

## EDP: Design Rationale

PROJECT Address: 4175 Burkehill Place  
DATE: May 24, 2019

Where zoning and environmental regulations are extremely prohibitive and cause "undue hardship" an application to Council for a Development Variance Permit may be considered by home owners. Due to the existence of a major watercourse and the desire to maintain and enhance the existing natural habitat at 4175 Burkehill Place the allowable build-able envelope on this property is extremely restricted in size.

We are submitting a design proposal to the DoWV planning department to request a development variance which would allow for a reasonably sized house (4,818.5 square foot 3 storey houses including a 2 car attached garage) to be built on the upper part of the property where construction would least impact the natural environment. This habitat currently consists of number of mature trees including an Arbutus, lower lying natural vegetation and existing steep rocky, natural topography.

This neighbourhood character is fairly current consisting of all post-war housing mixed with relatively new housing stock that has either been built in the past 10 years or is currently under construction. Most of the houses are of a modern character with post and beam style construction and low single pitch sloped shed roofs. There are 2 new houses on immediate the cul-de-sac located at 4165 and 4150 Burkehill Place. The house at 4165 in particular is a modern version of this style and is of a similar size and height to the house that we are proposing. We feel that this is representation of what a typical 2 storey above grade (w/basement) conforming house on this street might look like should other houses be re-developed. This neighbourhood is in transition given the age and condition of the existing housing. At least 2 of the adjacent neighbouring properties will be subject to an environmental development permit as well when developed.

In an effort to reduce the impact of the house at the street we are proposing a design where the upper floor is stepped back from the main floor below. A partially screened terrace allows light to filter and soften the facade while providing privacy from overlook to adjacent houses. The overall height of the roof is consistent with other 2 storey + basement houses on the street (see specifically the new house built at 4150 Burkehill Place). The introduction of significant native planting and hedges at the side yards is proposed to maintain privacy to the level of the upper floor.

We are proposing that the house will be extremely energy efficient meeting a level of Step 5 (the highest level requiring that houses be net zero ready meaning that the house will produce as much energy as it consumes) of the BC Energy Code well above the current District requirement. The building envelope and mechanical systems as proposed are highly efficient using heat transfer and storage technology and will achieve better than average performance in airtightness. The house will be built to a very high quality, using durable materials which are environmentally produced (Swiss Pearl panels). Environmental standards on glazing currently require double glazing but with the intention of meeting Step 5 of the building code we will provide triple paned glass.

Two car parking is being provided exceeding parking requirements for this zone. Further, an additional car could (if necessary) be parked in front of the house and still not impede existing traffic in the cul-de-sac. A traffic management plan will be provided.

This house does not impact any views of houses behind it. Although we question the notion that a neighbour is entitled to views directly across a side-yard, the proposed design scheme is a significant improvement over a potentially conforming scheme. The NE corner of the proposed house has been adjusted to move building bulk out of the way of existing view corridors allowing for better sight lines of the forest and Arbutus tree for the adjacent neighbour. We have demonstrated that a conforming scheme would have a considerably greater impact on views than the house that is proposed. We have shown that the proposed house scheme with a flat roof could actually be lower overall than a conforming scheme with a sloped roof. Thus proposing a flat roof is reducing the impact of the second floor on views across the sideyard.

Proposed Deviations from Current Zoning:

1. Relaxation of the Front Yard setback from 29'-10" (9.1m) to 9'-0" (2.7m)
2. Relaxation of Highest Building Face from 22'-0" (6.7m) to 28'-2" (8.6m)
3. Relaxation of Front Yard Impervious Surface from 50% coverage to 70% coverage