



Foreshore Development Permit Area April 28, 2021 virtual information meeting Q&A

Q: Will the District be setting allowable building height variance around the new FCL?

A: The District will not be setting allowable building height variances. If an applicant was proposing variances to the Zoning Bylaw, they would provide rationale for the variances as well as potential impact to neighbours. The permitting process would include neighbour notification to address any concerns.

Q: The DWV ocean yard setback is 30 feet, whereas the Riparian setback is 15 m. For a new home project are we allowed to locate the principal structure at 30 feet?

A: Yes, the environmental riparian buffer zone is likely larger than the zoning setback for a single family property. This would not restrict a house from being developed within its permitted building envelope even if it encroaches into the riparian buffer zone; however, the DPA guidelines require an assessment from a Qualified Environmental Professional to ensure any structures do not negatively impact the sensitive foreshore environment and provide recommendations to ensure long-term protection of this area.

Q: Why doesn't the DPA cover public property like Ambleside Ferry Building, etc.?

A: The DPA does cover public property that is owned by the District. The redevelopment of the Ferry Building will be done to the calculated FCL for this property. The District is required to adhere to the DPA requirements and be aligned with the objectives of the DPA.

Q: Why is the flood construction level different for different properties?

A: The FCL differs across properties primarily because of the wave effects component of the calculation. Depending on site topography, where a property is located on the coast, and what features are on the property (seawalls, etc.), the wave effects can change, thereby, resulting in changes in the FCL.

Q: How will storm run off from raised properties be addressed re impact on neighbours and on the erosion of the foreshore?

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A: A stormwater management plan, prepared by a Professional Engineer, is required at the building permit stage. The plan needs to consider overland flow paths for both controlled and uncontrolled flow and demonstrate that water flow will not be diverted onto a neighbouring property. Features such as cut off ditches, perimeter drainage for any retaining walls, or other such measures will need or could be introduced in order to address any grade differentials. The District's Land Development Department has guidelines for stormwater management.

Q: How do Buyers be made aware of these permit requirements? The Property Disclosure Statement mentions flood plane.

A: The Development Permit will be registered to the Land Title for a property; therefore, a potential buyer could be made aware from obtaining a copy of the land title certificate. Additionally, all of the information for the DPA will be posted on the DWV website and be made available to the public.

Q: This seems to apply to individual private properties, I'm in a 100 unit building right on the Seawalk. The building can't be moved obviously. What can be done to mitigate the risk of flooding for our building?

A: Yes, the FCL requirements are only applicable to new developments with living space; however, there are measures that property owners can take to protect their property and existing house/building. A coastal engineer or environmental professional could be engaged to assess the flood impacts to a property and provide recommendations to mitigate future flooding and damage.

Q: Your base case appears to be a 1m rise in sea level by the end of the century, this coincides with a 1 degC increase in global average temperature. However, with all the commitments taken by companies and countries to reduce carbon emissions by 50% by 2030 and carbon neutral by 2050, shouldn't this be taken into account? Hence, maybe sea levels will not rise as predicted.

A: The Provincial guidelines will be reviewed periodically to ensure that the best available science is being used to project sea level rise. If projections change, the District will update their guidelines for the foreshore DPA to reflect guidance from the Province.

Q: Will the proposed DP prevent, delay or increase costs for waterfront homeowners from repairing or replacing docks, ramps or stairs that are important for safe access to the water for swimming, kayaking and boating?

A: Work on existing foreshore encroachment structures is completed through a separate process under the Head Lease that the District has with the Province to manage the public foreshore. As with the current process, staff review proposed work on encroachments under the conditions of the Head Lease and the zoning conditions for

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the public foreshore. Should the work on existing encroachments extend onto private property, a Development Permit will also be required.

Q: To be clear, will height and HBF and Basement exemption continue to be measured from Natural grades regardless of the FCL/ Main floor level?

A: The building height and highest building face (HBF) would be calculated from the FCL grade and not the natural or existing grade.

Q: Why does the DPA requirements stop at “mitigation” and not include an “adaptation“ approach that may or may not include work in the foreshore, intertidal and sub tidal areas ?

A: Through the Coastal Planning Study that the District completed in 2020, staff reviewed various adaptation options for sea level rise and coastal flooding, on the foreshore, intertidal, subtidal areas. The District may consider these options in the future to protect against sea level rise. The implementation of a foreshore DPA does not prevent the District from moving forward with other adaptation tools in future.

Q: Is the 15 meter from the natural boundary line or future boundary line as it is mentioned in the other guidelines?

A: In order to protect the existing state of the foreshore environment, the 15 m buffer area from the natural boundary will use the natural boundary at the time of the proposed work.

Q: If properties currently protected by seawalls are at risk, is your expectation to have the seawall height raised, or are other designs being considered and piloted?

A: Each property will need to identify the appropriate design to protect against coastal flooding and redevelopment to the FCL. Raising a seawall may not be the best approach if it causes more impact to the foreshore environment through scour and erosion; therefore, other options should be considered during the planning for redevelopment.

Q: Do these regulations apply to building near a creek?

A: The District has a Watercourse Protection Development Permit Area already in place for protection of riparian areas around creeks. Further information can be found at: <https://westvancouver.ca/home-building-property/development/environmental-development-permit>

Q: How will new homes already in the permitting process be grandfathered if this new plan is adopted by council as planned this summer?

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A: As per the *Local Government Act*, if a building permit application has already been submitted to the District's Building Department, prior to the date of the foreshore DPA adoption by Council, it is grandfathered and the new guidelines would not apply. Any building permits application submitted after the adoption date, will be subject to the new guidelines.

Q: Guidelines suggest no Living space allowed below the FCL. How about Basement space with proper waterproofing measures, it is normally allowed in other Municipalities?

A: A basement could be considered below the FCL if it is flood-proofed as designed and certified by a Qualified Professional.

Q: Would each individual homeowner developer be required to retain their own coastal engineer and FCL report?

A: The guidelines include the conservative FCLs that were calculated by the District, to define the foreshore DPA boundaries. A property owner could choose to use this FCL for development of their property or retain their own coastal engineer to complete a flood hazard assessment to calculate a site-specific FCL.

Q: Is riprap following the natural slope acceptable?

A: If there are proposal to naturalize an area, the District is looking primarily for softer materials versus riprap. However, given that some properties are exposed more significantly to wave action, rip rap is sometimes the best option. If riprap is proposed for a shoreline, it is a requirement that a coastal engineer design the slope and provide rationale for the best materials to use, based on site conditions.

Q: Will existing structures within the 15m zone be grandfathered in and recorded as such with land titles?

A: Yes, any structures already within the 15 m riparian zone, will be grandfathered. The foreshore DPA has guidelines to control new development.

Q: Will new docks, floats or ramps that are tied to the land above the foreshore be permitted if developed with best management practices?

A: The District has a separate mechanism to review structures that encroach onto the public foreshore, such as docks. The District manages the public foreshore through a Head Lease with Province and has conditions that need to be met under that lease, with respect to encroachments. The foreshore DPA will not change the current process in which staff evaluate encroachments onto the public foreshore as they are governed by the Head Lease and the District's Zoning Bylaw.

Q: As a District that has declared a climate change emergency how can extensive filling of waterfront properties (i.e. filling brought in by multiple dump trucks with

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disproportionate emissions) be considered give the obvious sensitive attention to natural foreshore protection - seems a bit of an oxymoron. Surely there are other ways to raise FCL of living space without such drastically negative environment effects.

A: Yes, this is an excellent point and there are other ways of raising a house to meet the FCL such as placing the garage at the lower level, which is exempt from the FCL requirement, using onsite fill materials, or consideration of a floodproof basement design.

Q: If properties currently protected by seawalks are at risk, is your expectation to have the seawall height raised, or are other designs being considered and piloted?

A: This could be something that the District looks at as adaption options for sea level rise are evaluated over the short and long-term. The foreshore DPA is only one adaptation tool that is being considered and does not prevent the District from exploring and moving forward other measures, as required.

Q: Is there any involvement by Fisheries and Oceans Canada in the waterfront development process, current, or proposed?

A: If work is proposed within the public foreshore area, there is a requirement under the District's Head Lease with the Province to ensure approval from all levels of government. The District requires an assessment from the Qualified Environmental Professional to determine whether an Authorization is required from Fisheries and Oceans Canada. For work done on private property, again, it is the responsibility of the applicant to ensure they are adhering to regulations from all levels of government. This is a guideline for the Foreshore DPA.

Q: If the property is protected to elevation higher than the FCL including freeboard, is it still required that the liveable area be higher than FCL?

A: If the property or proposed building location is higher than the FCL, than the proposed building would be exempt from the requirement to calculate an FCL. From the District's FCL study for the entire coastline, it was determined that some properties have only a portion of the area below the FCL elevations; therefore, if the location of the new building is above this elevation, than it may be exempt from the requirement to calculate an FCL as it is already outside of the coastal floodplain area. This information is included in the guidelines.

Q: In the FCL criteria, is it only the projected 1M sea level rise that has increased over previous calculations?

A: Yes, the 1 m sea level rise was updated in the Provincial guidelines in 2018 as well as the addition of including land subsidence/uplift in the calculation.

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Q: Would you please send me the link to the latest and greatest available guideline prepared for DWV.

A: The foreshore DPA guidelines will not be posted until staff bring forward to Council for consideration. Staff are anticipating that the foreshore DPA will be brought to Council prior to the summer Council recess. The guidelines would be included in the Report to Council that is posted online in advance of the Council meeting.

Q: You mentioned that the HBF will be calculated from the new FCL average grade. What about the max height of retaining walls between adjacent properties? Will they be calculated from the new FCL or existing grade?

A: Retaining walls are currently calculated from natural grade.

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