
2. WALL INSULATION TO BE R20 MINIMUM IF DWELLING IS NOT HEATED BY NATURAL GAS.
3. MINIMUM INSULATION WALLS R20 WALLS, R28 FOR FLAT OR VAULTED CEILINGS, AND R48 FOR ATTIC SPACES.
4. CEILING AND WALLS TO HAVE 6 MIL U.V. POLY FULLY CALKED AS PER 9.2.
5. R10 RIGID INSULATION REQUIRED UNDER UNHEATED SLABS ON GRADE: 2" VERTICAL OR HORIZONTAL FROM BOTTOM EDGE OF SLAB.
6. R12 RIGID INSULATION REQUIRED UNDER ENTRIE SLAB AREA FOR SLABS WITH RADIANT HEATING.

STAIRS

1. STRAIGHT STAIR: RISE MIN. 5" MAX. 7.87" RUN MIN. 8.25" MAX. 14"
2. ALL STAIRS TO BE TO HAVE A 1" NOSING.
3. MINIMUM HEADROOM IS 6'6" FROM A LINE THROUGH NOSINGS, MEASURED VERTICALLY.
4. HANDRAIL TO BE BETWEEN 32" TO 38" FROM A LINE, MEASURED VERTICALLY, THROUGH NOSING.
5. WINDERS TO CONFORM TO 9.6.4.5.
6. PRIMARY STAIR WIDTH MINIMUM 2' 10".
7. CURVED STAIRS AND STAIRS 45° IN WIDTH OR GREATER REQUIRE 2 HANDRAILS.
8. HANDRAIL REQ. ON INTERIOR STAIRS WITH THREE OR MORE RISERS, AND EXTERIOR STAIRS WITH FOUR OR MORE RISERS.
9. HANDRAIL AS A GUARD IS TO BE BETWEEN 38" AND 38".

ENERGY EFFICIENCY REQUIREMENTS:

- CLIMATE ZONE 4 WITH PERFORMANCE 9.36.6.**
ENERGY STEP CODE: STEP 1
APPROXIMATE PER 9.36.2.1 & CONSTRUCTION OF AIR BARRIER DETAILS (9.36.2.1):
- SEE SHEETS AL, AT & AS DETAILS
MECHANICAL VENTILATION SYSTEM SUPPLY AIR (9.32.3.4):
- PROVIDE VENTILATION TO BEDROOMS & HALLWAYS PER 9.32.3.4 (3)

HVAC AND SERVICE WATER HEATING REQUIREMENTS (9.32 & 9.33)

- HVAC SYSTEMS AND DUCTS TO BE SIZED & INSTALLED PER 9.36.3.2
- PROVIDE DAMPERS FOR AIR INTAKE & OUTLET PER 9.36.3.3
- PER 9.36.3.3, PIPING FOR HEATING AND COOLING SYSTEMS TO BE LOCATED INSIDE THE PLANE OF INSULATION; WHERE PIPING IS LOCATED OUTSIDE THE BUILDING ENCLOSURE OR WITHIN UNCONDITIONED SPACE, THE INSULATION MUST BE INSTALLED TO A THERMAL RESISTANCE NOT LESS THAN THE EFFECTIVE RESISTANCE REQUIREMENTS OF THE EXTERIOR ABOVE GRADE WALL.
- PROVIDE TEMPERATURE CONTROLS FOR HEATING AND COOLING EQUIPMENT PER 9.36.3.
- THE ACCURACY OF THE CONTROL MUST BE BETTER THAN PLUS OR MINUS 0.5°C.
- HRY TO CONFORM TO 9.36.3.9, INCLUDING HAVING A MINIMUM SENSIBLE HEAT RECOVERY EFFICIENCY OF 60%.

NEW SERVICE CONNECTION INSTALLATION NOTES:

8. PROPERTY CORNERS MUST BE POSTED BY A REGISTERED BC LAND SURVEYOR PRIOR TO ANY CONNECTION BEING INSTALLED.
9. DO NOT INSTALL TEMPORARY POWER POLES WITHIN 3.0M OF ANY EXISTING OR PROPOSED UNDERGROUND UTILITY LOCATION OR IT WILL HAVE TO BE REMOVED AT YOUR EXPENSE. ZONE MUST BE CLEAR PRIOR TO ANY DNV WORK.
10. ANY BUILDING MATERIALS, GARBAGE, CONTAINERS, SPILL, PILES ETC. WITHIN 1.0M OF AN EXISTING OR PROPOSED SANITARY, STORM, OR WATER CONNECTION WILL PREVENT ANY DNV WORK FROM PROCEEDING UNTIL THE AREA HAS BEEN CLEARED.

ZONING REQUIREMENTS

LAND ZONED SITE AREA 25% 2,654 SF (274.45 M²)
ALLOWABLE -PROPOSED (40' -02" = 38' 7.776 SF (356.41 M²)
FLOOR AREA RATIO -MAX. ALLOW. 4,221 SF (392.14 M²)

PARKING -OPEN TO BELOW EXEMPTION 420 SF (39.02 M²)
200 SF (18.58 M²)

-PROPOSED -BASEMENT (EXEMPTED) 1,787 SF (166.02 M²)
BASEMENT PARKING (EXEMPTED) 442 SF (41.09 M²)
-MAIN FLOOR 2,352 SF (218.51 M²)
-UPPER FLOOR (80% MAX. LOWER FL. -OPEN TO BELOW (EXEMPTED) 1,842 SF (171.14 M²)
197 SF (18.30 M²)

TOTAL COUNTED FLOOR AREA 4,194 SF (389.64 M²)
GROSS FLOOR AREA 6,620 SF (615.02 M²)

-COVERED DECKS 422 SF (39.20 M²)
VERANDA 153 SF (14.21 M²)
-UPPER FLOOR (80% MAX. LOWER FL.) 130 SF (12.10 M²)

TOTAL COUNTED FLOOR AREA: 411 SF (38.20 M²)

AVERAGE GRADE CALC (159.42' + 156.36' + 166.21' + 163.71') / 4 = 161.43' (49.20 M)
MAX HEIGHT -MAXIMUM (161.43' - 29.52'): 3:12 SLOPE MIN -PROPOSED (161.43' + 29.44'): 4:12 SLOPE 190.95' (58.20 M)
190.47' (58.05 M)

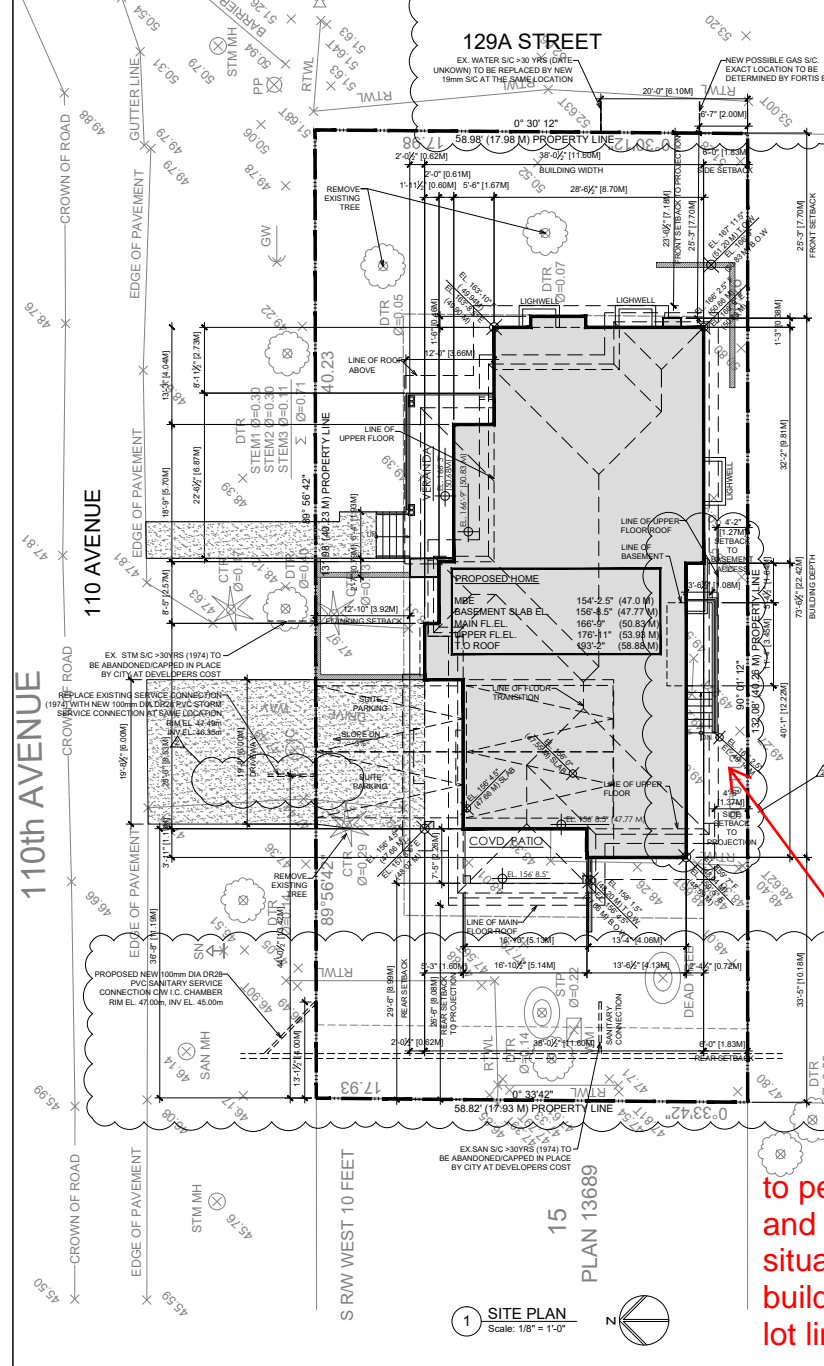
SET BACKS ALLOWABLE PROPOSED
-FRONT YARD 7.5 M 25.25' (7.70 M)
-SIDE YARD 1.8 M 6.00' (1.83 M)
-FLANKING SIDE 3.8 M 12.84' (3.92 M)
-REAR YARD 7.5 M 29.52' (9.00 M)

IMPERMEABLE SURFACES

ALLOWABLE 7.7 X 7776 SF 5443 SF (505.71 M²)
PROPOSED 3122 SF (290.06 M²)

GENERAL SITE PLAN NOTES:

1. ANY DEVELOPMENT PROPOSED ON DNV BOULEVARDS MUST BE SUBMITTED FOR APPROVAL PRIOR TO COMPLETION. THIS INCLUDES ALL PLANTING, LANDSCAPING, STRUCTURAL AND NON-STRUCTURAL ENTITIES.
2. NO PERMANENT STRUCTURES PERMITTED ON DNV BOULEVARDS. THIS INCLUDE STAIRS, RETAINING WALLS, RAILINGS, IRRIGATION SYSTEM, ETC. ANY CHANGES TO DNV'S BOULEVARD MUST BE APPROVED.
3. FIRST 2.0M OF THE BOULEVARD FROM THE ROAD EDGE ARE TO BE FREE OF LANDSCAPING DESIGNS. CLEARANCE REQUIRED FOR PEDESTRIAN ACCESSIBILITY. AT MINIMUM TO BE RESTORED WITH TOPSOIL AND SOD.
4. ALL CURBING WORK TO BE DONE BY THE DISTRICT CREWS WITH ALL CHARGES PAID BY THE DEVELOPER. MAX DRIVEWAY WIDTH 4.3M FROM ROAD EDGE TO PROPERTY LINE.
5. ASPHALT DRIVEWAYS MUST BE 65MM MINIMUM ASPHALT PAVEMENT THICKNESS ON A MINIMUM 150MM THICK 19MM MINUS CRUSH GRANULAR BASE MATERIAL. (DISTRICT ROAD)
6. CONCRETE DRIVEWAYS MUST BE AT MINIMUM 120MM THICKNESS ON A 150MM 19MM MINUS CRUSH GRANULAR BASE MATERIAL. (DISTRICT ROAD)
7. SANITARY, WATER AND STORM INSPECTION CHAMBERS MUST BE KEPT VISIBLE AND ACCESSIBLE. DO NOT COVER DURING OR AFTER THE CONSTRUCTION.



129A STREET

EX. WATER SIC -> 30% GATE UNKNOWN TO BE REPLACED BY NEW 19mm SIC AT THE SAME LOCATION
NEW POSSIBLE GAS SIC EXACT LOCATION TO BE DETERMINED BY FORTS BC.

15 SITE PLAN

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

to permit basement access and the basement well to be situated between the principal building and the side (south) lot line.