



DEVELOPMENT PERMIT

No. **DP- 2021-11**

TO: **David Nestman**

ADDRESS:

██████████
██████████ ██████████
(Permittee)

1) This Development Permit is issued subject to compliance with all of the Bylaws of the Town of Gibsons applicable thereto, except those specifically varied or supplemented by this Permit.

2) The Development Permit applies to land within the Town of Gibsons described below:

Parcel Identifier: 024-251-208

**Legal Description: LOT A DISTRICT LOT 684 GROUP 1 NEW
WESTMINSTER DISTRICT PLAN LMP39391**

Civic Address: 543 Shaw Road

(the "Lands")

3) The Lands are within Development Permit Area('s) of the Town of Gibsons Official Community Plan (Bylaw 985, 2005). This permit applies to:

- Development Permit Area No. 2 (Environmentally Sensitive Areas) for the purpose of protection of the natural environment.

4) The Lands shall be developed only in strict accordance with the terms and conditions and provisions of this Permit, including without limitation to the specifications in the following reports, which are attached to and form part of this Permit:

Riparian Assessment Report – 543 Shaw Road, stamped by Cam Forrester, R.P.F, dated June 11, 2021

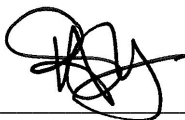
5) All recommendations of the report(s) are to be followed including without limitation:

(a) Erosion & Sediment Control (ESC):

- i. During construction, storage of materials, pathways and machinery traffic will be conducted so as not to disturb the ditch or adjacent sod;
- ii. In order to maintain the effectiveness of the vegetated lawn for filtering and moderating surface water flow, the ditch should be protected during construction by erecting a fence barrier as far from the ditch as practicable. (0.5-1.0m is sufficient). Clearly demarcate with appropriate signs and/or a fence;
- iii. Where traffic and work on or over the ditch is unavoidable, cover the ditch temporarily with material suitable to avoid compaction and disturbance (wooden pallets, plywood sheets or heavy tarps; and,

- iv. Avoid the area during periods of heavy rainfall or saturated ground conditions.
- (b) Pollution Prevention
 - i. The proximity of Charman Creek represents a high risk of polluting a fish bearing stream in the case of a hydrocarbon spill. Measures to protect area as follows:
 - ii. Equipment shall be free of obvious surface hydrocarbon pollutants, such as grease blobs, hanging drips, leaks or stain;
 - iii. A large format spill kit will be located on-site;
 - iv. No equipment will be parked within 10m of the watercourse; and,
 - v. •Crews will be briefed on spill response and pollution prevention measures.
- (c) An environmental monitoring program is required during any future construction phase to ensure that the objectives for DITCH RIPARIAN management are understood and protected. This will consist of:
 - i. Work crew education and standard operating procedures for construction and fuel management when working in and around water;
 - ii. pre-work meeting, pre-work plan and crew signoffs;
 - iii. on-site monitoring as required to ensure DITCH RIPARIAN integrity through following the pre-work plan;
 - iv. the ability for the qualified monitor to direct and advise works related to protection of the DITCH RIPARIAN, especially on the implementation of erosion and sediment controls;
 - v. the ability to issue stop work orders in the case of practices that are illegal or damaging to the DITCH RIPARIAN;
 - vi. the ability to report environmental infractions related to stream protection regulations;
 - vii. photographs and notes should be taken to document the various phases of construction, any observed environmental events and their resolution.
- 6) Minor changes to the aforesaid drawings that do not affect the intent of this Development Permit are permitted only with the approval of the Director of Planning.
- 7) Upon completion of the works, a letter from a qualified Environmental Professional is required to confirm all conditions of this permit were met.
- 8) If the Permittee does not commence the development permitted by this Permit within twenty-four months of the date of this Permit, this Permit shall lapse.
- 9) This Permit is NOT a Building Permit.

ISSUED THIS 15TH DAY OF JUNE 2021.



Lesley-Anne Staats, MCIP, RPP
Director of Planning

Copy of permit to the Qualified Environmental Professional



June 11, 2021

Riparian Assessment Report – 543 Shaw Rd

Background

The purpose of this report is to provide an assessment and classification of the drainage ditch/swale (Ditch-1) along the north boundary of 543 Shaw Rd. and to support the owner's Development Permit application (DPA 2 – Riparian). The DP is required for construction of an addition on the north side of the existing house.

This assessment is intended:

1. To provide a classification of the ditch that aligns with the Riparian Areas Practices Act, Town of Gibsons By-Laws and with the intent of DPA 2; and,
2. To provide recommendations for maintaining the current level of riparian functionality.

Location information

Street Address	575 Gower Point Rd						
Local Government	Town of Gibsons					City Gibsons	
Stream Name	Charman Creek						
Legal Description (PID)	Lot A DL 684 LMP 39391 PID: 024-251-208					Region Lower Mainland	
Stream/River Type	Stream (Ditch)					DFO Area 2	
Watershed Code	900-151500						
Latitude	49	23'	46.11"	Longitude	123	30'	41.79"

June 11, 2021

Riparian & Aquatic Habitat and Baseline Conditions

Charman Creek. Ditch 1 is a modest swale (0.1-0.2m – depth/0.2-0.4m - width) – see Photos 1-6. Ditch-1 runs east to west along the northern property line, originating at the east side of the lot, and discharging on the west side.

The channel is mainly a continuation of the lawn, and the channel bottom is mainly sod, with minor organic depressions observed. The neighbouring Town of Gibsons lot adjacent and to the north is fully vegetated adjacent to the ditch with a sapling sized cedar hedge row and prolific rich site shrubbery. It appears that the ToG lot is characterized by a high-water table, hygic tolerant species such as vigorous spirea and equisetum. A shallow organic swale was observed connecting Ditch-1 to

surface water in Lot C. (Photo 4) During winter conditions, Ditch-1 partially fills and gently flows or percolates to the west. This zone could be considered part of the headwater catchment area to Charman Creek which generally originates in upper Gibsons, through a catchment area of approximately 160 hectares. The Charman watershed is characterized by extensive roadside ditches, culverts and piping, with a mix of residential development and second growth forest. Charman Creek has historically supported fish populations and there are documented historic fish observations throughout its length. From 543 Shaw Rd, the Charman stream channel is approximately 100m to the west. Ditch-1 was not investigated through to its connection to Charman. It is expected that the ditch enters stormwater drains or ditching at some point Ditch 1 conveys surface water to Charman Creek seasonally and as such would meet the definition of a ditch for the purposes of the RAPR. The expected habitat function of Ditch-1 is to continue to deliver sediment free run off through 543 Shaw Rd as it makes its way to Charman.



Figure 1. Overview of 543 Shaw Rd, Ditch-1 and Charman Creek headwaters.



June 11, 2021

Photos

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Photo 1. Viewing west at general construction site. Ditch-1 at base of hedge.



Photo 2. Ditch-1 at northwest corner of the lot. Barely discernable swale ditch.



Photo 3. Ditch-1 mid-lot north boundary.



Photo 4. Surface flow entering Ditch-1 in northeast corner.



Photo 5. Adjacent lot north boundary. Observing saturated conditions, high water table tolerant plants. Viewing west.



Photo 6. Stormwater drainage ditch along west side of Shar road at northeast lot corner. Water table approx. 1m below road surface during observation.

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Habitat Impacts

Potential construction disturbance.

The final residence design indicates that the foundation edge is 2.5m from the north, property line, less for roof overhang. Distance from the exterior wall/foundation to the ditch is estimated at 1.5-2m.

The main risk to ditch function during construction are from foundation excavation and then later during construction, from perimeter light equipment and foot traffic, which could have the impact of exposing and disturbing soil, altering long-term hydraulic flow capacity, compacting rooting zones and potentially allowing sediment to enter the ditch.

Recommendations

Erosion & Sediment Control (ESC):

- During construction, storage of materials, pathways and machinery traffic will be conducted so as not to disturb the ditch or adjacent sod;
- In order to maintain the effectiveness of the vegetated lawn for filtering and moderating surface water flow, the ditch should be protected during construction by erecting a fence barrier as far from the ditch as practicable. (0.5-1.0m is sufficient). Clearly demarcate with appropriate signs and/or a fence;
- Where traffic and work on or over the ditch is unavoidable, cover the ditch temporarily with material suitable to avoid compaction and disturbance (wooden pallets, plywood sheets or heavy tarps; and,
- Avoid the area during periods of heavy rainfall or saturated ground conditions.

Pollution Prevention

The proximity of Charman Creek represents a high risk of polluting a fish bearing stream in the case of a hydrocarbon spill. Measures to protect area as follows:

- Equipment shall be free of obvious surface hydrocarbon pollutants, such as grease blobs, hanging drips, leaks or stain;
- A large format spill kit will be located on-site;
- No equipment will be parked within 10m of the watercourse; and,
- Crews will be briefed on spill response and pollution prevention measures.



June 11, 2021

Environmental Monitoring Program

An environmental monitoring program is required during any future construction phase to ensure that the objectives for DITCH RIPARIAN management are understood and protected. This will consist of:

- Work crew education and standard operating procedures for construction and fuel management when working in and around water;
- pre-work meeting, pre-work plan and crew signoffs;
- on-site monitoring as required to ensure DITCH RIPARIAN integrity through following the pre-work plan;
- the ability for the qualified monitor to direct and advise works related to protection of the DITCH RIPARIAN, especially on the implementation of erosion and sediment controls;
- the ability to issue stop work orders in the case of practices that are illegal or damaging to the DITCH RIPARIAN;
- the ability to report environmental infractions related to stream protection regulations;
- photographs and notes should be taken to document the various phases of construction, any observed environmental events and their resolution.

A Post Development Report is to be completed by a QEP. The report must document those recommendations and special measures were adhered to during construction.

Timing of Works

At the time of writing, the owner is waiting for a development permit in order to recommence construction of the house addition in summer 2021.

Construction will be monitored and overseen by a QEP once development proceeds.



June 11, 2021

Closure

I am qualified to carry out this DPA2 assessment for the construction application as it relates to aquatic habitat for the owners of 543 Shaw Rd. It is my opinion that if the above protection measures are implemented, construction will not result in any deleterious effect to water quality or downstream fish habitat.

QEP SIGNATURE and SEAL	QEP PRINTED NAME
	<p>Cam Forrester, R.P.F.</p> <p># 2118</p>
	<p>Date signed: Jun 11, 2021</p>