

City of Surrey
PLANNING & DEVELOPMENT REPORT
 Application No.: 7920-0049-00

Planning Report Date: July 12, 2021

PROPOSAL:

- Development Permit
- Development Variance Permit

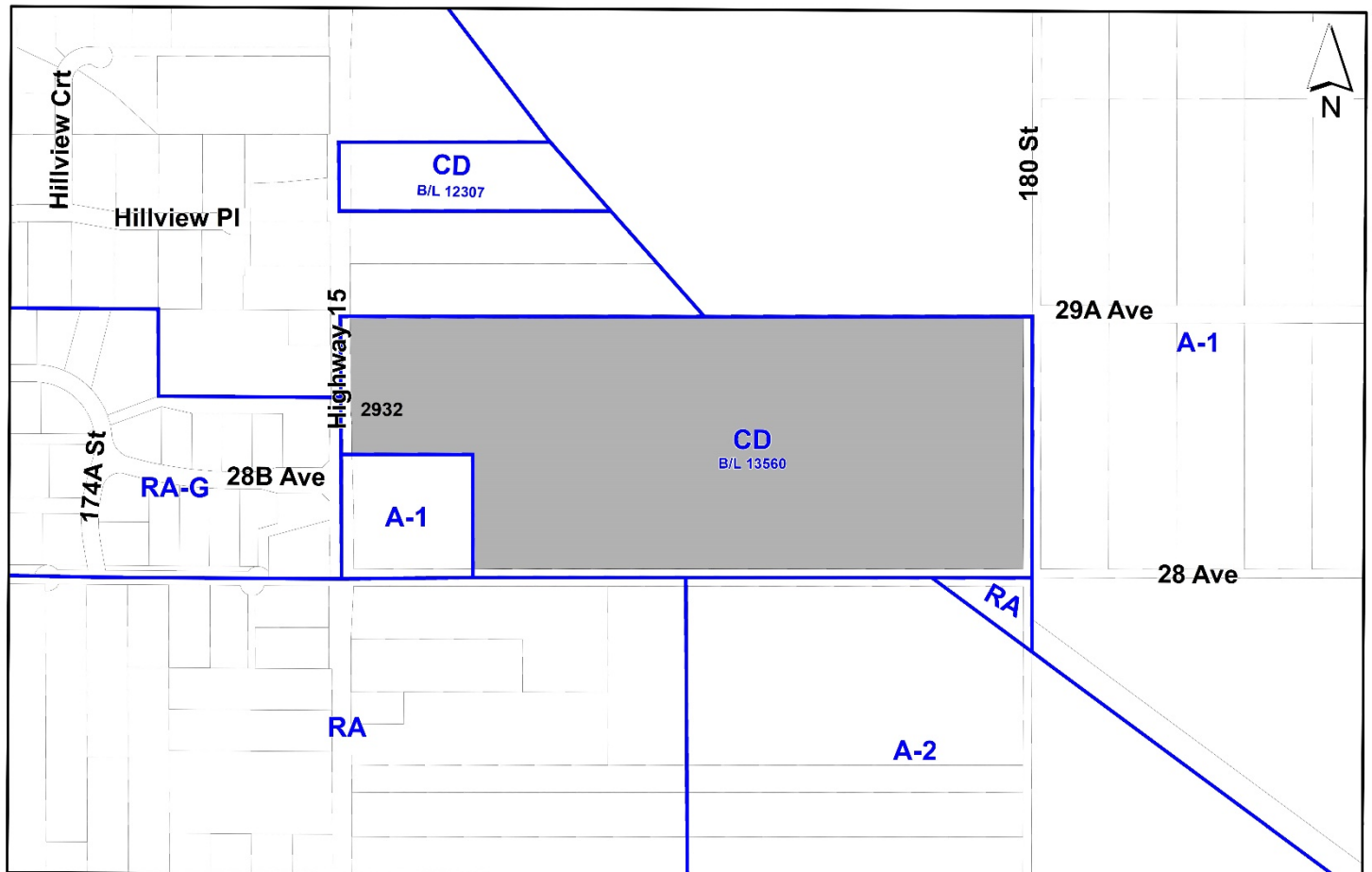
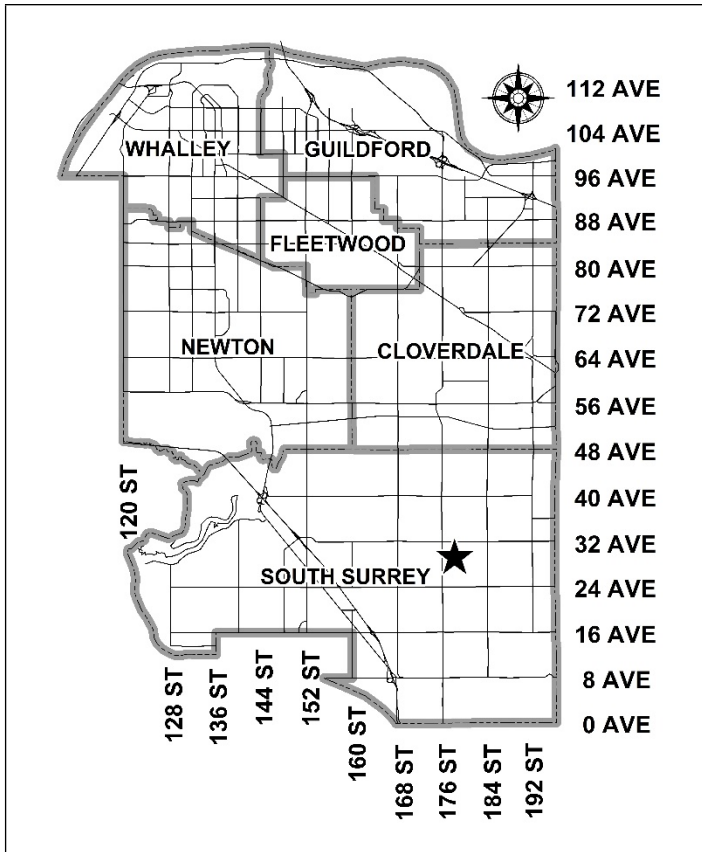
to permit the development of a covered assembly structure for gatherings.

LOCATION: 2932 – 176 Street

ZONING: CD (Bylaw No. 13560)

OCP DESIGNATION: "Urban", "Agricultural", and "Conservation and Recreation"

NCP DESIGNATION: "Institutional", "Riparian Area", "Cluster Residential", "Roads", "Multiple Residential or Detached Residential", "Parks, Natural Areas, and Buffers", and "Multiple Residential"



RECOMMENDATION SUMMARY

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

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- Proposing to vary Part 5 Parking and Loading/Unloading provisions of the Surrey Zoning Bylaw, No.12000, 1993, as amended, to allow for off-street grass parking.
- Proposing to reduce the minimum streamside setbacks for a red-coded Class A watercourse from 30 metres to 15 metres to formalize the existing gravel road and parking.

RATIONALE OF RECOMMENDATION

- The proposed reduced streamside setback for the red-coded Class A watercourse is only for the western side of the watercourse. The 15 metre setback was historically established in 1999 following review from the Ministry of Environment and was supported at that time. No further development is proposed within the 30 metre setback, and so the variance to reduce the required setback to 15 metres will bring the site into conformity with the Part 7A Streamside setbacks of the Zoning Bylaw.
- The proposal generally complies with the Development Permit requirements in the OCP for Sensitive Ecosystems (Streamside Areas and Green Infrastructure Areas) other than the proposed variance.
- The proposed grass parking does not meet the paving provisions for off-street parking spaces of Part 5 of the Zoning Bylaw; however, the grass parking is only required to meet the parking requirements associated with the additional floor area being generated by the pavilion structure.
- As a condition of approval, the applicant will be required to register a restrictive covenant limiting the use of the pavilion structure to two-days a year in conjunction with the congregation's annual two-day event. As the use of the pavilion is tied to the annual two-day event, there will be no impact to the required on-site parking by permitting grass parking to meet the parking requirements for the pavilion.

RECOMMENDATION

The Planning & Development Department recommends that:

1. Council authorize staff to draft Development Permit No. 7920-0049-00 for Sensitive Ecosystems (Streamside Areas) generally in accordance with the finalized Ecosystem Development Plan.
2. Council approve Development Variance Permit No. 7920-0049-00 (Appendix I) varying the following, to proceed to Public Notification:
 - (a) to vary Part 5 Parking and Loading/Unloading provisions of the Surrey Zoning Bylaw, No.12000, 1993, as amended, to allow for off-street grass parking.
 - (b) to reduce the minimum streamside setbacks for a red-coded Class A watercourse from 30 metres to 15 metres to formalize the existing gravel road and parking.
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) the applicant satisfy the deficiency in tree replacement on the site, to the satisfaction of the Planning and Development Department;
 - (d) submission of a finalized Ecosystem Development Plan and Impact Mitigation Plan to the satisfaction of City staff;
 - (e) registration of a Section 219 Restrictive Covenant for Sensitive Ecosystems and installation of riparian landscaping;
 - (f) registration of a combined Statutory Right-of-Way / Section 219 Restrictive Covenant over the designated Streamside Protection Area for both "No Build" and conveyance access; and
 - (g) registration of a Section 219 Restrictive Covenant limiting the use of the pavilion to two-days per year in association with the congregation's annual event.

SITE CONTEXT & BACKGROUND

Direction	Existing Use	NCP Designation	Existing Zone
Subject Site	Institutional use for Science of the Soul.	"Institutional", "Riparian Area", "Cluster Residential", "Roads", "Multiple Residential or Detached Residential", "Parks, Natural Areas, and Buffers", and "Multiple Residential"	CD (Bylaw No. 13560)
North:	Acreage single family and agricultural property in the ALR.	"Cluster Residential", "Roads", "Multiple Residential or Detached Residential", "Parks, Natural Areas, and Buffers", and "Multiple Residential"	RA and A-1
East:	Agricultural property in the ALR.	OCP: Agricultural	A-1
South:	Vacant agricultural properties outside of the ALR.	"Stormwater Detention Pond", "Multiple Residential", "Parks, Natural Areas, and Buffers", and "Riparian Area"	RA and A-2
West (Across 176 Street):	Acreage single family properties.	"Existing Open Space" and "Existing One Acre and Half Acre Lots"	RA-G

Context & Background

- The subject site is located along 176 Street (Highway 15) and is located within the Redwood Heights NCP. The site is 20.8 hectares in size and approximately 5.8 hectares of the property is located within the Agricultural Land Reserve (ALR).

- The property is designated "Urban", "Agricultural", and "Conservation and Recreation" in the Official Community Plan (OCP). The property is designated "Institutional", "Riparian Area", "Cluster Residential", "Roads", "Multiple Residential or Detached Residential", "Parks, Natural Areas, and Buffers", and "Multiple Residential" in the Redwood Heights Neighbourhood Concept Plan (NCP) and currently zoned "Comprehensive Development Zone (CD Bylaw No. 13560)".
- The subject site was developed in 1998/1999 under Development Application No. 7998-0152-00, which permitted the development of a 300-seat assembly hall for the Science of the Soul congregation.
- The applicant is proposing to construct an open-air pavilion to support the congregation's annual two-day summer event. Currently, the congregation applies for a temporary tent permit every year to erect a large festival tent. In order to formalize the event, the congregation is seeking to construct an open-air pavilion that will avoid the need to apply for a temporary tent permit each summer for their annual event.
- As part of the proposal, the applicant also intends to construct an expanded paved parking lot at the northern boundary of the property, adjacent to the proposed pavilion.

DEVELOPMENT PROPOSAL

Planning Considerations

- The applicant is proposing to construct an open-air pavilion to support the congregation's annual two-day event. The proposal requires a Development Variance Permit to reduce the required minimum streamside setback of a red-coded Class A watercourse from 30 metres to 15 metres, and to vary the parking provisions of Part 5 of the Zoning Bylaw to allow grass parking.

Referrals

Engineering: The Engineering Department has no objection to the project subject to the completion of Engineering requirements as outlined in Appendix II.

Ministry of Transportation & Infrastructure (MOTI): No comment.

Transportation Considerations

- The current assembly hall is 6,325 square metres in size, which requires 474 parking stalls. The site currently has 180 paved parking stalls, meaning the site is short by 294 parking stalls. The applicant proposes to construct an additional 304 paved parking stalls, resulting in a total of 484 paved parking stalls on-site.

- The proposed open-air pavilion is considered "floor area" for the purposes of calculating the required number of parking stalls on-site. The pavilion is proposed to be 8,688 square metres in size, which requires a total of 652 parking spaces based on the assembly hall place of worship parking rate of 7.5 parking spaces per 100 square metres.
- Together, the existing assembly hall and the proposed pavilion require a total of 1,126 parking spaces. The applicant is proposing to meet this requirement with 484 paved parking spaces and 646 grass parking spaces for a total of 1,130 parking spaces.
- By constructing an additional 304 paved parking stalls, the applicant will formally meet the parking requirements of the existing assembly hall (474 parking spaces required for the building, 484 total proposed). The additional required parking spaces are the result of constructing the formal pavilion structure.
- As a condition of approval, the applicant will be required to register a restrictive covenant limiting the use of the pavilion structure to two-days a year in conjunction with the congregation's annual two-day event.
- As the use of the pavilion is tied to the annual two-day event, there will be no impact to the required on-site parking by permitting grass parking to meet the parking requirements for the pavilion.

Parkland and/or Natural Area Considerations

- The applicant proposes to protect the riparian areas on and adjacent to the site through the registration of a combined Restrictive Covenant/Right-of-Way against the property to ensure safeguarding and maintenance of the Protection Area in perpetuity, in compliance with the OCP. See the Development Permit section for more information on environmental protection.

Sustainability Considerations

- The applicant has met all of the typical sustainable development criteria, as indicated in the Sustainable Development Checklist.

POLICY & BY-LAW CONSIDERATIONS

Regional Growth Strategy

- The subject property is designated "General Urban" and "Agricultural" in the Metro Vancouver Regional Growth Strategy (RGS).
- The proposed parking lot and pavilion are to be located on the portion of the property designated as "General Urban".

Official Community Plan

Land Use Designation

- The subject property is designated "Urban", "Agricultural", and "Conservation and Recreation" in the Official Community Plan (OCP).
- The proposed parking lot and pavilion are to be located on the portion of the property designated as "Urban".

Secondary Plans

Land Use Designation

- The subject property is designated "Institutional", "Riparian Area", "Cluster Residential", "Roads", "Multiple Residential or Detached Residential", "Parks, Natural Areas, and Buffers", and "Multiple Residential".
- The proposed parking lot and pavilion are to be located on the portion of the property designated as "Institutional".

Zoning Bylaw

Parking Variance

- The applicant is requesting the following variance:
 - (a) to vary Part 5 Parking and Loading/Unloading provisions of the Surrey Zoning Bylaw, No. 12000, 1993, as amended, to allow for off-street grass parking.
- Part 5 A.4 (a).ii, Parking and Loading/Unloading of the Surrey Zoning Bylaw, No. 12000, 1993, as amended requires that all off-street parking spaces be surfaced with asphalt, concrete, or similar pavement.
- The proposed grass parking area is to be located on the east side of the watercourse that bisects the site and will only be used once a year for the two-day event held by the congregation. The grass parking area will not be used on a day-to-day basis.
- Given that the grass parking area supports the functioning of only a two-day event, once a year, Engineering staff support the requested variance to proceed for consideration.

Streamside Variance

- The applicant is requesting the following streamside variance:
 - (a) to reduce the minimum streamside setbacks for a red-coded Class A watercourse from 30 metres to 15 metres to formalize the existing gravel road and parking

- The site was developed in 1998/1999 to permit the existing assembly hall on the property. At the time, Envirowest Consulting Ltd. conducted an assessment that was reviewed by the Province (at that time, the Ministry of Environment, Lands and Parks), that concurred with the determination of a Class B status for this stream. A 15 metre setback was formalized through this application and a restrictive covenant offered the required protection for the watercourse.
- Also, as part of the application in 1998/1999, Envirowest conducted fish sampling at this location that found threespine stickleback within the stream. As of November 1, 2019, the Department of Fisheries and Oceans (DFO) updated the definition of a "fish" to now include 'coarse fish species', not simply commercial or gaming fish. This change resulted in updates to the City's stream classifications and therefore, the watercourse is now considered to be a Class A stream.
- The proposed surfaced parking lot and pavilion will be located outside the minimum 30 metre setback on both sides of the stream. The proposed variance is to support the existing disturbance, such as a gravel road and parking, that is located closer than 30 metres, as measured from top-of-bank.
- Given that the original development was permitted by the Province with a 15 metre setback and that no further development is to occur within the 30 metre setback, staff support the requested variance 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 northeastward across the property. 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 30 metres, as measured from the top of bank. The proposed setbacks comply with the requirements outlined in the Zoning By-law on the eastern side of the watercourse, however, a variance is being sought to reduce the minimum streamside setback on the west side from 30 metres to 15 metres.
- The riparian area that bisects the site will be protected through the registration of a combined Restrictive Covenant/Right-of-Way against the property to ensure safeguarding and maintenance of the Protection Area in perpetuity, in compliance with the OCP. The watercourse along the northern boundary will be protected with an Environmental Restrictive Covenant.
- Both watercourses will be protected by the installation of riparian protection fencing at the streamside setback.

- An Ecosystem Development Plan, prepared by Ian Whyte, *R.P. Bio.*, of Envirowest Consultants Ltd. and dated May 31, 2021, was reviewed by staff and an independent peer reviewer, 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.

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 on the eastern portion of the site along the boundary between the agricultural portion of the property and the urban portion. 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 Local BCS Corridor within the subject site, in the Redwood BCS management area, with a Medium ecological value.
- The BCS further identifies the GIN area of the subject site as having a 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 30 meters.
- The BCS GIN Corridor currently meanders along the edge of the Agricultural Land Reserve (ALR) and inside the "urban" portion of the property. Given that there is a Farm Protection Buffer on the edge of the ALR, the applicant proposes to realign the GIN Corridor to follow the same extents of the Farm Protection Buffer along the edge of the ALR.
- The development proposal does not include any GIN protection or enhancement, as it is assumed that further development of these lands will provide the necessary protection and enhancement once fully developed as per the Redwood Heights NCP land use designations. At that time, it is expected that the GIN Corridor will be protected through conveyance to the City and/or landscape enhancement. 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.
- The GIN Corridor on the subject site will not be further disturbed through this proposal but may continue to be utilized as the existing access road between the assembly hall and the agricultural producing portion of the property.

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 (or is within 30 metres from the top of a slope/or 10 metres from the base of a slope in excess of 20%). The Hazard Land (Steep Slope) Development Permit is required to protect developments from hazardous conditions.

- Given that there is no development proposed within 30 metres of the steep slope areas of the site, it was determined that this proposal is exempt from the Hazard Lands (Steep Slope) Development Permit Area requirements.

Farming Protection Development Permit Requirement

- The subject property falls within the Farming Protection Development Permit Area (DPA) in the OCP, given that it is located within 50 metres of the Agricultural Land Reserve (ALR) boundary. The Farm Protection Development Permit is required to reduce agricultural-urban conflicts through increased setbacks and vegetated buffering. However, due to there being no construction or development on the portion of the property within 50 metres of ALR, it was determined that this proposal is exempt from the Farming Protection Development Permit Area requirements.

Form and Character Development Permit Requirement

- The proposed development is not subject to a Development Permit for Form and Character as the proposed use is institutional.

TREES

- Aelicia Otto, ISA Certified Arborist of ACL Group Arbortech Consulting, 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)			
Katsura	31	0	31
Himalayan Birch	53	0	53
Persian Ironwood	12	0	12
Columnar Hornbeam	50	0	50
Maidenhair Tree	1	0	1
Norway Maple	1	0	1
Sweetgum	1	0	1
Indian Bean Tree	2	0	2
Beech	12	10	2
Rowan	3	0	3
Vine Maple	5	0	5
Japanese Maple	1	0	1
Linden	1	0	1
Fringe Tree	2	0	2
English Oak	4	0	4
Redbud	1	0	1
Coniferous Trees			
Blue Spruce	2	0	2
Western Red Cedar	2	0	2

Total (excluding Alder and Cottonwood Trees)	184	10	174
Total Replacement Trees Proposed (excluding Boulevard Street Trees)	20		
Total Retained and Replacement Trees	194		
Contribution to the Green City Program	\$0		

- The Arborist Assessment states that there are a total of 184 mature trees on the site. There are no Alder or Cottonwood trees on the site. It was determined that 174 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, road dedication and proposed lot grading.
- For those trees that cannot be retained, the applicant will be required to plant trees on a 2 to 1 replacement ratio for all trees. This will require a total of 20 replacement trees on the site. The applicant is proposing 20 replacement trees, meeting City requirements.
- In summary, a total of 194 trees are proposed to be retained or replaced on the site.

INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

Appendix I.	Development Variance Permit No. 7920-0049-00
Appendix II.	Engineering Summary
Appendix III.	Summary of Tree Survey and Tree Preservation

approved by Shawn Low

Rémi Dubé
Acting General Manager
Planning and Development

KS/cm

(the "City")

DEVELOPMENT VARIANCE PERMIT

NO.: 7920-0049-00

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: 013-243-012

South 15 Chains North West Quarter Section 20 Township 7 Except: Firstly: The East 33 Feet Secondly: The South 33 Feet Thirdly: Part Subdivided by Plan 25115 and Fourthly: Part on Statutory Right of Way Plan 84545 New Westminster District

2932 - 176 Street

(the "Land")

4. Surrey Zoning By-law, 1993, No. 12000, as amended is varied as follows:
 - (a) to vary Part 5 Parking and Loading/Unloading provisions of the Surrey Zoning Bylaw, No. 12000, 1993, as amended, to allow for off-street grass parking.
 - (b) to reduce the minimum streamside setbacks for a red-coded Class A watercourse from 30 metres to 15 metres to formalize the existing gravel road and parking.
5. 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.

6. The Land shall be developed strictly in accordance with the terms and conditions and provisions of this development variance permit.
7. 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.
8. The terms of this development variance permit or any amendment to it, are binding on all persons who acquire an interest in the Land.
9. 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

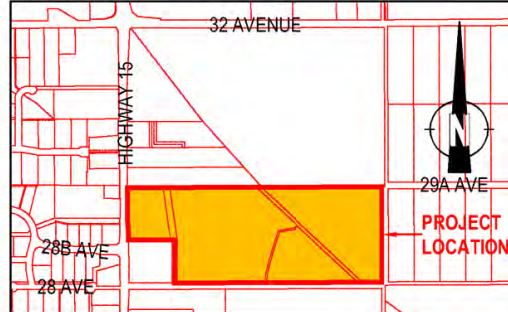
PLAN
SCALE 1:2000

SCHEDULE A



LEGEND	
	Property Line (Site)
	Bylaw Setback
	RAPR SPEA
	Class A Stream
	Class B Stream
	Class C Stream
	Agricultural Land Reserve (ALR)

LOCATION
SCALE 1:15000



Proposed variance to reduce the minimum streamside setbacks of a red-coded Class watercourse from 30 metres to 15 metres to formalize the existing gravel road and parking.

minimum and average proposed setback = 15m

this stream not assessed

this stream not assessed

Proposed variance to Part 5 of the Zoning Bylaw to allow for off-street grass parking.

- REFERENCE DRAWINGS
- 1. Email: 181-10062-00_20210225_dwg_vm_CAD Base.dwg. Received February 25, 2021; Jas Sandhu.
 - 2. Email: ACAD-181-10062-00_20190828_dwg_vm_to environmental.dwg. Received September 05, 2019; WSP Canada Inc.
 - 3. 2019 Legal Base and Watercourses from City of Surrey.
 - 4. Agricultural Land Reserve from City of Surrey.

SCIENCE OF THE SOUL

2932 - 176 STREET
Surrey, BC



www.enviowest.ca

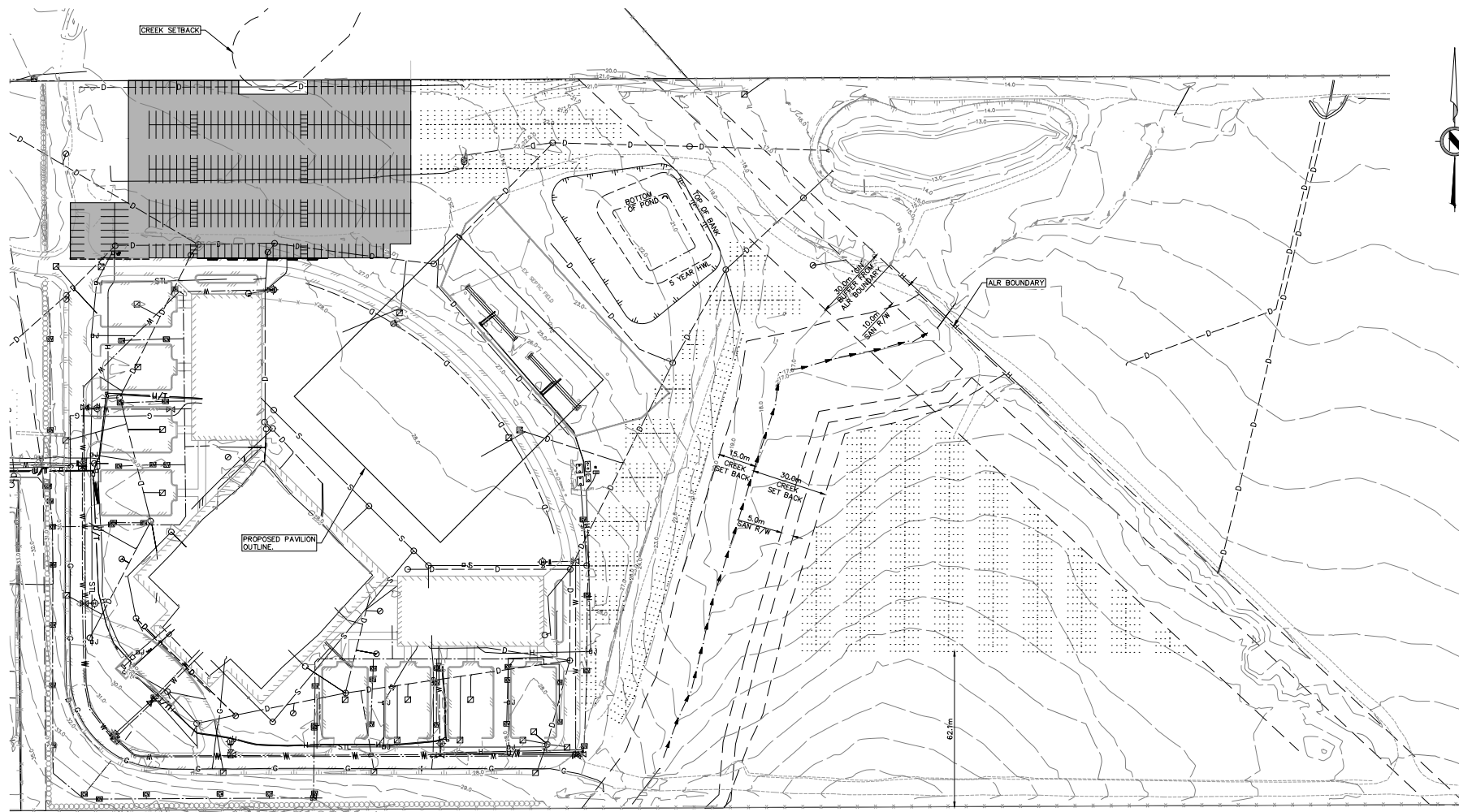
enviowest consultants inc.

Suite 101 - 1515 Broadway Street
Port Coquitlam, British Columbia
Canada V3C 6M2

office: 604-944-0502
facs/mile: 604-944-0507
sasper-verdere@enviowest.ca

SETBACKS

DESIGN: CP	DRAWN: CEV/SCM	CHECKED: IWV	REVISION: 07	REVISION DATE: May 31, 2021
SCALE: As Shown	DATE: November 15, 2019		DRAWING NUMBER: 1472-01-02	



wsp
WSP CANADA INC.
 #300 - 65 RICHMOND STREET
 NEW WESTMINSTER, B.C.
 CANADA V3L 5P5
 TEL. 604-525-4651 | FAX. 604-525-5715
 www.wsp.com

REV.	DATE	REVD PER CITY COMMENTS
A	02.14.20	REVD PER CITY COMMENTS
B	05.14.20	REVD BUILDING LAYOUT
C	05.28.20	REVD ASPHALT PARKING
D	06.17.20	REVD PER CITY COMMENTS
E	09.01.20	REVD ASPHALT PARKING
F	01.21.21	REVD GRASS PARKING
G	02.25.21	REVD GRASS PARKING

CLIENT
VANCOUVER STUDY CENTRE
 2934 176 STREET,
 SURREY, B.C.

PROJECT
RSSB PAVILION

DRAWING TITLE
PARKING PLAN
 ONSITE

181-10062-00 JOB NO.
 1:750 SCALE
 NOV/2019 DATE
 A.L. DESIGN
 B.D. DRAWN
 SHEET NO.
C5 OF 5

LEGEND:
 — ASPHALT PARKING c/w LINE PAINTING (IN GREY HATCHING)
 GRASS PARKING, NO PHYSICAL LINE PAINTING DONE ON GRASS

TOTAL PARKING STALLS PROVIDED:
 PROPOSED PAVED PARKING LOT = 304
 GRASS PARKING = 646

SEE SHEET C3 FOR GENERAL NOTES

LEGAL DESCRIPTION
 SECTION 20, TOWNSHIP 7, N.W.D.
 BYLAW 13360

BENCHMARK
 SURVEY MONUMENT #94H0567,
 N 999.980 E 999.998, LOCATED AT
 INTERSECTION OF 176 ST. & 28 AVE.
 ELEV = 32.865m

TO: **Manager, Area Planning & Development
- South Surrey Division
Planning and Development Department**

FROM: **Development Engineer, Engineering Department**

DATE: **July 6, 2021** PROJECT FILE: **7820-0049-00**

RE: **Engineering Requirements
Location: 2932 176 Street**

DEVELOPMENT PERMIT/DEVELOPMENT VARIANCE PERMIT

The following issues are to be addressed as a condition of issuance of the Development Permit for Sensitive Ecosystems (Streamside) associated with the proposed construction of an open-air pavilion and parking lot, and issuance of a Development Variance Permit to reduce the west side streamside setback of from a Class A watercourse from 30.0 m to 15.0 m and to allow for grass parking spaces instead of paved and drained spaces:

- Provide a combined statutory right-of-way/restrictive covenant (SRW/RC) for the Class A watercourse and its streamside setbacks. An additional 5.0 m area is required along the west side due to variance proposed.
- Register an Environmental Restrictive Covenant for riparian protection along the watercourse at the north boundary of the property. This is a private watercourse where Engineering does not require a Combo RC/SRW at this time.
- Register a Restrictive Covenant for on-site detention to ensure there is no net increase in post-development flow and volume to the downstream receiving watercourse. The applicant is proposing an on-site detention pond which is to be the responsibility of the owner to maintain and operate. The on-site drainage plan and details are to be reviewed under the Building Permit process.
- Register a Restrictive Covenant for on-site water quality treatment. The civil consultant is to confirm how water quality treatment is proposed.

An Administrative Processing fee of \$1,722.00 is required to process legal documents noted above.



Jeff Pang, P.Eng.
Development Engineer
IK1

APPENDIX F: CITY OF SURREY SUMMARY FORM

Surrey Project No.: n/a
 Project Address: 2934 176 Street, Surrey, BC
 Consulting Arborist: Aelicia Otto

ON-SITE TREES:	QUANTITY OF TREES
Total Bylaw Protected Trees Identified (on-site and shared trees, including trees within boulevards and proposed streets and lanes, excluding Park and ESA dedications)	184
Bylaw Protected Trees to be Removed	10
Bylaw Protected Trees to be Retained (excludes trees in Park dedication areas and ESA's)	174
Replacement Trees Required: Alder and Cottonwood at 1:1 ratio: 0 times 1 = 0 All Other Bylaw Protected Trees at 2:1 ratio: 10 times 2 = 20 TOTAL:	20
Replacement Trees Proposed	20
Replacement Trees in Deficit	0
Protected Trees Retained in Proposed Open Space/ Riparian Areas	n/a

OFF-SITE TREES:	QUANTITY OF TREES
Bylaw Protected Off-Site Trees to be Removed	0
Replacement Trees Required: Alder and Cottonwood at 1:1 ratio: 0 times 1 = 0 All Other Bylaw Protected Trees at 2:1 ratio: 0 times 2 = 0 TOTAL:	0
Replacement Trees Proposed	0
Replacement Trees in Deficit	0

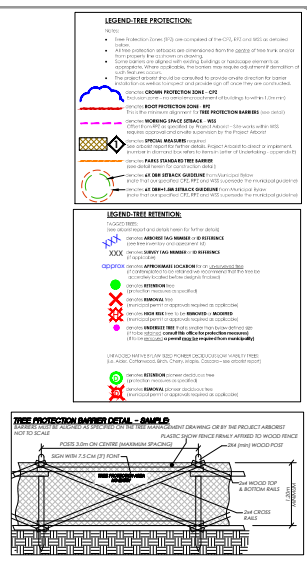
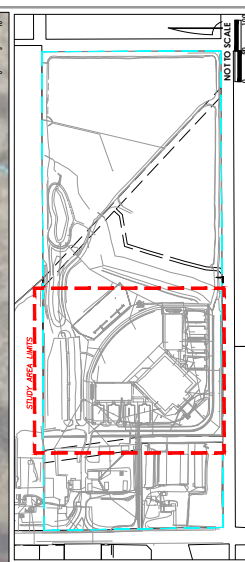
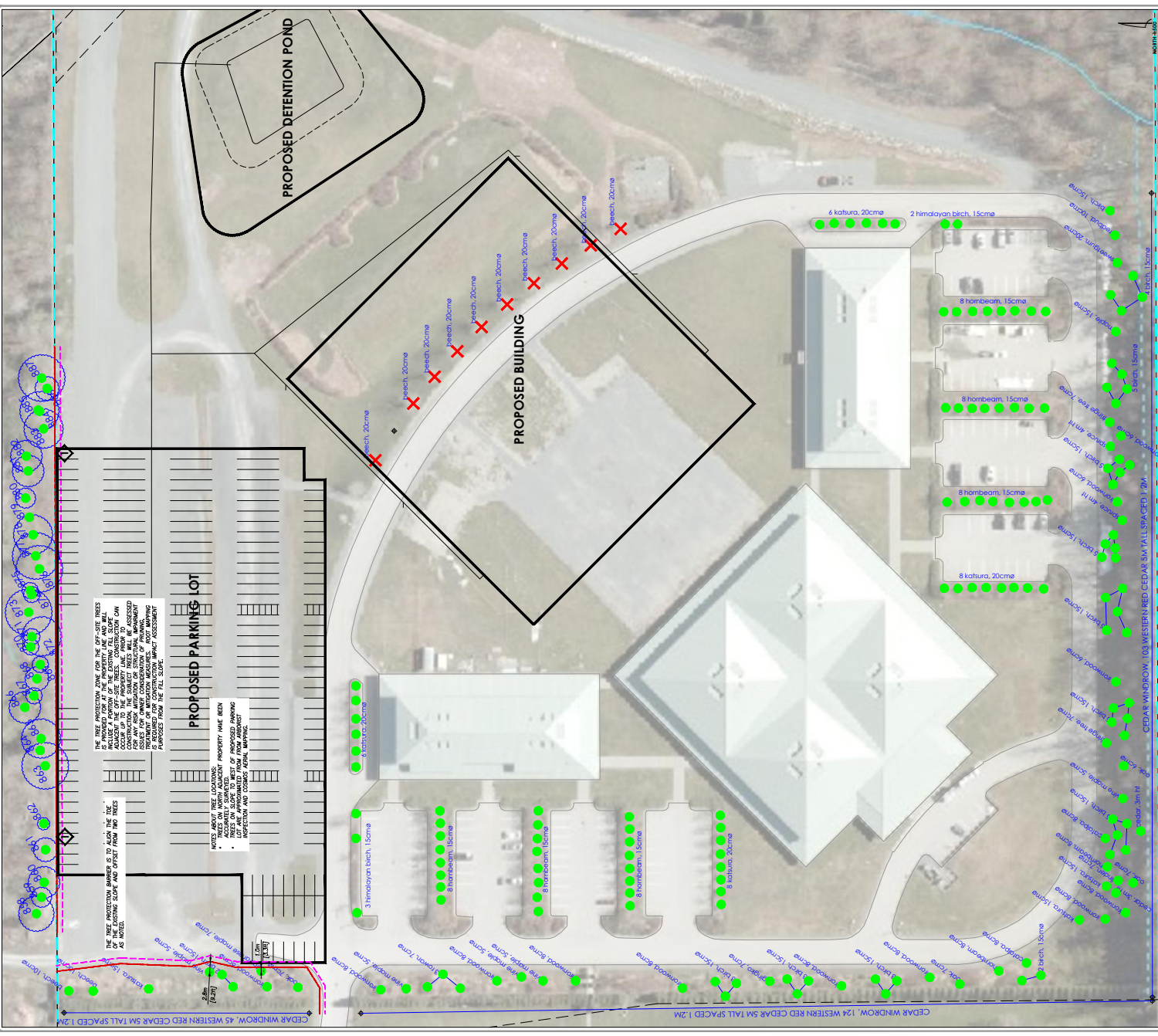
N/A denotes information "Not Available" at this time.

This summary and the referenced documents are prepared and submitted by:


 Aelicia Otto, Consulting Arborist

Dated: August 18, 2020

Direct: 604 275 3484
 Email: aelicia@aclgroup.ca



CONTEXT MAP NOT TO SCALE

TREE PROTECTION STANDARD MEASURES

The project arboret must be called to attend and review, approve, direct and/or supervise certain works from time to time during the demolition, site preparation, construction and landscaping, at critical milestones or activities. To schedule reviews or site visits as described above, we require a minimum of 5 business days advance notice.

A. Tree Protection Barrier Installation.
Prior to site work commencing, to erect and inspect the installation of tree protection barriers. We will sign off once they are approved, so that site work can proceed.

B. Tree Health Management/Inspection.
Prior to construction, the project arboret must undertake or direct the installation of soil protection and enhancement treatments where deemed necessary or appropriate. Such but not limited to:
a. Soil arborist may be applied within TPZ (a 10cm minus wet composted bark mulch, Nutri-Mulch, or equivalent to a depth of 100mm) or as directed by the Project Arboret.
b. Irrigation watering program and system (a manual sprinkler or a timer, temporary irrigation, or drip delivery) by developer (owner) or by the project arboret. Note that backflow of the watering may be required. The watering shall achieve even coverage within the TPZ to deliver the equivalent of up to 5 cm (2 inches) depth on a basis monthly schedule in April through June and September, and for a weekly schedule for July and August. Watering events will be staggered by the project arboret when natural rainfall for a period is sufficient to sustain the tree.

C. Access/Signage.
D. Whenever access into the tree protection zone (TPZ) is contemplated or desired for any reason.
E. Root within TPZ.
F. Whenever any grading, trenching, excavation or landscape work occurs within a TPZ, including the root protection zone (RPZ) and the working space setback (WSS) offset from a RPZ as specified by the project arboret.
G. Disturbance.
H. Certain retained trees may require pruning as recommended by the project arboret to treat one or more of the following: restoration of form, aesthetics, irrigation or defoliation, building clearance, sight lines, crown raising clearance for vehicles or pedestrians and/or construction vehicles. All tree pruning work is to be carried under the direction of the project arboret from this office and by an ISA Certified Arborist employed by a qualified tree service firm working in conformance with applicable ANSI standards (A300 and Z323), and meeting the city, contractor and/or developer/owner insurance and licensing requirements.
I. Low Impact Tree or Shrub Removal.
For any tree removal or stump removal from within a RPZ or WSS.
J. Landscaping/Restoration.
K. All landscaping activities must be reviewed by this office in advance of commencing and on-site direction and guidance from the project arboret planned accordingly, such as but not limited to:
a. Preparation works and construction of landscape features including but not limited to: sidewalks, paths, patios, decks, retaining walls, fencing, irrigation, conduit, benches, patio pavers, soil placement, grass or turf installation, staking or other landscape items.
b. Turf within TPZ is discouraged, however if desired we may support it as long as a suitable mulch zone setback is implemented around the base of the tree.
c. Certain landscape features may be excluded or will require specific materials and methods to be utilized that meet tree root protection compliance requirements.
d. Holes for the planting of any plants, shrubs or hedges within the TPZ is restricted to small pots (e.g. #1 or #2 depending on species) and using potting/planting standards. Planting holes are restricted in size. Dig out existing grade to avoid damage to woody roots, and backfilled with minimal amount of growing medium.

TREE PROTECTION SPECIAL MEASURES

The following items within a TPZ require project arboret direction, treatment or supervision/monitoring. See the Tree Management Drawing for additional reference to locations where special measures are required.

1. Root Mapping and Risk Assessment Prior to Construction. Tree # 858 - 887

The project arboret will conduct a site assessment and perform root mapping and construction impact assessment prior to construction to determine locations adjacent to the off-site trees.

