

City of Surrey
PLANNING & DEVELOPMENT REPORT

Application No.: 7919-0299-00

Planning Report Date: February 10, 2020

PROPOSAL:

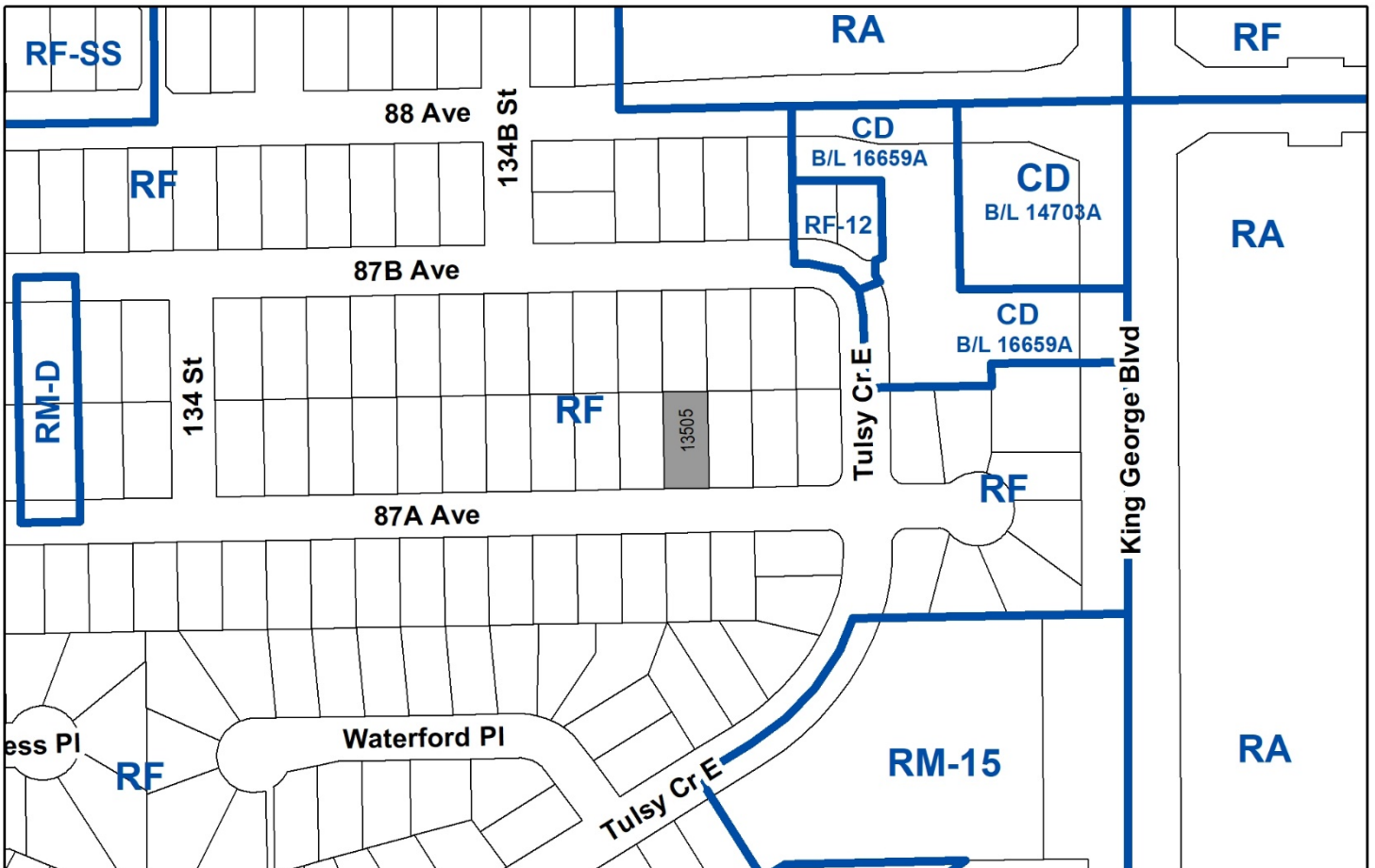
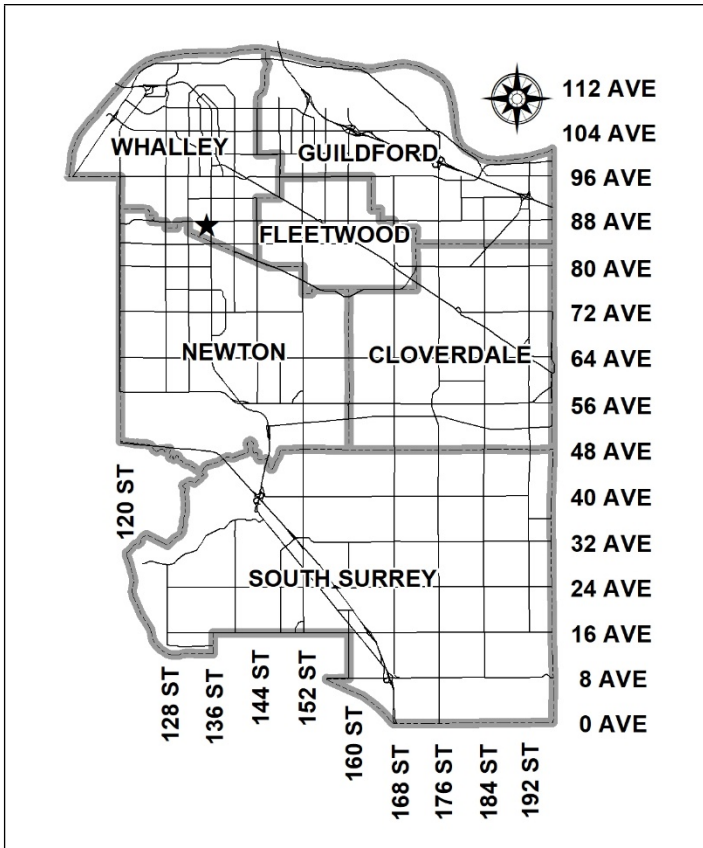
- **Development Variance Permit**

to reduce the front and rear yard setbacks to allow the construction of a single-family dwelling on a lot encumbered by a gas pipeline right-of-way.

LOCATION: 13505 - 87A Avenue

ZONING: RF

OCP DESIGNATION: Urban



RECOMMENDATION SUMMARY

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

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- The applicant is seeking to reduce the front and rear yard setbacks to construct a new single-family dwelling on the lot.

RATIONALE OF RECOMMENDATION

- The proposed setbacks will allow the owner to have an adequate front entrance staircase and porch which is consistent with the surrounding homes.
- The proposed variances provide for an adequately sized building envelope on the single-family lot.
- The subject lot is heavily encumbered by a gas pipeline right-of-way along the north property line.
- The decreased front yard setback will still accommodate a 7.5-metre long driveway for garage access and vehicle parking and the decreased rear yard setback will still accommodate a functional yard space.
- The varied setbacks will achieve a consistent streetscape with the other existing houses along this section of 87A Avenue.
- Prior to Demolition and Building Permit issuance, the applicant must obtain a valid Pipeline and/or Right-of-Way Permit from FortisBC to allow demolition of the existing home and construction of a new home on the lot.
- Staff supports the requested variance to proceed to Public Notification.

RECOMMENDATION

The Planning & Development Department recommends that Council approve Development Variance Permit No. 7919-0299-00 (Appendix III) varying the following, to proceed to Public Notification:

- (a) to reduce the minimum front (south) yard setback of the RF Zone, from 7.5 metres to 6.0 metres as measured from the front entry staircase; and
- (b) to vary Part 4 General Provisions of Zoning By-law No. 12000 to reduce the minimum rear (north) yard setback from the natural gas transmission right-of-way (FortisBC Energy Inc.), from 7.5 metres to 3.0 metres for the basement access well and 5.9 metres to the principal building.

SITE CONTEXT & BACKGROUND

Direction	Existing Use	OCP Designation	Existing Zone
Subject Site	Existing single family dwelling	Urban	RF
North:	Single family dwelling	Urban	RF
East:	Single family dwelling	Urban	RF
South (Across 87A Avenue):	Single Family dwelling	Urban	RF
West:	Single Family dwelling	Urban	RF

Context & Background

- The 729 square metre subject property is located at 13505 – 87A Avenue in Whalley. The subject property is approximately 18 metres wide and 40 metres deep.
- The lot is designated "Urban" under the Official Community Plan (OCP) and currently zoned "Single Family Residential Zone (RF)" under Surrey Zoning By-law, 1993, No. 12000, as amended.
- The subject property is encumbered by an 9.1 metre wide natural gas transmission right-of-way (FortisBC Energy Inc.) located along the northern property line.
- The required rear yard setback from a natural gas transmission right-of-way was established as a way of preventing construction of dwellings directly adjacent to the right-of-way and providing for a useable backyard on encumbered lots, while maintaining access to the natural gas transmission lines for maintenance purposes.

DEVELOPMENT PROPOSAL

Planning Considerations

- The applicant is proposing a Development Variance Permit (DVP) to reduce the minimum front and rear yard setbacks of the RF Zone and General Provisions in order to construct a single-family dwelling on a lot encumbered by a gas pipeline right-of-way.
- The FortisBC right-of-way encumbers the rear portion of the lot. Part 4 Section E.18 of Zoning By-law No. 12000 states that principal buildings on lots containing or abutting a natural gas transmission right-of-way at the rear lot line shall not be sited less than 7.5 metres from the right-of-way boundary and this setback shall be measured at 90 degrees to the gas right-of-way boundary closest to the building line.
- The rear building face of the proposed home has been designed with a proposed minimum 5.9 metre rear yard setback to the natural gas transmission right-of-way. The basement access well is located 3.0 metres from the right-of-way. The applicant understands that no buildings or structures can be located within the gas transmission right-of-way, the area will remain as grassed rear yard space which will be accessible to the property owner.
- With the proposed setback relaxations, the applicant can achieve a functional house plan closer to the maximum allowable floor area permitted under the RF Zone, as shown in the table below:

	Permitted Floor Area Based on RF Zone	Achievable Floor Area (no DVP)	Achievable Floor Area (with DVP)
Proposed Lot	395 sq.m.	231 sq.m.	265 sq.m.

- Without the proposed setback relaxations, the applicant is able to achieve a maximum house size of 231 square metres due to encumbrances from the onsite gas pipeline right-of-way.

Referrals

Engineering: The Engineering Department has no concerns relative to the Development Variance Permit.

FortisBC: Prior to Building Permit issuance, the applicant must obtain a FortisBC Pipeline and/or Right-of-Way Permit.

FortisBC has requested that the City consider registering an overlapping restrictive covenant over the FortisBC right-of-way area to prevent any future accessory buildings or structures that FortisBC deems an encroachment within the right-of-way area. The City's Legal Services staff recommend against an overlapping covenant as FortisBC is already entitled to any such rights pursuant to the statutory right-of-way.

POLICY & BYLAW CONSIDERATIONS

Official Community Plan

Land Use Designation

- The subject property is designated Urban in the Official Community Plan (OCP). The proposed single-family dwelling complies with the Urban designation.

Zoning Bylaw

- The applicant is requesting the following variances:
 - to reduce the minimum front (south) yard setback of the RF Zone, from 7.5 metres to 6.0 metres as measured from the front entry staircase; and
 - to vary Part 4 General Provisions of Zoning By-law No. 12000 to reduce the minimum rear (north) yard setback from the natural gas transmission right-of-way (FortisBC Energy Inc.), from 7.5 metres to 3.0 metres for the basement access well and 5.9 metres to the principal building.
- The decreased front yard setback will still accommodate a 7.5-metre long driveway for garage access and vehicle parking and the decreased rear yard setback will still accommodate a functional yard space.
- A FortisBC Right-of-Way that spans across of the rear of the property limits the buildable area. A reduction to the rear yard setback from the right-of-way will allow the applicant to design a more functional floor plan while achieving a house size closer to the maximum house size permitted under the RF Zone.
- The applicant has advised staff that they are aware that no accessory buildings and/or structures are permitted within the FortisBC right-of-way area.
- The varied setbacks will achieve a consistent streetscape with the other existing houses along this section of 87A Avenue.
- Staff support the requested variances.

TREES

- Tim Vandenberg, ISA Certified Arborist of Mike Fadum and Associates Ltd., prepared an Arborist Assessment for the subject property. The table below provides a summary of the tree retention and removal by tree species:

Table 1: Summary of Tree Preservation by Tree Species:

Tree Species	Existing	Remove	Retain
Deciduous Trees (excluding Alder and Cottonwood Trees)			
Honey Locust	1	0	1
Horse Chestnut	1	1	0
Coniferous Trees			
Austrian Pine	1	1	0
Western Red Cedar	3	3	0
Total (excluding Alder and Cottonwood Trees)	6	5	1
Total Replacement Trees Proposed (excluding Boulevard Street Trees)		3	
Total Retained and Replacement Trees		4	
Contribution to the Green City Program		\$2,800	

- The Arborist Assessment states that there are a total of 6 mature trees on the site, excluding Alder and Cottonwood trees. It was determined that 1 tree can be retained as part of this development proposal. The proposed tree retention was assessed taking into consideration the location of services, building footprints, road dedication and proposed lot grading.
- For those trees that cannot be retained, the applicant will be required to plant trees on a 1 to 1 replacement ratio for Alder and Cottonwood trees, and a 2 to 1 replacement ratio for all other trees. This will require a total of 10 replacement trees on the site. Since only 3 replacement trees can be accommodated on the site, the deficit of 7 replacement trees will require a cash-in-lieu payment of \$2,800, representing \$400 per tree, to the Green City Fund, in accordance with the City’s Tree Protection Bylaw.
- In summary, a total of 4 trees are proposed to be retained or replaced on the site with a contribution of \$2,800 to the Green City Fund.

INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

- Appendix I. Site Plan
- Appendix II. Summary of Tree Survey and Tree Preservation
- Appendix III. Development Variance Permit No. 7919-0299-00

approved by Ron Gill

Jean Lamontagne
General Manager
Planning and Development

ELM/cm

ZONING CALCULATIONS:
13505 87A AVENUE, SURREY - RF Zone

Lot Area = 7851 SQFT
Allowed Lot Coverage = 2849.76 SQFT
Proposed Lot Coverage: 2745.15 SQFT

**THIS HOME IS DESIGNED TO COMPLY WITH SECTION 9.36.2 - 9.36.4 OF B.C. BUILDING CODE 2018
ENERGY EFFICIENCY REQUIREMENTS FOR CLIMATE ZONE 4**

- DWELLING TO BE VENTILATED IN COMPLIANCE TO 9.32.3.5 BY INDEPENDENTLY DISTRIBUTED HRV SYSTEM BUILDING SPECIFICATIONS:

- VENTILATION AND DUCTING MUST BE PROVIDED PER B.C.B.C 2018 SECTION 9.32
- AIR BARRIER TO BE INSTALLED PER B.C.B.C 2018 SECTION 9.36
- ALL INSULATION TO BE INSTALLED PER B.C.B.C 2018 SECTION 9.36
- GARAGE DOOR W/ MINIMUM NOMINAL R.S.I. 1.1
- ALL ACCESS HATCHES TO UNCONDITIONED SPACES: MAX. U-VALUE OF 2.6

ENERGY EFFICIENCY REQUIREMENTS (PART 9 BLDG):

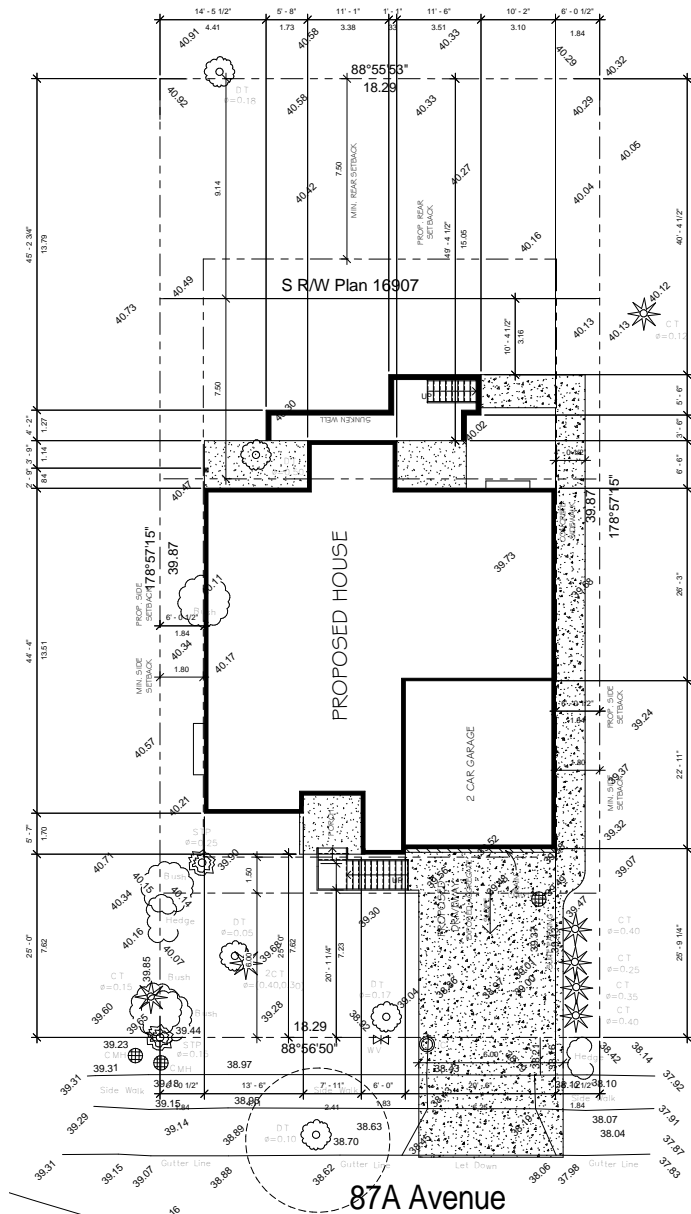
- Step Code 1
- WITH HRV
- VENTILATION METHOD: 9.32.3.4.(4) - Independently distributed HRV system

AIR BARRIER SYSTEM:

Will consist of flexible sheet materials
Shall have all joints lap not less than 50mm
sealed with a non-hardening type sealant and
be structurally supported
As per 9.36.2.10(5)(6) of BCBC2018

NOTE:
CHECK ALIGNMENT OF DRIVEWAY
LIFTDOWN PRIOR TO CONSTRUCTION
OWNER/BUILDER CHECK ALL
WITH SURVEYOR TO LAY HOUSE ON
LOT AND TO BE SURE TO BE DONE. IT
SHOULD BE NOTICED TO AND
APPROPRIATELY MARKED
EXISTING GRADES
(@ PROF. LINES)

① Site Plan
1/8" = 1'-0"



Storm Manhole
Rim Elev= 34.27m
W INV. Elev. = 31.85m
Dist to West MH=121.95m

THESE PLANS CONFORM TO BCBC 2018
CONSTRUCTION SHALL FOLLOW LOCAL
BUILDING BY-LAWS ALONG WITH THESE
PLANS.

CONTRACTOR MUST CONFIRM ALL
DIMENSIONS PRIOR TO START OF
CONSTRUCTION.

THE DESIGNER ASSUMES NO LIABILITY FOR
ANY ERRORS AND OMISSIONS IN THESE
PLANS. IT IS THE BUILDER/OWNER'S
RESPONSIBILITY TO REVIEW AND VERIFY
THE WHOLE PLAN (i.e. ALL LEVELS,
DIMENSIONS, STRUCTURAL ADEQUACIES)
PRIOR TO CONSTRUCTION.

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Sunny Ball

PH. - (604) 354 3000

No.	Description	Date

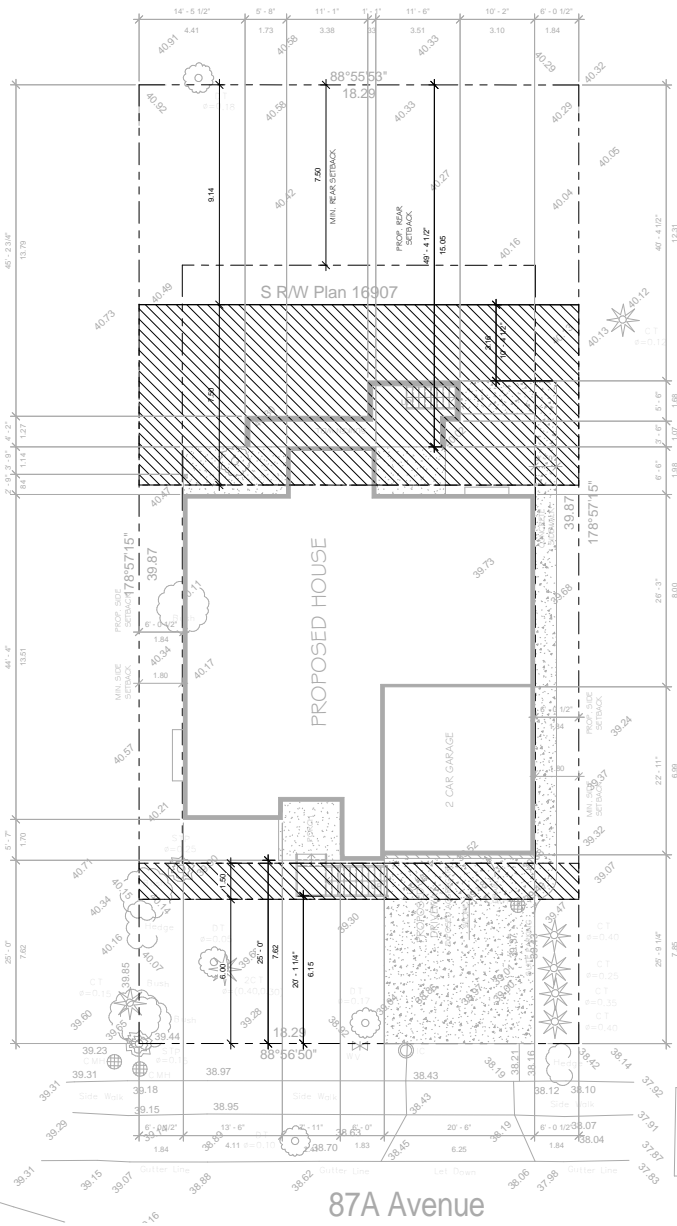
13505 87A Avenue
Surrey, B.C.

SITE PLAN, NOTES & CALCULATIONS

Project number PVDL-17-1159-AH
Date 10 JAN 2018
Drawn by HB
Checked by GS

A1

Scale 1/8" = 1'-0"



1 Site Plan DVP
1/8" = 1'-0"

NOTE:
CHECK ALIGNMENT OF DRAINWAY
SET DOWN FROM TO CONSTRUCTION
CONTRACTOR TO VERIFY
CONTRACTOR TO VERIFY
WITH SUPPORTED LAY-OUTS ON
ADJUSTMENT HAS TO BE DONE, IT
SHOULD BE APPROVED BY DESIGNER
MUST MAINTAIN
EXISTING GRADES
@ HIGH POINTS

Mouthole
Elev. = 35.16m
Elev. = 35.33m

GENERAL NOTES

- DIMENSIONS TAKE PRECEDENCE OVER SCALE MEASUREMENTS.
 - ALL DIMENSIONS MUST BE VERIFIED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
 - CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS ON THE JOB AND DESIGNER SHALL BE INFORMED OF ANY VARIATION FROM THE DIMENSIONS AND CONDITIONS SHOWN ON THE DRAWINGS.
 - CONSTRUCTION MUST COMPLY WITH B.C. BUILDING CODE 2018, ELECTRICAL B.C. CODE 2018, PLUMBING B.C. CODE 2018 AND WINDOWS AND GLAZING B.C. CODE 2018.
 - EXACT LOCATION OF THE BUILDING MUST BE CONFIRMED WITH LOCAL AUTHORITIES OR SURVEYOR. ADJUST SITES GRADES AS REQUIRED.
 - FOOTINGS MUST BE TAKEN DOWN FROST LEVEL TO UNDISTURBED SUBSTRATA. INTERIOR FACE OF CONCRETE (FOOTINGS AND WALLS) MUST BE INSULATED WITH 25mm (1"7) OF RIGID INSULATION.
 - PROVIDE 8" CLEARANCE BETWEEN GRADE AND SIDING
 - CONCRETE OF FOOTINGS OR WALLS MUST HAVE #45 FEEL AND MUST BE ANCHORED WITH 1/2" DIA. BOLTS @ 0' O.C.
 - ALL FOOTINGS ARE TO EXTEND 18" BELOW GRADE MINIMUM.
 - PROVIDE VENTILATION TO ROOMS IN COMPLIANCE WITH B.C.B.C. SECTION 9.3.5
 - WATERPROOF WALLBOARD REQUIRED AS TILE BASE AROUND TUBS AND SHOWERS
 - DWELING SECURITY AS OUTLINED IN B.C.B.C. SECTION 9.4.6.
 - ANCHOR POSTS TO FOOTING TO RESIST UPLIFT
 - GLASS IN WINDOWS & DOORS TO BE DOUBLE GLAZED SAFETY GLASS.
 - WINDOW FRAMES TO BE THERMALLY BROKEN.
 - TUBS WITH SHOWERS MUST HAVE A MIN. HEIGHT OF 3'11" FROM TUB RIM.
 - 1" NOSING REQUIRED ON TREADS LESS THAN 10"
 - R-10 RIGID INSULATION REQUIRED UNDER ENTIRE SLAB AREA FOR SLABS WITH RADIANT HEATING
 - CROSS BRIDGING REQUIRED @ 700' oc MAX. OR GLUE & NAIL PANEL SUBFLOOR.
 - LINO OR EQUAL REQUIRED TO BATHROOM FLOORS
 - GLASS IN ENTRANCE, SHOWER AND SLIDING DOORS ARE TO BE SAFETY GLASS.
 - MIRROR DOORS AT ENTRANCES TO WALK-IN CLOSETS ARE TO BE BACKED W/ SOLID MATERIAL AS PER #3.6.5.3.
 - FLASHING MUST BE PROVIDED OVER ALL EXTERIOR OPENINGS.
 - PROVIDE WEATHER-STRIPPING FOR ALL EXTERIOR DOORS.
 - PROVIDE CALKING AROUND ALL EXTERIOR OPENINGS.
 - FLASH ALL CHANGES OF MATERIAL ON EXTERIOR WALLS.
 - ALL EXTERIOR AND GARAGE ELECTRICAL OUTLETS TO BE WATERPROOFED.
 - PROVIDE WEATHER-STRIPPING FOR ALL EXTERIOR DOORS.
 - PROVIDE CALKING AROUND ALL EXTERIOR OPENINGS.
 - FLASH ALL CHANGES OF MATERIAL ON EXTERIOR WALLS.
 - ALL EXTERIOR AND GARAGE ELECTRICAL OUTLETS TO BE WATERPROOFED.
 - PROVIDE 2" CLEAR SPACE BETWEEN FIREPLACE AND FRAMING.
 - PROVIDE TEMPERED GLASS WHEN DISTANCE BETWEEN GLASS AND FINISH FLOOR IS LESS THAN 8"
 - HEADERS AND TRIMMERS MUST COMPLY WITH B.C. BUILDING CODE 2018.
 - ALL JOIST HANGERS TO HAVE A RESISTANCE OF 2000 lbs. Ref. STRUCTURAL ENG. UNLESS OTHERWISE NOTED.
 - ALL UNITS NOT SPECIFIED ARE 2x12 DOUBLE
 - ATTIC OR GARAGE SPACE ACCESS TO BE HATCHED AND INSULATED. MINIMUM SIZE 20x26" & WEATHERSTRIPPED.
 - PROVIDE SCREENED VENTILATION TO ALL ATTIC SPACES AS REQUIRED 1:300
 - PROVIDE BRACING TO ALL CORNERS.
 - PROVIDE 2" CONTINUOUS SCREENED VENTILATION AT SOFFITS.
 - BALCONY RAILINGS TO BE MINIMUM 36" OVER FINISH FLOORS.
 - CONFIRM ALL ROUGH OPENINGS OF WINDOWS AND DOORS
 - OWNER OR CONTRACTOR SHALL OBTAIN MANUFACTURER CERTIFICATE, AND SHOP DRAWINGS FOR GLUE-LAMINATED BEAMS
 - OWNER OR CONTRACTOR SHALL OBTAIN MANUFACTURER CERTIFICATE FOR TRUSSES.
 - FOR INSTALLATION, REFER TO SHOP DRAWINGS. SKYLIGHTS TO BE INSTALLED ACCORDING TO SHOP DRAWINGS BY OTHERS.
 - DOUBLE JOIST UNDER ALL WALLS RUNNING IN THE SAME DIRECTION OF FLOOR JOIST
 - ALL FRAMING ELEMENTS MUST BE NO 2 DOUBLAS FIR.
 - REGISTERED STRUCTURAL ENGINEER SUBMITS LETTER OF UNDERTAKING FOR REVIEW, DESIGN AND SUPERVISION OF STRUCTURAL COMPONENTS, ALSO SEISMIC & WIND DESIGN AS PER CWC GUIDE.
- MISCELLANEOUS**
1. FINISH GRADES ON SITE TO DIRECT ANY SURFACE WATER FLOW FROM THE BUILDING.
 2. WHERE A WINDOW OPENS TO A WINDOW WELL THE OPERATION OF THE SASH SHALL NOT REDUCE THE CLEARANCE IN A MANNER THAT WOULD RESTRICT ESCAPE IN CASE OF EMERGENCY.
 3. PROVIDE BUILDING AND SITE DRAINAGE AS PER LOCAL REQUIREMENTS.
 4. ALL DOWNSPOUTS WILL BE CONNECTED TO DRAIN PIPES INSTALLED ALL AROUND THE PROPOSED BUILDING.

THESE PLANS CONFORM TO BCBC 2018
CONSTRUCTION SHALL FOLLOW LOCAL BUILDING BY-LAWS ALONG WITH THESE PLANS.

CONTRACTOR MUST CONFIRM ALL DIMENSIONS PRIOR TO START OF CONSTRUCTION.
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PH. - (604) 354 3000

No.	Description	Date

13505 87A Avenue
Surrey, B.C.

DVP

Project number	PVDL-17-1159-AH
Date	10 JAN 2018
Drawn by	HB
Checked by	GS
Scale	1/8" = 1'-0"

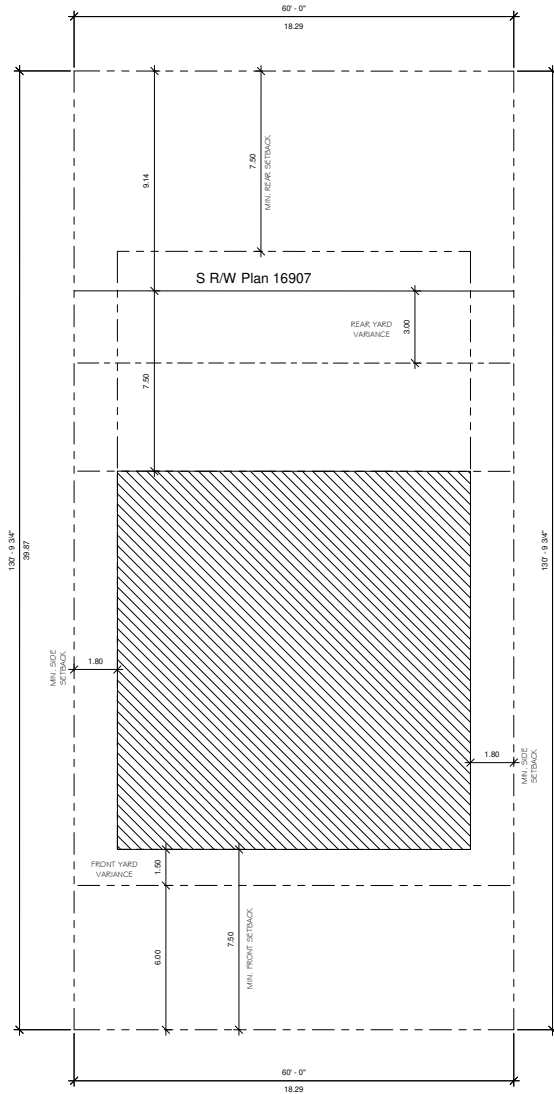
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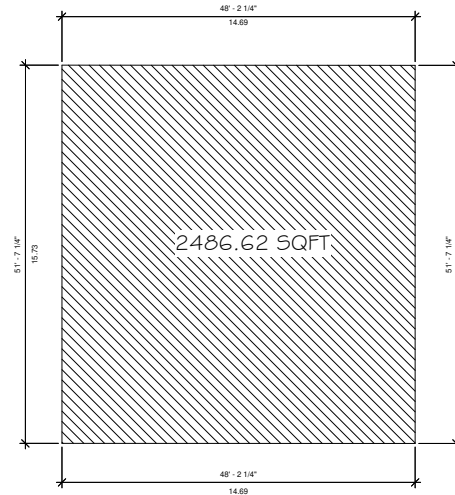
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LOT AREA = 7851 SQFT
 ALLOWED LOT COVERAGE = 2849.76 SQFT
 MAX. POSSIBLE COVERAGE WITHOUT VARIANCE = 2486.62 SQFT
 MAX. POSSIBLE COVERAGE WITH VARIANCE = 2849.76 SQFT



① Site Plan Area
 1/8" = 1'-0"

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No.	Description	Date

13505 87A Avenue
 Surrey, B.C.

AREA CALCULATIONS

Project number	PVDL-17-1159-AH
Date	17 JAN 2018
Drawn by	HB
Checked by	GS

A1.2
 Scale 1/8" = 1'-0"

MIKE FADUM AND ASSOCIATES LTD.
VEGETATION CONSULTANTS

Tree Preservation Summary

Surrey Project No: 19-0299-00

Address: 13505 - 87A Avenue

Registered Arborist: Tim Vandenberg, ISA Certified Arborist: PN-8565A

On-Site Trees	Number of Trees
Protected Trees Identified (on-site and shared trees, including trees within boulevards and proposed streets and lanes, but excluding trees in proposed open space or riparian areas)	6
Protected Trees to be Removed	5
Protected Trees to be Retained (excluding trees within proposed open space or riparian areas)	1
Total Replacement Trees Required: <ul style="list-style-type: none"> - Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio 0 X one (1) = 0 - All other Trees Requiring 2 to 1 Replacement Ratio 5 X two (2) = 10 	10
Replacement Trees Proposed	3
Replacement Trees in Deficit	7
Protected Trees to be Retained in Proposed [Open Space / Riparian Areas]	NA

Off-Site Trees	Number of Trees
Protected Off-Site Trees to be Removed	0
Total Replacement Trees Required: <ul style="list-style-type: none"> - Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio 0 X one (1) = 0 - All other Trees Requiring 2 to 1 Replacement Ratio 0 X two (2) = 0 	0
Replacement Trees Proposed	NA
Replacement Trees in Deficit	NA

Summary report and plan prepared and submitted by: Mike Fadum and Associates Ltd.

Signature of Arborist:



Date: January 15, 2020



Mike Fadum and Associates Ltd.
#105, 8277-129 Street, Surrey, BC, V3W 0A6
Phone 778-593-0300 Fax 778-593-0302





**MIKE FADUM AND ASSOCIATES LTD.
VEGETATION CONSULTANTS**

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Fax: (778) 593-0302
Email: mfadum@fadum.ca

CLIENT

FILE NO.

PROJECT TITLE
**TREE PRESERVATION
AND PROTECTION PLAN**

13505 - 87A AVENUE
SURREY, B.C.

REVISIONS:

NO.	DATE	BY	REVISION
1	JAN13/20	MK	REVISIONS

GENERAL NOTES:
 • NON BY-LAW TREES HAVE BEEN REMOVED FROM THE PLANS.
 • TREE PROTECTION FENCING SHALL BE CONSTRUCTED TO MUNICIPAL STANDARDS.
 • REASSESS TREES WITH LOT GRADING PLANS.
 • REPLACEMENT TREES SHALL CONFORM TO BC/SLA/BC/LNA LANDSCAPE STANDARDS. SPECIES AND LOCATIONS TO BE DETERMINED AT LANDSCAPE STAGE.

SHEET TITLE

T2 - TREE PROTECTION PLAN

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DRAWN

MK

SCALE

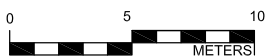
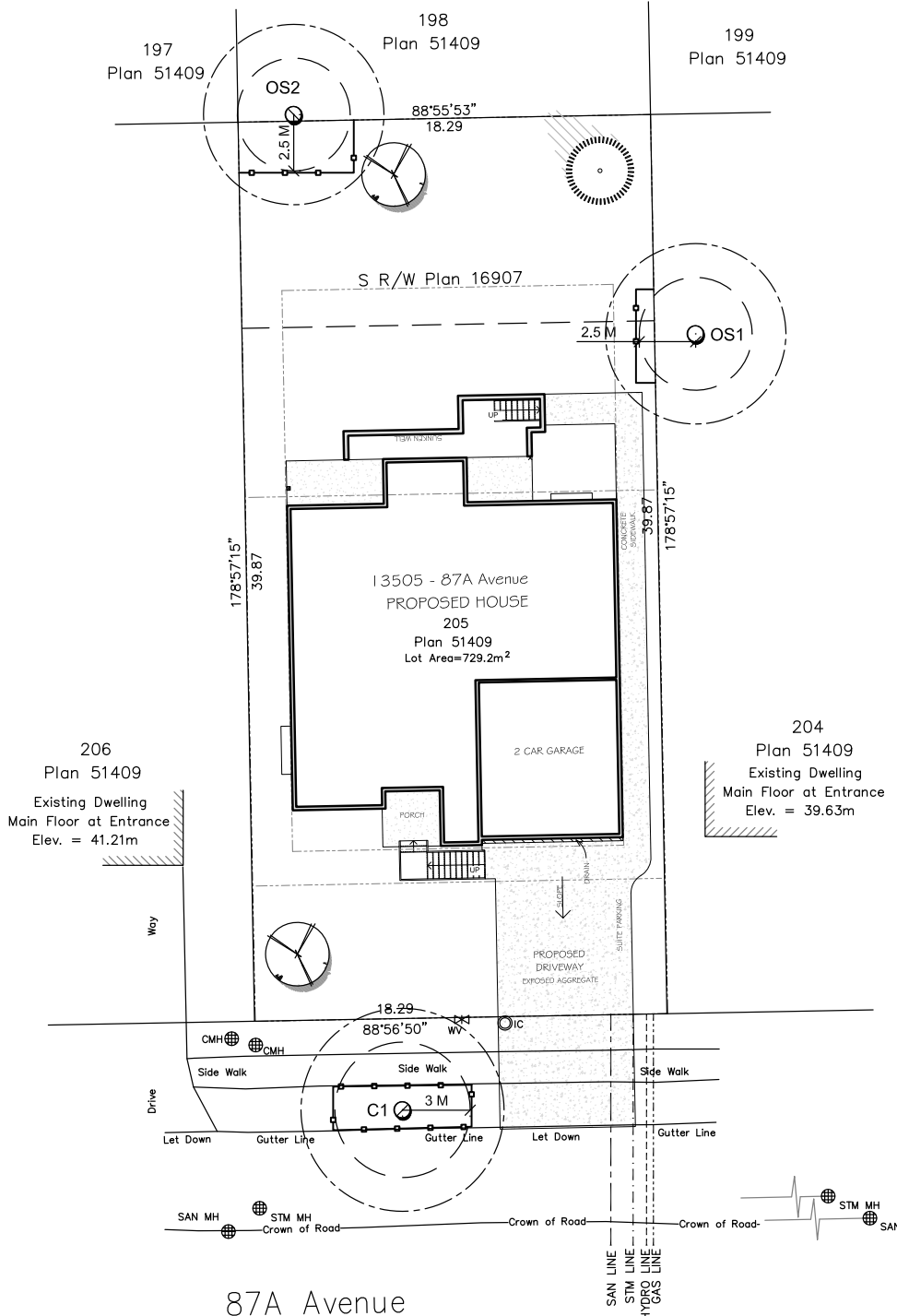
AS SHOWN

DATE

NOVEMBER 28, 2019

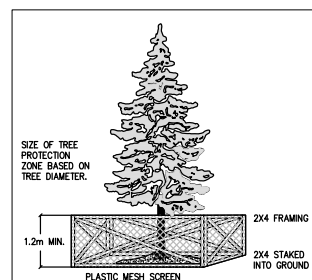
T-2

SHEET 2 OF 2



LEGEND

- TREE TO BE RETAINED
- TREE PROTECTION FENCING
- DECIDUOUS REPLACEMENT TREE (5 CM. DIA. MINIMUM)
- CONIFEROUS REPLACEMENT TREE (3.0 M. HT. MINIMUM)
- MINIMUM NO DISTURBANCE ZONE
- 1.5m NO-BUILD ZONE



CITY OF SURREY

(the "City")

DEVELOPMENT VARIANCE PERMIT

NO.: 7919-0299-00

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: 004-928-636
Lot 205 Section 29 Township 2 New Westminster District Plan 51409
13505 - 87A Avenue

(the "Land")

3. Surrey Zoning By-law, 1993, No. 12000, as amended is varied as follows:
 - (a) In Section F of Part 16 "Single Family Residential Zone (RF)", the minimum front (south) yard setback is reduced from 7.5 metres to 6.0 metres as measured from the front entry staircase; and
 - (b) In Sub-section E.18. (a) of Part 4 General Provisions, the minimum rear setback of a principal building on a lot containing or abutting a natural gas transmission right-of-way is reduced from 7.5 metres to 3.0 metres for the basement access well and 5.9 metres to the principal building.
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.

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 – Doug McCallum

City Clerk – Jennifer Ficocelli

ZONING CALCULATIONS:
13505 87A AVENUE, SURREY - RF Zone

Lot Area = 7851 SQFT
Allowed Lot Coverage = 2849.76 SQFT
Proposed Lot Coverage: 2745.15 SQFT

THIS HOME IS DESIGNED TO COMPLY WITH SECTION 9.36.2 - ENERGY EFFICIENCY REQUIREMENTS FOR CLIMATE ZONE 4

- DWELLING TO BE VENTILATED IN COMPLIANCE TO 9.32.3.5 BY BUILDING SPECIFICATIONS;
- VENTILATION AND DUCTING MUST BE PROVIDED PER B.C.B.C.
- AIR BARRIER TO BE INSTALLED PER B.C.B.C. 2018 SECTION 9
- ALL INSULATION TO BE INSTALLED PER B.C.B.C. 2018 SECTION 9
- GARAGE DOOR W/ MINIMUM NOMINAL R.S.I. 1.1
- ALL ACCESS HATCHES TO UNCONDITIONED SPACES: MAX. U-VALUE 0.15

ENERGY EFFICIENCY REQUIREMENTS (PART 9 BLDG):

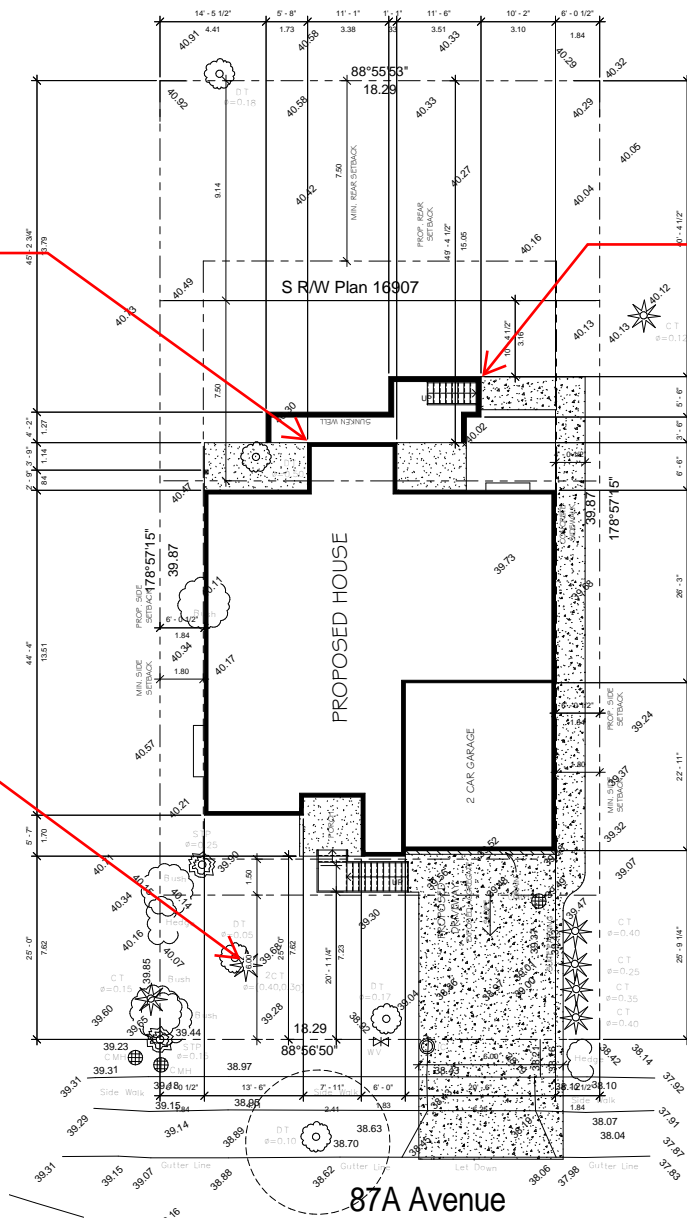
- Step Code 1
- WITH HRV
- VENTILATION METHOD: 9.32.3.4.(4) - Independently distrib

AIR BARRIER SYSTEM:

Will consist of flexible sheet materials
Shall have all joints lap not less than 50mm
sealed with a non-hardening type sealant and
be structurally supported
As per 9.36.2.10(5)(4)(6) of BCBC2018

Variance to reduce the rear (north) yard setback from a natural gas transmission right-of-way under the General Provisions of Zoning By-law No. 12000 from 7.5 metres to 5.9 metres to the principal dwelling.

Variance to reduce the minimum front (south) yard setback of the RF Zone from 7.5 metres to 6.0 metres as measured from the front entry staircase.



Variance to reduce the rear (north) yard setback from a natural gas transmission right-of-way under the General Provisions of Zoning By-law No. 12000 from 7.5 metres to 3.0 metres for the basement access well.



THESE PLANS CONFORM TO BCBC 2018
CONSTRUCTION SHALL FOLLOW LOCAL BUILDING BY-LAWS ALONG WITH THESE PLANS.
CONTRACTOR MUST CONFIRM ALL DIMENSIONS PRIOR TO START OF CONSTRUCTION.
THE DESIGNER ASSUMES NO LIABILITY FOR ANY ERRORS AND OMISSIONS IN THESE PLANS. IT IS THE BUILDER/OWNER'S RESPONSIBILITY TO REVIEW AND VERIFY THE WHOLE PLAN (i.e. ALL LEVELS, DIMENSIONS, STRUCTURAL ADEQUACIES) PRIOR TO CONSTRUCTION.
DO NOT SCALE DRAWINGS.
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Sunny Ball

PH. - (604) 354 3000

No.	Description	Date

**13505 87A Avenue
Surrey, B.C.**

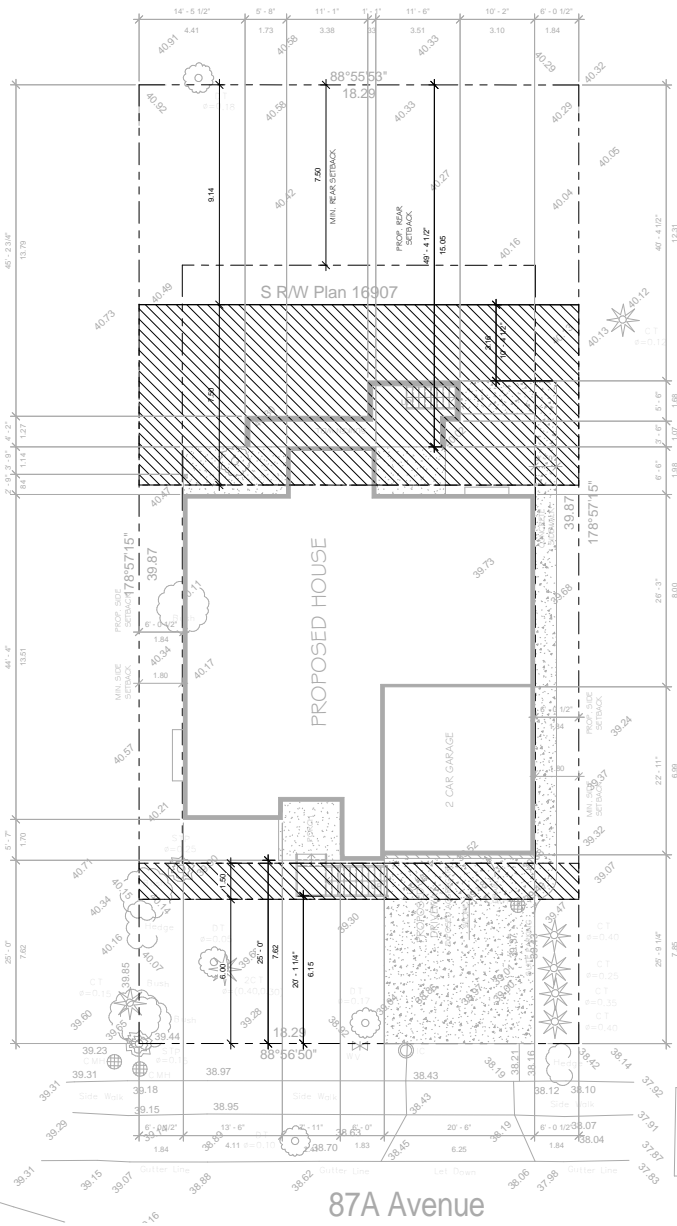
SITE PLAN, NOTES & CALCULATIONS

Project number: PVDL-17-1159-AH
Date: 10 JAN 2018
Drawn by: HB
Checked by: GS

A1

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

① Site Plan
1/8" = 1'-0"



1 Site Plan DVP
1/8" = 1'-0"

Mouthole
 SW = 35.16m
 Elev. = 35.33m

NOTE:
 CHECK ALIGNMENT OF DRAINWAY
 SET DOWN FROM TO CONSTRUCTION
 CONVEYANCE CHECK & WATER
 WITH SUPPORTED LAY HOUSE ON
 ADJUSTMENT HAS TO BE DONE. IT
 SHOULD BE APPROVED BY DESIGNER
 MUST MAINTAIN
 EXISTING GRADES
 @ HIGH WATER

GENERAL NOTES

- DIMENSIONS TAKE PRECEDENCE OVER SCALE MEASUREMENTS.
 - ALL DIMENSIONS MUST BE VERIFIED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
 - CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS ON THE JOB AND DESIGNER SHALL BE INFORMED OF ANY VARIATION FROM THE DIMENSIONS AND CONDITIONS SHOWN ON THE DRAWINGS.
 - CONSTRUCTION MUST COMPLY WITH B.C. BUILDING CODE 2018, ELECTRICAL B.C. CODE 2018, PLUMBING B.C. CODE 2018 AND WINDOWS AND GLAZING B.C. CODE 2018.
 - EXACT LOCATION OF THE BUILDING MUST BE CONFIRMED WITH LOCAL AUTHORITIES OR SURVEYOR. ADJUST SITES GRADES AS REQUIRED.
 - FOOTINGS MUST BE TAKEN DOWN FROST LEVEL TO UNDISTURBED SUBSTRATA. INTERIOR FACE OF CONCRETE (FOOTINGS AND WALLS) MUST BE INSULATED WITH 25mm (1" 7) OF RIGID INSULATION.
 - PROVIDE 8" CLEARANCE BETWEEN GRADE AND SIDING
 - CONCRETE OF FOOTINGS OR WALLS MUST HAVE #45 FEEL AND MUST BE ANCHORED WITH 1/2" DIA. BOLTS @ 12" O.C.
 - ALL FOOTINGS ARE TO EXTEND 18" BELOW GRADE MINIMUM.
 - PROVIDE VENTILATION TO ROOMS IN COMPLIANCE WITH B.C.B.C. SECTION 9.3.5
 - WATERPROOF WALLBOARD REQUIRED AS TILE BASE AROUND TUBS AND SHOWERS
 - DWELING SECURITY AS OUTLINED IN B.C.B.C. SECTION 9.4.6.
 - ANCHOR POSTS TO FOOTING TO RESIST UPLIFT
 - GLASS IN WINDOWS & DOORS TO BE DOUBLE GLAZED SAFETY GLASS.
 - WINDOW FRAMES TO BE THERMALLY BROKEN.
 - TUBS WITH SHOWERS MUST HAVE A MIN. HEIGHT OF 3'11" FROM TUB RIM.
 - 1" NOSING REQUIRED ON TREADS LESS THAN 10"
 - R-10 RIGID INSULATION REQUIRED UNDER ENTIRE SLAB AREA FOR SLABS WITH RADIANT HEATING
 - CROSS BRIDGING REQUIRED @ 70" oc MAX. OR GLUE & NAIL PANEL SUBFLOOR.
 - LINO OR EQUAL REQUIRED TO BATHROOM FLOORS
 - GLASS IN ENTRANCE, SHOWER AND SLIDING DOORS ARE TO BE SAFETY GLASS.
 - MIRROR DOORS AT ENTRANCES TO WALK-IN CLOSETS ARE TO BE BACKED W/ SOLID MATERIAL AS PER #3.6.5.3.
 - FLASHING MUST BE PROVIDED OVER ALL EXTERIOR OPENINGS.
 - PROVIDE WEATHER-STRIPPING FOR ALL EXTERIOR DOORS.
 - PROVIDE CALKING AROUND ALL EXTERIOR OPENINGS.
 - FLASH ALL CHANGES OF MATERIAL ON EXTERIOR WALLS.
 - ALL EXTERIOR AND GARAGE ELECTRICAL OUTLETS TO BE WATERPROOFED.
 - PROVIDE WEATHER-STRIPPING FOR ALL EXTERIOR DOORS.
 - PROVIDE CALKING AROUND ALL EXTERIOR OPENINGS.
 - FLASH ALL CHANGES OF MATERIAL ON EXTERIOR WALLS.
 - ALL EXTERIOR AND GARAGE ELECTRICAL OUTLETS TO BE WATERPROOFED.
 - PROVIDE 2" CLEAR SPACE BETWEEN FIREPLACE AND FRAMING.
 - PROVIDE TEMPERED GLASS WHEN DISTANCE BETWEEN GLASS AND FINISH FLOOR IS LESS THAN 8"
 - HEADERS AND TRIMMERS MUST COMPLY WITH B.C. BUILDING CODE 2018.
 - ALL JOIST HANGERS TO HAVE A RESISTANCE OF 2000 lbs. Ref. STRUCTURAL ENG. UNLESS OTHERWISE NOTED.
 - ALL UNITS NOT SPECIFIED ARE 2x12 DOUBLE
 - ATTIC OR GARAGE SPACE ACCESS TO BE HATCHED AND INSULATED. MINIMUM SIZE 20x26" & WEATHERSTRIPPED.
 - PROVIDE SCREENED VENTILATION TO ALL ATTIC SPACES AS REQUIRED 1:300
 - PROVIDE BRACING TO ALL CORNERS.
 - PROVIDE 2" CONTINUOUS SCREENED VENTILATION AT SOFFITS.
 - BALCONY RAILINGS TO BE MINIMUM 36" OVER FINISH FLOORS.
 - CONFIRM ALL ROUGH OPENINGS OF WINDOWS AND DOORS
 - OWNER OR CONTRACTOR SHALL OBTAIN MANUFACTURER CERTIFICATE, AND SHOP DRAWINGS FOR GLUE-LAMINATED BEAMS
 - OWNER OR CONTRACTOR SHALL OBTAIN MANUFACTURER CERTIFICATE FOR TRUSSES.
 - FOR INSTALLATION, REFER TO SHOP DRAWINGS. SKYLIGHTS TO BE INSTALLED ACCORDING TO SHOP DRAWINGS BY OTHERS.
 - DOUBLE JOIST UNDER ALL WALLS RUNNING IN THE SAME DIRECTION OF FLOOR JOIST
 - ALL FRAMING ELEMENTS MUST BE NO 2 DOUBLAS FIR.
 - REGISTERED STRUCTURAL ENGINEER SUBMITS LETTER OF UNDERTAKING FOR REVIEW, DESIGN AND SUPERVISION OF STRUCTURAL COMPONENTS, ALSO SEISMIC & WIND DESIGN AS PER CWC GUIDE.
- MISCELLANEOUS**
1. FINISH GRADES ON SITE TO DIRECT ANY SURFACE WATER FLOW FROM THE BUILDING.
 2. WHERE A WINDOW OPENS TO A WINDOW WELL THE OPERATION OF THE SASH SHALL NOT REDUCE THE CLEARANCE IN A MANNER THAT WOULD RESTRICT ESCAPE IN CASE OF EMERGENCY.
 3. PROVIDE BUILDING AND SITE DRAINAGE AS PER LOCAL REQUIREMENTS.
 4. ALL DOWNSPOUTS WILL BE CONNECTED TO DRAIN PIPES INSTALLED ALL AROUND THE PROPOSED BUILDING.

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DVP

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A1.1

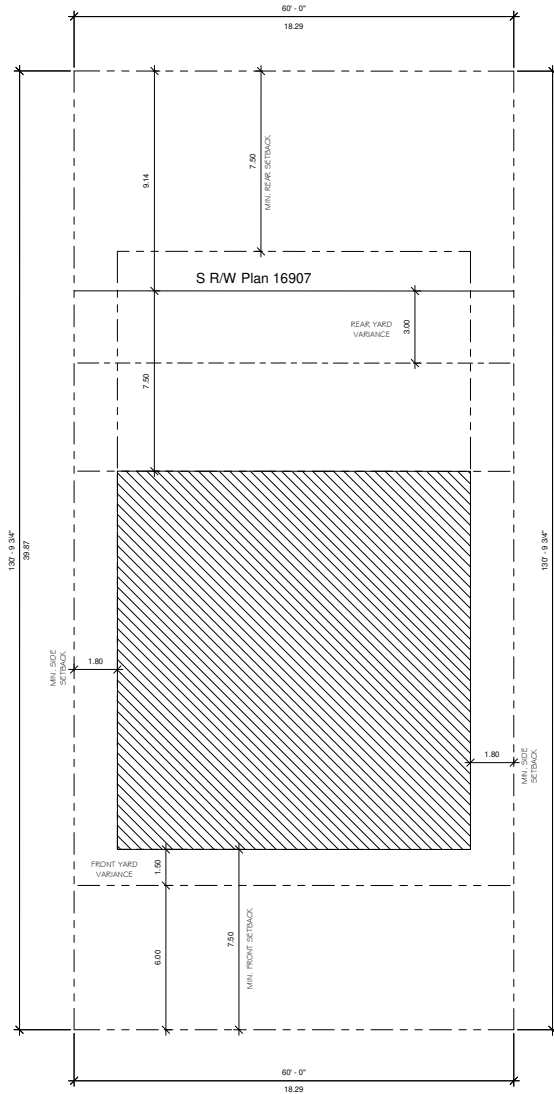
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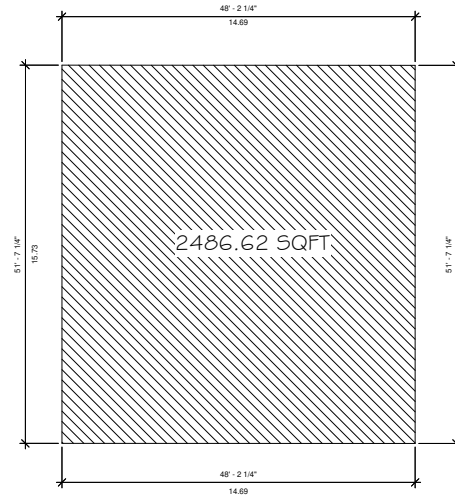
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LOT AREA = 7851 SQFT
ALLOWED LOT COVERAGE = 2849.76 SQFT

MAX. POSSIBLE COVERAGE WITHOUT VARIANCE = 2486.62 SQFT
MAX. POSSIBLE COVERAGE WITH VARIANCE = 2849.76 SQFT



① Site Plan Area
1/8" = 1'-0"



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**AREA
CALCULATIONS**

Project number	PVDL-17-1159-AH
Date	17 JAN 2018
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Checked by	GS

A1.2

Scale 1/8" = 1'-0"