



Geohazard Area DPA Guidelines

Checklist to be completed and signed by Qualified Geotechnical Engineer

Report Guidelines

Report Requirements	Met?
Describe the topography and geomorphology of the site	
Identify potential natural hazards	
Assess the nature, extent, frequency, and potential effects of identified hazards	
Include a review of relevant previous geohazard studies or engineering work in the vicinity	
Identify safe building sites	
Recommend hazard mitigation measures and development protection measures	
Recommend the conditions and requirements of the development permit	
Consider Provincial requirements for flood and landslide assessment	
Consider the 2010 APEGBC Guidelines for Legislated Landslide Assessments for Proposed Residential Developments, or any subsequent updated version	
Certify that the land may be used safely for the intended use	
Information must be detailed enough to support registration of a Section 219 Covenant as required by the Land Title Act.	

Slope Hazard Guidelines

Guidelines – Toe of Slope	Met?
Qualified professionals must verify the adequate minimum setback from the toe of slopes, based on slope stability and/or runout modelling.	
Professional engineers and/or professional geoscientists must verify whether the minimum 15 m setback from the crest of slopes is adequate. Site-specific analysis may identify areas, such as the northeast portion of the Town, where a greater setback is required.	

Guidelines – Crest of Slope	Met?
<p>Where a reduced setback of less than 15 m (<15 m) from the crest of the slope is proposed, the qualified professional must provide a defensible justification based on:</p> <ul style="list-style-type: none"> a) Subsurface investigations. b) Groundwater monitoring (including piezometers). c) Slope stability modelling d) Site-specific geometry and soil/groundwater conditions 	
<p>The following professional guidelines must be adhered to:</p> <ul style="list-style-type: none"> a) EGBC Professional Practice Guideline: Geotechnical Engineering Services for Building Projects, including application of the Canadian Foundation Engineering Manual (CFEM) or provision of rationale where deviation occurs. b) EGBC Professional Practice Guideline: Landslide Assessments in British Columbia. 	
<p>Standard practice is expected to include:</p> <ul style="list-style-type: none"> a) Site reconnaissance b) Subsurface investigation and reconciliation with literature review findings c) Groundwater monitoring d) Slope stability and/or runout modelling. 	

Creek Flood Hazard Guidelines

Guidelines	Met?
<p>Qualified professionals must verify a safe development site within the creek flooding areas. Analysis to support development in a flood area may include:</p> <ul style="list-style-type: none"> a) Hydraulic modelling to identify flood extents and the capacity of the culverts in the vicinity. The modelling may need to account for debris flows. <ul style="list-style-type: none"> i. Gibson Creek – KWL (2013) identified that Gibson Creek may experience debris flows based on the Melton Ratio. b) Slope stability and/or runout modelling. 	

Coastal Flood Hazard Guidelines

Guidelines	Met?
<p>Development within the Coastal Flood Hazard areas must include a coastal engineering report prepared by a qualified Professional Engineer with coastal flood experience (i.e. Coastal Engineer) to verify a safe development site.</p>	
<p>A property-specific Flood Construction Level (FCL) is required if any proposed livable floor areas will be lower than the FCLs provided in Table 1, pg. 8 of Schedule C.</p>	
<p>Analysis to support development in the coastal flooding areas must include:</p> <ul style="list-style-type: none"> a) Estimation of coastal flood levels Consideration of future sea level rise and wave run-up b) Compliance with Provincial Flood Hazard Guidelines c) Mitigation measures from potential transfer of flood risk to adjacent properties, consistent with the EGBC Flood Hazard Assessment (FHA) Guidelines (2018) <p>Consideration of nature-based solutions or Greenshores approaches that manage coastal flood and erosion</p>	
<p>Development in Coastal Flood Hazard Areas must identify a Flood Construction Level (FCL) sufficient for the intended lifespan of the development (or adhere to minimum FCLs in Table 1) and specify measures to achieve it, such as:</p> <ul style="list-style-type: none"> a) Engineered fill b) Raised foundations c) Coastal bank protection or armouring. 	