

MEMORANDUM

TO: Joseph Smallwood, Project Facilitator

FROM: Adessa Mohammadi, Building Code Engineer

SUBJECT: 1050 Beach Ave - DP-2025-00685, Flood Risk Comments

• FCL at this location is 4.6m with an additional elevation increase for wave runup, where applicable. It appears areas such as Electrical/Life Safety, Electrical and Mechanical room, etc. on Mechanical level are located below the designated FCL for this site. A multi-disciplinary resiliency/mitigating report shall be prepared by qualified professionals for proposed reduction in the FCL in accordance with Article 2.2.10.6. of Division C of VBBL 2025, which will be reviewed at BP stage by CBO office. Please refer to EGBC Guide on Legislated Flood Assessment in a Changing Climate in BC: PP Guidelines - Legislated Flood Assessments in a Changing Climate in BC V.2.1

- Electrical service equipment that must be accessible for disconnection under flood conditions should be located above the area potentially subject to flooding, in order to prevent a shock hazard to the persons operating the means of service disconnection or provided with remote shut off above FCL as per article 2.2.10.3. of Division C of VBBL 2025. refer to EGBC Practice Advisory Note here for more information and include the mitigating measures in the electrical design: Practice-Advisory-Electr-Consid-Flood-Resilient-Design.pdf.aspx
- A flood plain covenant may be required. Future guidance of this requirement is required by all/any applicable parties. Refer to COV guideline for Flood Plain Standards and Requirements here: <u>Guidelines: Flood Plain Standards and</u> Requirements
- A primary objective for constructing in a flood plain is resilience which are achieved not only by structural elevation but also through adequate drainage or implementing flood resilient construction/methods. This generic consideration is typically provided for enquirers for constructing in a designate flood plain would include, but not limited to:
 - Structural capacity to resist water pressures on the exterior wall of the buildings on the site.
 - Sealing of service connections and supporting structures where they are located below the FCL.
 - Fixed equipment, electrical panels/switchgear, service meters and building penetrations (eg: vents) to be located above the FCL.

- Any electrical systems or equipment located below the FCL shall be permitted if they are designed to be submersible.
- Grading, landscaping, and water retention drainage systems and plugs for drainage systems
- o Installation of flood barriers on the building or within the property
- o Flood detection and audible/visual warnings for early notification
- o Flood Emergency Response Manual prior to occupancy