



November 15, 2018

Our File: 2211-46871-12

Ms. Joanne Rees  
Village Planner  
Village of Cumberland  
2673 Dunsmuir Avenue  
Box 340, Cumberland, BC V0R 1S0

Dear Ms. Rees,

**COAL VALLEY ESTATES - PHASE 9 – RESIDENTIAL DEVELOPMENT  
REMAINDER DL 24, NELSON DISTRICT  
REVISED DEVELOPMENT PERMIT APPLICATION**

**1.0 INTRODUCTION**

Further to our recent correspondence, we would like to amend the current Development Permit application for Phases 9 & 10 to reflect the enclosed Phase 9 Development Permit application for the Coal Valley development. This application covers the Phase 9 area shown on the attached MCSL Dwg CDA-2. Note that the Phase 9 boundaries are approximate and may require minor adjustments during detailed lot layout.

The proposed development area of Phase 9 is within the MU-1 zoning. The MU-1 zoning allows for mixed residential and commercial use. Phases 9 will be only single family residential development.

**2.0 OCP DEVELOPMENT PERMIT REQUIREMENTS**

The proposed development relates to following sections of the OCP Bylaw No.990, 2014, summarized as follows:

- OCP Map C “Development Permit Areas” identifies the proposed development area “DPA#8 Mixed Land Use” which applies to stand-alone multi family and commercial developments. As the purpose of this Development Permit application is for subdivision of the land for single family use, DPA#8 requirements are not addressed herein.
- OCP Map E DPA#1 “Environmental Protection” identifies the proposed development to contain “watercourses” and is within in the “Connectivity Area” listed in OCP 10.1.3 2c



and thus requires a DPA#1. The DPA#1 response to the guideline requirements and the supporting documentation is discussed in the following *Section 3.0*.

- OCP Map F DPA #2 “Groundwater Protection” identifies north third of the parent parcel in the groundwater aquifer however, as previously confirmed with the Village (October 29, 2014), since the property is not within the Village water supply aquifer, a DPA response is not required.
- OCP Map H DPA#4 “Wildfire Urban Interface” encompasses the proposed development lands and the responses to the guideline requirements and supporting documentation are discussed in the following *Section 4.0*.

**2.1. Enclosed in support of Development Permit Application is:**

- Completed Development Permit Application Form;
- Drawing MCSL 46871-08 CDA-2 with Phase 9 overlain;
- Proposed Lot Layout Plan (PLR);
- Signed Authorization for Agent;
- Current title search;
- Completed site profile;
- Documentation for DPA #1 Environmental Protection and responses within this document and the following attachments:
  - *Strategic Natural Resource Consultants, Environmental Assessment – Coal Valley Estates Remainder (June 24, 2018, prepared by Cindy Hannah, R.P. Bio.*
  - *Strategic Natural Resource Consultants, Aquatic Ecosystems Assessment letter (May 10 2018), prepared by Cindy Hannah, R.P. Bio*
  - *McElhanney Consulting Services Ltd (MCSL), Stormwater Management Plan (SWMP) (November 24, 2014), Prepared by Chris Durupt, P.Eng.*
  - *Lewkowich Geotechnical Engineering Ltd, Preliminary Geotechnical Review (February 9 2007), Prepared by Darron Clark, P.Eng.*
  - *Strategic Natural Resource Consultants, Wildfire Threat Assessment (May 16, 2018), Prepared by Leigh Stalker, RPF*

Per your email, we understand the Village will refund \$525 from the previous application fees to reflect the reduced lot count.



### 3.0 DPA #1 ENVIRONMENTAL PROTECTION

The OCP Map E DPA#1 “Environmental Protection” boundary for “Connectivity Area” includes the proposed Phase 9 development area. The “Watercourse” and “Connectivity Area” within OCP 10.1.3 2c requires preparation of a DPA#1. This section will respond to the DPA#1 OCP Guidelines and Requirements.

OCP Ref.	Response and Documentation
10.1.5 1)	A biological site inventory was conducted by Cindy Hannah, R.P. Bio. at <i>Strategic Natural Resource Consultants (SNRC)</i> and is attached. The investigation was done in accordance with the <i>Develop with Care 2014</i> Guidebook (Ministry of FLNRO) and included owl call-play back surveys. <i>SNRC’s</i> review concluded that Phase 9 of the development is within extensively disturbed areas <b>with low potential for rare flora and fauna.</b>
10.1.5 2)	The following supporting documents were prepared by qualified professionals: Qualified biologist Cindy Hannah at <i>Strategic Natural Resource Consultants</i> conducted a bio-inventory assessment – see enclosed and discussion above for item 10.1.5 1). Qualified biologist Cindy Hannah at <i>Strategic Natural Resource Consultants</i> conducted an aquatic ecosystems assessment – see enclosed and discussion below for item 10.1.6.1. A geotechnical review by <i>Lewkowich Geotechnical Engineering Ltd</i> in 2006/2007. A professional engineers report for Stormwater Management Plan (SWMP) by <i>McElhanney Consulting Services Ltd (MCSL)</i> November 2014.
10.1.5 3)	Addressed in the bio-inventory prepared by SNRC and summarized above for item 10.1.5 1).
10.1.5 4)	A bio-inventory plan is included in the bio-inventory assessment prepared by SNRC.
10.1.5 5)	Further wildlife surveys are proposed per the bio-inventory report prepared by SNRC.
10.1.5 6)	The biological site inventory did not identify any environmentally sensitive areas within Phase 9 boundaries. The development will abide by the accepted standard practices for Erosion and Sediment Control (ESC) so as not to affect any downstream environmental sensitive areas.
10.1.5 7)	MCSL has prepared a Stormwater Management Plan (SWMP) for the larger original 46 hectare Phase 5 site, to set a baseline for existing site runoff, develop performance targets for post-development (based on the BCSWGB and Village Guidelines), and provide preliminary sizing for the proposed mitigation techniques or Best Management Practices (BMPs) required to achieve the performance targets. Refer to enclosed report.



OCP Ref.	Response and Documentation
10.1.5 8)	As noted in the bio-inventory prepared by SNRC, Phase 9 is in extensively disturbed areas, so implementation of Best Management Practices (BMPs) outlined in the Stormwater Management Plan (SWMP), such as 300mm thickness of amended soil, landscaping and on-lot infiltration galleries, will aid in the restoration of the natural system. The on-lot BMP improvements would be done at the building permit stage of the development. Refer to the attached SWMP for further details.
10.1.5 9)	There is no noted mature vegetation to retain within Phase 9 boundaries. The subject property was previously a working forest, cleared by the previous and current owner.
10.1.5 10)	The proposed site design for Phase 9 does not preserve the existing vegetation which is predominantly invasive weeds. The nature of the single family lot layout would make it a challenge to restore historical forest densities. The existing hydrologic function mimics pre-development conditions through the use of stormwater BMP strategies, to promote on-site capture of runoff and groundwater recharge. Properly employed, this approach will mitigate peak runoff rates, and provide qualitative treatment of runoff, prior to discharge.
10.1.5 11)	There are no noted nesting sites and breeding areas within Phase 9 boundaries. Refer to the <i>bio-inventory prepared by SNRC</i> .
10.1.5 12)	Efforts will be made to schedule construction appropriately, if there is an indication of impact on wildlife; at this time there are no noted concerns within Phase 9 boundaries.
10.1.5 13)	This guideline to preservation of native shrubs, groundcover, and tree cover of existing and potential connections to adjacent Terrestrial, Aquatic and Connectivity Areas will be largely achieved outside the Phase 9 residential development and is more appropriately addressed in the future development of the remainder of the original Phase 5 development area (which contains riparian and forested areas).
10.1.5 14)	There are no anticipated restricted development areas in Phase 9, so special provisions are not anticipated to prevent introduction of foreign materials. Notwithstanding, sediment and erosion control will be monitored and enforced.
10.1.5 15)	All proposed street lighting will be in accordance with existing Village bylaws and design standards.
10.1.5 16)	The boundaries for Phase 9 are outside the wildlife corridor (see response ref. 10.1.6.3 a) and are not in the riparian area (see response ref. 10.1.6.1)
10.1.5 17)	MCSL has prepared a Stormwater Management Plan (SWMP) that manages rainwater based on British Columbia Stormwater Planning Guidebook (BCSWPG) and Beyond the Guidebook, a 2007 revised publication which builds on the BCSWPG. Refer to the attached report.
10.1.5 18)	The development activities will not exceed 20 m beyond the boundaries shown on the site plan approved during the development permit.
10.1.5 19)	There are no restricted development boundaries identified (in Phase 9) to fence with high visibility temporary fencing.



OCP Ref.	Response and Documentation
10.1.5 20)	There are no trees to protect within the Phase 9 development boundaries.
10.1.5 21)	There is one proposed pedestrian walkway in Phase 9 which will be designed to prevent motorized vehicle use.
10.1.5 22)	The Phase 9 development is not within the Riparian Area Regulation (RAR); refer to item 10.1.6.1 below.
10.1.6.1	<p><b>Aquatic Ecosystem Areas</b></p> <p>The attached aquatic ecosystems review conducted by Cindy Hannah, R.P. Bio at <i>Strategic Natural Resource Consultants</i>. Addresses the DPA #1 bylaw requirements for Aquatic Ecosystems. The SWMP prepared by MCSL addresses source controls and reduction in post development runoff. A detailed Erosion and Sediment Control Plan will be prepared as part of the subdivision servicing design.</p>
10.1.6.2	<p><b>Terrestrial Ecosystem Areas</b></p> <p>The Phase 9 development area is not within a sensitive terrestrial ecosystem area per the attached bio-inventory prepared by SNRC. The SWMP prepared by MCSL addresses source controls and reduction in post development runoff. A detailed Erosion and Sediment Control Plan will be prepared as part of the subdivision servicing design.</p>
10.1.6.3	<p><b>Connectivity Areas</b></p> <p>The Phase 9 development is within the OCP designated Connectivity Area.</p> <ul style="list-style-type: none"> <li>a) The development parcel is adjacent to the existing residential development and will cause the least impact to native fauna movement between adjacent habitats. The development is outside the proposed biodiversity corridors identified in Map 5: CVCS Priority Ecological Areas for Conservation: Lands of the Comox Valley Conservation Strategy- Nature Without Borders document 2nd ed.</li> <li>b) New roads within the Connectivity Area are between 18 and 20m (ROW).</li> <li>c) The bio-inventory did not indicate any special considerations for wildlife crossing and mitigation measures for road crossing within Phase 9.</li> <li>d) There is one pedestrian walkway planned for this phase of development.</li> <li>e) The use of native and drought tolerant vegetation will be encouraged.</li> <li>f) Most of the proposed Phase 9 development has been previously cleared.</li> <li>g) There was no sensitive ecosystem identified within the proposed Phase 9 development area.</li> </ul>



#### 4.0 DPA #4 WILDFIRE URBAN INTERFACE

The OCP Map H DPA#4 “Wildfire Urban Interface” includes the proposed development area. This section will respond to OCP Guidelines and Requirements.

OCP Ref.	Response and Documentation
10.4.5 1)	The attached <i>Wildfire Threat Assessment</i> contains a detailed site plan which shows Wildfire Urban Interfaces, as well as the location of watercourses, existing natural vegetation and on-site topography as of October 2016. There are no existing buildings within the proposed Phase 9 development area. The proposed residential lot layout is shown, and the buildings will conform to zoning setbacks. All existing trees within Phase 9 will be removed to facilitate development.
10.4.5 2)	The attached <i>Wildfire Threat Assessment</i> includes mitigating strategies to reduce threat of wildfire which are in accordance with the DPA#4 document.
10.4.5 3)	A fuel hazard assessment was conducted by L. Stalker, RPF at Strategic Natural Resource Consultants, and is presented in the attached report dated May 16, 2018. Page 7 and 8 of the report outline preventative measures to mitigate risk of wildfire spread.
10.4.5 4)	The proposed asphalt road and connections to existing road network are adequate for evacuation and access for emergency response vehicles. There is also fire access to the existing gravel roads on the remainder of the property.
10.4.5 5)	The setbacks from the proposed lots will have buildings with setbacks larger than 10.0m to the forest interface.
10.4.5 6)	The ends of proposed roads will allow for access the abutting forested lands, and fire hydrants will be in close proximity to the ends of the road.
10.4.5 7)	The timing of the development has not been determined, though construction adjacent to forested lands may be limited during periods of high fire hazard.
10.4.5 8)	A fuel hazard assessment was conducted by L. Stalker, RPF at <i>Strategic Natural Resource Consultants</i> , and is presented in the attached report dated May 16, 2018. Page 7 and 8 of the report outline preventative measures to mitigate risk of wildfire spread.



Please advise us of any further requirements.

Yours truly,

McELHANNEY CONSULTING SERVICES LTD.

Alex Fachler, Grad Tech,  
Engineering Technician

Enclosures

cc: Coal Valley Estates Ltd.

Reviewed by:



Chris Durupt, P. Eng.  
Project Manager

2018/11/16