

DATE OF MEETING | February 22, 2021 |

AUTHORED BY | LAINY STEVENSON, PLANNER, CURRENT PLANNING |

SUBJECT | **DEVELOPMENT PERMIT APPLICATION NO. DP1196
– 1174 ISLAND HIGHWAY SOUTH** |

OVERVIEW

Purpose of Report

To present for Council’s consideration, a development permit application to replace an existing valve station within the required watercourse setback for the Chase River. |

Recommendation

That Council issue Development Permit No. DP1196 at 1174 Island Highway South with a variance to reduce the minimum required watercourse setback from 30m to 15.5m for the proposed valve station building at the Chase River Pump Station. |

BACKGROUND

A development permit application, DP1196, was received from the Regional District of Nanaimo (RDN), to permit the construction of a new valve station building within the watercourse setback at 1174 Island Highway South.

Subject Property and Site Context

<i>Zoning</i>	CS2 – Community Service Two
<i>Location</i>	The subject property is located on the east side of the Island Highway, between the Chase River and the E & N Railway Corridor. The Nanaimo River estuary is approximately 300m to the east.
<i>Total Area</i>	5,020.5m ²
<i>Official Community Plan (OCP)</i>	Map 1 – Future Land Use Plans – Parks and Open Space; and Waterfront; Map 3 – Development Permit Area No. 1 – Watercourses

The subject property is a large lot that slopes down from the Island Highway South toward the edge of the Chase River, which runs from west to east through the site. The RDN’s Chase River Pump Station is currently located within the subject property. Surrounding uses include the Chase River Estuary Park, low-density residential, commercial business, and the E & N Corridor along the southern boundary of the subject property. |

DISCUSSION

The Chase River crosses the northern portion of the subject property. Schedule C of the “City of Nanaimo Zoning Bylaw 2011 No. 4500” requires a minimum 30m set back from the top of

bank from the Chase River. The existing underground valve station is currently located within the required watercourse leave strip.

Proposed Development

The applicant is proposing to replace the existing below-ground valve station with a new building to house the valve infrastructure at grade. The existing station has minimal storage capacity and access challenges. The proposed above-ground valve chamber building will improve safety for wastewater operators by eliminating confined space and improving access to critical valves and instruments, provide a secure structure that is removable from the foundation to allow maintenance or replacement when required, and reduce downtimes in operations for maintenance. The new building will be located on an existing paved area north of the pump station and will not affect any existing vegetation within the riparian area.

The building will be approximately 30m² in floor area and 3.6m above finished grade. The building will be set on a concrete foundation 1.2 m above grade, with a single door on the southeast side of the structure for operation and maintenance access.

At this location, the Chase River is tidal and classified as estuarine. The Riparian Areas Protection Regulation (RAPR) only applies to fresh water and therefore does not apply at this location. The intent of the watercourse Development Permit Area is to restore and enhance watercourses and riparian areas so they can provide biologically diverse corridors for wildlife movement and for the protection of natural features. A Qualified Environmental Professional (QEP) assessed the subject property and the proposed development and recommended re-vegetation of the watercourse leave strip on both sides of the river and the installation of an environmental protection fence.

The proposed improvements within the watercourse leave strip area include the following:

- *Gravel Pathway Relocation:* The existing gravel pathway will be moved further away from the river and widened to 2m.
- *Fencing:* A new fence will be installed approximately 11.5m from the riverbank (at its closest point) to separate that path from the portion of the riparian area that is to be restored.
- *Invasive Species Removal:* Invasive Himalayan blackberry thickets in the riparian area will be removed, while minimizing the removal of existing native plants and shrubs.
- *Riparian Vegetation Planting:* Riparian vegetation will be restored with native trees and shrubs along the river bed (on each side), and to the east of the paved area on both sides of the raised boardwalk in the Chase River Estuary Park as this area is adjacent to the outer edge of the floodplain.

The riparian area is proposed to be expanded and enhanced by removing existing Himalayan blackberry thickets and replacing them with native shrubs and trees. Grassy areas surrounding the property site will also be replaced with native shrubs and trees. The existing pathway that goes through the site to connect pedestrians with the Chase River Estuary Park to the east will be realigned and widened to 2m.

A 1.2m-high split-rail-design riparian fence will be built on the south side of the re-vegetation area to minimize future disturbance of the watercourse leave strip area. A hedge will also be planted along the north side of the new valve station to create a living visual screen from the

proposed path relocation. Proposed grass areas south of the new pathway and north of the paved area will be planted with low-maintenance grass seed mixture.

Proposed Variances

Minimum Watercourse Setback

The required watercourse setback is 30m from the top of bank of the Chase River. The proposed setback is 15.5m for the new valve station; a proposed variance of 14.5m.

Staff support the proposed variance as the size and depth of the existing forcemain limit the location of the proposed new valve station. The proposed restoration for the riparian area will provide bank stabilization and enhance the existing conditions within the watercourse setback area.

SUMMARY POINTS

- Development Permit No. DP1196 proposes to permit the construction of a new valve station building with a 15.5m setback within the watercourse setback at 1174 Island Highway South.
- The watercourse leave strip will be enhanced with natural vegetation.
- Staff support the proposed variance.

ATTACHMENTS

ATTACHMENT A: Permit Terms and Conditions
ATTACHMENT B: Context Plan
ATTACHMENT C: Location Plan
ATTACHMENT D: Site Plan
ATTACHMENT E: Rendering
ATTACHMENT F: Re-Vegetation Plan
ATTACHMENT G: Aerial Photo

Submitted by:

Lainya Rowett
Manager, Current Planning

Concurrence by:

Jeremy Holm
Director, Development Approvals

Dale Lindsay
General Manager, Development Services

ATTACHMENT A PERMIT TERMS AND CONDITIONS

TERMS OF PERMIT

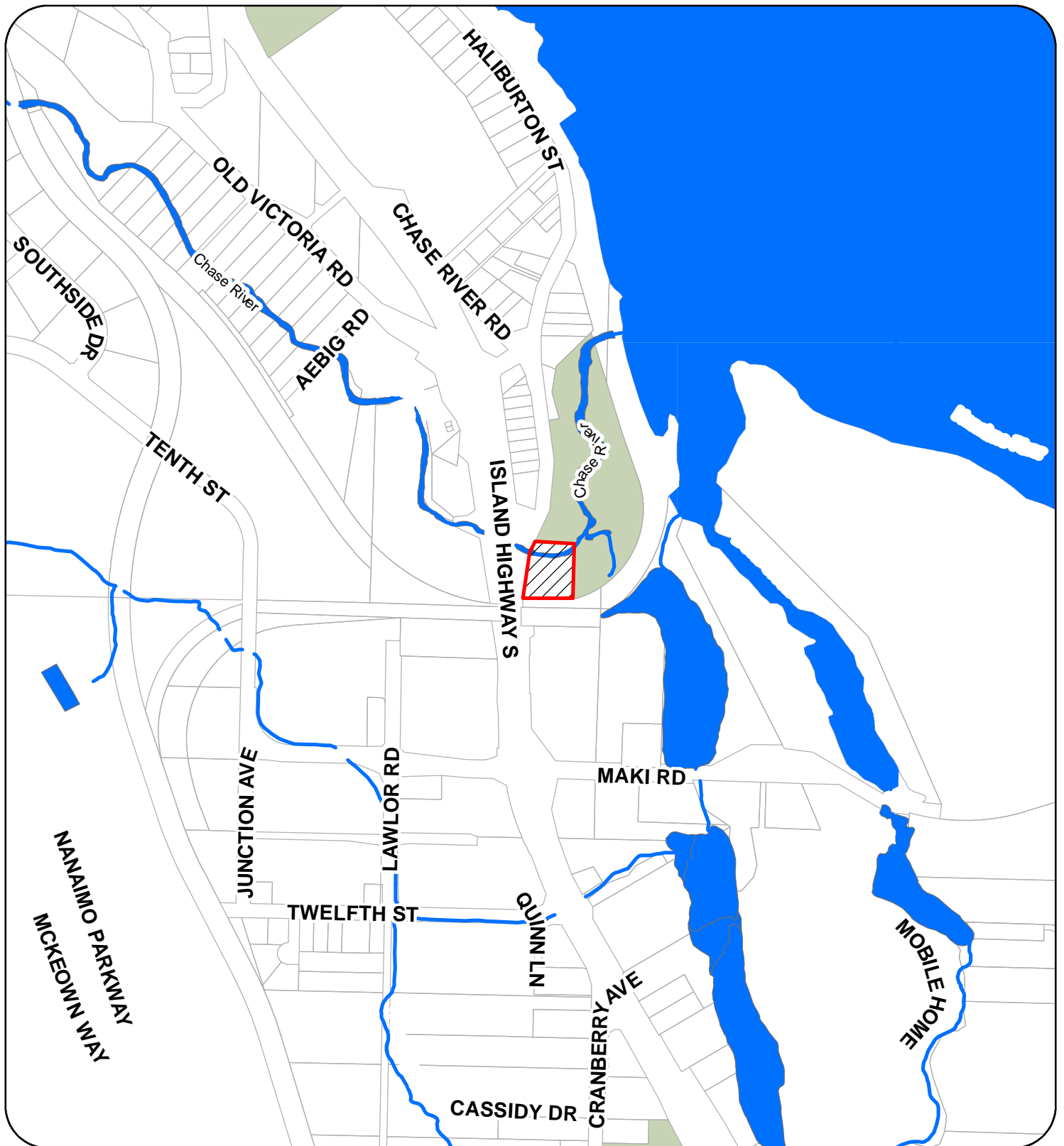
“City of Nanaimo Zoning Bylaw 2011 No. 4500” is varied as follows:

1. *Section 6.3.2 Location and Siting of Buildings and Structures to Watercourses* – to reduce the minimum watercourse setback from 30m to 15.5m for the proposed valve station building.

CONDITIONS OF PERMIT

1. The subject property is developed in accordance with the Site Plan prepared by Jacobs, dated December 2020, as shown on Attachment D.
2. The subject property is developed in accordance with the plans and recommendations contained within the “Vegetation Management Plan for Chase River Pump Station & Sanitary Sewer Forcemain Upgrades”, prepared by Environmental Dynamics Inc., dated 2020-DEC-10.
3. A three-year maintenance period with two assessments per year is required. A certified letter of completion is required from a qualified professional at the end of the three-year maintenance period.

ATTACHMENT B CONTEXT MAP

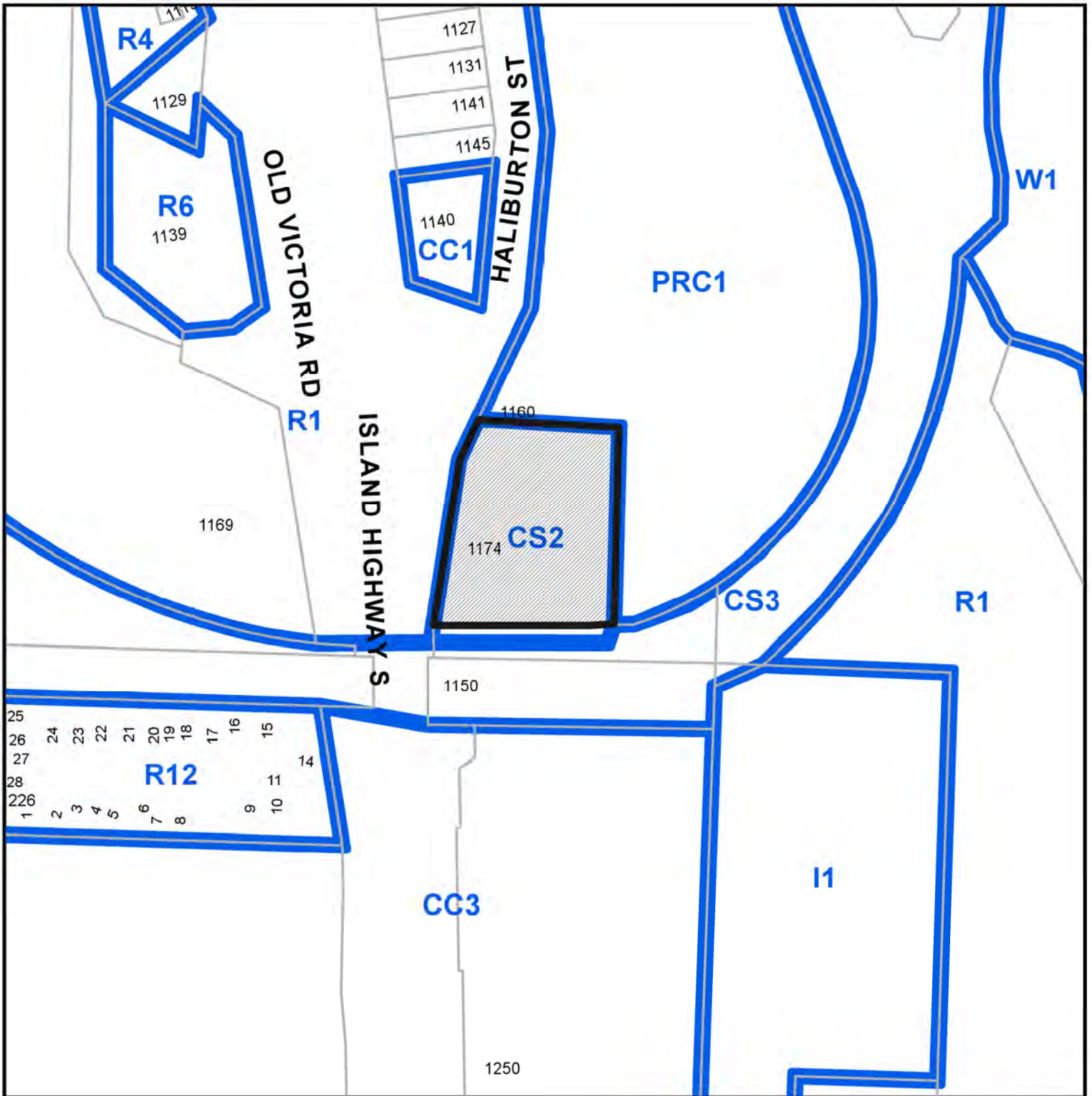


DEVELOPMENT PERMIT APPLICATION NO. DP1196 - 1174 ISLAND HIGHWAY SOUTH



1174 ISLAND HIGHWAY SOUTH

ATTACHMENT C
LOCATION PLAN



DEVELOPMENT PERMIT APPLICATION NO. DP001196



 **Subject Property**

CIVIC: 1174 ISLAND HIGHWAY S

LEGAL: PART OF SECTION 1 SHOWN OUTLINED IN RED, NANAIMO DISTRICT,
PLAN 2163R

ATTACHMENT D SITE PLAN



RECEIVED
DP1196
2020-DEC-14

FOR PERMIT

DEVELOPMENT DATA	
ITEM	DESCRIPTION
1	LOCATE VALVE STATION 15.5m FROM TOP OF RIVER BANK BUILDING AREA: 28.74m ² , HEIGHT: 3.0m, GRADE EL: 4.30m
2	RELOCATE PATHWAY TO EDGE OF RIPARIAN SETBACK APPROX. AREA: 120.11m ²
3	INSTALL 1.0m HIGH WOOD FENCE TO DELINEATE RIPARIAN AREA
4	INSTALL 1.5m HIGH CHAIN LINK FENCE TO DELINEATE OPERATIONAL AREA
5	EVASIVE PLANT REMOVAL/VEGETATION REMEDIATION
6	TRUCK ACCESS TO BACK OR WET-WELL FOR PUMP REPLACEMENTS AND MAINTENANCE.

NOTES:
1. RELOCATED PATHWAY (ITEM 2) WILL BE A MINIMUM WIDTH OF 2m AND WILL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF NANAIMO'S MANUAL OF ENGINEERING STANDARDS AND SPECIFICATIONS (MOESS). THE PATHWAY WILL BE A SOFT SURFACE MULTI-USE PATH WITH A 0.5m SHOULDER AS PER STANDARD DWG. NO. 28-22 (MOESS, SECTION 8) AND LAYERS INSTALLED PER MOESS SECTION 9.

DRAWING NO.	TITLE	REV	DATE	ISSUED FOR PERMIT	DESCRIPTION	DRN	CHK	APP	REVISIONS
	REFERENCE DRAWINGS								

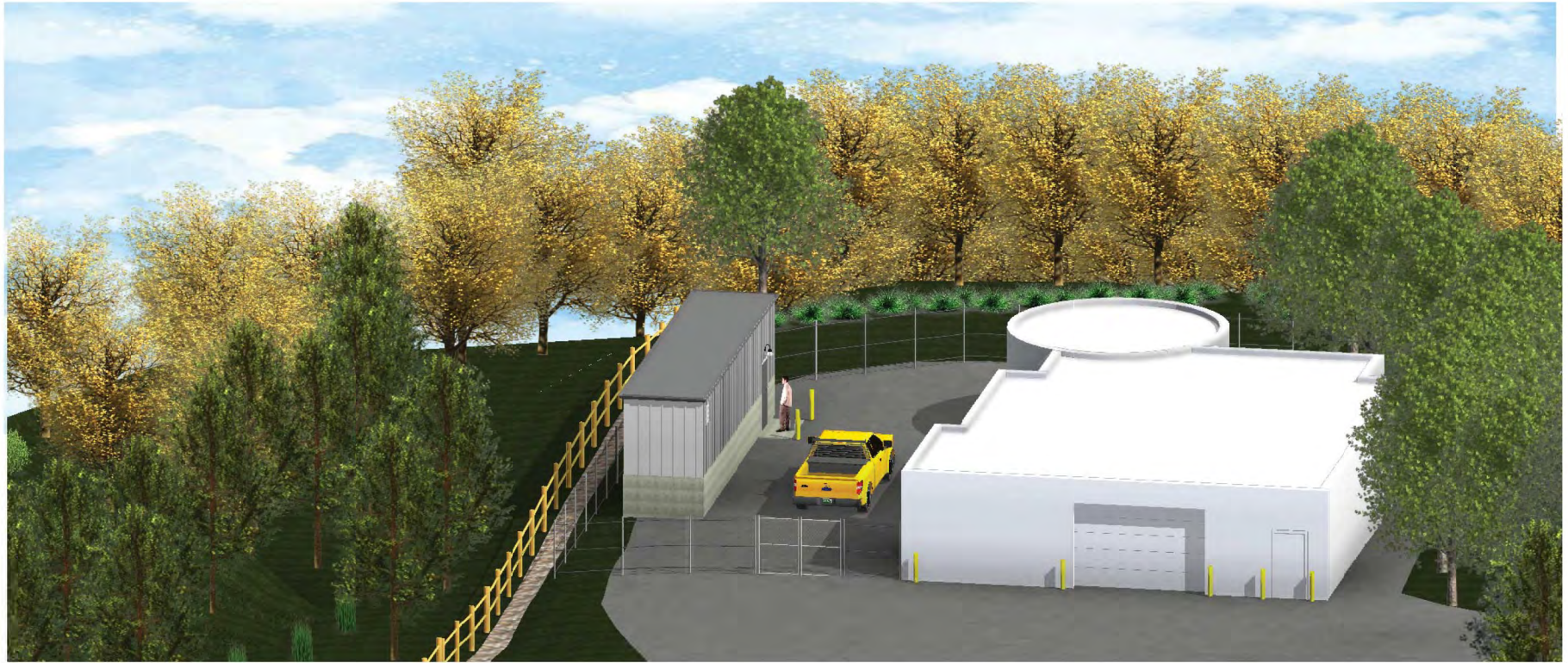


PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT NAME		CHASE RIVER FORCEMAIN NO. 1 REPLACEMENT AND PUMP STATION UPGRADES	
DRAWN	JH	CHASE RIVER PUMP STATION UPGRADES VALVE STATION	
DESIGNED	CW	SITE CONSIDERATIONS	
CHECKED	JG	DRAWING NUMBER	CRPS-C-C010
APPROVED	JG	SHEET	001
		PROJECT NO.	707564
		SCALE	H 1:100 V -
		DATE	
		REV	B



ATTACHMENT E RENDERING



3D VIEW – VALVE STATION

RECEIVED
DP1196
2020-APR-23
Current Planning

DRAWING NO.	TITLE	REV	DATE	DESCRIPTION	SR	CW	JG
	REFERENCE DRAWINGS			REVISION	DRN	CHK	APP
		A	APR 2020	ISSUED FOR PERMIT			



PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT NAME		CHASE RIVER FORCEMAIN NO. 1 REPLACEMENT AND PUMP STATION UPGRADES	
DRWN	SR	CHASE RIVER PUMP STATION UPGRADES VALVE STATION RENDERINGS-1	PROJECT NO. 707564
DESIGNED	CW		
CHECKED	CW		
APPROVED	JG	DRAWING NUMBER	CRPS-C-A001
		SHEET	DATE
			APR 2020
		SCALE	RV



ATTACHMENT F RE-VEGETATION PLAN



Site Plan: Chase River Vegetation Management Plan

Parcel Boundary

Treatment Areas

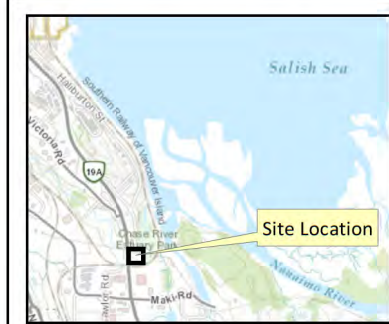
- 1 - Dense Blackberry Removal and Infill Planting
- 2 - Sparse Blackberry Removal and Infill Planting
- 3 - Dense Blackberry Removal and Dense Planting
- 4 - Dense Planting
- 5 - Maintain Existing Planting
- 6 - Landscaped / Lawn

Proposed Hedge

Proposed Development

- New Valva Station
- 2 m Wide Gravel Pathway

Note: All plantings must be spaced 0.5 m from the proposed pathway to provide suitable shoulder vegetation clearance.



0 5 10 15 20 25
Meters

Map scale: 1:500 (printed at 8.5x11)
Map Projection: NAD 1983 UTM Zone 10N

N

Data Sources

Layout of proposed development based on site plan from Jacobs (Project No. 707564, Drawing Number CRPS-C-010, Sheet 001)

2018 orthophotos from the City of Nanaimo

Parcel boundaries from Parcel Map BC

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DP1196

2020-DEC-14

Current Planning

Disclaimer
EDI Environmental Dynamics Inc. has made every effort to ensure this map is free of errors. Data has been derived from a variety of digital sources and, as such, EDI does not warrant the accuracy, completeness, or reliability of this map or its data.

Drawn: IW	Checked: AC	Drawing: 1 of 1	Date: 2020-12-10
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**ATTACHMENT G
AERIAL PHOTO**



DEVELOPMENT PERMIT APPLICATION NO. DP001196



 1174 ISLAND HIGHWAY S