

City of Surrey
PLANNING & DEVELOPMENT REPORT

Application No.: 7919-0154-00

Planning Report Date: January 17, 2022

PROPOSAL:

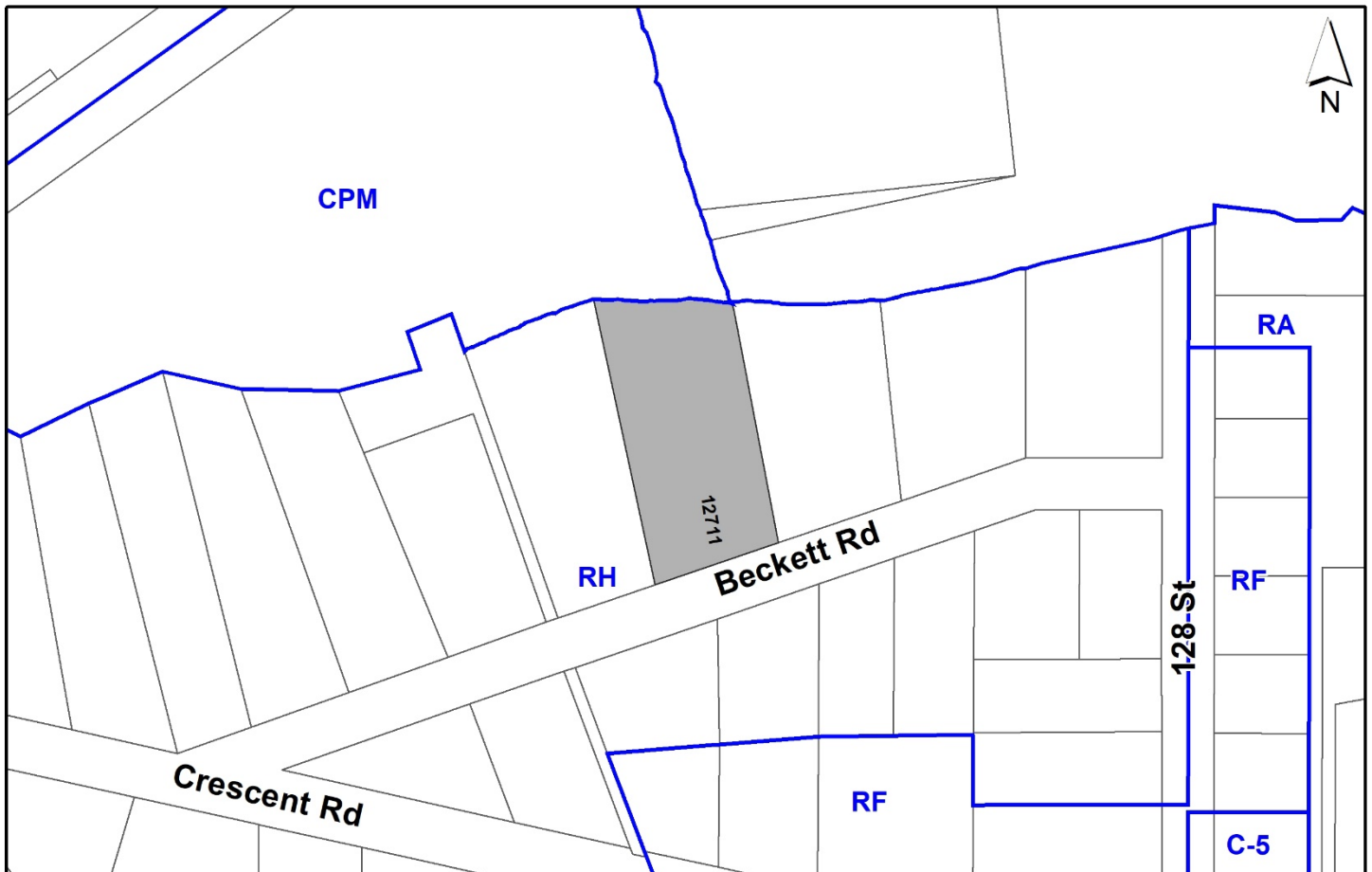
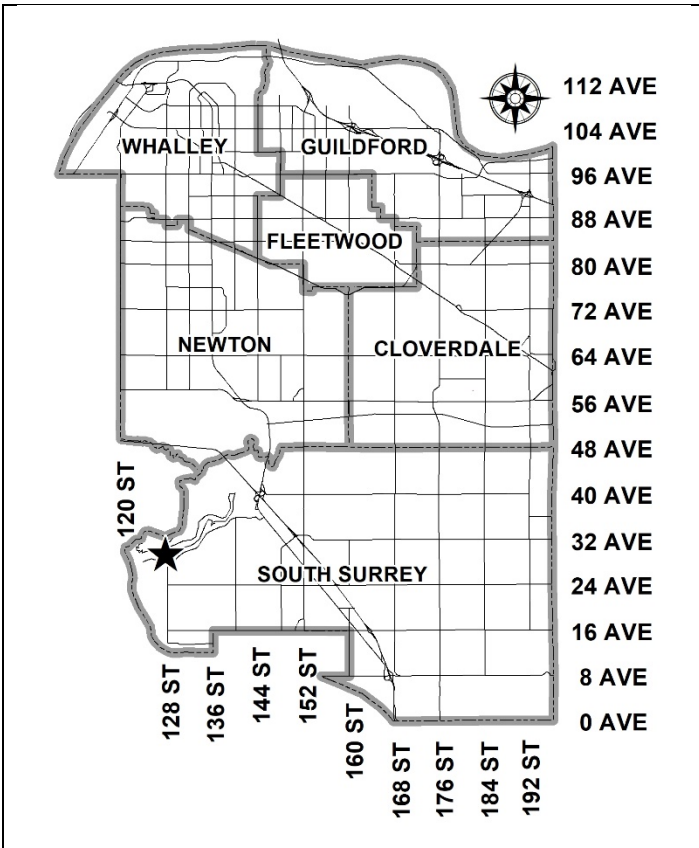
- Development Permit
- Development Variance Permit

for Hazard Lands (Steep Slopes) and Sensitive Ecosystems (Streamside and GIN) and to reduce the minimum setback from a Class A watercourse for a portion of the site to permit the construction of a new single family dwelling.

LOCATION: 12711 - Beckett Road

ZONING: RH

OCF DESIGNATION: Suburban



RECOMMENDATION SUMMARY

- Approval to draft Development Permit for Sensitive Ecosystems and Hazard Lands.
- Approval for Development Variance Permit to proceed to Public Notification.

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- The applicant is proposing to reduce the minimum streamside setback for a Class A (red-coded) watercourse from 15 metres to 0 metres, as measured from top-of-bank, for east and west portions of the site.

RATIONALE OF RECOMMENDATION

- The proposal complies with the Suburban designation in the Official Community Plan (OCP), and the General Urban designation in the Metro Vancouver Regional Growth Strategy (RGS).
- The property's northern plain, adjacent to the Nicomekl River, meets the City of Surrey's Zoning By-law No. 12000 definition of top-of-bank but only for a portion of the property's width. For land along the east and west property lines the slope of the land is not less than 3:1 for a minimum of 15 metres. Therefore, for eastern and western portions of the property, the streamside protection area extends up the slope away from the Nicomekl River, approximately 65 metres from the water's edge, where the definition of top-of-bank is met and is equivalent to the top-of-slope.
- The applicant's Qualified Environmental Professional (QEP) has submitted an Ecosystem Development Plan and Impact Mitigation Plan, which have been peer-reviewed by an independent, third-party QEP. The reports indicates that the proposed development, even with a reduced setback for a portion of the site, will not negatively impact the watercourse or riparian area.
- The applicant is proposing restoration activities, including removing invasive species and planting native species within the streamside protection area.
- The proposed streamside setback variance will help facilitate construction of a new single family dwelling on the property.
- The proposal partially complies with the Development Permit requirements in the OCP for Sensitive Ecosystems (Streamside Areas & Green Infrastructure Areas). The subject property is located within the streamside protection area of a Class A (red-coded) watercourse.
- The proposal complies with the Development Permit requirements in the OCP for Hazard Lands (Steep Slopes).

RECOMMENDATION

The Planning & Development Department recommends that:

1. Council authorize staff to draft Development Permit No. 7919-0154-00 for Sensitive Ecosystems (Streamside Area & Green Infrastructure Area) and Hazard Lands (Steep Slopes) in accordance with the attached drawings (Appendix III).
2. Council approve Development Variance Permit No. 7919-0154-00 (Appendix IV) varying the following, to reduce the minimum setback distance for a Class A (red-coded) stream from 15 metres to 0 metres, as measured from top-of-bank, for east and west portions of the site; and
3. Council instruct staff to resolve the following issues prior to final approval:
 - (a) ensure that all engineering requirements and issues including restrictive covenants, dedications, and rights-of-way where necessary, are addressed to the satisfaction of the General Manager, Engineering;
 - (b) submission of a finalized landscaping plan and landscaping cost estimate to the specifications and satisfaction of the Planning and Development Department;
 - (c) submission of a finalized tree survey and a statement regarding tree preservation to the satisfaction of the City Landscape Architect;
 - (d) submission of a finalized Ecosystem Development Plan and Impact Mitigation Plan to the satisfaction of the General Manager, Planning and Development Department;
 - (e) submission of a finalized Geotechnical Report to the satisfaction of the General Manager, Planning and Development Department; and
 - (f) registration of a Section 219 Restrictive Covenant for Sensitive Ecosystems and a Section 219 Restrictive Covenant for the Geotechnical Report.

SITE CONTEXT & BACKGROUND

Direction	Existing Use	OCP Designation	Existing Zone
Subject Site	Single Family Residential	Suburban	RH
North:	Nicomekl River; Marina	Urban	CPM
East, West, & South (Across Beckett Road):	Single Family Residential	Suburban	RH

Context & Background

- The subject property is located mid-block on the north side of Beckett Road, west of 128 Street. The property is designated "Suburban" in the Official Community Plan (OCP) and is zoned "Half-Acre Residential Zone (RH)".
- The property is approximately 5,260 square metres in size, with a lot width of 50 metres and lot depth of 112 metres.
- The subject site is comprised of a relatively flat upper terrace on the southern portion of the site fronting Beckett Road, a sloped middle portion, and a northern flat plateau adjacent to the Nicomekl River and Crescent Beach Marina.
- The site is subject to a Development Permit for Hazard Lands (Steep Slopes), as well as a Development for Sensitive Ecosystems (Streamside Area & Green Infrastructure Network).
- The Nicomekl River, a Class A (red-coded) watercourse, is located along the north property line of the subject site.
- Under Part 7A "Streamside Protection" of Zoning By-law No. 12000, for lots that existed prior to September 12, 2016, where zoning allows for single family dwellings and duplex uses, the minimum setback from top-of-bank for a Class A (red-coded) watercourse is 15 metres. The location of top-of-bank was determined through a field survey conducted by the applicant's Qualified Environmental Professional (QEP).
- The property's northern plain, adjacent to the Nicomekl River, meets the City of Surrey's Zoning By-law No. 12000 definition of top-of-bank but only for a portion of the property's width. For land along the east and west property lines the slope of the land is not less than 3:1 for a minimum of 15 metres. Therefore, for eastern and western portions of the property, the streamside protection area extends up the slope away from the Nicomekl River, approximately 65 metres from the water's edge, where the definition of top-of-bank is met and is equivalent to the top-of-slope.

DEVELOPMENT PROPOSAL

Planning Considerations

- The application is proposing to partially-demolish an existing single family dwelling and construct a new single family dwelling on the subject property.
- To facilitate this redevelopment, the applicant is proposing a Development Variance Permit to reduce the minimum streamside setback from a Class A (red-coded) watercourse from 15 metres to 0 metres, as measured from top-of-bank, for a portion of the site.
- The proposed new single family dwelling is to be located on the southeast corner of the property, adjacent to Beckett Road. A portion of the dwelling is proposed to overlap with the footprint of the existing single family dwelling.

- No RAPR assessment was completed for this project as this portion of the Nicomekl River is part of an estuary and therefore RAPR legislation is not applicable.

Referrals

Engineering: The Engineering Department has no objection to the project subject to resolution of drainage services concerns which will be addressed as part of a future Building Permit Application.

Sustainability Considerations

- The applicant has met all of the typical sustainable development criteria, as indicated in the Sustainable Development Checklist.
- In addition, the applicant has highlighted the following additional sustainable features:
 - Impermeable surfaces will be reduced by removing a portion of the existing dwelling, asphalt driveway, and concrete surface. Permeable surfaces will be increased by adding topsoil and increasing landscaping areas.
 - A fuel oil furnace used to heat the existing dwelling will be removed and replaced with a geothermal heat exchange system.

POLICY & BY-LAW CONSIDERATIONS

Regional Growth Strategy

- The proposal complies with the "General Urban" designation in the Regional Growth Strategy.

Official Community Plan

Land Use Designation

- The proposal complies with the Suburban designation in the Official Community Plan (OCP).

Zoning By-law

Streamside Variance

- The applicant is requesting the following streamside variance:
 - to reduce the minimum setback distance for a Class A (red-coded) stream from 15.0 metres to 0 metres, as measured from top-of-bank, for west and east portions of the site.
- Under Part 7A of Zoning By-law No. 12000 for lots that existed prior to September 12, 2016, where zoning allows for single family dwelling and duplex uses, the streamside setback from top-of-bank for a Class A (red-coded) stream is 15 metres.

- It was determined through a field survey conducted by the applicant's Qualified Environmental Professional (QEP) that the location of top-of-bank, in accordance with the definition in the City of Surrey Zoning By-law No. 12000, for the Class A (red coded) watercourse adjacent to the site is located at the bottom of the slope in a central portion of the property, and at the top of slope for the eastern 13 metres and western 9.7 metres of the site. As such, the variance would only be applicable to those portions of the site where the top-of-bank is equivalent to the top-of-slope.
- The proposed streamside reduction to 0 metres for the eastern and western portions of the lot would be consistent with the existing condition, with the existing single family dwelling and accessory buildings located on the southern portion of the site above the top-of-slope.
- The applicant is not proposing any development activity on the southwestern portion of the site. The requested variance here is in order to support retention of existing accessory buildings on the property.
- The proposed new single family dwelling is to be located on the southeastern portion of the site, with approximately 30% of the footprint of the proposed new dwelling located within the 15-metre streamside protection area.
- The applicant's QEP has submitted an Ecosystem Development Plan and Impact Mitigation Plan. The reports indicate that the proposed development, even with a reduced setback for a portion of the site, will not negatively impact the watercourse or riparian area. The report was peer reviewed by JBL Environmental Services Ltd. The peer reviewer found that the setback requirements of Part 7A of the Zoning By-law No. 12000 were determined accurately.
- In support of the requested variance, the application is proposing to remove invasive species from the streamside protection area on the property and revegetate with native species.
- No RAPR assessment was completed for this project as this portion of the Nicomekl River is part of an estuary and therefore RAPR legislation is not applicable.
- Staff support the requested variances to proceed for consideration.

DEVELOPMENT PERMITS

Sensitive Ecosystems (Streamside Areas) Development Permit Requirement

- The subject property falls within the Sensitive Ecosystems Development Permit Area (DPA) for Streamside Areas in the OCP, given the location of an existing Class A (red-coded) watercourse which flows westerly. The Sensitive Ecosystems (Streamside Areas) Development Permit is required to protect aquatic and terrestrial ecosystems associated with streams from the impacts of development.
- In accordance with Part 7A Streamside Protection setbacks of the Zoning By-law, a Class A (red-coded) watercourse requires a minimum streamside setback of 15 metres, as measured from the top of bank. The proposed setbacks do not comply with the requirements outlined in the Zoning By-law for a portion of the site. Instead, the applicant is proposing a minimum 0

metre setback along the east and west property lines in order to facilitate construction of a new single family dwelling.

- The riparian area will be protected through the registration of a Restrictive Covenant against the property to ensure safeguarding and maintenance of the Protection Area in perpetuity, in compliance with the OCP.
- An Ecosystem Development Plan, prepared by Mark Gollner, *R.P. Bio.*, of Marlim Ecological Consulting Ltd. and dated December 17, 2021 was reviewed by staff and found to be generally acceptable, with some modifications to content and format of the report still required. The finalized report and recommendations will be incorporated into the Development Permit.
- The report was peer reviewed by JBL Environmental Services Ltd. The peer reviewer found that the setback requirements of Part 7A of the Zoning By-law No. 12000 were determined accurately.
- The recommendations of the reports were reviewed by staff and found to be generally acceptable, with some modifications to content and format of the report still required. The finalized report and recommendations will be incorporated into the Development Permit prior to final issuance of the Development Permit.

Sensitive Ecosystems (Green Infrastructure Areas) Development Permit Requirement

- The subject property falls within the Sensitive Ecosystems DPA for Green Infrastructure Areas in the OCP, given the location of a Biodiversity Conservation Strategy (BCS) Green Infrastructure Network (GIN) Corridor located along the northern portion of the subject property. The Sensitive Ecosystems (Green Infrastructure Areas) Development Permit is required to protect environmentally sensitive and/or unique natural areas from the impacts of development.
- The City of Surrey Biodiversity Conservation Strategy (BCS) Green Infrastructure Network (GIN) map, adopted by Council on July 21, 2014 (Corporate Report No. R141; 2014), identifies a Regional BCS Corridor within the subject site, in the Serpentine/Nicomekl BCS management area, with a High ecological value.
- The BCS further identifies the GIN area of the subject site as having a Very High habitat suitability rating, derived from species at risk presence, species accounts and known ecosystem habitat inventories. The BCS recommends a target Corridor width of 50 meters.
- The development proposal conserves approximately 2,500 square meters of the subject site through Tree Retention and planting enhancement and 770 square metres through Registration of a Restrictive Covenant, which together are 3,270 square meters or 62% of the total gross area of subject site. This method of GIN retention/enhancement will assist in the long-term protection of the natural features and allows the City to better achieve biodiversity at this location consistent with the guidelines contained in the BCS.

- As noted above, an Ecosystem Development Plan, prepared by Mark Gollner, *R.P. Bio.*, of Marlim Ecological Consulting Ltd. and dated December 17, 2021, was reviewed by staff, and found to be generally acceptable, with some modifications to content and format of the report still required. The report was peer reviewed by JBL Environmental Services Ltd. With minor comments. The finalized report and recommendations will be incorporated into the Development Permit.

Hazard Lands (Steep Slope) Development Permit Requirement

- The subject property falls within the Hazard Lands (Steep Slope) Development Permit Area (DPA) in the OCP, given that the site contains steep slopes in excess of 20% gradient through the central portion of the site. The Hazard Land (Steep Slope) Development Permit is required to protect developments from hazardous conditions.
- The site consists of an upper terrace adjacent to Beckett Road, which slopes steeply down from south to north towards a flat plain adjacent to the Nicomekl River and Crescent Beach Marina. The steep slopes on the site are associated with proximity to the Nicomekl River. The majority of the slope is covered by dense vegetation.
- A geotechnical report, prepared by Harman Dhillon, *P. Eng.*, of Braun Geotechnical Ltd. and dated October 26, 2020, was peer reviewed by James Wetherill, *P. Eng.*, of Braun Geotechnical Ltd. and found to be generally acceptable by the peer reviewer. The report and peer review were reviewed by staff and found to conform to the OCP Development Permit guidelines for Hazard Lands, with some modifications to content of the report still required. The finalized geotechnical report will be incorporated into the Development Permit.
- The geotechnical report investigated issues related to slope stability and natural storm water drainage, from a geotechnical perspective, to determine the feasibility of redevelopment on the site and proposing recommendations to ensure the ongoing stability of the slope.
- The consultant has determined that the development is feasible provided that the recommendations in their report are incorporated into the overall design of the site, including site preparation techniques, the use of engineered fill, on-site drainage should be directed away from the existing slope, and that a minimum 3.0 metre setback from the top of slope been respected for any development.
- Registration of a Section 219 Restrictive Covenant that requires the owner to develop the site in accordance with the conditions in the geotechnical report as a condition of final adoption.
- An existing deck located downslope and within the 3.0 metres setback from top of slope is proposed to be retained with the proposed development. A field review conducted by Hub Engineering Inc. confirmed that the deck footings met slope recommendations outlined in the project's geotechnical report. The depth of the existing deck footings will be confirmed by Braun Geotechnical at the time of future construction, with additional work required if it is found that they do not meet this criteria.
- At Building Permit stage, the Building Division will require Letters of Assurance from a geotechnical engineer to ensure that the building plans comply with the recommendations in the approved geotechnical report.

TREES

- Ian MacLachlan, ISA Certified Arborist of Diamond Head Consulting 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)			
Cherry Plum	1	0	1
English Holly	1	0	1
Japanese Cherry	2	0	2
Magnolia	1	0	1
Pacific Dogwood	1	0	1
Coniferous Trees			
Black Pine	2	0	2
Western Red Cedar	10	0	10
Total (excluding Alder and Cottonwood Trees)	18	0	18
Total Replacement Trees Proposed (excluding Boulevard Street Trees)		0	
Total Retained and Replacement Trees		18	
Contribution to the Green City Program		NA	

- The Arborist Assessment states that there are a total of 18 mature trees on the site, with no Alder and Cottonwood trees. It was determined that all 18 trees can be retained as part of this development proposal. The proposed tree retention was assessed taking into consideration the location of services, building footprints, and proposed lot grading.
- In summary, a total of 18 trees are proposed to be retained on the site with no contribution to the Green City Program required.

INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

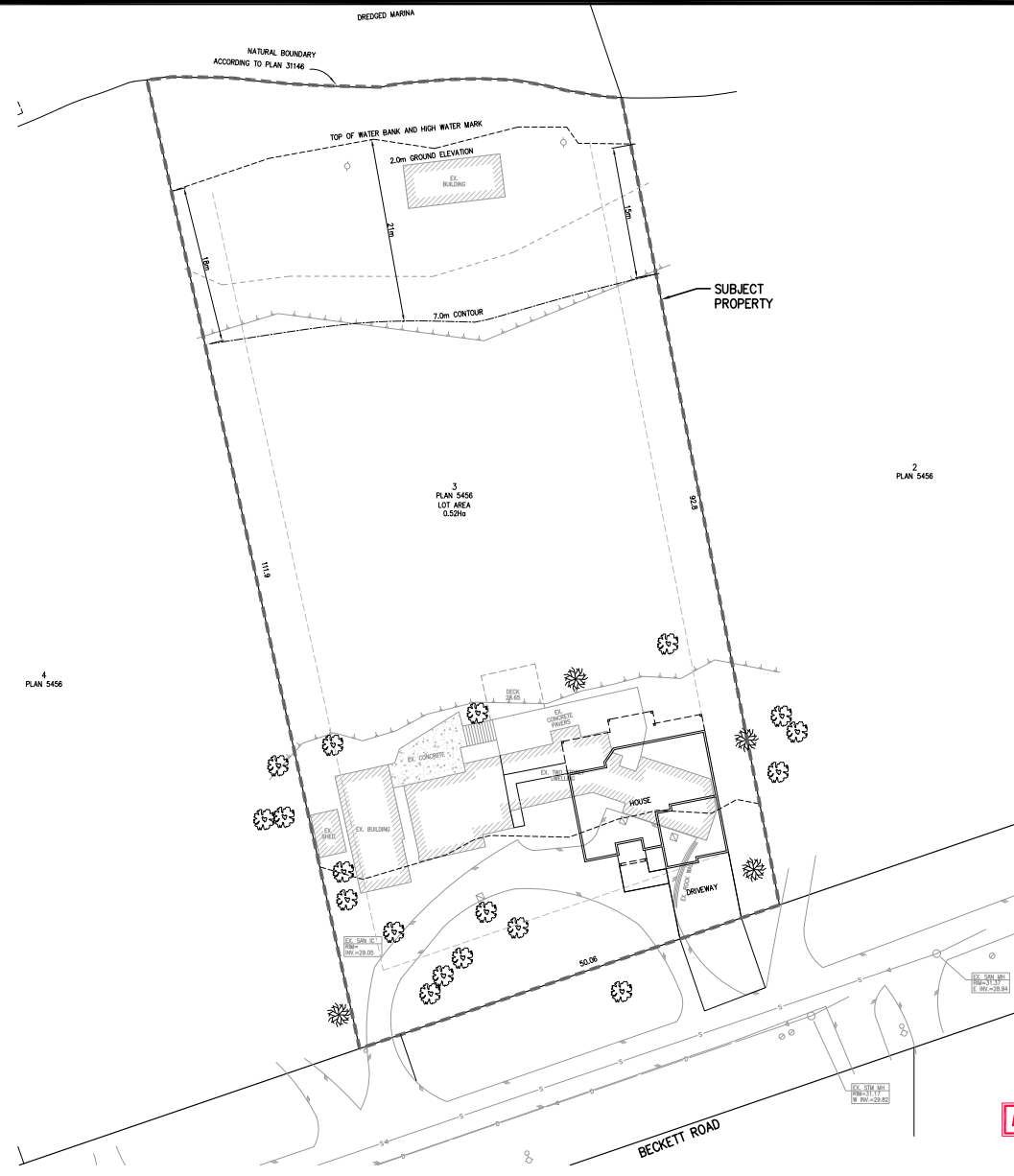
- Appendix I. Site Plan
- Appendix II. Summary of Tree Survey and Tree Preservation
- Appendix III. Streamside Protection Area Map
- Appendix IV. Development Variance Permit No. 7919-0154-00

approved by Shawn Low

Ron Gill
Acting General Manager
Planning and Development

SR/cm

Appendix I



NOTE: ALL GROUND ELEVATIONS ARE IN METRIC (METERS).

NOTE: ALL DIMENSIONS TO BE TAKEN FROM EAST AND SOUTH PROPERTY LINES ONLY.

NOT FOR CONSTRUCTION

General Notes

BENCHMARK: MONUMENT #5492
 CRESCENT ROAD & BECKETT ROAD
 GEODETIC ELV. 26.711m(CVD286VRD)

No.	Revision/Issue	Date

DRAWING TITLE

OVERALL SITE PLAN

Project Name and Address

FAMILY RESIDENCE
 12711 BECKETT ROAD
 SURREY, B.C.

LOT 3, SEC 19, Tp1,
 PL. NWP 5456, NWD

Project	2017-150	Sheet	A-1
Date	MAR 2018	Scale	
Scale	1:250		

4.0 Tree Preservation Summary

Table 2: City of Surrey tree preservation summary table for on-site and off-site trees, including the number of replacement trees proposed.

Surrey Project Number

Site Address 12711 Beckett Road, Surrey

Registered Arborist Ian MacLachlan (PN-8643A)

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)	18
Protected Trees to be Removed	0
Protected Trees to be Retained (excluding trees within proposed open space or riparian areas)	18
Total Replacement Trees Required: - 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	0
Replacement Trees in Deficit	0
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: - 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	0
Replacement Trees in Deficit	0

Summary, report and plan prepared and submitted by



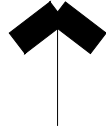
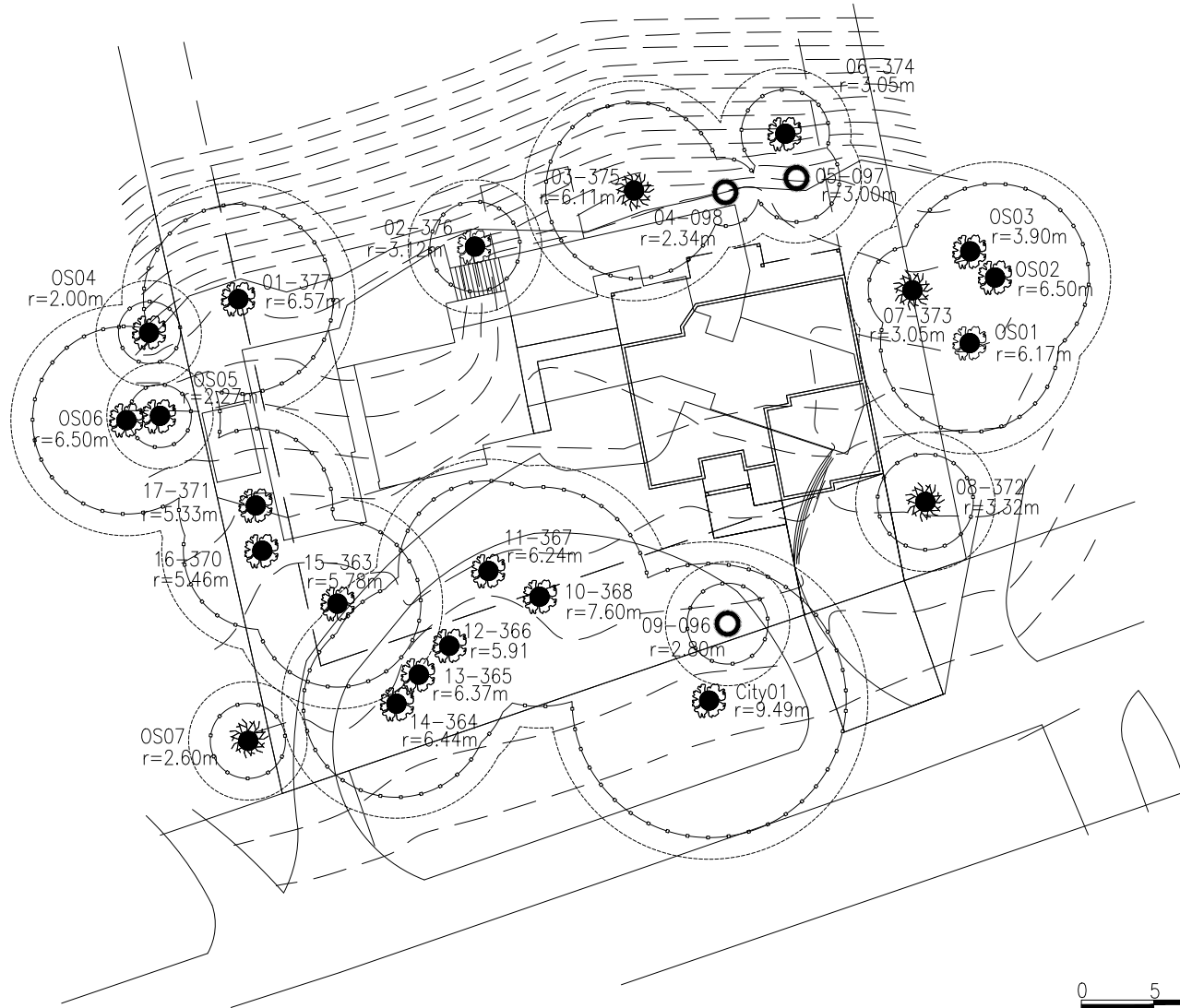
Signature of Arborist

June 26th, 2019

Date

Arborist Notes:

- Demolition of existing structures to be completed under arborist supervision. Retention of foundation sections may be required to maintain tree stability.
- Existing asphalt driveway to be removed under arborist supervision. Restoration of former driveway footprint and any grade changes must be completed using topsoil and composted organic woodchip mulch following arborist consultation.
- Retention of trees 07-373 and 08-372 is requested by the client with the intention of re-evaluating their retention at the time of construction.
- Any site servicing must be routed beneath proposed driveway to avoid root zone conflicts with large mature trees.



LEGEND

- = TREES TO BE RETAINED
- ☼ = TREES TO BE REMOVED
- = PROTECTION BARRIER

DATE	REVISION	NO.

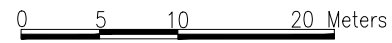
C.KAVOLINAS & ASSOCIATES INC.
 BCSCA CSLA
 2462 JONQUIL COURT
 ABBOTSFORD, B.C.
 V3C 3E9
 PHONE (604) 857-2376

CLIENT
 MR. MIKE KOMPTER
 HUB ENGINEERING INC.
 SUITE #212
 12992 - 76 AVENUE
 SURREY, B.C.
 V3W 2V6
 604-573-4328

TITLE
 PLAN VIEW
 TREE LOCATION PLAN
 TREE RETENTION PLAN
 SINGLE FAMILY RES.
 12711 BECKETT ROAD
 SURREY, B.C.

SCALE: 1:150	DATE: June 26th, 2019
DRAWN: [initials]	CHECKED: [initials]
ENCL: [initials]	AS NOTED: [initials]

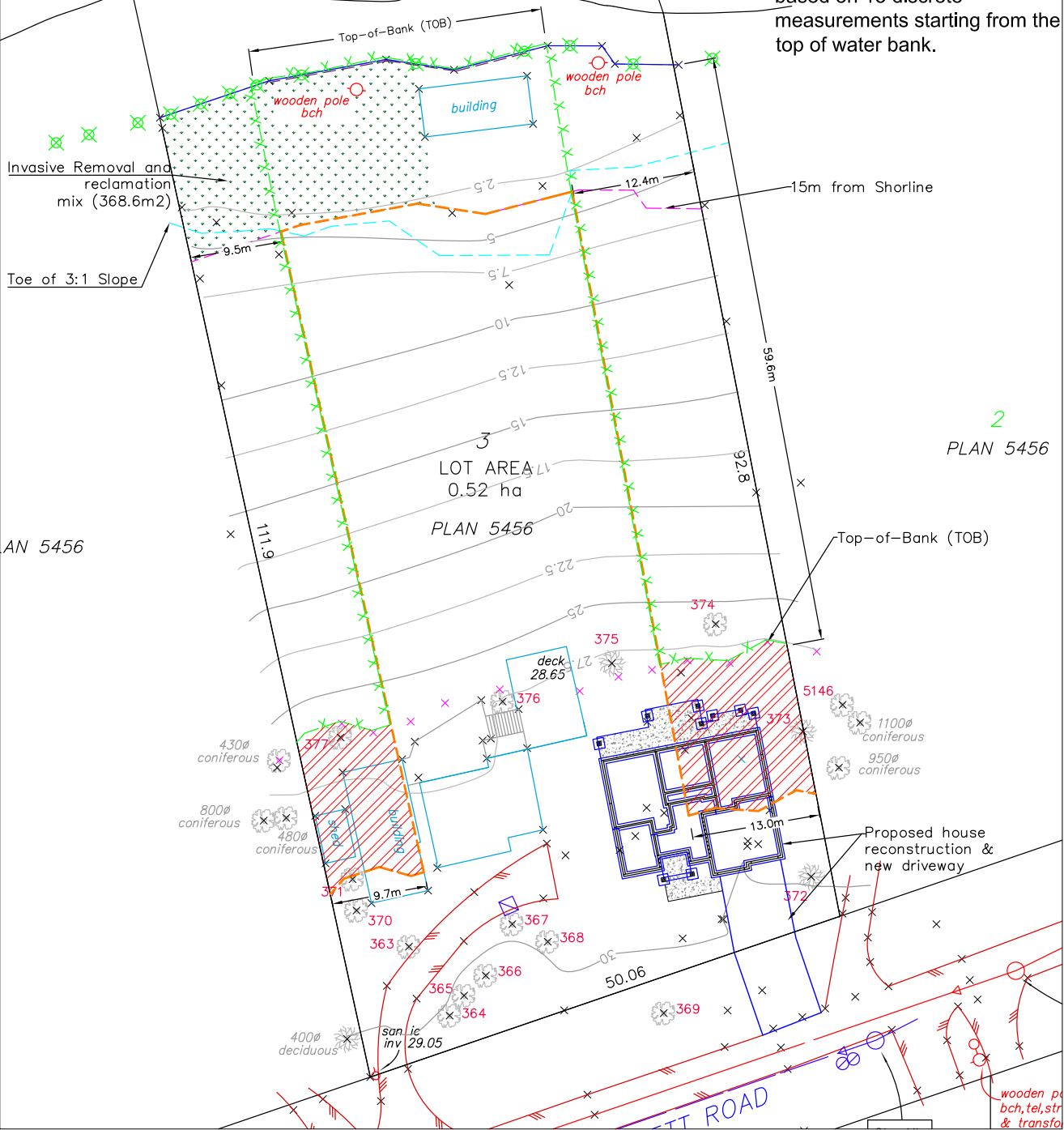
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- The base of the 3:1 slope was based on a field survey conducted by Marlim on January 17, 2021. The toe of the 3:1 slope was determined based on 13 discrete measurements starting from the top of water bank.



NATURAL BOUNDARY ACCORDING TO PLAN 31146



LEGEND	Toe of 3:1 Slope	Driveways/Roadways	Proposed Variance to 0m
Top-of-Bank (TOB) as per part 7b of COS Bylaw	Property Boundary	Proposed Development	15m SPA as per part 7b of COS Bylaw
15m SPA	Discrete Measure points	Restoration Area	
Existing Buildings			

Figure 6: Proposed Development and SPA

Marlim Project:
389.19.01

12711 Beckett Road, Surrey

Date:
October 2021

Marlim Ecological Consulting Ltd.

Page:
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CITY OF SURREY

(the "City")

DEVELOPMENT VARIANCE PERMIT

NO.: 7919-0154-00

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: 011-136-863
Lot 3 Section 19 Township 1 New Westminster District Plan 5456

12711 Beckett Road

(the "Land")
3. Surrey Zoning By-law, 1993, No. 12000, as amended is varied as follows:
 - (a) In Section B.2 of Part 7A "Streamside Protection", the minimum distance (streamside setback area) from top of bank for a "Class A Stream" is reduced from 15 metres to 0 metres, as measured from top-of-bank, for east and west portions of the site.
4. This development variance permit applies to only the portion of 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.

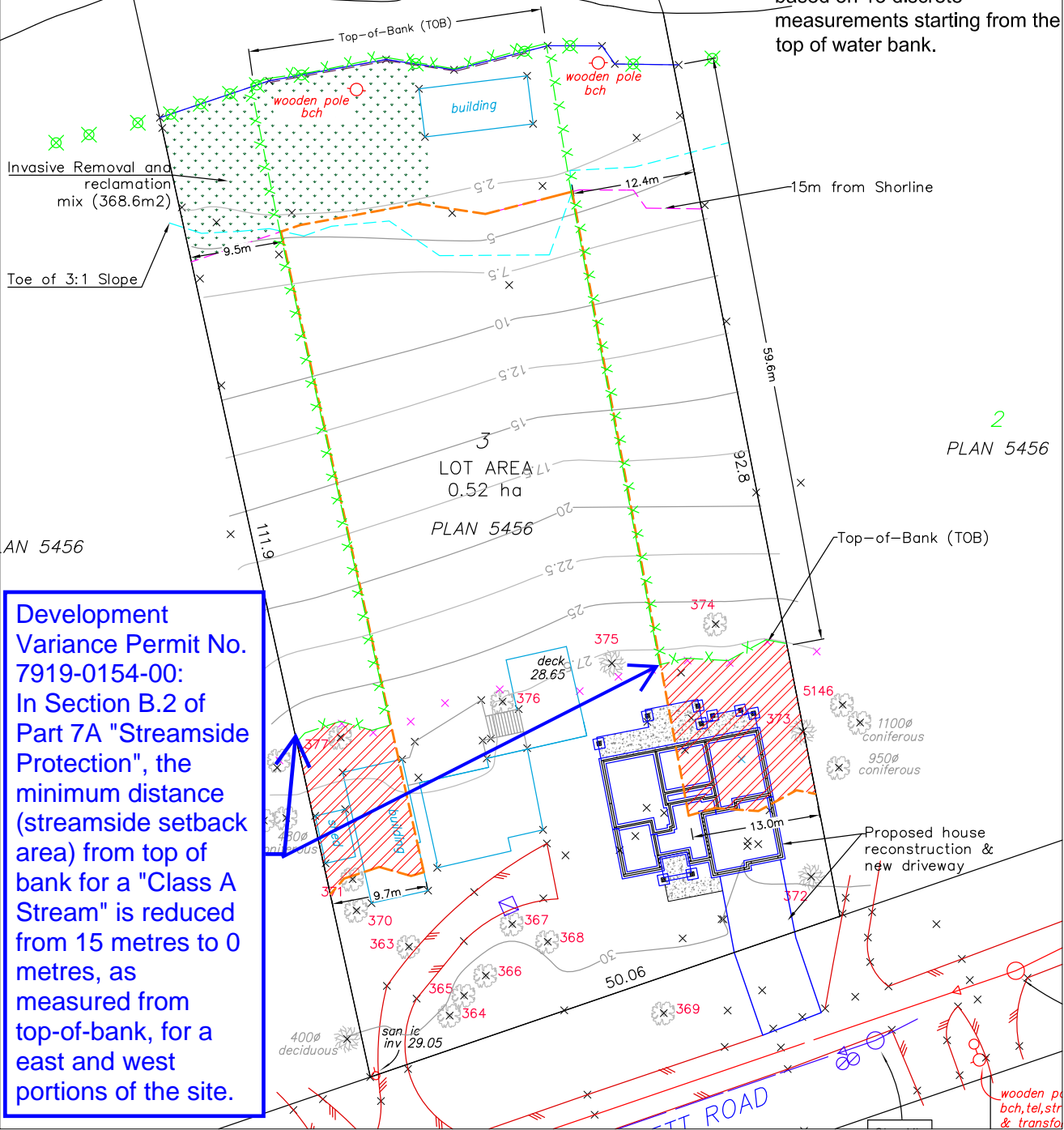
AUTHORIZING RESOLUTION PASSED BY THE COUNCIL, THE DAY OF , 20 .
ISSUED THIS DAY OF , 20 .

Mayor – Doug McCallum

City Clerk – Jennifer Ficocelli

- The base of the 3:1 slope was based on a field survey conducted by Marlim on January 17, 2021. The toe of the 3:1 slope was determined based on 13 discrete measurements starting from the top of water bank.

NATURAL BOUNDARY ACCORDING TO PLAN 31146



Development Variance Permit No. 7919-0154-00:
 In Section B.2 of Part 7A "Streamside Protection", the minimum distance (streamside setback area) from top of bank for a "Class A Stream" is reduced from 15 metres to 0 metres, as measured from top-of-bank, for a east and west portions of the site.

LEGEND			
	Top-of-Bank (TOB) as per part 7b of COS Bylaw		Proposed Variance to 0m
	Toe of 3:1 Slope		15m SPA as per part 7b of COS Bylaw
	Property Boundary		Proposed Development
	15m SPA		Discrete Measure points
	Existing Buildings		Restoration Area
	Driveways/Roadways		

 <p>MARLIM ECOLOGICAL CONSULTING LTD.</p>	<h2>Figure 6: Proposed Development and SPA</h2>	Marlim Project: 389.19.01
	<h3>12711 Beckett Road, Surrey</h3>	Date: October 2021
	Marlim Ecological Consulting Ltd.	Page: 6
Phone: 604-531-4338	Email: mail@marlimecological.com	Web: www.marlimecological.com